

ARTICLE

Preventing Terrorist Attacks on Offshore Platforms: Do States Have Sufficient Legal Tools?

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Introduction

A speedboat full of explosives crashes into an Indian oil platform located 160 kilometers off the coast of Mumbai, causing an immense explosion.¹ As a result, fifteen crewmembers are killed, hundreds of millions of dollars of damage is inflicted, and India is left without a vital source of energy. Additionally, the explosion causes a massive oil leak with the attendant catastrophic ecological effects.

Offshore oil and gas production is the world's biggest marine industry and an extremely important source of energy.² As illustrated in the above example, a terrorist attack on an offshore oil or gas platform has potentially devastating effects, both economic and environmental.³

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¹ This is a hypothetical example intended to illustrate the impact of a terrorist attack on an offshore platform.

² Laurence Reza Wrathall, *The Vulnerability of Subsea Infrastructure to Underwater Attack: Legal Shortcomings and the Way Forward*, 12 SAN DIEGO INT'L L.J. 223, 225 (2010).

³ The blowout of British Petroleum's Macondo well in the Gulf of Mexico on April 20, 2010, claimed the lives of eleven crewmembers of the Deepwater Horizon drilling rig and caused a discharge of 185 million gallons of oil. This led to severe environmental impacts, including the destruction of numerous marine animals and organisms. See John Wyeth Griggs, *BP Gulf of Mexico Oil Spill*, 32 ENERGY L.J. 57, 57-58 (2011). Although the blowout

Additionally, due to their isolation and distance from shore, offshore platforms are difficult to protect and extremely vulnerable to attack. In the current security environment, with the increased military capability of transnational terrorist organizations,⁴ preventing an attack on such a critical resource and industry is an extremely challenging endeavor.

This Article examines what authority coastal states have under international law to protect their offshore platforms from the dire consequences of such attacks. It argues that while states have sufficient legal authority to take measures for protecting offshore platforms located in their territorial sea, they lack such authority outside that area. In particular, this Article addresses the authority given to states in the 1982 United Nations Convention on the Law of the Sea (LOSC) to restrict navigation within 500-meter-wide safety zones around offshore platforms located in the exclusive economic zone (EEZ) or on the continental shelf.⁵ In this regard, this Article argues that not only are such safety zones insufficient for protecting platforms from deliberate attacks, but they also seem to be insufficient for protecting those platforms from safety hazards.

Part I of this Article explains the importance of the offshore oil and gas industry, addresses the vulnerability of oil and gas platforms to terrorist attacks, and analyzes the potential outcome of such attacks. Part II examines the current state of the international law of the sea with regard to the protection of offshore platforms, with its main focus on the legal mechanism for establishing safety zones around offshore platforms under

was not caused by a terrorist attack, it illustrates the potential impacts of an attack on an offshore oil platform.

⁴ See, e.g., Janine Zacharia, *Israel Intercepts Ship It Says Carried Iranian Weapons Bound for Gaza*, WASH. POST, Mar. 15, 2011, available at http://www.washingtonpost.com/world/israel-intercepts-ship-it-says-carried-iranian-weapons-bound-for-gaza/2011/03/15/ABY16TX_story.html (citing Israeli officials who noted that the Israeli Navy found C-704 shore-to-sea missiles in an arms shipment intended for terrorist entities in the Gaza Strip; according to these sources, the missiles have a range of 21 kilometers); J. Ashley Roach, *Initiatives to Enhance Maritime Security at Sea*, 28 MARINE POL'Y 41, 41 (2004) (noting that al Qaeda has been reported to own fifteen cargo ships that may be used as "floating bombs").

⁵ United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter LOSC]. The provisions of the convention concerning the exclusive economic zone and the high seas are largely considered a reflection of customary international law. See Natalie Klein, *Legal Implications of Australia's Maritime Identification System*, 55 INT'L & COMP. L.Q. 337, 340 (2006).

the LOSC. Further, it discusses developments on this issue since the creation of the LOSC in state practice as well as in the decisions of the International Maritime Organization (IMO).⁶ Additionally, it explains why safety zones with a maximum breadth of 500 meters, as are allowed under the LOSC, are insufficient for protecting offshore platforms from terrorist attacks. Part III examines other sources of international law that may provide the legal authority necessary for protecting offshore platforms from attack. It discusses the right of self-defense, rights under the law of naval warfare, and the possibility of requesting the UN Security Council to authorize the use of forcible measures to enforce restrictions on navigation near a state's offshore platforms. It further examines the contribution of the 1988 Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf in this regard. Finally, Part IV proposes solutions for the shortcomings of the current legal regime concerning the protection of offshore platforms.

This Article focuses on coastal state rights for protecting offshore platforms from terrorist attacks launched from sea vessels. Although terrorists may also attempt to use aircraft for attacking those vulnerable assets, coastal state rights concerning the prevention of such attacks do not appear in this Article. Nonetheless, many of the legal conclusions in this Article are also relevant for an analysis of a state's rights against an aerial threat.

I. The Problem of Protecting Offshore Platforms from Attack

Offshore platforms constitute high-value targets for terrorist attacks for two main reasons: (1) their importance to many states in generating energy and income and (2) the severe damage an attack on such assets may

⁶ The IMO is a specialized agency of the United Nations tasked primarily with the development of detailed regulations for international shipping, maritime safety, prevention of marine pollution, and maritime security. Such regulations are formulized through diplomatic conventions convened by the IMO, as well as through the work of the IMO's specialized committees, which promote cooperation among member states on legal and technical matters relating to the aforementioned areas. The IMO consists of an Assembly, a Council, and a Secretariat. All member states are represented in the Assembly, which elects the Council. The Secretariat operates under the guidance of the IMO Secretary General. See DONALD R. ROTHWELL & TIM STEPHENS, *THE INTERNATIONAL LAW OF THE SEA* 344 (2010); Craig H. Allen, *Revisiting the Thames Formula: The Evolving Role of the International Maritime Organization and its Member States in Implementing the 1982 Law of the Sea Convention*, 10 *SAN DIEGO INT'L L.J.* 265, 271–273 (2009).

inflict. The offshore oil and natural gas industry is the world's largest marine industry, and oil production alone amounts to more than \$300 billion per year.⁷ Furthermore, natural gas and oil are a significant source of energy and an important source of income to states that control these resources.⁸ Consequently, an attack on an offshore oil or gas platform could not only interrupt a nation's regular supply of energy, but also deprive it of an important source of income. Yet, the results of a terrorist attack on an offshore platform are not limited to those discussed above. Such attacks, especially when aimed at oil platforms, could also cause severe and long-term environmental damage.⁹

Besides the devastating damage they may inflict, attacks on offshore platforms are tempting to terrorists for another reason: these platforms are difficult to protect. While attacks on military bases, government installations, and transportation routes are becoming more difficult to carry out due to increased security, offshore platforms remain rather vulnerable.¹⁰ The isolation of these platforms, their distance from shore, and their widespread presence¹¹ make it virtually impossible for states to protect them

⁷ Wrathall, *supra* note 2, at 225.

⁸ Additionally, the oil and gas industry is a major source of employment in many countries. For example, the oil and gas industry in the Gulf of Mexico employs approximately 55,000 people annually. ECORIGS & LA. UNIV. MARINE CONSORTIUM, REMOVAL OF OFFSHORE OIL AND GAS PLATFORMS 3 (2008).

⁹ For example, the 1983 Iraqi attack on Iran's Nowruz oil platform resulted in the spilling of 2 million barrels (approximately 84 million gallons) of oil into the Persian Gulf and led to the loss of marine life, damage to the gulf ecosystem, and atmospheric pollution. See Margaret T. Okorodudu-Fubara, *Oil in the Persian Gulf War: Legal Appraisal of an Environmental Warfare*, 23 ST. MARY'S L.J. 123, 129, 134 (1991). Recent accidents involving oil platforms further illustrate the severe and long-term environmental damage an attack on an oil platform could cause: on March 20, 2001, an explosion on the Petrobras P-36 oil platform, located 75 miles off the coast of Brazil, resulted in a massive leak of 312,000 gallons of oil. *Giant Oil Rig Sinks*, 5 OIL DROP 1, 1–3 (2001). A blowout on the Deepwater Horizon oil rig on April 20, 2010, produced the largest accidental marine oil spill in U.S. history: approximately 200 million gallons of oil were discharged into the Gulf of Mexico. The incident impacted the livelihoods of fisherman, destroyed numerous marine animals and organisms, and polluted beaches and marshes. See Griggs, *supra* note 3, at 57–58; NAT'L COMM'N ON THE BP DEEP WATER HORIZON OIL SPILL & OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING: REPORT TO THE PRESIDENT 173–195 (2011).

¹⁰ Gal Luft & Anne Korin, *Terror's Next Target*, INST. FOR ANALYSIS GLOBAL SECURITY, <http://www.iags.org/n0111041.htm> (last visited Jan. 10, 2012).

¹¹ For example, in the Gulf of Mexico alone there are over 3,900 offshore platforms. ECORIGS & LA. UNIV. MARINE CONSORTIUM, *supra* note 8, at 1.

completely from attack. Moreover, these platforms are engaged in the exploration and storage of large quantities of flammable liquids or gases that may significantly increase the effect of an attack.¹² Finally, offshore platforms are usually fixed to a permanent location and cannot conduct evasive maneuvers when attacked.

The threat to offshore platforms is enhanced by the fact that terrorist organizations have in past years obtained advanced capabilities that may be used for launching such attacks. For example, al Qaeda was once believed to own or control approximately fifteen cargo ships that could be used as “floating bombs” against offshore targets.¹³ Additionally, a recent interception of a cargo vessel in the Eastern Mediterranean revealed advanced shore-to-sea missiles allegedly sent from Iran to terrorists in Gaza.¹⁴ These missiles are capable of striking an offshore target at a distance of twenty-one kilometers (approximately eleven nautical miles).¹⁵

Although there have been few successful terrorist attacks on offshore platforms thus far, attacks and attempted attacks have become more frequent in the past several years.¹⁶ For example, more than fifteen terrorist attacks were launched in the last decade against oil platforms off the shore of Nigeria.¹⁷ Attackers kidnapped, killed, and injured crewmembers, and damaged equipment on the platforms, which consequently disrupted drilling activities.¹⁸ In another incident on April 24, 2004, terrorists

¹² Stuart Kaye, *Threats from the Global Commons: Problems of Jurisdiction and Enforcement*, 8 MELB. J. INT'L L. 185, 190 (2007).

¹³ Roach, *supra* note 4, at 41.

¹⁴ Zacharia, *supra* note 4.

¹⁵ Zacharia, *supra* note 4.

¹⁶ Mikhail Kashubsky, *A Chronology of Attacks on and Unlawful Interferences with Offshore Oil and Gas Installations, 1975 – 2010*, PERSP. ON TERRORISM, <http://www.terrorismanalysts.com/pt/index.php/pot/article/view/offshore-gas-and-oil-attacks>.

¹⁷ *Id.*

¹⁸ *Id.* In addition, several offshore platforms were attacked by pirates in the last decade. *Id.* Attacks have also been directed against other parts of the oil industry. For instance, on October 6, 2002, terrorists rammed a boat full of explosives into the French tanker *MT Limburg* in the Gulf of Aden off the Yemeni coastline. As a result, one crewmember died and approximately 90,000 barrels of oil (roughly 4 million gallons) poured into the sea. See PHILIPP WENDEL, STATE RESPONSIBILITY FOR INTERFERENCES WITH THE FREEDOM OF NAVIGATION IN PUBLIC INTERNATIONAL LAW 26 (2007).

launched a suicide attack on Iraq's two main offshore oil terminals.¹⁹ Coalition forces thwarted the attack, but it resulted in the death of three American servicemen.²⁰ These incidents illustrate that terrorist organizations have become aware of the potential damage that may be inflicted through attacks on the offshore oil and gas industry.²¹

This disturbing reality clearly requires states to examine their approach for securing offshore platforms. However, as the next part of this article illustrates, states that wish to take measures to protect their offshore platforms from attack lack the sufficient legal authority to do so effectively.

II. Protecting Offshore Platforms Under the International Law of the Sea

A. *The Key Legal Terms Involved*

Before addressing the available legal tools for protecting offshore platforms in different parts of the sea, this Section briefly explains key legal terms of the international law of the sea. These terms are important for understanding the discussion and arguments in subsequent Sections.

1. Territorial Sea

The "territorial sea" is the belt of sea adjacent to a state's territory, extending up to twelve nautical miles from the state's baselines and subject to the sovereignty of the coastal state.²² As part of this sovereignty, a coastal

¹⁹ Patrick J. McDonnell, *Suicide Boats Attack Iraqi Oil Installations in Gulf*, L.A. TIMES, Apr. 24, 2004, available at <http://articles.latimes.com/2004/apr/25/world/fg-iraq25>.

²⁰ *Id.*

²¹ This awareness is clearly demonstrated in a letter allegedly signed by Osama bin Laden that was revealed following the attack on the French tanker *MT Limburg*, discussed *supra* note 18. According to the letter, "[b]y exploding the tanker in Yemen, the holy warriors hit the umbilical cord and lifeline of the crusader community, reminding the enemy of the heavy cost of blood and the gravity of losses they will pay as a price for their continued aggression on our community and looting of our wealth." Ewen MacAskill & Brian Whitaker, *Alleged Bin Laden Letter Revels in Recent Attacks*, GUARDIAN, Oct. 15, 2002, available at <http://www.guardian.co.uk/world/2002/oct/15/alqaida.terrorism>.

²² LOSC, *supra* note 5, arts. 2–3; U.S. DEP'T OF NAVY, THE COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS, 1–2 (2007) [hereinafter NAVAL HANDBOOK]. Baselines are artificial lines that are determined by the coastal state in accordance with the provisions in Part II, Section 2 of the LOSC. Baselines are also used for measuring the breadth of other maritime zones. The waters on the landward side of the baselines are called internal waters. The coastal state exercises full sovereignty over its internal waters,

state has absolute authority to regulate all resource-related activities, such as, *inter alia*, the construction of platforms for the extraction of oil or gas from the seabed.²³ Nevertheless, vessels of all states enjoy a “right of innocent passage through the territorial sea.”²⁴ “Passage” means “continuous and expeditious” navigation for the purpose of traversing the territorial sea without entering internal waters.²⁵ Passage is considered “innocent” as long as it “is not prejudicial to the peace, good order or security of the coastal state.”²⁶ Nevertheless, in its territorial sea, a coastal state may take measures to enhance security and safety, including, in certain cases, the temporary suspension of innocent passage.²⁷

2. Contiguous Zone

The “contiguous zone” is the sea area adjacent to a state’s territorial sea and may extend up to twenty-four nautical miles from the state’s baselines.²⁸ In its contiguous zone, a coastal state does not enjoy the sovereign rights and prerogatives it possesses in its territorial waters.²⁹ The state may, however, exercise the degree of control necessary to prevent violations of its customs, fiscal, immigration, or sanitary laws and regulations within its territory or territorial sea and punish any such violators accordingly.³⁰ Consequently, vessels and aircraft of all nations enjoy freedom of navigation and overflight in the contiguous zone, subject to the coastal state’s laws pertaining to customs, fiscal, immigration, and sanitary matters.³¹

3. Exclusive Economic Zone

The “exclusive economic zone” (EEZ) is the area beyond and adjacent to the territorial sea, and may extend to up to 200 nautical miles

which under international law have the same legal character as the state’s land territory. *See id.* at 1–7.

²³ ROTHWELL & STEPHENS, *supra* note 6, at 75; LOSC, *supra* note 5, art. 2.

²⁴ LOSC, *supra* note 5, arts. 17–19; ROTHWELL & STEPHENS, *supra* note 6, at 76.

²⁵ LOSC, *supra* note 5, art. 18.

²⁶ *Id.* art. 19. Article 19 includes a list of activities that shall be considered to be prejudicial to the peace, good order, and security of the coastal state. *See id.*

²⁷ *See infra* Part II.B.

²⁸ LOSC, *supra* note 5, art. 33.

²⁹ *See id.*

³⁰ *Id.*

³¹ NAVAL HANDBOOK, *supra* note 22, at 2–9.

from a state's baselines.³² In its EEZ, a coastal state exclusively possesses numerous sovereign rights for the purpose of economic and scientific exploitation of the natural resources of the seabed, subsoil, and the waters superjacent to the seabed.³³ However, other states still enjoy the freedom of navigation and overflight in these areas.³⁴ Accordingly, when navigating in the EEZ, vessels are subject to the jurisdiction of their flag state in all matters except those that fall within the coastal state's exclusive jurisdiction.³⁵ In exercising their rights in the EEZ, both the coastal state and other nations are required to have "due regard" to the rights of one another.³⁶

Inside an EEZ, a coastal state has the exclusive authority to construct, or authorize the construction of, artificial islands, installations, and structures (these three categories will hereinafter be referred to as "offshore platforms"), such as rigs for drilling oil from the seabed.³⁷ The coastal state will then have exclusive jurisdiction over any such offshore platforms, pursuant to which it may take measures—such as the establishment of safety zones—to ensure both the safety of the platform itself and the navigability of its surrounding waters.³⁸

4. Continental Shelf

The "continental shelf" is the area that extends beyond the territorial sea of a state to either the outer edge of the continental margin or

³² LOSC, *supra* note 5, arts. 55, 57. In order to enjoy rights in the EEZ, the coastal state is required to claim an EEZ. *See* ROTHWELL & STEPHENS, *supra* note 6, at 85. States with adjacent or opposite coasts are expected to enter agreements for the delimitation of the EEZ between them. *See* LOSC, *supra* note 5, art. 74.

³³ LOSC, *supra* note 5, art. 56(1)(a).

³⁴ *Id.* art. 58.

³⁵ *See* ROTHWELL & STEPHENS, *supra* note 6, at 93.

³⁶ LOSC, *supra* note 5, arts. 56, 58. The "due regard" standard requires states to respect the rights of other states in the area and to refrain from activities that unreasonably interfere with such rights. *See* U.S. DEP'T OF STATE, COMMENTARY—THE 1982 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA AND THE AGREEMENT ON IMPLEMENTATION OF PART XI 24, 26 (1994). All nations are also required to comply with the coastal state's laws and regulations regarding its exclusive rights in the area. LOSC, *supra* note 5, art. 58(3).

³⁷ *Id.* art. 60(1). The terms artificial islands, installations, and structures are broad and cover a wide array of offshore platforms. Geir Ulfstein, *The Conflict Between Petroleum Production, Navigation and Fisheries in International Law*, 19 OCEAN DEV. & INT'L L. 229, 239 (1988).

³⁸ LOSC, *supra* note 5, art. 60(2), (4). *See infra* Part II.C (elaborating on the right to establish safety zones around offshore platforms).

to a distance of 200 nautical miles from the state's baselines, whichever is greater.³⁹ A coastal state enjoys sovereign rights over its continental shelf for the purposes of exploration and exploitation of natural resources.⁴⁰ Similar to the EEZ, a coastal state may construct offshore platforms pursuant to this right.⁴¹ The rules that apply to the construction and operation of offshore platforms in the EEZ also apply to such platforms on the continental shelf.⁴² All nations enjoy the freedom of navigation and overflight over a state's continental shelf.⁴³

5. The High Seas

The "high seas" are comprised of areas of the sea that are not included in the EEZ, territorial sea, or the internal waters of any state.⁴⁴ In those areas, all states possess "freedom of the high seas," which includes, *inter alia*, freedom of navigation and overflight and the freedom to construct offshore installations.⁴⁵ In exercising high seas freedoms, states must have "due regard"⁴⁶ for the interests of other states.⁴⁷ Additionally, when in the high seas, vessels are subject to the exclusive jurisdiction of the flag state.⁴⁸ Indeed, but for a few exceptions,⁴⁹ states may not exercise law enforcement jurisdiction over vessels bearing a foreign flag.⁵⁰

³⁹ LOSC, *supra* note 5, art. 76(1). States with adjacent or opposite coasts are expected to enter agreements for the delimitation of the continental shelf between them, as they are with regard to the EEZ. *See id.* art. 83.

⁴⁰ *Id.* art. 77. However, these rights are limited only to natural resources on the seabed and subsoil and, unlike rights in the EEZ, do not extend to natural resources in the superjacent waters, such as fish. *Id.* art. 77(4). Another feature that differentiates the continental shelf from the EEZ is that the coastal state's rights on the continental shelf do not depend upon a proclamation. *See id.* art. 77(3).

⁴¹ *Id.* art. 80.

⁴² *See id.*

⁴³ *See id.* art. 78.

⁴⁴ *Id.* art. 86. Archipelagic waters of an archipelagic state are similarly not considered part of the high seas. For a definition of the term archipelagic state, *see id.* art. 46.

⁴⁵ *Id.* art. 87(1).

⁴⁶ *See supra* note 39.

⁴⁷ LOSC, *supra* note 5, art. 87(2).

⁴⁸ ROTHWELL & STEPHENS, *supra* note 6, at 149–50.

⁴⁹ Such exceptions include involvement of a vessel in piracy, slave trade, and unauthorized broadcasting. *See* LOSC, *supra* note 5, art. 110.

⁵⁰ Natalie Klein, *Legal Limitations on Ensuring Australia's Maritime Security*, 7 MELB. J. INT'L L. 306, 311–12 (2006).

B. Protection of Offshore Platforms in the Territorial Sea

Although vessels of all states are entitled to exercise innocent passage in a state's territorial sea, the law of the sea provides coastal states with the authority to take measures to promote safety and security within that area. States may use this authority for preventing terrorist attacks on offshore platforms located within the territorial sea. It should be noted, however, that the discussion in this and the following Sections focuses on coastal state authority over the activities of foreign vessels. With regard to vessels flying its own flag, the coastal state has an even broader authority to impose limitations and regulations on the conduct no matter where they are, but especially in its territorial sea.⁵¹

States have a right to take necessary steps to prevent non-innocent passage within their territorial sea and may use this right to better protect offshore platforms in that area.⁵² As noted, in order to be considered innocent, passage of a vessel in foreign territorial waters must not be "prejudicial to the peace, good order or security of the coastal State."⁵³ In this regard, Article 19(2) of the LOSC contains a list of specific foreign activities in the territorial sea that would be considered "prejudicial" in this sense. This list includes activities such as the threat or use of force against the coastal state, any exercise with weapons, and "any other activity not having a direct bearing on passage."⁵⁴ The list also labels as non-innocent "any act aimed at interfering with any systems of communication or any other facilities or installations of the coastal State."⁵⁵ The term "any other facilities or installations" is broad and basically refers to all offshore platforms in the territorial sea.⁵⁶ Consequently, a coastal state may prevent a vessel engaged in an act aimed at interfering with the activity of an offshore platform from gaining access to its territorial sea.⁵⁷ To this end, an attempt

⁵¹ 2 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA 1982: A COMMENTARY 212 (Myron H. Nordquist et al. eds., 1993) [hereinafter LOSC COMMENTARY].

⁵² LOSC, *supra* note 5 art. 25(1).

⁵³ *Id.* art. 19(1); R. R. CHURCHILL & A. V. LOWE, THE LAW OF THE SEA 82-87 (3rd ed. 1999).

⁵⁴ LOSC, *supra* note 5, art. 19(2).

⁵⁵ *Id.*

⁵⁶ See LOSC COMMENTARY, *supra* note 51, at 176, 200; Hossein Esmacili, *The Protection of Offshore Oil Rigs in International Law (Part I)*, 18 AUSTL. MINING & PETROLEUM L.J. 241, 244 (1999).

⁵⁷ LOSC, *supra* note 5, art. 25(1). One commentator argues that a comparison between the said provision and other provisions in Article 19 leads to a conclusion that minor

to attack an offshore platform would clearly qualify as an act aimed at interfering with the activity of the platform. Accordingly, the coastal state could prevent access to its territorial sea to any vessel engaged in such an activity. In order to do so, however, the coastal state would need to know that the relevant vessel is engaged in an attempt to attack offshore platforms. Hence, this authority would be of little utility where the coastal state lacked such information.

A second right the coastal state may invoke for the purpose of protecting its offshore platforms is the right to temporarily suspend innocent passage of foreign vessels in specified areas of its territorial sea.⁵⁸ Such suspensions are allowed only if they are “essential for the protection” of the coastal state’s security.⁵⁹ States have liberally interpreted this right in practice, invoking it not only when necessary, but also when expedient for the protection of the coastal state’s security.⁶⁰ This right may thus allow the coastal state to suspend innocent passage in the vicinity of offshore platforms in order to protect them from terrorist attacks. Nevertheless, although this authority could prove useful in protecting offshore platforms in case of high alert for a terrorist attack, its temporary nature does not provide a permanent solution for securing these assets.

interference with an offshore installation would not be considered “prejudicial to the peace, good order or security of the coastal State.” Esmaili, *supra* note 56, at 245. He fails, however, to address Article 19(k)’s emphasis on the intent behind the activity, expressed in the words “aimed at interfering,” as opposed to the activity itself. In this writer’s opinion, that emphasis leads to a conclusion that any act aimed at causing interference to the operation of an offshore platform, whether minor or major, would be considered “prejudicial to the peace, good order or security of the coastal State.” In this regard, it is worth noting that where the drafters of Article 19 wished to demand both gravity and intent for an activity to be considered “prejudicial to the peace, good order or security . . .” they did so explicitly. For example, Article 19(h) refers to “any act of willful and serious pollution.” Therefore, the fact that the drafters did not demand that the act be aimed to cause “serious” interference with an offshore platform implies that they did not intend to limit the application of the said provision to such acts.

⁵⁸ LOSC, *supra* note 5, art. 25(3); CHURCHILL & LOWE, *supra* note 53, at 87. This right was also included in the Convention on the Territorial Sea and the Contiguous Zone, art. 16(3), Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205.

⁵⁹ LOSC, *supra* note 5, art. 25(3); *cf.* CHURCHILL & LOWE, *supra* note 53, at 87.

⁶⁰ CHURCHILL & LOWE, *supra* note 53, at 87–88. In implementing such temporary suspensions the coastal state may not discriminate “in form or in fact among foreign ships.” LOSC, *supra* note 5, art. 25(3). The coastal state is also required to duly publish any planned suspension before putting it into effect. *Id.*

The coastal state is also entitled to adopt laws and regulations with respect to “the safety of navigation and the regulation of maritime traffic” and “the protection of navigational aids and facilities and other facilities or installations.”⁶¹ Foreign vessels must comply with such laws and regulations.⁶² Accordingly, the coastal state may impose limitations on navigation of vessels in the vicinity of its offshore platforms in order to ensure the safety of those platforms. Such measures may require vessels to change their course or to follow instructions that may prolong their journey, as long as this does not unreasonably hamper their right to innocent passage.⁶³ Under this authority, a coastal state could establish safety zones around its offshore platforms and prohibit unauthorized access to those zones. This could allow security personnel on the platforms to identify more effectively potential attacks and to take measures to prevent them, such as dispatching a speedboat with armed personnel to examine a vessel that has entered the safety zone without permission. Of course, the safety zones would have to be wide enough to allow such responses.

Finally, a coastal state may require foreign vessels in its territorial sea to use designated sea lanes and prescribed traffic schemes. Coastal states are entitled to impose such requirements, especially with regard to the passage of tankers, nuclear-powered ships, and ships carrying inherently dangerous or noxious substances or materials.⁶⁴ Accordingly, a coastal state could use this authority to prevent vessels from approaching the close vicinity of its offshore platforms. Nevertheless, when imposing such measures, the coastal state would be required to take into account recommendations of the International Maritime Organization (IMO),⁶⁵ channels customarily used for international navigation, special characteristics of specific ships and channels, and the density of traffic.⁶⁶ In addition, as the authority to use sea lanes and traffic schemes is intended to promote the safety of navigation, for example, the prevention of collisions,⁶⁷ the implementation of such

⁶¹ LOSC, *supra* note 5, art. 21(1)(a),(b); *cf.* LOSC COMMENTARY, *supra* note 51, at 200; CHURCHILL & LOWE, *supra* note 53, at 95.

⁶² *See* LOSC, *supra* note 5, art. 21(4); CHURCHILL & LOWE, *supra* note 53, at 95.

⁶³ Esmacili, *supra* note 56, at 245.

⁶⁴ LOSC, *supra* note 5, art. 22.

⁶⁵ Article 22(3)(a) of the LOSC refers to “recommendations of the competent international organization.” The IMO is the only international organization recognized for such purposes. LOSC COMMENTARY, *supra* note 51, at 212.

⁶⁶ LOSC, *supra* note 5, art. 22(3)(b)–(d).

⁶⁷ *Id.* art. 22(1); LOSC COMMENTARY, *supra* note 51, at 211–12; ROTHWELL & STEPHENS, *supra* note 6, at 221.

measures for purely security purposes, such as the prevention of terrorist attacks, might draw criticism.⁶⁸

Clearly, in their territorial sea, states are entitled to implement certain measures that may enhance the protection of offshore platforms. Although there are limits to each of the rights discussed in this Section, these rights provide coastal states with sufficient authority to prevent attacks on offshore platforms. As explained in the following Sections, this stands in direct contrast to the more limited authority coastal states possess to protect offshore platforms in their contiguous zones, EEZs, and on their continental shelves.

C. Protection of Offshore Platforms in the Contiguous Zone

A state's jurisdiction in its contiguous zone is limited to the regulation of customs, fiscal, immigration, or sanitary issues.⁶⁹ Since the contiguous zone is also considered a part of a state's EEZ when an EEZ has been declared, the rights accorded to a state with regard to protecting its offshore platforms in the contiguous zone are similar in the two zones. These rights in the EEZ are thoroughly discussed in Subsection D.

D. Protection of Offshore Platforms in the EEZ and on the Continental Shelf

1. The Evolution of Safety Zones

a. The First United Nations Conference on the Law of the Sea

The 1958 Convention on the Continental Shelf ("Continental Shelf Convention")⁷⁰—drafted during the 1958 United Nations Conference on the Law of the Sea ("UNCLOS I")—was the first convention to codify a coastal state's right to install offshore platforms on its continental shelf and to establish safety zones around those platforms. The Convention also created a fixed limit of 500 meters for the breadth of such safety zones.

⁶⁸ See LOSC COMMENTARY, *supra* note 51, at 211–12.

⁶⁹ Nevertheless, some states have claimed a right to exercise jurisdiction on security issues in their contiguous zones. Several of those claims were protested by the United States. See J. ASHLEY ROACH & ROBERT W. SMITH, UNITED STATES RESPONSES TO EXCESSIVE MARITIME CLAIMS 166–71 (2d ed.1996).

⁷⁰ Convention on the Continental Shelf, Apr. 29, 1958, 15 U.S.T. 471, 499 U.N.T.S. 311 [hereinafter Continental Shelf Convention].

However, this limit was based on analogous regulations concerning the safety of oil production facilities on land⁷¹ and did not adequately address the distinct threats platforms face in the offshore environment.⁷²

The notion of safety zones around offshore platforms was born in the International Law Commission's (ILC) deliberations on the legal regime pertaining to the Continental Shelf in the early 1950s.⁷³ In its report to the UN General Assembly in 1956, the ILC recommended that coastal states be allowed to construct and maintain installations on their continental shelf and to establish safety zones at a "reasonable distance" around these installations.⁷⁴ In the ILC's view, the establishment of safety zones was necessary due to the "extreme vulnerability" of these installations and the need to protect them from shipping.⁷⁵

The ILC further suggested that states be authorized within these safety zones to take measures necessary for protecting offshore installations.⁷⁶ As for the breadth of those zones, although the ILC "did not consider it essential to specify the size of the[se] safety zones," it stated that generally "a maximum radius of 500 metres is sufficient for the purpose."⁷⁷ This proposed limit was not based on extensive research on methods for combating threats unique to offshore installations. Instead, it was borrowed from national legislation concerning the protection of oil production facilities on land from the dangers of fire.⁷⁸

UNCLOS I further discussed the issue of building installations on the continental shelf and establishing safety zones around them.⁷⁹ Consequently, provisions on this matter were included in the Continental Shelf Convention ("Convention"). This Convention gives coastal states the right to construct, maintain, and operate offshore platforms (which are

⁷¹ See Ulfstein, *supra* note 37, at 244.

⁷² See *infra* Part II.D.2.a.

⁷³ Stuart Kaye, *International Measures to Protect Oil Platforms, Pipelines, and Submarine Cables from Attack*, 31 TUL. MAR. L.J. 377, 381–382 (2007); Esmacili, *supra* note 56, at 246.

⁷⁴ *Articles Concerning the Law of the Sea*, reprinted in [1956] 2 Y.B. Int'l L. Comm'n 264, 299, U.N. Doc. A/CN.4/97; see also Esmacili, *supra* note 56, at 246.

⁷⁵ *Articles Concerning the Law of the Sea*, *supra* note 74, at 270. See also CLIVE R. SYMMONS, *THE MARITIME ZONES OF ISLANDS IN INTERNATIONAL LAW* 106 (1979).

⁷⁶ *Articles Concerning the Law of the Sea*, *supra* note 74, at 299.

⁷⁷ *Id.*

⁷⁸ Ulfstein, *supra* note 37, at 244.

⁷⁹ Esmacili, *supra* note 56, at 246.

referred to as “installations and other devices”) on the continental shelf, for the exploration and exploitation of their natural resources.⁸⁰ Moreover, it authorizes coastal states to establish safety zones around offshore platforms and “to take in those zones measures necessary for their protection.”⁸¹

As for the breadth of safety zones, several of the states participating in UNCLOS I suggested including in the convention a fixed limit on breadth, arguing that disputes would inevitably arise absent a fixed determination.⁸² Although this view eventually prevailed, instead of creating a fixed breadth that was specifically tailored to address threats in the offshore environment, drafters of the Convention chose to use the same breadth that had been included in the ILC’s report—500 meters.⁸³

Thus, the Continental Shelf Convention was the first codification of the coastal state’s right to install offshore platforms on its continental shelf and to establish safety zones to protect those platforms. However, the 500-meter limit on the breadth of safety zones, which was included in that convention, had been based on analogous regulations concerning the protection of oil production facilities on land from the dangers of fire. Apparently, the distinct attributes of the offshore oil and gas industry and navigational safety issues were not taken into account when this limit was adopted. Even today, with fifty-seven states party to the Continental Shelf Convention,⁸⁴ its provisions concerning offshore platforms have not been

⁸⁰ Continental Shelf Convention, *supra* note 70, art. 5, para. 2.

⁸¹ *Id.* Furthermore, ships of all states are required to respect those safety zones and the coastal state is entitled to prevent entry to such zones. *See id.* art. 5, para. 3; SYMMONS, *supra* note 75, at 106.

⁸² Esmacili, *supra* note 56, at 247; SYMMONS, *supra* note 75, at 106. In this regard, the Netherlands proposed to limit the width of safety zones to a distance of fifty meters around oil rigs to prevent fires from starting on rigs due to the lighting of cigarettes on private yachts. The United States opposed the establishment of a fixed limit on safety zones. Ulfstein, *supra* note 37, at 244.

⁸³ Continental Shelf Convention, *supra* note 70, art. 5, para. 3. Besides limiting the breadth of safety zones, the Convention also prohibits their establishment (or the establishment of the platforms they are meant to protect) where they may interfere with “recognized sea lanes essential to international navigation.” *Id.* art. 5, para. 6. Furthermore, it proscribes the establishment of platforms and safety zones where they may result in an “unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea,” or where they may interfere with “fundamental oceanographic or other scientific research carried out with the intention of open publication.” *Id.* art. 5, para. 1.

⁸⁴ Kaye, *supra* note 73, at 384.

heavily disputed.⁸⁵ The Second United Nations Conference on the Law of the Sea did not address the issues of offshore platforms and safety zones.⁸⁶ Nevertheless, as the following Subsection stresses, delegates participating in the Third United Nations Conference on the Law of the Sea (UNCLOS III) thoroughly discussed these matters.

b. The Third United Nations Conference on the Law of the Sea

As offshore gas and oil production grew in the 1960s and 1970s, several states stressed the need to further clarify the regime concerning the exploration and exploitation of natural resources under coastal state jurisdiction.⁸⁷ This led to extensive discussions on this matter in UNCLOS III. Among the issues discussed was the breadth of safety zones. Several states proposed that coastal states should be given more discretion to determine the breadth of those zones.⁸⁸ However, fear of disturbing the “delicate balance” between exploitation of natural resources and the freedom of navigation eventually led to the re-adoption of the 500-meter rule, with a possibility to establish larger zones if authorized by “generally accepted international standards” or recommended by the IMO.⁸⁹

The earliest draft proposals in UNCLOS III did not specify a maximum distance for safety zones. Instead, the determination of the breadth of safety zones would have been left to the discretion of the coastal state.⁹⁰ For example, in a 1973 proposal, the United States suggested that coastal states be authorized to determine the breadth of their safety zones, as long as these zones are “reasonably related to the nature and function of

⁸⁵ *Id.*

⁸⁶ This conference was convened for discussing two issues only: the breadth of the territorial sea and fishery limits. *See* SECOND UNITED NATIONS CONFERENCE ON THE LAW OF THE SEA: OFFICIAL RECORDS ix (1960); ROTHWELL & STEPHENS, *supra* note 6, at 9.

⁸⁷ Kaye, *supra* note 73, at 384. Among states that proposed to clarify the said regime were the United States, Belgium, the USSR, Malta, and several Latin American states. *See* LOSC COMMENTARY, *supra* note 51, at 574–76.

⁸⁸ States that held such a position include India, Turkey, and Nigeria. The United States had also supported this approach. However, it later submitted a proposal that was similar to the rule which was eventually adopted in Article 60 of the LOSC. SYMMONS, *supra* note 75, at 10–11; LOSC COMMENTARY, *supra* note 51, at 575–77, 581.

⁸⁹ *See* LOSC, *supra* note 5, art. 60, para. 5; 1 D. P. O’CONNELL, THE INTERNATIONAL LAW OF THE SEA 503 (I. A. Shearer ed., 1982).

⁹⁰ *See* Kaye, *supra* note 73, at 384. Additionally, D. P. O’Connell notes that several “concerned [s]tates” attempted to extend the breadth of safety zones to 2,000–4,000 meters. O’CONNELL, *supra* note 89.

the installation” and “conform to international standards.”⁹¹ Turkey expressed a similar view, arguing that a 500-meter safety zone would be insufficient for protecting contemporary installations.⁹² India, too, claimed that a 500-meter safety zone would be inadequate for protecting offshore platforms due to the “size and speed of modern tankers” and the time it would take to stop or divert such vessels.⁹³

Nevertheless, other states feared that giving coastal states discretion in determining the breadth of safety zones would lead to excessive limitations on navigation and disturb the “delicate balance” between exploitation of natural resources and the freedom of navigation.⁹⁴ This eventually led to the re-adoption of the 500-meter rule. Yet, as explained *infra*, drafters of the LOSC left a possibility for establishing larger zones.

The result is Article 60 of the LOSC. This article contains the framework for the construction and operation of “artificial islands, installations and structures” in the EEZ and on the continental shelf.⁹⁵ Article 60(4) authorizes a coastal state, “where necessary,” to establish “reasonable safety zones” around its offshore platforms, and provides that it may take “appropriate measures” to ensure safety both of navigation and of the platform itself.⁹⁶ Article 60(5) addresses the breadth of safety zones:

⁹¹ LOSC COMMENTARY, *supra* note 51, at 575; SYMMONS, *supra* note 75, at 106–07. Yet, the United States later supported the inclusion of a fixed 500-meter limit. *See supra* note 88.

⁹² SYMMONS, *supra* note 75, at 107.

⁹³ VICE ADMIRAL GM HIRANANDANI (RETD.), TRANSITION TO GUARDIANSHIP 78 (2009). India suggested that the coastal state be given the right to designate an area of the EEZ, in which it would “prohibit or regulate the entry and passage of foreign ships” and take other measures it deems “necessary or appropriate” for protecting the mineral or living resources or “other economic uses” of the area, ensuring safety of offshore structures, protecting the environment, and preventing smuggling. LOSC COMMENTARY, *supra* note 51, at 581.

⁹⁴ *See* O’CONNELL, *supra* note 89.

⁹⁵ LOSC, *supra* note 5, art. 60. Although this article is located in Part V of the Convention, which deals with EEZs, its provisions apply *mutatis mutandis* to the establishment of offshore platforms on the continental shelf. *See id.* art. 80. Furthermore, similar to the regime under the Continental Shelf Convention, the LOSC states that a coastal state’s exercise of rights over the continental shelf, including its right to construct offshore platforms and to establish safety zones around them, “must not infringe or result in an unjustifiable interference with navigation.” *Id.* art. 78, para. 2. In contrast, in its EEZ, the coastal state needs only to have “due regard” to the rights of other states. *Id.* art. 56, para. 2.

⁹⁶ LOSC, *supra* note 5, art. 60, para. 4. This stands in contrast to the Continental Shelf Convention that referred only to “measures necessary for [the offshore platforms]”

The breadth of the safety zones shall be determined by the coastal State, taking into account applicable international standards. Such zones shall be designed to ensure that they are reasonably related to the nature and function of the artificial islands, installations or structures, and shall not exceed a distance of 500 metres around them, measured from each point of their outer edge, except as authorized by generally accepted international standards or as recommended by the competent international organization.⁹⁷

Thus, in contrast to the Continental Shelf Convention, the LOSC created a mechanism for extending safety zones beyond the 500-meter limit.⁹⁸ According to Article 60(5), such an extension would be possible if “authorized by generally accepted international standards” or “recommended by the competent international organization.”⁹⁹ The rationale behind giving such authority to the “competent international organization,” referring to the IMO,¹⁰⁰ was to address concerns raised by states in the drafting process, such as the United States, Turkey, and India, that 500-meter safety zones would be insufficient in certain circumstances.¹⁰¹ Accordingly, drafters believed that navigational and security interests in certain areas would be better addressed through action by the IMO than by a unilateral decision of the coastal state.¹⁰² However, this authority remains unused. As mentioned in the next Section, despite requests for the IMO to authorize wider safety zones, the IMO has neither adopted recommendations on this matter nor established guidelines for developing such recommendations.¹⁰³ Furthermore, no “generally accepted

protection.” Compare Continental Shelf Convention, *supra* note 70, art. 5, para. 2, with LOSC, *supra* note 5, art. 60, para. 4. The LOSC text illustrates that the primary purpose of safety zones is to ensure safety of navigation. Kaye, *supra* note 73, at 386; see also LOSC COMMENTARY, *supra* note 51, at 586; Ulfstein, *supra* note 37, at 247.

⁹⁷ LOSC, *supra* note 5, art. 60, para. 5.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ See LOSC COMMENTARY, *supra* note 51, at 586–87.

¹⁰¹ See O’CONNELL, *supra* note 89.

¹⁰² See *id.*

¹⁰³ JAMES KRASKA, MARITIME POWER AND THE LAW OF THE SEA 213 (2011); LOSC COMMENTARY, *supra* note 51, at 586–87. See *infra* Part II.D.2.a (elaborating on the IMO’s deliberations on requests to establish safety zones larger than 500 meters).

international standards” have been articulated.¹⁰⁴ As a result, safety zones are currently limited to a breadth of 500 meters under the LOSC regime.

The rules concerning the establishment of safety zones adopted in the LOSC reflect the fear expressed by some states that such zones would subject international navigation to unnecessary limitations. During the negotiations in UNCLOS III, several states offered to leave the determination of the breadth of safety zones to the discretion of the coastal state. Nonetheless, difficulties in reaching an agreement on this issue eventually led to the re-adoption of the 500-meter limit in the LOSC, despite the insufficiency of 500-meter safety zones for protecting offshore platforms from safety hazards.

2. Developments Since the LOSC

a. Attempts to Obtain IMO Approval for Larger Safety Zones

In the past decades since the conclusion of the LOSC, several states have attempted to obtain IMO¹⁰⁵ authorization for establishing safety zones larger than 500 meters. To date, however, the IMO has authorized no such extensions. Furthermore, the IMO’s recent assertion that there is no need, at present, to develop guidelines for considering requests for larger safety zones implies that the organization will not authorize such requests in the near future.

Shortly after the LOSC had been concluded, the IMO addressed the threat that infringements of safety zones posed to offshore platforms.¹⁰⁶ During deliberations on the issue, Canada proposed several measures designed to better address the threat posed by such infringements.¹⁰⁷ First, Canada proposed to extend safety zones beyond 500 meters in certain cases.¹⁰⁸ Second, it proposed the establishment of “cautionary zones” not to exceed three nautical miles from the platforms to ensure effective communication between a platform and vessels passing in its vicinity. Finally, Canada suggested limiting navigation to designated sea routes in

¹⁰⁴ See KRASKA, *supra* note 103, at 213.

¹⁰⁵ For a brief overview of the IMO and its organs see *supra* note 6.

¹⁰⁶ See Ulfstein, *supra* note 37, at 245.

¹⁰⁷ See *id.*

¹⁰⁸ See *id.*

offshore exploration areas.¹⁰⁹ The Canadian proposals met with strong opposition in the IMO.¹¹⁰ Opposing states argued that the proposals would contradict Article 60 of the LOSC and would exceed the mandate of the IMO.¹¹¹ As a result, the IMO rejected these logical and innovative proposals, leaving the problem of inadequate safety zones unsolved.¹¹²

Infringements of safety zones thus continued to pose a significant threat to the safety of offshore platforms.¹¹³ In an attempt to address that threat, the IMO adopted several resolutions that included guidance to coastal states, flag states, and vessels on measures to prevent such infringements.¹¹⁴ The most recent resolution, Resolution A.671(16),¹¹⁵ contains several recommendations that states are requested to implement in order to prevent further infringements of safety zones. For example, governments are called to take “all necessary steps” to ensure that ships flying their flags do not enter duly established safety zones, unless specifically authorized.¹¹⁶ Additionally, the resolution encourages coastal states to report infringements of safety zones within their jurisdiction to the flag state of the infringing vessel.¹¹⁷

Yet, Resolution A.671(16) did not fully address concerns over collisions between vessels and offshore platforms. Several states still believed that 500-meter safety zones were insufficient for protecting offshore platforms from safety hazards. One of those states, Brazil, requested the IMO’s authorization for extending the breadth of safety zones surrounding

¹⁰⁹ *See id.*

¹¹⁰ *See id.*

¹¹¹ *See id.* Among states opposing the Canadian proposal were the USSR, the Federal Republic of Germany, and the United Kingdom. *Id.*

¹¹² *Id.*

¹¹³ *See* Int’l Maritime Org. [IMO], *Safety Zones and Safety of Navigation Around Offshore Installations and Structures*, Assembly Res. A.671(16), pmb., (Oct. 19, 1989).

¹¹⁴ *See id.*

¹¹⁵ *Id.* This resolution revoked older resolutions on the issue: Resolutions A.341(IX), A.379(X), and A.621(15). Nonetheless, it incorporated several of their recommendations.

¹¹⁶ *Id.* art. 1(d).

¹¹⁷ Upon receiving such a report, the flag state should take necessary action in accordance with its national legislation. *Id.* art. 1(d), annex arts. 3.1, 3.2. Although Resolution A.671(16) is not in itself legally binding, flag state parties to the LOSC are required to implement its recommendations with regard to vessels flying their flag. *See* LOSC, *supra* note 5, art. 60(6); ROTHWELL & STEPHENS, *supra* note 6, at 344; IMO Secretariat, *Implications of the United Nations Convention on the Law of the Sea for the International Maritime Organization*, at 10, annex at 7, IMO Doc. LEG/MISC.6 (Sept. 10, 2008) [hereinafter IMO Doc. LEG/MISC.6].

its oil platforms in the Campos Basin region in order to reduce the risk of collisions in 2007.¹¹⁸ Brazil demonstrated that routine offloading operations, during which a shuttle boat and a tanker are connected to the oil platform, require a radius of approximately 1,400 meters.¹¹⁹ Consequently, Brazil stressed the need for larger safety zones and requested the IMO's permission for establishing safety zones of a breadth of one to two miles (depending on the technical characteristics of the specific platform).¹²⁰ Brazil argued that such an extension would considerably reduce the frequency of collisions.¹²¹

Later that year, the IMO's Sub-Committee on Safety of Navigation discussed the Brazilian proposal. Although the proposal received general support in the Sub-Committee, it was not approved because no procedures or guidelines existed for determining proposed extensions of safety zones.¹²² Consequently, Brazil, together with the United States, filed another proposal for the establishment of a working program to develop guidelines that the IMO would use for considering requests for safety zones larger than 500 meters.¹²³ The two nations noted that in the four years prior to their proposal, three coastal states had requested the IMO's authorization for larger safety zones.¹²⁴ Considering the increase in size and complexity of offshore platforms, the proposal predicted that the number of requests would increase in the future.¹²⁵

However, the United States later withdrew from the proposal, noting that “[a]fter careful and thorough consideration, the United States believed there was no demonstrated need, at present, for safety zones larger

¹¹⁸ Braz., Proposal for the Establishment of an Area to be Avoided and Modifications to the Breadth of the Safety Zones Around Oil Rigs Located off the Brazilian Coast – Campos Basin, at 9, IMO Doc. NAV 53/3 (Feb. 26, 2007).

¹¹⁹ *Id.* at 5–6.

¹²⁰ *Id.* at 9.

¹²¹ *Id.* at 7.

¹²² IMO Mar. Safety Comm., Subcomm. on Safety of Navigation, Rep. on its 53rd Sess., para. 3.14, IMO Doc. NAV 53/22 (Aug. 14, 2007) [hereinafter IMO Doc. NAV 53/22]. Nevertheless, the Sub-Committee approved Brazil's request to establish an “Area to be Avoided” in the Campos Basin region. *Id.* paras. 3.52–53.

¹²³ U.S. & Braz., Development of Guidelines for Consideration of Requests for Safety Zones Larger than 500 Metres Around Artificial Islands, Installations and Structures in the Exclusive Economic Zone, paras. 1, 3, IMO Doc. MSC 84/22/4 (Feb. 4, 2008).

¹²⁴ *Id.* para. 5.

¹²⁵ *Id.*

than 500 metres or the development of guidelines for such zones.”¹²⁶ Furthermore, it argued that instead of working on the development of guidelines for such safety zones, the IMO should focus on available measures and on the organization’s existing guidance on safety zones that “perhaps had not been followed over time.”¹²⁷ The U.S. position eventually led the IMO’s Sub-Committee on Safety of Navigation to similarly conclude that “there was no demonstrated need, at present, to establish safety zones larger than 500 metres . . . or to develop guidelines to do so.”¹²⁸ This conclusion was later approved by the Maritime Safety Committee.¹²⁹

In conclusion, attempts in the last few decades to obtain IMO authorization for extending safety zones beyond the 500-meter limit have failed. Although several states have requested larger safety zones and demonstrated a compelling need for such extensions in order to prevent collision accidents, other states seemed reluctant to make use of the IMO’s authority in this regard. As a result, almost two decades after the LOSC entered into force, not only is there no example of IMO authorization for safety zones larger than 500 meters, but there are also no guidelines or procedures for evaluating requests for larger safety zones. It seems unlikely that the IMO will permit an extension of safety zones in the near future, unless an exceptional collision accident occurs. In this regard, it should be noted that the deliberations in the IMO on extending safety zones were focused solely on safety considerations. Considering the IMO’s safety-oriented mandate and the conflicting political interests a security-related request (that is, implementation of measures for preventing deliberate attacks as opposed to measures for preventing shipping accidents) may involve, it is unclear whether the IMO would be willing to consider an extension of safety zones based solely on security grounds.¹³⁰

¹²⁶ IMO Mar. Safety Comm., Subcomm. on Safety of Navigation, Rep. on its 56th Sess., para. 4.6, IMO Doc. NAV 56/20 (Aug. 31, 2010) [hereinafter IMO Doc. NAV 56/20].

¹²⁷ *Id.*

¹²⁸ *Id.* para. 4.15. This decision was seemingly motivated by the fear of limiting the freedom of navigation. The IMO reports do not specify the position of other states on this issue.

¹²⁹ See IMO Mar. Safety Comm., Rep. on its 88th Sess., para. 11.8, IMO Doc. MSC 88/26 (Dec. 15, 2010).

¹³⁰ See Ulfstein, *supra* note 37, at 251 (discussing the IMO’s “conservative approach” with regard to safety zones). *But see* Rosalie Balkin, *The International Maritime Organization and Maritime Security*, 30 TUL. MAR. L.J. 1, 2–3 (2006) (noting that “the IMO has taken a wide view of its mandate to promote safety in the shipping industry” and has acknowledged it has an important role in combating the threat terrorism poses to international navigation).

b. The 500-meter Rule in State Practice

A review of state practice reveals general acceptance of the 500-meter rule. In their domestic laws pertaining to the establishment of offshore platforms in the EEZ or on the continental shelf, several states have specifically limited the breadth of safety zones to 500 meters. Among those states are Belgium, Bulgaria, Denmark, France, the Russian Federation, Sweden, the United Kingdom, Poland, and Venezuela.¹³¹ Yet, in several other states, legislation concerning safety zones is less specific. For example, in Ireland, Malta, and Nigeria, domestic law allows the government to establish safety zones without specifying the maximum breadth of such zones.¹³² Norway, on the other hand, imposes limitations on fishing and anchoring in areas outside a 500-meter radius of platforms.¹³³ Furthermore, recent media reports indicate that at least one state is examining the possibility of extending safety zones around its offshore oil and gas platforms in order to better protect those platforms from terrorist attacks.¹³⁴

Consequently, although there seems to be wide acceptance of the 500-meter rule as a maximum limit on the breadth of safety zones, the practice of several states remains vague. However, as the following Subsection stresses, an analysis of state practice in this regard should take into account not only explicit claims pertaining to the breadth of safety

¹³¹ Esmacili, *supra* note 56, app. at 250–51; Hossein Esmacili, *The Protection of Oil Rigs in International Law (Part II)*, 19 AUSTL. MINING & PETROLEUM L.J. 35, 41–42 (2000). Except for Venezuela, all of the states mentioned above are parties to the LOSC. U.N. Office of Legal Affairs, Div. for Ocean Affairs & the Law of the Sea, *Status of the United Nations Convention on the Law of the Sea, of the Agreement Relating to the Implementation of Part XI of the Convention and of the Agreement for the Implementation of the Provisions of the Convention Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks* (Nov. 06, 2012), available at http://www.un.org/Depts/los/reference_files/status2010.pdf.

¹³² For instance, the 1968 Irish Continental Shelf Act authorizes the government to prohibit the entrance of vessels to a specific area for the purpose of protecting an offshore platform in that area. Esmacili, *supra* note 56, at 251.

¹³³ Norway has prohibited fishing and anchoring outside its safety zones in certain parts of its Ekofisk and Statfjord fields. Ulfstein, *supra* note 37, at 233, 246.

¹³⁴ According to media reports, India is considering extending its safety zones to a breadth of five nautical miles. See Anupama Airy, *Government to Secure Offshore Oil and Gas Installations*, HINDUSTAN TIMES, Nov. 16, 2009, available at <http://www.hindustantimes.com/News-Feed/Business/Govt-to-secure-offshore-oil-and-gas-installations/Article1-477059.aspx>; see also *Government Focuses on Securing Oil & Gas Installations*, DAILY NEWS & ANALYSIS, Dec. 4, 2008, available at http://www.dnaindia.com/india/report_govt-focusses-on-securing-oil-and-gas-installations_1211433.

zones, but also general claims concerning security jurisdiction in the EEZ and on the continental shelf.

c. Security and Sovereignty Claims in Areas Beyond the Territorial Sea

The previous Subsection's review of state practice concerning the establishment of safety zones suggests that many states have generally accepted the 500-meter rule as legally binding. An analysis of state practice, however, indicates a growing willingness of coastal states to interfere with navigational freedoms in their EEZs or on their continental shelves, far beyond 500-meter safety zones, based on security grounds.¹³⁵ These interferences include not only prohibition of foreign military exercises, weapons testing, and maneuvers, but also restrictions on navigation and overflight aimed at promoting more general national security interests.¹³⁶

States use various arguments in their attempts to justify such interferences. Several states claim to have a territorial sea that extends far beyond the twelve-mile limit provided in the LOSC, and accordingly claim the legal authority to limit navigation in that area for security purposes.¹³⁷ Other states, although not explicitly naming the areas "territorial sea," claim the authority to limit the rights of foreign vessels within their EEZs and continental shelves to those accorded to such vessels in the territorial sea—the right of innocent passage.¹³⁸ In addition, there are states that claim to have security jurisdiction in more limited areas of the EEZ, extending to a distance of twenty-four to fifty nautical miles from shore.¹³⁹ Nevertheless, other states—the United States in particular—have protested such claims of

¹³⁵ ROTHWELL & STEPHENS, *supra* note 6, at 95.

¹³⁶ *Id.*

¹³⁷ For example, Ecuador and Peru claim to have a 200-mile territorial sea. *See* KRASKA, *supra* note 103, at 301–02.

¹³⁸ Examples of such states include Portugal and the Maldives. *Id.* at 304, 312. Yet, the most prominent example of a state that claims to have security sovereignty in the EEZ and attempts to limit navigation in that zone to innocent passage is China. China vigorously enforces those claims and does not hesitate to use military force in doing so. *See id.* at 303 (referencing Table 11), 317, 319; ROTHWELL & STEPHENS, *supra* note 6, at 95.

¹³⁹ For example, India, Egypt, Yemen, Vietnam, and Burma claim to have security jurisdiction in an area extending to twenty-four nautical miles from their shores. Similarly, Syria and North Korea have declared "security zones" out to forty-one and fifty nautical miles respectively. KRASKA, *supra* note 103, at 303 (referencing Table 11). Nicaragua, Sudan, Saudi Arabia, and Venezuela have also declared "security zones" beyond the twelve-mile territorial sea. *Id.*

security jurisdiction beyond the twelve-mile territorial sea and argue that such claims are unlawful.¹⁴⁰

An interesting and recent example of a state that had imposed security measures in its EEZ in response to a terrorist threat is Australia. In the post-9/11 period, Australia became concerned that terrorists would attack its ports and offshore oil and gas platforms. This concern led Australia to declare in 2004 the implementation of an identification procedure called the Australian Maritime Identification System (AMIS).¹⁴¹ Under AMIS, all vessels were required to provide information regarding matters such as their identity, crew, cargo, location, and intended port of arrival upon entering Australia's EEZ.¹⁴² However, the implementation of AMIS raised concern and criticism among states and commentators who questioned the legality of this new policy.¹⁴³ As a result, Australia reformulated AMIS so that ships transiting in the EEZ would be requested to provide the aforementioned information only on a voluntary basis.¹⁴⁴

In conclusion, an analysis of state practice concerning measures for protecting offshore platforms should take into account not only the breadth of safety zones declared by states, but also claims states have made regarding security jurisdiction beyond the twelve-mile territorial sea. As this review has suggested, there is a growing willingness of states to interfere with navigational freedoms in areas beyond the territorial sea. Yet, it is difficult at this stage to determine the impact state practice concerning the assertion and enforcement of security jurisdiction in the EEZ and on the continental shelf might have on the protection of offshore platforms.¹⁴⁵ This practice is limited to only a small number of states, including Portugal, India, and China, and is currently not widespread enough to create a new customary

¹⁴⁰ See, e.g., ROACH & SMITH, *supra* note 69, at 166–71, 186–89, 203–05, 409–14, 417–20.

¹⁴¹ Klein, *supra* note 5, at 337. The area in which these measures were to be implemented was initially referred to as a “Maritime Identification Zone.” *Id.*

¹⁴² *Id.* at 340; Natalie Klein, *The Right of Visit and the 2005 Protocol on the Suppression of Unlawful Acts Against the Safety of Maritime Navigation*, 35 DENV. J. INT'L L. & POL'Y 287, 314 (2007).

Vessels bound to Australian ports were required to provide similar information when the vessel was at a distance of 1,000 nautical miles from the Australian coast. Klein, *supra* note 5, at 337, 339, 343. These security measures were to be enforced through interdictions conducted by the Australian Defense Force. Klein, *supra* note 50, at 308.

¹⁴³ See ROTHWELL & STEPHENS, *supra* note 6, at 96; Klein, *supra* note 5, at 338–39.

¹⁴⁴ Klein, *supra* note 50, at 308.

¹⁴⁵ See ROTHWELL & STEPHENS, *supra* note 6, at 97.

norm.¹⁴⁶ Such practices, however, combined with the increasing threat to coastal state interests in the EEZ, might gradually promote recognition of a right to limit navigational freedoms for enhancing the security of offshore platforms in the EEZ.¹⁴⁷ In order to ensure that such a right is reasonably balanced with navigational rights, states should actively strive to reach an agreement on the necessary modifications to the existing rules concerning the protection of offshore platforms.

3. Why 500-meter Safety Zones Are Insufficient

As was noted above, it is questionable whether the 500-meter safety zones, which were incorporated into the LOSC, were properly designed to effectively address the safety threats posed to offshore platforms. As some states have openly argued, such zones are insufficient for protecting offshore platforms from common shipping hazards, such as accidental collisions.¹⁴⁸ Consequently, it is highly unlikely that 500-meter safety zones could be effective in protecting offshore platforms from deliberate attacks.

Drafters of the LOSC did not intend to address the threat of deliberate attacks, such as a deliberate ramming of a platform with a ship full of explosives, in the provisions pertaining to offshore platforms, as such attacks were not common at the time.¹⁴⁹ Not surprisingly, the 500-meter safety zones incorporated in the LOSC are insufficient for defending offshore platforms from attack. To illustrate, a vessel approaching an offshore platform at a speed of twenty-five knots (approximately twenty-nine miles per hour) would pass from the outer edge of the safety zone to the installation in approximately thirty-nine seconds.¹⁵⁰ In such a short period of time, individuals on board the platform would probably not be aware of the incursion before the vessel hit the platform. Even if personnel onboard the platform were to observe the vessel at the moment it entered the zone, this observation would still not provide enough time to mount an effective response in most cases.¹⁵¹ Moreover, 500 meters is within the effective range

¹⁴⁶ *Id.*

¹⁴⁷ *See id.*

¹⁴⁸ *See supra* Part II.D.2.a.; A.N. Cockcroft, *Routing and the Environment*, 39 J. NAVIGATION, 213, 219 (1986).

¹⁴⁹ *See* O'CONNELL, *supra* note 89.

¹⁵⁰ Kaye, *supra* note 73, at 405.

¹⁵¹ *Id.*

of some weapon systems that terrorists are known to possess.¹⁵² Consequently, terrorists could launch a deadly attack on an offshore platform without even entering the 500-meter zone.

500-meter safety zones are clearly insufficient for preventing terrorist attacks on offshore platforms. Such zones do not provide security personnel on the platforms with sufficient time to respond to a threat, nor even to call for assistance from the state's military or law enforcement forces.¹⁵³ This is especially true in areas with a higher density of maritime traffic where it would be more difficult to identify a potential terrorist vessel from an innocent one.

¹⁵² For example, Hamas is believed to possess Kornet anti-tank guided missile systems with a range of approximately three miles. See Isabel Kershner, *Missile from Gaza Hits School Bus*, N.Y. TIMES, Apr. 7, 2011, available at <http://www.nytimes.com/2011/04/08/world/middleeast/08gaza.html>; JANE'S INFANTRY WEAPONS 410 (Terry J. Gander & Charles Q. Cutshaw eds., 27th ed. 2001–02) (describing weapon specifications and potential damage). Hezbollah, which also apparently controls Kornet missile systems, is additionally believed to hold RPG-29 anti-tank missiles with a range of 500 meters. See Peter Spiegel & Laura King, *Israel Says Syria, Not Just Iran, Supplied Missiles to Hezbollah*, L.A. TIMES, Aug. 31, 2006, available at <http://articles.latimes.com/2006/aug/31/world/fg-hezbollah31>; Ze'ev Schiff, *Hezbollah Anti-Tank Fire Causing Most IDF Casualties in Lebanon*, HAARETZ, Aug. 6, 2006, available at <http://www.haaretz.com/news/hezbollah-anti-tank-fire-causing-most-idf-casualties-in-lebanon-1.194528>; JANE'S INFANTRY WEAPONS, *supra*, at 405–06.

¹⁵³ D.P. O'Connell argues in this regard that "regular surveillance by suitable ships and aircraft suffices to ward off the mounting of terrorist attacks, which would require special equipment and vessels." O'CONNELL, *supra* note 89, at 504. However, this view seems outdated. First, as was noted above, offshore platforms are difficult to protect, mainly because of their isolation and distance from shore. With the increasing number of offshore platforms worldwide, this means that it would be impossible for some states to provide constant protection for their offshore platforms. See *supra* Part I. Second, regarding the "special equipment and vessels" necessary to launch attacks on offshore platforms, recent attacks on such platforms and other offshore targets have proven that all it takes is a boat with enough explosives and a dedicated operator. For example, terrorists used two small boats to conduct an attack on two Iraqi offshore oil terminals on April 24, 2004. Coalition forces patrolling the area prevented the boats from damaging the terminals. McDonnell, *supra* note 19. Small boats were also used to launch attacks on the French tanker *MT Limburg* on October 6, 2002, and on the USS *Cole* on October 12, 2000. WENDEL, *supra* note 18, at 26; Michael T. Kotlarczyk, "The Provision of Material Support and Resources" and *Lawsuits Against State Sponsors of Terrorism*, 96 GEO. L.J. 2029, 2030 (2007–2008). Third, terrorist organizations already possess advanced weaponry and large ships that would make such an attack even easier to launch. See *supra* Part I.

Larger safety zones could certainly improve the ability to protect offshore platforms from attack. First, they would enhance the ability to distinguish potential threats that warrant further examination—such as vessels that have entered the safety zone without permission—from other maritime traffic. This would be especially valuable in areas with dense maritime traffic. Second, larger safety zones would provide security personnel on board the platform, and possibly the coastal state’s military or law enforcement forces operating in that area, with a longer reaction time to potential attacks.¹⁵⁴ More time from the moment the safety zone was infringed to the moment the infringing vessel approaches the platform means a better ability to employ defensive measures, such as questioning the vessel’s motives and engaging it upon determination of hostile intent.

Indeed, one could argue that no matter how large safety zones are, they will never be large enough to protect offshore platforms from long-range weapon systems. Nonetheless, an expansion of safety zones—for example, to a distance of three nautical—could significantly promote the ability to protect offshore platforms from the most common and available methods of attacks, especially the use of vessels mounted with explosives. A more compelling argument against the expansion of safety zones is that larger safety zones mean wider limitations on the freedom of navigation. While in many cases the limitations resulting in the expansion of safety zones may be negligible, the establishment of large safety zones in some areas could significantly impede navigational freedoms. This could, for example, require commercial cargo vessels to choose longer navigational routes in order to avoid infringement of safety zones in areas rich with offshore platforms, and, as a result, increase shipping industry costs. This tension between security interests and navigational freedoms will be addressed in the discussion of possible solutions in Part V *infra*.

IV. Other Legal Sources for Protecting Offshore Platforms

Part III discussed the rights a coastal state may invoke under the international law of the sea for protecting its offshore platforms from terrorist attacks. As argued above, that body of law does not provide sufficient legal authority for achieving protection in areas beyond the territorial sea. This Part explores other sources of authority under

¹⁵⁴ Various factors affect this reaction time, including the speed of both the attacking and the defending vessels, the types of weapons involved, and weather and sea conditions.

international law that may allow states to impose necessary measures for securing their offshore platforms.

A. *The Right of Self-Defense*

The right of self-defense allows a state to use force in response to an armed attack against it. A state could invoke self-defense as a justification for limiting navigation near its offshore platforms in order to protect them from terrorist attacks. Yet, such measures would generally need to be of a temporary nature and confined to a limited area. Furthermore, even if a state taking defensive measures meets the requirements for self-defense, it still might face difficulties in proving that its actions were in fact permissible.

Under the right of self-defense contained in Article 51 of the UN Charter, a state may use force in response to an armed attack launched against it.¹⁵⁵ Although the doctrine of self-defense originally dealt with responses to attacks launched by states, the practice of states in the past several decades indicates that self-defense may also be invoked in response to armed attacks by non-state actors, such as terrorist organizations.¹⁵⁶ Furthermore, although Article 51 is generally interpreted as referring to a state's responses to armed attacks that had already been inflicted upon it, there is a strong argument that international law also recognizes a right of anticipatory self-defense.¹⁵⁷ According to this notion, a state need not wait

¹⁵⁵ U.N. Charter, art. 51. The right of self-defense is an exception to the general prohibition on the use of force between states, as enumerated in art. 2, para. 4 of the Charter.

¹⁵⁶ Michael N. Schmitt, *Responding to Transnational Terrorism Under the Jus ad Bellum: A Normative Framework*, 56 NAVAL L. REV. 1, 8–9, 11. See also S.C. Res. 1368, pmbl., U.N. Doc. S/RES/1368 (Sept. 12, 2001) (recognizing the “inherent right of individual and collective self-defense” in response to the terrorist attacks against the United States on September 11, 2001). *But see* Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territories, Advisory Opinion, 2004 I.C.J. 136, 194 (July 9) (arguing that Article 51 of the UN Charter may not be invoked in response to an armed attack that cannot be imputed to a state).

¹⁵⁷ The question whether international law permits anticipatory self-defense has raised much controversy among scholars. Moreover, different scholars attribute different meanings to the terms “anticipatory self-defense” and “imminent threat.” See Christopher Greenwood, *Self Defence*, MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, para. 45, available at http://www.mpepil.com/subscriber_article?script=yes&id=/epil/entries/law-9780199231690-e401&recno=1&searchType=Quick&query=self+defence (last updated Apr. 2011) (arguing that there is “a strong case that international law still recognizes a right of anticipatory self-defence in circumstances in which an armed attack is imminent.”);

to suffer an actual attack in order to act in self-defense. It may use force in order to thwart an imminent armed attack directed against it.¹⁵⁸

Customary international law requires that the use of force in self-defense be necessary and proportional to the armed attack precipitating the response.¹⁵⁹ An act of self-defense is necessary when peaceful means have been exhausted or are clearly futile under the circumstances to defeat or

NAVAL HANDBOOK, *supra* note 22, at 4–5 (stating that “included within the inherent right of self-defense is the right of a nation to protect itself from imminent attack” and clarifying that “imminent does not necessarily mean immediate or instantaneous”); Thomas M. Franck, *What Happens Now? The United Nations After Iraq*, 97 AM. J. INT’L L. 607, 619 (2003) (commenting that “anticipatory self-defense has been known to international law for almost two centuries and has gained a certain credibility, despite the restrictive terms of Charter Article 51” and that “[t]his credibility is augmented both by contemporary state practice and by deduction from the logic of modern weaponry.” *Contra* Albrecht Randelzhofer, *Article 51*, in 1 THE CHARTER OF THE UNITED NATIONS: A COMMENTARY 788, 803–04 (Bruno Simma et al. eds., 2d ed. 2002) (claiming that “[t]here is no consensus in international legal doctrine over the point in time which measures of self-defense against an armed attack may be taken,” however, arguing that “self-defence is . . . permissible only after an armed attack has already been launched”); IAN BROWNLIE, INTERNATIONAL LAW AND THE USE OF FORCE BY STATES 278–79 (1963) (stating that “Article 51 does not permit anticipatory action” and that “arguments to the contrary are either unconvincing or based on inconclusive pieces of evidence”); Michael J. Glennon, *The Fog of Law: Self-Defense, Inherence, and Incoherence in Article 51 of the United Nations Charter*, 25 HARV. J.L. & PUB. POL’Y 539, 547 (2002) (similarly noting that “arguments that the [U.N.] Charter permits anticipatory self-defense are unpersuasive”). For further discussion of the difficulties involved in identifying a clear rule permitting or prohibiting anticipatory self-defense, see David A. Sadoff, *Question of Determinacy: The Legal Status of Anticipatory Self-Defense*, 40 GEO. J. INT’L L. 523, 579–80 (2009).

¹⁵⁸ Yoram Dinstein distinguishes between “interceptive self-defense,” which he describes as a response to an armed attack that is “in progress, even if it still is incipient,” and a “preventative strike,” which in his terms is a response to an armed attack that is “merely foreseeable.” He argues that while the former is legal, the latter is not. YORAM DINSTEIN, WAR, AGGRESSION AND SELF-DEFENCE 204–05 (5th ed. 2011). *See also* Mary Ellen O’Connell, *Lawful Self-Defense to Terrorism*, 63 U. PITT. L. REV. 889, 894 (2002) (noting that “[w]here a state does intend to use force in self-defense, it need not in all cases wait for the initial armed attack to actually strike its target . . . there must be a plan for the attack, and the plan must be in the course of implementation.”).

¹⁵⁹ *Id.* at 208; *Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.)*, 1986 I.C.J. 14, 94 (June 27); *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, 245; *Oil Platforms (Iran v. U.S.)*, 2003 I.C.J. 161, 183 (Nov. 6) [hereinafter *Oil Platforms*]. Dinstein also mentions a third requirement of immediacy. According to this requirement, there must not be an unjustified lapse of time between the armed attack and the exercise of self-defense. DINSTEIN, *supra* note 158, at 233.

deter the armed attack in question.¹⁶⁰ It is proportional if it does not exceed the amount of force that is required, under the circumstances, to defeat an attack that is underway or to deter an anticipated attack.¹⁶¹

Consequently, where a state has established that a vessel approaching one of its offshore platforms is about to launch an imminent attack against that platform, the state may use necessary and proportional force in order to thwart that attack.¹⁶² However, in reality it may be extremely difficult to identify the hostile intent of a vessel navigating near an offshore platform before that vessel launches an attack.¹⁶³ This is especially true in areas with busy maritime traffic. Thus, in order to be effective in preventing attacks, measures taken by the coastal state must facilitate identification of threats as early as possible.

One such measure would be to limit navigation in a zone surrounding one or several offshore platforms. Notice of such limitations would need to be distributed to states, port authorities, and vessels navigating in the area. The zone would need to be wider than the LOSC safety zone in order to provide security forces with sufficient time to determine if a vessel entering that area—despite warnings—has hostile intent and to employ defensive measures.¹⁶⁴ But in order for enforcement measures conducted in such zones—specifically, the use of force to prevent entry or to conduct searches on noncompliant vessels—to be a permissible

¹⁶⁰ DINSTEN, *supra* note 158, at 232; Michael N. Schmitt, “Change Direction” 2006: Israeli Operations in Lebanon and the International Law of Self-Defense, 84 INT’L L. STUD. SER. U.S. NAVAL WAR C. 265, 280 (2008).

¹⁶¹ Schmitt, *supra* note 160, at 282.

¹⁶² See generally, *supra* note 157.

¹⁶³ NAVAL HANDBOOK, *supra* note 22, at 4–9.

¹⁶⁴ The United States asserts a right to use such tactics “under a self-defense or defense-of-nationals justification” for protecting its offshore platforms and other assets from terrorist attacks. See U.S. NAVAL WAR C., MARITIME OPERATIONAL ZONES 1-5-6 (2006) [hereinafter OPERATIONAL ZONES]. According to this position, the United States may establish security zones to which access is forbidden to all vessels, unless specifically authorized by the U.S. Coast Guard. Security zones can be established, *inter alia*, for “preventing or responding to an act of terrorism against an individual, vessel, or structure that is subject to the jurisdiction of the United States.” *Id.* at 1-5. Consequently, the United States may declare and enforce such zones in its EEZ or on its outer continental shelf in order to protect its offshore platforms from terrorist attacks. This authority has been codified in 33 U.S.C. § 1226 (2006). According to the U.S. position, security zones established outside the territorial sea must be “temporary in nature or otherwise incident driven” in order to be consistent with international law. See OPERATIONAL ZONES, at 1-7.

under international law, they must comport with the customary requirements mentioned above.¹⁶⁵ First, the zones need to be established as a response to an imminent threat of an armed attack on the state's offshore platforms.¹⁶⁶ As a result, they would apparently have to be temporary in nature. Second, enforcement measures taken in those zones need to be a necessary response to the threat of attack. This may entail, as far as circumstances permit, a duty to use non-forcible measures, such as effective warnings, against a noncompliant and unidentified vessel prior to using force against it. Third, enforcement measures need to be proportionate to the threat. This may not only restrain the amount of force used, but also limit the size of the zones in which limitations are imposed. However, to the extent that the proportionality requirement is met, a mere inconvenience to sea traffic would not be considered a violation of the freedom of navigation.¹⁶⁷

Nevertheless, invoking the right of self-defense for limiting navigation near offshore platforms would not provide coastal states with a complete solution for protecting these assets. First, as was previously noted, any limitations on navigation justified by the necessity of self-defense could only be temporary and thus could not provide a long-term solution. Second, a coastal state may encounter difficulties in justifying the use of force against a vessel that disobeyed its orders but was not engaged in any attack. In that case, the vessel's flag state may claim that the use of force was an unlawful act of aggression. In justifying its actions, the coastal state faces the burden of proving to the international community, and perhaps to the UN Security Council, that it did in fact face an imminent threat of attack and that the measures taken were a necessary and proportionate response to that threat.¹⁶⁸ This might require the exposure of sensitive intelligence

¹⁶⁵ See D.W. BOWETT, SELF-DEFENCE IN INTERNATIONAL LAW 66, 70–73 (1958).

¹⁶⁶ As mentioned above, there is no agreed upon definition of the term "imminent threat."

Where a state has reasonable intelligence-based grounds to believe that an attack is underway, imminent could arguably be interpreted to mean hours or even days.

¹⁶⁷ See Wolff Heintschel von Heinegg, *Current Legal Issues in Maritime Operations: Maritime Interception Operations in the Global War on Terrorism, Exclusion Zones, Hospital Ships and Maritime Neutrality*, 80 INT'L L. STUD. SER. U.S. NAVAL WAR C. 207, 214 (2006). However, some commentators have asserted that the establishment of maritime security zones in peacetime is unlawful. See, e.g., Frederick C. Leiner, *Maritime Security Zones: Prohibited Yet Perpetuated*, 24 VA. J. INT'L L. 967, 980, 984 (1984).

¹⁶⁸ In the Oil Platforms Case, the International Court of Justice held that the burden of proof that an armed attack justifying self-defense had occurred rests on the state claiming to act in self-defense. Oil Platforms, *supra* note 159, at 189. Mary Ellen O'Connell notes that

information that the coastal state may not be inclined to share with others.¹⁶⁹

In summary, a state could limit navigation near its offshore platforms based on the right of self-defense in order to protect those platforms from a terrorist attack. Such limitations, however, would have to be a necessary and proportionate response to an imminent threat of attack. In other words, the more limited those measures are in space and time and the more imminent the threat they are aimed to address, the better the coastal state's chances of justifying those measures under the self-defense doctrine. Nonetheless, a state taking such measures should acknowledge that it may be rather difficult to prove that its acts constituted legitimate self-defense.¹⁷⁰

"we cannot point to any well-established set of rules governing evidence in international law in general or in the case of self-defence in particular." Nevertheless, she argues that the standard for justifying the use of armed force in self-defense should be "clear and convincing evidence that the circumstances warrant the use." Mary Ellen O'Connell, *Evidence of Terror*, 7 J. CONFLICT & SEC. L. 19, 21–22 (2002).

¹⁶⁹ See Ruth Wedgwood, *Responding to Terrorism: The Strikes Against bin Laden*, 24 YALE J. INT'L L. 559, 566 (1999) (discussing the difficulties in sharing intelligence information on which an operational decision was based).

¹⁷⁰ A coastal state could similarly attempt to justify limitations on navigation near its offshore platforms under the doctrine of necessity. To this end, the state would have to meet stringent requirements. First, it would need to prove that the limitations and enforcement measures it imposed were the only means to safeguard an "essential interest" against a "grave and imminent peril." Second, it would be required to prove that the said measures did not seriously impair essential interests of other states or of the international community as a whole. See JAMES CRAWFORD, *THE INTERNATIONAL LAW COMMISSION'S ARTICLES ON STATE RESPONSIBILITY* 178 (2002); *Gabcikovo-Nagymaros Project* (Hung. v. Slov.) 1997 I.C.J. 7, 40–41 (Sept. 25). See also CRAWFORD, *supra*, at 179–80 (noting the Russian decree of 1893 prohibiting sealing in an area of the high seas as an example of an invocation of necessity). Due to the devastating potential repercussions of an attack on an offshore platform, the prevention of such an attack could qualify as an "essential interest." Furthermore, although restrictions on navigation in a limited vicinity of offshore platforms could limit the navigational freedoms of other states, this would not normally be considered an impairment of an "essential interest" of those states if reasonable navigational alternatives are available. Nevertheless, the threat would need to be imminent, and therefore measures a state could take under a necessity justification would normally have to be temporary. Additionally, a coastal state may encounter difficulties in proving that the measures taken were the only means available to prevent attacks on its offshore platforms.

B. *The Law of Naval Warfare*

When a state is engaged in an armed conflict,¹⁷¹ its oil and gas platforms may face an even graver threat of terrorist attacks than they do in peacetime. An attack on such assets could disrupt a coastal state's energy supply and could significantly impact its economy and morale. Moreover, the environmental damage resulting from such an attack could disrupt war efforts by requiring naval forces to engage in clean-up missions. This heightened potential for damage may enhance terrorists' motivation to strike a state's offshore platforms during an armed conflict. Nonetheless, under the law of naval warfare, states engaged in an armed conflict are accorded wider legal authority to restrict navigation in certain areas of the sea than they are in peacetime.¹⁷² States could then invoke this authority to protect their offshore platforms from attack.

Although naval operations are not as frequent in non-international armed conflicts as they are in international armed conflicts, the law of naval

¹⁷¹ The previous Section discussed rules pertaining to the use of force by a state in self-defense in situations short of an armed conflict (“*jus ad bellum*”). The current Section analyzes rights accorded to a state during an armed conflict (“*jus in bello*”). International law generally distinguishes between two types of armed conflicts: “international armed conflict” and “non-international armed conflict.” The term international armed conflict is commonly used to describe any dispute between two or more states involving the use of armed force. The existence of an international armed conflict does not depend upon the intensity or duration of hostilities. HARVARD UNIV., PROGRAM ON HUMANITARIAN POLICY AND CONFLICT RESEARCH, COMMENTARY ON THE HPCR MANUAL ON INTERNATIONAL LAW APPLICABLE TO AIR AND MISSILE WARFARE 39 (2010), available at <http://ihlresearch.org/amw/Commentary%20on%20the%20HPCR%20Manual.pdf> [hereinafter HPCR COMMENTARY]; Emily Crawford, *International Armed Conflict*, MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, para. 1–2, available at http://www.mpepil.com/subscriber_article?script=yes&id=/epil/entries/law-9780199231690-e429&recno=7&searchType=Quick&query=armed+conflict (last updated May 2011). The term non-international armed conflict is generally used to describe “confrontations between government forces and the armed forces of one or more non-state organized armed group, or between such groups, arising within the territory of a state.” HPCR COMMENTARY, *supra*, at 57. In order to qualify as a non-international armed conflict, the armed confrontation must reach a minimum level of intensity. Determining the thresholds of applicability and qualification of non-international armed conflicts is a controversial matter. *Id.*; Theodor Meron, *Humanization of Humanitarian Law*, 94 AM. J. INT'L L. 239, 260 (2000).

¹⁷² OPERATIONAL ZONES, *supra* note 164, at 3-4.

warfare accords certain rights to states under both types of conflict.¹⁷³ Consequently, the rights discussed in this Section would generally apply to both international and non-international armed conflicts. This applicability is especially important in light of the tendency to classify armed conflicts between states and transnational terrorist organizations as non-international armed conflict.¹⁷⁴ Therefore, whether a state is engaged in an armed conflict with another state or with a transnational terrorist organization, it could employ the measures discussed in this section in order to protect its offshore platforms from attack.

One measure a state engaged in an armed conflict could take in order to protect its offshore platform is to establish exclusion zones around those platforms. Exclusion zones are areas of the sea to which a party to an

¹⁷³ See Natalino Ronzitti, *Naval Warfare*, MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, paras. 35–36, available at http://www.mpepil.com/subscriber_article?script=yes&id=/epil/entries/law-9780199231690-e342&recno=1&searchType=Quick&query=naval+warfare (last updated June 2009); THE TURKEL COMMISSION, PUB. COMMISSION TO EXAMINE THE MARCH INCIDENT OF 31 MAY 2010; REPORT PART 1, 48–49 (Jan. 2011) available at <http://www.turkel-committee.com/files/wordocs//8707200211english.pdf>; SECRETARY-GENERAL'S PANEL OF INQUIRY, *Report on the 31 May Flotilla Incident*, app. I at 84–85 (Sept. 2011), available at http://www.un.org/News/dh/infocus/middle_east/Gaza_Flotilla_Panel_Report.pdf; The Prize Cases, 67 U.S. (2 Black) 635, 666–69 (1863). These sources support the right to impose a naval blockade, which is a method of economic warfare that may significantly impact neutral states' rights, in a non-international armed conflict. Consequently, it appears that other belligerent rights under the law of naval warfare, which have a much more limited impact on neutral rights, are accorded to states engaged in such conflicts. In addition, the San Remo Manual, which is broadly cited in this Section, does not limit the scope of its provisions to international armed conflicts. See SAN REMO MANUAL ON INTERNATIONAL LAW APPLICABLE TO ARMED CONFLICTS AT SEA 73 (Louise Doswald-Beck ed., 1995) [hereinafter SAN REMO MANUAL]. *Contra* Douglas Guilfoyle, *The Mavi Marmara Incident and Blockade in Armed Conflict*, 2010 BRIT. Y.B. INT'L L. 171, 179 (arguing that “[t]he content of the rules of naval warfare applicable to [non-international armed conflicts] is at best uncertain and the availability of blockade in such cases is open to doubt”).

¹⁷⁴ See *Hamdan v. Rumsfeld*, 548 U.S. 630–31 (2006) (classifying the armed conflict between the United States and al Qaeda as a “conflict not of an international character”). Nevertheless, the approach that armed conflicts of this kind should be classified as non-international armed conflicts is not universally accepted. See, e.g., HCJ 769/02 *Pub. Comm. Against Torture in Israel v. Gov't of Israel* [2005] IsrSC 57(6) 285, ¶¶ 16–21 (applying the law of international armed conflict to the armed conflict between Israel and Hamas).

armed conflict may prevent access of vessels.¹⁷⁵ Although the establishment and enforcement of exclusion zones in some of those conflicts did not conform to international law, most commentators view the establishment of exclusion zones as a legitimate method of warfare.¹⁷⁶ Nonetheless, some commentators consider the legality of exclusion zones a highly controversial issue.¹⁷⁷

The 1994 San Remo Manual on International Law Applicable to Armed Conflicts at Sea (“Manual”)¹⁷⁸ concedes that such zones should only be established “as an exceptional measure” and that their establishment does not absolve a belligerent of its duties under international humanitarian law (namely, the duty to distinguish between civilian objects and military objectives).¹⁷⁹ However, it recognizes a belligerent’s right to apply “enforcement measures” against vessels that disobey restrictions in such zones, though without specifying what those measures may include.¹⁸⁰

The Manual then proceeds to outline several rules for establishing exclusion zones. First, it requires that a zone’s size, location, and duration and the measures imposed “shall not exceed what is strictly required by military necessity and the principle of proportionality.”¹⁸¹ Furthermore, it

¹⁷⁵ SAN REMO MANUAL, *supra* note 173, at 181–82. Such zones were declared and enforced in several armed conflicts in the twentieth century. YORAM DINSTEIN, *THE CONDUCT OF HOSTILITIES UNDER THE LAW OF INTERNATIONAL ARMED CONFLICT* 227–28 (2d ed. 2010).

¹⁷⁶ See OPERATIONAL ZONES, *supra* note 164, at 4-12 to 4-14; NAVAL HANDBOOK, *supra* note 22, at 7-12; DINSTEIN, *supra*, at 228. Such zones have also been named military areas, barred areas, war zones, and operational zones. SAN REMO MANUAL, *supra* note 173, at 181.

¹⁷⁷ See Christopher Michaelsen, *Maritime Exclusion Zones in Times of Armed Conflict at Sea: Legal Controversies Still Unresolved*, 8 J. CONFLICT & SEC. L. 363, 389 (2003).

¹⁷⁸ The San Remo Manual is a comprehensive document that aims to provide a contemporary restatement of international law applicable to armed conflicts at sea along with several progressive developments in this field. It was prepared by a group of naval experts during the period of 1988–94. SAN REMO MANUAL, *supra* note 173, at 5.

¹⁷⁹ *Id.* at 181–82. Similarly, the Manual determines that “the same body of law applies both inside and outside the zone.” *Id.* § 106(a).

¹⁸⁰ *Id.* at 181–82. The Manual further states that in adequately declared zones, “it might be more likely to presume that ships or aircraft in the area without permission were there for hostile purposes than it would be if no zone had been established.” *Id.* at 181.

¹⁸¹ *Id.* § 106(b). The Manual explains this is a requirement for “a proportional and demonstrable nexus between the zone and the measures imposed, including both restrictive and enforcement measures, and the self-defense requirements of the State establishing the zone.” It further states that while the United Kingdom’s 200-mile zone around the

requires that the imposing belligerent give due regard to the rights of neutral states to legitimate uses of the sea, publicly declare the commencement, duration, location, and extent of the zone, as well as the restrictions imposed, and provide “necessary safe passage” through the zone for neutral vessels if the geographical extent of the zone significantly impedes free and safe access to the ports and coasts of neutral states.¹⁸²

Given the strategic importance of a state’s offshore platforms, the need to protect them from a terrorist attack during an armed conflict would generally fulfill the military necessity requirement for the establishment of exclusion zones. Such a tactic would allow a coastal state engaged in an armed conflict to use reasonable force to prevent unauthorized access to the vicinity of its offshore platforms. Nevertheless, a state implementing such tactics should consider the fact that controversy still exists concerning the legality of exclusion zones under international law.

Another right a state engaged in an armed conflict could invoke for limiting navigation near its offshore platforms is the right to establish special restrictions on the activity of vessels within “the immediate area or vicinity of naval operations.”¹⁸³ This area referred to is one “within which hostilities are taking place or belligerent forces are actually operating.”¹⁸⁴ Vessels that violate regulations established by a belligerent in such an area may be captured and in some cases fired upon, provided that such regulations were not given arbitrarily.¹⁸⁵ Accordingly, a state engaged in an armed conflict would have the authority to use force in order to restrict navigation near its offshore platforms if those platforms are near or within the immediate area of operations. Arguably, an operation to protect such platforms during an

Falklands during its 1982 conflict with Argentina “was probably adequate,” its declaration of the entire South Atlantic as a war zone “was disproportionate to its defense requirements and would affect shipping unconnected with the conflict.” *Id.* at 182.

¹⁸² *Id.* § 106(d). The provision of “safe passage” is also required “in other cases where normal navigation routes are affected, except where military requirements do not permit.” *Id.*

¹⁸³ *Id.* § 108.1.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* § 146(e), § 146.6 (stating proposition that neutral merchant vessels may be captured); OPERATIONAL ZONES, *supra* note 164, at 4-4 (stating proposition that neutrals may be forcibly removed or fired upon).

armed conflict due to a threat of attack against them could suffice for imposing such restrictions.¹⁸⁶

In sum, when engaged in an armed conflict, a state has a greater authority to protect its offshore platforms from terrorist attacks than it does in peacetime. The state could establish exclusion zones around its offshore platforms and restrict navigation within those zones. Alternatively, in some cases a state could justify limitations on navigation near its offshore platforms based on its right to restrict navigation in “the immediate area or vicinity of naval operations.”¹⁸⁷ A state enforcing such restrictions would not be absolved of its duties under the law of armed conflict, namely to adhere to the principles of distinction and proportionality. It would, however, be entitled to use reasonable force in order to enforce those limitations.

C. UN Security Council Resolution

Another source on which coastal states may draw to protect offshore platforms from attack is a UN Security Council Resolution. When acting under Chapter VII of the UN Charter, the Security Council may allow member states to use force in face of a “threat to the peace, breach of the peace, or act of aggression.”¹⁸⁸ Hence, a coastal state facing a threat of terrorist attacks on its offshore platforms could turn to the Security Council

¹⁸⁶ See OPERATIONAL ZONES, *supra* note 164, at 4-5-6. A contemporary example of the use of an “immediate area of operations” for such purposes is the establishment of warning zones around two Iraqi offshore oil terminals located roughly nineteen miles from Iraq’s main port of Basra. On April 24, 2004, terrorists launched a small-boat suicide attack on the two oil terminals. In response, the United States established warning zones extending to 3,000 meters around the terminals, advised all vessels to remain clear of those zones, and called vessels requiring essential transit through the zones to identify themselves and their intentions and to obey orders given by coalition maritime security forces. *See id.*; NAVAL HANDBOOK, *supra* note 22 at C-1-C-2.

¹⁸⁷ See SAN REMO MANUAL, *supra* note 173, § 108.1.

¹⁸⁸ U.N. Charter arts. 39, 42. In particular, the Security Council may authorize states to “take action by air, sea, or land forces as may be necessary to maintain or restore international peace and security.” *Id.* art. 42. These measures may include “demonstrations, blockades, and other operations by air, sea, or land forces of Members of the United Nations.” *Id.* Although Article 42 seems to refer to action taken by the Security Council itself, it is widely interpreted as allowing the Security Council to authorize member states to take such action. *See, e.g.*, ERIKA DE WET, THE CHAPTER VII POWERS OF THE UNITED NATIONS SECURITY COUNCIL 260-61 (2004); DAVID SCHWEIGMAN, THE AUTHORITY OF THE SECURITY COUNCIL UNDER CHAPTER VII OF THE UN CHARTER 39 (2001).

and request the council's authorization to forcibly restrict navigation near those platforms. The Security Council could authorize the coastal state to take such measures if it deemed them "necessary to maintain or restore international peace and security."¹⁸⁹

Nevertheless, it is unlikely that the Security Council would normally authorize a state to take such action outside its territorial sea. Exceptional circumstances involving a threat to peace that is of interest to the international community would be required in order for the Security Council to give such authority to a coastal state. Such circumstances might include, for example, a terrorist threat that could significantly impede the supply of oil to vast parts of the world. Yet, even if such circumstances were to exist, it would still be difficult to obtain the required authority, given the conflicting interests, compromises, and tensions involved in passing a Security Council resolution, not to mention the veto authority of the permanent members of the council.¹⁹⁰ Additionally, the process of forming a Security Council resolution could take a considerable amount of time, making it problematic for a coastal state to rely on this course of action in the face of an imminent threat. Thus, although a Chapter VII Security Council resolution could provide a state with the necessary authority to impose and enforce restrictions on navigation near its offshore platforms, in most cases this would not be a viable solution for a state facing a threat of attack.

D. *The SUA Protocol*

A discussion on the legal aspects of protecting offshore platforms cannot be complete without reference to the 1988 Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf (SUA Protocol).¹⁹¹ This protocol was intended to

¹⁸⁹ The Security Council has wide discretion in deciding how to use its authority under Chapter VII. DE WET, *supra* note 188, at 184. The council has in the past authorized states to enforce restrictions on maritime traffic, usually as a means of enforcing embargos against states that had refused to comply with the council's resolutions. *See, e.g.*, S.C. Res. 665, para. 1, U.N. Doc. S/RES/665 (Aug. 25 1990); S.C. Res. 841, para. 6, U.N. Doc. S/RES/841 (June 19 1993); S.C. Res. 1973, para. 13, U.N. Doc. S/RES/1973 (Mar. 17 2011).

¹⁹⁰ *See* Thomas M. Brown, *For the "Round and Top of Sovereignty": Boarding Foreign Vessels at Sea on Terror-Related Intelligence Tips*, 59 NAVAL L. REV. 63, 91–93 (2010).

¹⁹¹ Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, Mar. 10, 1988, 1678 U.N.T.S 304 [hereinafter SUA Protocol].

address the threat of terrorist attacks on offshore platforms by promoting the ability of states to bring perpetrators of such attacks to justice *ex post*. Nevertheless, it does not provide states with practical tools for preventing such attacks *ex ante*.

The SUA Protocol is a protocol to the Convention on the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA Convention).¹⁹² Both were formed in response to the 1985 *Achille Lauro* incident and the growing awareness of the threat of terrorist attacks against offshore targets.¹⁹³ The Protocol, like the SUA Convention, requires state parties to make certain offenses¹⁹⁴ punishable under domestic law and to prosecute offenders within the state's territory or extradite them to another state that has jurisdiction.¹⁹⁵

A 2005 Amendment to the SUA Protocol¹⁹⁶ (2005 Platforms Protocol) added several new offenses to the list included in the original

¹⁹² Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, Mar. 10, 1988, 1678 U.N.T.S. 222 [hereinafter SUA Convention]. To date, 160 states have ratified the SUA Convention and 148 states have ratified the SUA Protocol. *Status of Conventions Summary*, IMO (Jan. 2, 2013), <http://www.imo.org/About/Conventions/StatusOfConventions/Documents/Summary%20of%20Status%20of%20Conventions.xls> [hereinafter *Status of Conventions*].

¹⁹³ See Natalino Ronzitti, *Preface* to MARITIME TERRORISM AND INTERNATIONAL LAW, at xvii–viii (Natalino Ronzitti ed. 1990). On October 8, 1985, a group of Palestinian terrorists hijacked the Italian cruise ship *Achille Lauro* in Egyptian territorial waters. The terrorists demanded the release of prisoners and threatened to kill hostages if those demands were not met. The terrorists eventually released the ship after killing an American national onboard. *Id.*

¹⁹⁴ The protocol includes offenses such as destroying a fixed platform, causing damage to it that is likely to endanger its safety, and seizing a fixed platform by force or intimidation. See SUA Protocol, *supra* note 191, art. 2, para. 1. Nevertheless, the protocol only covers such offenses if they were committed “unlawfully and intentionally.” *Id.* The protocol also applies to abetting, attempting, or threatening the commission of such offenses. *Id.* art. 2, para. 2.

¹⁹⁵ *Id.* art. 1; SUA Convention, *supra* note 192, arts. 5, 7, 10. The protocol applies to fixed platforms on the continental shelf. SUA Protocol, *supra* note 191, art. 1, para. 1. The definition of “fixed platforms” includes artificial islands, installations, or structures “permanently attached to the seabed for the purpose of exploration or exploitation of resources or for other economic purposes.” *Id.* art. 1, para. 3.

¹⁹⁶ Protocol of 2005 to the Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, IMO Doc. LEG/CONF.15/22 (Nov. 1, 2005) [hereinafter 2005 Platforms Protocol].

protocol.¹⁹⁷ It also applied *mutatis mutandis* to offenses against fixed platforms, many provisions of the 2005 Amendment to the SUA Convention¹⁹⁸ (SUA 2005) concerning matters such as extradition procedures and transfer of information between state parties with regard to offenses¹⁹⁹ However, one of the most prominent features of SUA 2005—the procedure for obtaining flag state consent for boarding a vessel that is suspected of involvement in one of the said offenses—was not imported into the 2005 Platforms Protocol.²⁰⁰ This is rather unfortunate since the inclusion of that provision in the 2005 Platforms Protocol could have promoted, to a certain extent, efforts to protect offshore platforms from terrorist attacks by improving a state party’s ability to obtain flag state authorization for boarding suspicious vessels.²⁰¹

In summary, the SUA Protocol is focused on creating more efficient practices for the prosecution and extradition of individuals involved in attacks on offshore platforms. This legal instrument has seemingly contributed to the ability to bring to justice the perpetrators of such acts and has apparently promoted a sense of obligation among state parties to cooperate with one another concerning such processes. Yet, it only promotes *ex post* action. Besides possibly contributing, to some extent, to the deterrence against future terrorist attacks on offshore platforms, it does not

¹⁹⁷ For example, the use of weapons of mass destruction against fixed platforms and the discharge from an offshore platform of oil, liquefied natural gas, and other hazardous or noxious substances in a quantity or concentration that is likely to cause death, serious injury, or damage. *Id.* art. 4, para. 1. The 2005 Platforms Protocol also added a requirement that the purpose of the act be “to intimidate a population, or to compel a government or an international organization to do or to abstain from doing any act.” *Id.* The protocol has so far been ratified by only nineteen states. *Status of Conventions*, *supra* note 192.

¹⁹⁸ Protocol of 2005 to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, LEG/CONF.15/21 (Nov. 1, 2005) [hereinafter SUA 2005].

¹⁹⁹ 2005 Platforms Protocol, *supra* note 196, art. 2, para. 1; Kaye, *supra* note 12, at 195.

²⁰⁰ Article 8*bis* of the SUA 2005, which includes this procedure, does not apply to the 2005 Platforms Protocol. *See* 2005 Platforms Protocol, *supra* note 196, art. 2, para. 1.

²⁰¹ This is because the said procedure in SUA 2005 lays down a framework for obtaining flag state consent for boarding not only vessels suspected of being involved in a past offense, but also vessels that are reasonably suspected of planning to commit such an offense. *See* SUA 2005, *supra* note 198, art. 8*bis*, paras. 4–5. Nonetheless, the contribution of the said procedure to the ability to board vessels involved in such offenses is not yet clear since a flag state may deny a request for boarding without inspecting the suspicious vessel. *See* Klein, *supra* note 142, at 323–24, 329. Furthermore, so far only twenty-three states have ratified SUA 2005. *Status of Conventions*, *supra* note 192.

provide states with the necessary authority for preventing such attacks *ex ante*.

V. Proposed Solutions

The previous parts have discussed the threat of terrorist attacks against offshore oil and gas platforms and the available legal instruments for coping with that threat. As was emphasized, the main legal challenge to this end involves the protection of offshore platforms located outside a state's territorial sea, namely in its EEZ or on its continental shelf. Although a coastal state appears to have sufficient legal authority to protect its offshore platforms during an armed conflict, it lacks such authority in peacetime, except for the ability to take temporary measures under the right of self-defense.

This Section explores ways of improving the ability of coastal states to protect their offshore platforms from attack. Any viable solution in this regard must balance concerns over excessive limitations on the freedom of navigation with security concerns. With this in mind, this Section discusses both the advantages and disadvantages of each solution proposed below.

A. *Amending the LOSC*

One possible solution is to amend the LOSC's provisions regarding safety zones. As previously mentioned, the main problem with the LOSC safety zones is that they are too small and do not provide a sufficient response time to potential threats. Therefore, this Subsection discusses three alternative amendments to the LOSC that would allow states to establish larger safety zones. Although these amendments would enable coastal states to protect their offshore platforms from attack, it may—recalling the experience of UNCLOS III and the IMO—prove difficult to acquire consent from the relevant parties.

First, an amendment to the LOSC could replace the 500-meter limit on the breadth of safety zones in Article 60(5) with a larger fixed limit. For example, an amended Article 60(5) could allow the establishment of safety zones with a maximum breadth of three nautical miles. Such safety zones would provide security forces with a better ability to identify a terrorist vessel before it attacks the platform. Yet, such an amendment could also potentially impair the freedom of navigation in certain parts of the world. With the three-mile zone becoming the new standard, every state would

want to establish such wide zones around its platforms and this could eventually result in limited access to essential navigational routes.

However, this does not necessarily have to be the outcome. Even with the proposed amendment, states would still be bound by Article 60(7), which prohibits the establishment of safety zones “where interference may be caused to the use of recognized sea lanes essential to international navigation.”²⁰² Consequently, a state would not be entitled to establish wide safety zones where this may interfere with essential sea lanes. That state would need to decide if it is willing to take the risk of operating its offshore platforms with safety zones that do not interfere with recognized sea lanes or refrain from exploiting gas or oil in that area.

Critics of such an amendment could claim that those safeguards would not be sufficient to prevent abuse of navigational freedoms. They could further argue that it is much easier to enforce compliance with a fixed breadth to safety zones than it is with the prohibition on interfering with essential sea lanes. Such fears may be well founded. Nevertheless, fear of under-enforcement should not justify the rejection of an amendment that could significantly enhance protection of those strategic assets. Like many other provisions in the LOSC, this provision would need to be enforced through protests against unlawful practices and utilization of the LOSC’s provisions pertaining to the settlement of disputes.²⁰³

A second possible amendment to the LOSC would be to delete any reference to a fixed limit in Article 60(5). As a consequence, instead of the 500-meter limit, coastal states would have the discretion of determining the width of their safety zones, but would still be bound by the requirement that these zones be “reasonably related to the nature and function” of the offshore platform.²⁰⁴ Additionally, states would still be barred from establishing safety zones that interfere with “the use of recognized sea lanes

²⁰² Additionally, safety zones would still need to be “reasonably related to the nature and function” of the offshore platform. LOSC, *supra* note 5, art. 60, para. 5.

²⁰³ *See id.* arts. 55–75. Interference with the use of “recognized sea lanes essential to international navigation” would constitute a contravention of the provisions regarding “freedoms and rights of navigation,” and accordingly a dispute on such issues would trigger one of the LOSC’s “Compulsory Procedures Entailing Binding Decisions.” *See id.* art. 297, para. 1(a), arts. 286–296.

²⁰⁴ *Id.* art. 60, para. 5.

essential to international navigation.”²⁰⁵ On the one hand, this option would allow states to tailor suitable safety zones according to the size of the offshore platform, the density of maritime traffic in the area, and other relevant factors. Additionally, states would have the ability to modify their safety zones in response to changes in the maritime environment, such as the introduction of new types of platforms and tankers or the emergence of new threats. On the other hand, the deletion of a fixed limit could create a slippery slope that would lead to substantial limitations on navigational freedoms. With no agreed upon “benchmark” for the size of a safety zone, such a rule would be even more difficult to enforce than the first proposed amendment.

A third possible amendment could address the authority given to the IMO in Article 60(4) to allow the establishment of larger safety zones. Such an amendment could give the IMO a wider mandate for authorizing safety zones, for instance, by explicitly allowing the IMO to consider security matters in this regard. It is unclear, however, if such an amendment would solve the problem. As mentioned above, to date the IMO has not made use of its authority to allow the establishment of larger zones for safety reasons nor has it created guidelines or procedures for evaluating requests for such zones. Thus, it is unclear whether the IMO could successfully fulfill the more challenging role of authorizing larger safety zones based on security threats.²⁰⁶

Of the three possible amendments proposed in this Section, the first possibility, replacing the 500-meter limit on safety zones with a larger fixed limit, is the most desirable option. However, it is questionable whether state parties to the LOSC would be able to agree on such an amendment, given that they were not able to agree on similar proposals during the negotiations in UNCLOS III and bearing in mind the fear that such an amendment would impair navigational freedoms.

B. Getting the IMO to Authorize Wider Safety Zones

As previously discussed, Article 60(5) of the LOSC gave the IMO the authority to allow the establishment of safety zones wider than 500

²⁰⁵ *See id.* art. 60, para. 7.

²⁰⁶ In this regard, deliberations on sensitive issues such as terrorism and the limitation of navigational freedoms in the EEZ may lead to political disputes between delegates.

meters. Consequently, a coastal state may request the IMO's authorization for establishing larger safety zones. It may base its request on a growing threat of terrorist attacks against its offshore platforms and the insufficiency of the 500-meter zones for thwarting such attacks.²⁰⁷ Such a request, especially if it is supported by a significant number of states, would likely lead to consideration of the issue in IMO committees.

However, it seems unlikely that the IMO will authorize an extension of safety zones for such purposes in the near future. First, the IMO's relevant committees have just recently concluded with regard to safety aspects that there is no "demonstrated need" to establish safety zones larger than 500 meters or to create guidelines for doing so.²⁰⁸ Second, even if the IMO were to reconsider an extension of safety zones, it is unclear whether it would be willing to authorize such extensions based on security grounds, as opposed to safety grounds.²⁰⁹ Most likely, critics may argue that a security-based extension is not within the mandate given to the IMO in Article 60(5) considering the safety-oriented process this provision facilitates, as described above.

C. Implementing Identification Measures

The solution discussed in this Section focuses on improving the coastal state's ability to identify threats near its offshore platforms, given that

²⁰⁷ A coastal state could similarly request the IMO's authorization for limiting navigation near its offshore platforms to specific sea lanes through the use of routing measures. Although the LOSC contains no provisions regarding the implementation of routing measures specifically for the purpose of enhancing safety of navigation beyond the territorial sea, the IMO claims to have the authority to allow such measures and has done so in several instances. See IMO Doc. LEG/MISC.6, *supra* note 116, at 32; Ulfstein, *supra* note 37, at 236, 248; IMO Doc. NAV 53/22, *supra* note 122, paras. 3.52–3.53. In fact, the IMO's Sub-Committee on Safety of Navigation just recently recommended that governments consider and propose to the IMO routing measures around offshore platforms that would enhance the safety of both navigation and the platforms. IMO Doc. NAV 56/20, *supra* note 126, annex 6 para. 3. States could also request that the IMO use its authority under Article 211 of the LOSC to approve routing measures that would minimize the threat of pollution accidents, considering the potential pollution that may result from an attack on an offshore platform. LOSC, *supra* note 5, art. 211(1). However, even if the IMO authorizes such measures, coastal states may still encounter legal difficulties in enforcing them against noncompliant vessels. See G. Plant, *International Traffic Separation Schemes in the New Law of the Sea*, 9 MARINE POL'Y. 134, 139 (1985).

²⁰⁸ See *supra* Part II.D.2.a.

²⁰⁹ See Ulfstein, *supra* note 40, at 251.

it may not completely prevent access to areas outside the 500-meter safety zone. While the previously mentioned solutions require an international effort, the following solution may, to some extent, be implemented independently by coastal states. Yet, in order for this solution to be an effective means of securing offshore platforms in the long run, international cooperation would be required.

According to this proposed solution, the coastal state would request information from every vessel approaching within a certain distance of the state's offshore platforms or entering its EEZ.²¹⁰ The type of information sought would be aimed at enabling coastal state authorities to determine the potential level of threat of every vessel navigating in the area.²¹¹ Once receiving the information, the coastal state would be able to verify it with information available from other sources.²¹² Moreover, it would be able to

²¹⁰ The latter option is more likely to raise concern and criticism among flag states.

²¹¹ An example of information that may be relevant in this regard is the information sought under Australia's AMIS, discussed *supra* Part II.D.2.c. This includes information on crew, cargo, location, intended port of arrival, course of journey, etc. See Klein, *supra* note 5, at 340. Upon receiving such information, coastal state authorities would, for instance, be able to determine if the information the vessel had provided regarding its course of navigation, port of departure, and intended port of arrival reasonably justifies its navigation in the vicinity of the offshore platform. Additionally, the coastal state could also assess the potential threat from a vessel based on information concerning recent ports the vessel had visited.

²¹² For example, the coastal state may compare the information it received from the vessel with information from flag state authorities, the port of departure, intended port of arrival, or with information generated from the vessel's Automatic Identification System (AIS), if it has such a system installed. The AIS is a VHF based system that provides information on the location of certain types of vessels and shore stations. James Kraska & Brian Wilson, *The Pirates of the Gulf of Aden: The Coalition is the Strategy*, 45 STAN. J INT'L L. 243, 256 (2009); *AIS Transponders*, IMO, <http://www.imo.org/ourwork/safety/navigation/pages/ais.aspx> (last visited Jan. 12, 2012). Similarly, the coastal state may compare that information with information from the Long Range Identification and Tracking (LRIT) system, which enables coastal states to obtain information on the identity, location, and route of certain vessels passing within a distance of 1,000 nautical miles from their coasts. See Kraska & Wilson, *supra*, at 256. In some cases the use of AIS and LRIT may provide the coastal state with sufficient information for determining the potential threat from a certain vessel, without the need to request further information. Nevertheless, AIS and LRIT requirements currently apply only to certain types of vessels: the IMO requires AIS to be fitted only in ships of 300 gross tons and above engaged in international voyages, cargo ships of 500 gross tons and above not engaged in international voyages, and all passenger ships. *AIS Transponders*, *supra*. LRIT requirements apply only to passenger ships, cargo ships of at least 300 gross tons, and mobile offshore drilling units. IMO, *Adoption of Amendments to the*

request additional information from suspicious vessels and closely monitor their activity. The coastal state would not be entitled to prevent access to vessels that do not comply with the request to provide information. Nevertheless, assuming that most vessels would have no reason to refuse to cooperate with such measures, the coastal state would be able to focus its surveillance efforts on noncompliant vessels or those that provided information raising suspicion. In order to alleviate potential concerns over freedom of navigation, the application of these measures would be limited to vessels without sovereign immunity.²¹³ Accordingly, the operation of warships would not be affected by this practice.

A similar solution could be to establish warning zones around offshore platforms. Vessels would be advised to avoid entering those zones, which would extend several nautical miles around each platform.²¹⁴ Vessels that choose to enter those zones in spite of the advisory notice would be asked to provide detailed information similar to that mentioned above.²¹⁵

Protective measures such as these could contribute to a coastal state's ability to identify potential threats to its offshore platforms. Yet, the problem with both measures lies in the ability to enforce them. First, a coastal state would have a difficult time justifying nonconsensual boarding of vessels solely based on their refusal to cooperate with requests for information.²¹⁶ Such action would likely be considered a violation of the flag

International Convention for the Safety of Life at Sea, 1974, as Amended, MSC. Res. 202(81), annex 2 at 2, (May 19, 2006).

²¹³ See Kaye, *supra* note 73, at 422.

²¹⁴ Stuart Kaye, for example, suggests that states establish warning zones of a breadth of three nautical miles. *Id.* at 421.

²¹⁵ *Id.* at 422. The United States used warning zones for protecting its naval vessels from terrorist threats, following the 1983 attack on a U.S. Marines headquarters in Beirut. OPERATIONAL ZONES, *supra* note 164, at 2-3. It issued warnings notifying the world that U.S. forces were operating at a "heightened defensive posture," and requested that vessels and aircraft identify themselves and their intentions prior to approaching the vicinity of U.S. forces. *Id.* Vessels and aircraft were warned that failure to keep a certain distance from U.S. forces (the recommended standoff distance for naval vessels was five nautical miles), *id.* 3-2 n.2, would place them at risk of "being misidentified as a threat and subject to defensive measures." *Id.* at 2-3. Warning zones were repeatedly established over the years by U.S. forces operating in different parts of the world. *Id.* at 2-4.

²¹⁶ Stuart Kaye maintains that "[f]ailure to report would render the vessel liable to be boarded." However, he does not mention under what authority the coastal state would be entitled to board the vessel, considering flag state jurisdiction over the vessel. Kaye, *supra* note 73, at 422.

state's jurisdiction over the vessel.²¹⁷ Second, some states might question the legality of a requirement to provide information and argue that such a requirement violates the freedom of navigation. Yet, the mere request to provide information would not infringe flag state's rights, as long as a vessel's passage is not denied solely based on its refusal to provide information.²¹⁸ Eventually, in order to make those measures enforceable and more efficient in preventing attacks, states must cooperate with one another. In particular, an agreement between states requiring mandatory compliance with certain identification measures and enabling the boarding of a noncompliant foreign vessel could significantly promote the utility of such measures.²¹⁹

In conclusion, a coastal state could implement identification measures near its offshore platforms in order to better monitor the activity of vessels in that area. Such measures, which could certainly contribute to the prevention of terrorist attacks on offshore platforms, may be implemented by states immediately without any need to amend existing international legal instruments. Nonetheless, states implementing such measures would find it difficult to justify enforcement measures against noncompliant vessels as other states may argue that such actions violate flag state jurisdiction. Over time, this may lead to erosion in the effectiveness of such measures. Hence, in order for identification measures to be effective in the long run, states would need to cooperate with one another and to agree on ways of making such measures enforceable. Nevertheless, one must take into account that identification measures would probably not be as effective in preventing terrorist attacks as would a restriction on entry of vessels to the close vicinity of a platform. Even if all vessels cooperate with identification measures and provide information as requested, there is still a possibility that a potential attacker would be able to reach an offshore platform

²¹⁷ Nonetheless, the flag state could authorize the coastal state to employ enforcement measures against an uncooperative vessel flying its flag. Additionally, the coastal state would still be able to invoke the right of self-defense to justify the use of force against a vessel that poses an imminent threat to its platforms.

²¹⁸ ROTHWELL & STEPHENS, *supra* note 6, at 96; Klein, *supra* note 5, at 360.

²¹⁹ States could perhaps use the International Code for the Security of Ships and of Port Facilities (ISPS) system, which is implemented as a security measure in ports, as a basis for creating mandatory identification practices near offshore platforms. The ISPS Code, which was developed as an amendment to the SOLAS Convention, came into force in July 2004. It sets out mandatory security-related requirements for governments, port authorities, and shipping companies, as well as non-mandatory guidelines for implementing those requirements. See Klein, *supra* note 50, at 318–22; WENDEL, *supra* note 18, at 29–30.

without raising suspicion. This is especially true in areas where there is a significant amount of maritime traffic and therefore a limited ability to monitor effectively the activity of all vessels.

D. Progressive Reading of the LOSC

This Section lays out three alternative arguments coastal states may make for justifying restrictions on navigation in the close vicinity of offshore platforms based on existing provisions in the LOSC. States implementing restrictions near offshore platforms based on one of these arguments should acknowledge that such practices are likely to meet opposition.

A state may argue that the right to restrict navigation in the vicinity of offshore platforms is an unattributed right in the EEZ. In this regard, it could argue that the threat of terrorist attacks on offshore platforms was not foreseen by the drafters of the LOSC, and that the Convention therefore did not attribute the right to restrict navigation as a means of preventing such attacks. According to Article 59 of the LOSC, if a conflict concerning an unattributed right in the EEZ arises between the coastal state and another state, the conflict should be resolved “on the basis of equity and in the light of all the relevant circumstances, taking into account the respective importance of the interests involved to the parties as well as to the international community as a whole.”²²⁰ As this Article has argued, a terrorist attack on an offshore oil or gas platform could have severe repercussions, both on the coastal state and on “the international community as a whole.” Beyond claiming the lives of crewmembers on board the attacked platform, such attacks could severely damage the environment and disrupt the supply of energy. In light of these dire consequences, the need to prevent attacks on offshore platforms could arguably justify the imposition of limited restrictions on navigational freedoms.²²¹ In order for such measures to produce an equitable solution, coastal states would need to apply restrictions only in areas within a reasonable distance of offshore platforms and to avoid interfering with the use of “recognized sea lanes essential to international navigation.”²²²

²²⁰ LOSC, *supra* note 5, art. 59.

²²¹ For example, according to Natalie Klein, Article 59 could justify the imposition of mandatory identification requirements for vessels navigating in the EEZ, as was initially done by the Australian government as part of AMIS. *See* Klein, *supra* note 5, at 359–60; Klein, *supra* note 50, at 337.

²²² *See* LOSC, *supra* note 5, art. 60, para. 7.

Another argument a coastal state might use to justify restrictions on navigation near its offshore platforms is that such restrictions are necessary for preventing significant pollution to the marine environment.²²³ As mentioned, an attack on an offshore platform could severely damage the marine environment.²²⁴ The LOSC provides states with the authority to take certain measures in order to prevent such pollution. According to Article 194, “states shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source.”²²⁵ The article further establishes that in taking such measures, “states shall refrain from unjustifiable interference with activities carried out by other states in the exercise of their rights and in pursuance of their duties in conformity with this Convention.”²²⁶ Apparently, a coastal state facing a threat of attack on its offshore platforms—likely to result in severe pollution—would be entitled to take the necessary measures to prevent such an attack. Those measures could arguably include limiting navigation in a reasonable vicinity of offshore platforms.²²⁷ Nonetheless, other states may argue that such interferences with the fundamental concept of freedom of navigation may not be considered “measures consistent with this Convention.”

Another article that may promote a coastal State’s environmental argument in this regard is Article 221. According to that article:

²²³ See Natalino Ronzitti, *The Law of the Sea and the Use of Force Against Terrorist Activities*, in *MARITIME TERRORISM AND INTERNATIONAL LAW*, *supra* note 193, at 6. Seemingly, this would be a stronger argument with regard to oil platforms than it would with regard to gas platforms, considering the severe environmental repercussions of an oil spill.

²²⁴ See *supra* Part I.

²²⁵ LOSC, *supra* note 5, art. 194, para.1.

²²⁶ LOSC, *supra* note 5, art. 197, para. 4. See also *id.* art. 220, para. 6 (giving coastal states the right to institute proceedings, including detention of a vessel, where there is “clear objective evidence” that a vessel has committed a violation of standards or laws for the prevention, control, and reduction of pollution from vessels, resulting in a discharge that caused major damage or threat thereof to interests of the coastal state).

²²⁷ The commentary to the LOSC points out the wide scope of Article 194 and the fact that “[n]o indication is given to explain the meaning of ‘necessary’ in relation to the measures that are to be taken.” However, it also notes that “the expression ‘individually or jointly as appropriate’ . . . would seem to imply that the decision does not rest exclusively with the coastal State or other State concerned.” 4 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA 1982: A COMMENTARY 64 (Myron H. Nordquist et al. eds., 1991) [hereinafter 4 LOSC COMMENTARY].

Nothing in this part shall prejudice the right of states, pursuant to international law . . . to take and enforce measures beyond the territorial sea proportionate to the actual or threatened damage to protect their coastline or related interests . . . from pollution or threat of pollution following upon a maritime casualty or acts relating to such a casualty, which may reasonably be expected to result in major harmful consequences.²²⁸

The article defines “maritime casualty” as a “collision of vessels, stranding or other incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo.”²²⁹ A terrorist attack involving the ramming of a vessel into an offshore platform could constitute a “maritime casualty.” Consequently, the restriction of navigation in the close vicinity of an offshore platform could be considered a proportional enforcement measure for protecting the coastal state’s interests from the environmental damage such an attack could create.

It may be true that restrictions on navigation near offshore platforms for protecting them from terrorist attacks were not what the drafters of these articles had in mind.²³⁰ Moreover, one could claim that the environmental argument would be used in this regard only as an excuse to promote other interests of the coastal state, namely national security. Yet, given the severe environmental impact an attack on an offshore platform could have, the imposition of restrictions in a reasonable vicinity of offshore platforms may well promote the same interests these articles were meant to protect in the first place—the prevention of severe environmental damage.²³¹

A coastal state could also argue that the right to restrict navigation near its offshore platforms is inherently included in its sovereign rights in the EEZ “for the purpose of exploring and exploiting, conserving and managing

²²⁸ LOSC, *supra* note 5, art. 221, para. 1.

²²⁹ *Id.*

²³⁰ *See id.* art. 194, para. 3.

²³¹ For example, Article 221 was meant to address concerns over the preservation of the environment and to give states with a coastline affected or likely to be affected by marine pollution sufficient authority to effectively address such a threat. *See* 4 LOSC COMMENTARY, *supra* note 227, at 304–05.

the natural resources.”²³² In this context, a state could claim that it cannot enjoy its sovereign rights of exploiting the gas and oil resources in its EEZ when the platforms used for this purpose are under a constant and grave threat of attack. Accordingly, the state could argue that it is entitled to impose restrictions on navigation near its offshore platforms in order to provide the basic security necessary to allow the exploitation of resources, as long as “due regard” is given to the rights of other states.²³³ It could further claim that restrictions would meet the “due regard” requirement if they are imposed in a reasonable vicinity of offshore platforms and do not interfere with the use of “recognized sea lanes essential to international navigation.”²³⁴ Nevertheless, critics of such an argument would claim that in the EEZ, coastal states are accorded only those rights specifically articulated in the LOSC.²³⁵ Accordingly, since the LOSC did not articulate a right to restrict navigation for the purpose of protecting offshore platforms from attack, such measures are not permitted. The fact that the LOSC explicitly limits the right to restrict navigation near offshore platforms through the use of safety zones supports such a counterclaim.²³⁶

In conclusion, states may try to claim that a contemporary reading of the LOSC allows the imposition of restrictions on navigation near offshore platforms in order to protect them from attack. The imposition of restrictive measures based on such arguments is likely to meet opposition. Thus, states implementing such measures risk potential disputes with flag states opposing those practices. Disputes could especially arise in cases where the coastal state accomplishes such measures by use of force. Furthermore, wide interpretations of the existing rules are undesirable from a standpoint of preserving the international law of the sea and could create a slippery slope with regard to restrictions on navigational freedoms. Indeed, an amendment to the LOSC explicitly expanding the right to restrict navigation near offshore platforms would be preferable.

²³² LOSC, *supra* note 5, art. 56, para. 1(a). A similar argument may be made with regard to rights to explore and exploit the natural resources of a state’s continental shelf. *See id.* art. 77, para. 1.

²³³ *Id.* art. 56, para. 2.

²³⁴ *Id.* art. 60, para. 7.

²³⁵ *See* Klein, *supra* note 5, at 356–57.

²³⁶ *See* LOSC, *supra* note 5, art. 60, paras. 4–7.

Conclusion

The opening hypothetical illustrates the problem states face with regard to protecting offshore oil and gas platforms from terrorist attacks. Given their isolation and distance from shore, those platforms are especially vulnerable to terrorist attacks. Such attacks could have overwhelming repercussions on a state's energy resources, on its economy, and on the environment. This Article examined what authority coastal states have under international law for protecting their offshore platforms from the dire consequences of such attacks.

This Article first approached the issue by addressing rights accorded to states under the international law of the sea. As this Article has shown, while states have sufficient legal authority to take measures for protecting offshore platforms located in their territorial sea, they lack such authority outside that area. In particular, this Article addressed the authority given to states in the LOSC to restrict navigation within 500-meter-wide safety zones around offshore platforms. The analysis in this regard has shown that not only are such safety zones insufficient for protecting platforms from deliberate attacks, but they also seem to be insufficient for protecting them from safety hazards. The authority given to the IMO to authorize wider safety zones does not solve this problem, as the IMO has been unwilling to authorize such extensions, even when they were requested on purely safety-related grounds.

Furthermore, this Article examined other sources of international law that may provide the legal authority necessary for protecting offshore platforms from attack. In this context, it has shown that a coastal state could invoke the right of self-defense to justify restrictions on navigation near its offshore platforms. Yet, it concluded that a coastal state would not be able to rely on self-defense as a justification for long-term navigational restrictions. In addition, this Article has shown that during an armed conflict, a belligerent state acting under the law of naval warfare may impose reasonable restrictions on navigation to protect its offshore platforms from attack. This Article also addressed the possibility of obtaining UN Security Council authorization for enforcing restrictions on navigation near a state's offshore platforms. Nevertheless, it concluded that the chances of obtaining such authorization are low. This Article further addressed the 1988 Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf. It concluded that this

legal instrument does not provide states with necessary legal tools for preventing attacks on offshore platforms.

Given the lack of sufficient legal authority for protecting offshore platforms located outside the territorial sea, this Article proposed several solutions. This Article concluded that the most desirable solution involves amending the LOSC by replacing the 500-meter limit on the breadth of safety zones with a larger fixed limit. Under the amended rule, considering the importance of the freedom of navigation, states would not be entitled to establish wide safety zones where this may interfere with the use of sea lanes essential to international navigation. Such a solution would provide more clarity with regard to the protective measures that states may take and prevent unilateral action by states that feel especially threatened from attacks on their offshore platforms. Yet, as such an amendment does not seem likely in the near future, states may need to pursue other solutions—the risk of waiting for a devastating attack to happen is too high.