

Protecting Offshore Drilling Platforms against Terrorist Attacks: The Legal Perspective

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The discovery of natural gas in the eastern basin of the Mediterranean Sea is good news for Israel. The gas is expected to satisfy Israel's energy needs for many years, and export to other states is expected to yield significant tax revenues. It is therefore generally said that the infrastructure for drilling natural gas and transporting it to Israel's shores, mainly drilling platforms, constitutes a strategic asset for Israel.

Joining the opportunities created by the discovery of gas deposits at sea and the possibilities generated by their extraction are significant security risks to the drilling platforms. These platforms are located mid-sea, far from Israel's coasts (some over 100 kilometers), and are liable to become a target for terrorist attacks. Beyond the loss of human life (the platforms are manned by dozens of workers), such an attack may have serious consequences for the state. In economic terms, for example, rebuilding a damaged platform can cost hundreds of millions of dollars.¹ An interruption in gas pumping until the infrastructure is rebuilt also incurs a heavy economic loss. Moreover, an attack of this sort may likewise have harsh strategic consequences: it is capable of having a severe impact on the supply of energy to Israel, given the reliance on natural gas for energy production that is expected to increase with time.

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The challenges Israel faces in protecting the platforms are not only a function of the platforms' distance from Israel's shores. They also result from the fact that the platforms are located in a region where Israel's authority under international law is limited – mostly restricted to the right to exploit natural resources. This is not the same sovereignty that Israel enjoys over its territorial waters. For example, as a general rule, navigation and overflight cannot be restricted, ships passing through the area cannot be required to identify themselves, and so forth. This situation poses a significant challenge to Israel's security forces, particularly in scenarios in which there is a general threat to the platforms but no previous intelligence exists concerning the involvement of a specific vessel in hostile activity.

There is an extensive variety of threats to the platforms, among them, shore-to-sea missiles, unmanned aerial vehicles, and undersea sabotage operations.² In addition to the drilling platforms themselves, there are also threats to the accompanying infrastructure, such as undersea pipes, auxiliary vessels, and more.³ The analysis that follows focuses on the threat to drilling platforms from hostile vessels, but the principles that it outlines are relevant to dealing with a broad range of threats.

This article assesses the authority under international law for protecting the drilling platforms against terrorist attacks. It first reviews the relevant legal framework and defines the basic terms required for a legal analysis of the question of authority. It then analyzes the legal tools available to Israel for handling definite threats as well as for coping with general threats that are not based on concrete intelligence information. Finally, the article proposes solutions under the existing legal framework. The article deals with the threat under international law, and does not analyze aspects of internal Israeli law that may arise, for instance, regarding the division of responsibility between the government and the private companies operating the platforms, for the security of the platforms.

The Legal Framework

The authority to deal with threats to offshore drilling platforms is derived from three branches of international law: the law of the sea, the law of self-defense, and the law of naval warfare.

The Law of the Sea

The law of the sea broadly regulates the legal rights and duties of states at sea. These laws, which are partly based on old practices, are anchored today in customary international law⁴ and in a number of international treaties, the most important of which is the 1982 United Nations Convention on the Law of the Sea (UNCLOS).⁵ Israel is not a party to UNCLOS, but it is widely accepted that many of the rules set forth in the convention are customary rules binding on all states.⁶

The law of the sea establishes two basic principles relevant to the subject at hand. The first is flag state jurisdiction. Under this principle, a vessel is considered subject to the sovereignty of the state in which it is registered (the flag state). The flag state has exclusive jurisdiction over vessels flying its flag, except in specific cases explicitly addressed in UNCLOS. Therefore, in general, only the flag state is authorized to exercise sovereign authority over its vessels. The second principle is freedom of navigation. Under this principle, vessels of all states enjoy complete freedom of movement on the high seas. A breach of freedom of navigation is only allowed under one of the exceptions recognized under international law. Violating freedom of navigation without the express authority of international law and without the consent of the flag state would generally be considered a violation of the flag state's sovereignty.

In many cases, freedom of navigation may conflict with a state's security needs. For example, due to such needs a state may wish to interdict a vessel on the high seas, or to restrict navigation in areas where its strategic assets – such as drilling platforms – are located. Beyond the legal duty to respect freedom of navigation, the principle is extremely important even from a utilitarian perspective. Erosion of this principle is liable to have grave strategic and economic consequences, especially for states such as Israel whose navigation routes are near states with hostile interests.

Based on these general principles, the law of the sea grants various rights to states, depending on the geographic area involved. Several maritime zones are relevant to this discussion.

The *territorial sea* of a state extends 12 nautical miles from its shores. A state has broad sovereign authority in its territorial sea, including the right to impose restrictions on navigation for reasons of security and safety. Nevertheless, a state is obligated to allow “innocent passage” of foreign

vessels through its territorial sea, meaning passage that “is not prejudicial to the peace, good order or security of the coastal state.”⁷

The *exclusive economic zone* (EEZ) of a state is the area adjacent to its territorial sea, extending to 200 miles from its shore. States with adjacent exclusive economic zones are required to delineate the borders of these areas through an agreement. In its EEZ, a state has the exclusive right to exploit the natural resources of the seabed, subsoil and waters, as well as the exclusive right to conduct marine scientific research. Under this right, the coastal state has the exclusive authority to establish and allow the establishment of drilling platforms for the production of oil and gas.

The sovereignty of the coastal state in its EEZ, however, is confined to the exploitation of natural resources and the conduct of marine scientific research. Thus, for example, vessels and aircraft from all states enjoy freedom of navigation and overflight in an EEZ. Article 56 of UNCLOS states that the coastal state and other states shall have “due regard” for the rights of one another. When navigating in the EEZ of another state, a vessel is subject to the sovereignty of its flag state, except for select aspects involving the exclusive rights of the coastal state in its EEZ, such as the exercise of enforcement jurisdiction over fishing. Israel has never explicitly declared an EEZ, but in July 2011 it deposited coordinates with the UN for the delimitation of the northern border of its EEZ, following an agreement between Israel and Cyprus on the delimitation of the EEZ in the area.⁸

Another maritime zone is the *continental shelf*. This area extends to the edge of the continental margin,⁹ or 200 nautical miles from the shore (whichever is greater). As with the EEZ (which in most cases overlaps this area), within its continental shelf, the coastal state enjoys exclusive authority to exploit the natural resources of the seabed and subsoil. Vessels and aircraft also enjoy freedom of navigation and overflight in this region. In contrast with the EEZ, however, the rights within the continental shelf do not apply to fishing. The discussion below on the authority to protect platforms in the EEZ is also valid for the continental shelf.

The *high seas* are a zone comprising all the maritime areas that are neither within an EEZ nor within the territorial sea of any state. In this region, all states enjoy freedom of navigation and freedom of overflight. Vessels on the high seas are subject to the exclusive jurisdiction of the flag state.

The Law of Self-Defense

The right to self-defense, enshrined in Article 51 of the UN Charter, allows a state to use force in response to an armed attack against it. This authority constitutes an exception to the general ban on the use of force between states, set forth in Article 2(4) of the UN Charter. Although the doctrine of self-defense traditionally dealt with force in response to an attack launched by a state, state practice over the past decades shows that the right of self-defense can also be used to justify a response to an armed attack launched by non-state actors, including terrorist organizations. Furthermore, although some assert that the authors of Article 51 intended to regulate the response of a state to an attack against it after the attack has already taken place, international law today seems to also recognize the right of a state to use force in order to prevent an anticipated attack against it.

The lawful use of force under the right of self-defense must satisfy three criteria: necessity, proportionality, and imminence. According to the necessity criterion, the use of means other than force to thwart an attack must be attempted, insofar as such measures are possible under the circumstances. Under proportionality,¹⁰ the force used should be limited to what is necessary under the circumstances to thwart the attack or prevent additional attacks. Finally, imminence applies to threats that have not yet been carried out. Under this criterion, force may be used only to foil an attack expected in the near future.¹¹

The Law of Naval Warfare

The law of naval warfare regulates the rights and duties of states conducting naval operations in the context of an armed conflict. These laws developed mainly in customary international law and are not part of any official binding international treaty. Many of the customary rules in this area, together with innovations and current trends, are gathered in the 1994 San Remo Manual on International Law Applicable to Armed Conflicts at Sea.¹² It should be noted that while the law of naval warfare was developed largely in the context of international armed conflicts (i.e., between states), it nevertheless can be relied on as a source of authority for actions carried out by a state in an armed conflict with a non-state actor such as a terrorist group.¹³

A state that is engaged in an armed conflict is authorized to impose certain restrictions on navigation that cannot be legally imposed during peacetime, and to use force against vessels that violate these rules. Since October 2000,

Israel has been engaged in an armed conflict against Palestinian terrorist organizations, first and foremost Hamas,¹⁴ and has taken measures under the framework of the law of naval warfare in the context of this conflict.¹⁵ It seems fair to determine that Israel is also engaged in an ongoing armed conflict with Hizbollah.¹⁶

Confronting Concrete Threats

Israel has extensive authority to deal with a scenario in which it identifies a specific vessel that is planning an attack against its drilling platforms. Such identification is likely to be based on prior intelligence or detection of a vessel's hostile intent and the means of executing it (for example, identification of weaponry on a ship behaving in a threatening manner in the proximity of the platforms). In such situations, under the law of the sea, Israel can contact the vessel's flag state and ask the latter state to exercise its authority over the vessel in order to thwart the attack. However, the legal solution to such threats, which ordinarily necessitate a quick response, lies mainly in the law of self-defense and the law of naval warfare.

According to the law of self-defense, Israel is entitled to use force against a vessel posing a definite threat to its platforms. In order to take action against it, Israel must determine that there is an intention to use the vessel for an attack on the platforms in the near future. In addition, Israel must employ means other than force to prevent the attack, insofar as such measures are possible in the circumstances at hand. One example of such a measure is an appeal to the flag state or the state from whose port¹⁷ the vessel is bound to set sail, asking that state to exert its authority to foil the attack (for example, by preventing the vessel from leaving the port). If force is eventually used against the vessel, it must conform to the principle of proportionality. For example, the threat would preferably be removed by seizing the threatening vessel, rather than attacking it, provided that this does not pose a significant risk to the forces.

The law of naval warfare is likely to provide Israel with even more extensive authority with respect to a vessel belonging to a party with which Israel is in armed conflict (for example, Hamas or Hizbollah). Under the law of naval warfare, a vessel bearing military characteristics and belonging to such a party will usually constitute a military objective.¹⁸ Israel is therefore entitled to attack such a vessel in order to remove the threat.

As a rule, the use of force against a vessel, whether under self-defense law or under the law of naval warfare, should take place outside the territorial waters of neutral states (i.e., states not party to the conflict) in order to avoid a breach of their sovereignty. Additionally, a precondition for attacking a ship is the existence of reliable information about its involvement in hostile actions. Israel must also take steps to reduce the expected collateral damage to civilians or civilian objects caused by the attack, and refrain from attacking when the anticipated collateral damage is excessive in comparison with the military advantage expected from the attack.

Thus it appears that dealing with vessels when well-established information exists concerning their intention to attack drilling platforms does not involve significant legal challenges. Israel possesses relatively broad authority to take action to remove such threats, based on the law of self-defense or the law of naval warfare. General threats, however, pose a far greater challenge.

The Principal Challenge: Defense against the General Threat

The routine protection of platforms from general threats that cannot be tied to a concrete vessel creates a substantial challenge, in part due to the restrictions imposed on the authority of the coastal state in its EEZ.

Creating Safety Zones around the Platforms under the Law of the Sea

The law of the sea grants a state the authority to establish “safety zones” around its drilling platforms located in the EEZ, and to employ “appropriate measures” to ensure the safety of the platform and the ships navigating in the area. The difficulty in relying on these safety zones for protection of the platforms against terrorist attacks lies in the breadth of the zones: as a rule, under Article 60(5) of UNCLOS, the width of such a safety zone cannot exceed 500 meters. This restriction greatly curtails the possibility of effectively dealing with terrorist threats against the platforms.

Both the authority to declare safety zones around platforms and the restrictions on their width were first set out in the 1958 Convention on the Continental Shelf.¹⁹ Research into the process that led to the formulation of this treaty indicates that the choice of a 500-meter limit was quite arbitrary: this restriction was derived from the prevailing national standards at the time for the protection of land-based oil drilling facilities against fires.²⁰ In other words, the drafters of the treaty were not thinking about the security risks involved in the operation of platforms in an area traversed by vessels

of varying speed and size, let alone the danger to drilling platforms posed by maritime terrorism – a threat that developed several decades after the treaty was formulated.

The question of the width of the safety zones surrounding the platforms was discussed during the negotiations on UNCLOS in the 1970s. Some states asserted that 500 meters was inadequate for dealing with the modern security risks facing the drilling platforms – mainly the fear that large, fast ships would collide with the platforms. These states proposed that rather than stipulate a maximum radius of 500 meters, the treaty should grant the coastal state discretion in determining the breadth of the safety zones, subject to reasonableness. However, concern that granting discretion in this matter would open the door to exploitation and in practice lead to the imposition of broad restrictions on freedom of navigation in EEZs led to the adoption of the 500-meter limit in UNCLOS as well.²¹ Nevertheless, in order to meet the concerns raised about the ability to prevent accidents using 500-meter safety zones, the treaty left the door open to setting larger safety zones, provided it was recommended²² by the International Maritime Organization (IMO).²³

Since UNCLOS entered into force, a number of states have asked the IMO to approve safety zones wider than 500 meters. A key example is the submission by Brazil in 2007. As part of its request, Brazil demonstrated that routine loading and unloading of oil from drilling platforms (during which a tanker is connected to a platform) requires an operating space of 1,400 meters. According to Brazil, a safety zone with a width of 1-2 nautical miles could help significantly reduce concern about vessels colliding with the platforms.²⁴ This request, however, like similar requests submitted to the IMO, was rejected by the organization under the general argument that the organization was not convinced of the need to establish broader safety zones.²⁵

It appears that this decision was based on the same concern that prevented the expansion of the safety zones during the UNCLOS negotiations – fear of a loophole that would lead to the imposition of severe restrictions on freedom of navigation in EEZs. The IMO discussions on this issue dealt solely with the safety question. A request to the IMO to enlarge the safety zones for security reasons, such as prevention of terrorism, would likely encounter even more difficulties, given the political considerations that are, as a general rule, involved in deciding international issues of this type.

It is clear that safety zones of only 500 meters do not provide the solution needed for the protection of drilling platforms against terrorist attacks, such as a collision with a boat mounted with explosives. To illustrate this problem, it should be borne in mind that a vessel traveling at 25 knots (about 46 kilometers per hour) will cross such a safety zone within 40 seconds, leaving security personnel on the platform an extremely brief window of time, to say the least, within which to remove the threat. Furthermore, the weaponry currently possessed by terrorist organizations, such as anti-tank missiles,²⁶ makes it possible to attack a platform from a distance of over 500 meters without even penetrating the safety zone.

The law of the sea, therefore, does not provide an effective solution to the problem of terrorist threats to the platforms. With this in mind, the authority to restrict navigation in the proximity of platforms under the law of self-defense and the law of naval warfare must be considered.

Restrictions on Navigation in the Proximity of Platforms under the Law of Self Defense and the Law of Armed Conflict

General

When a vessel nearing a drilling platform is identified and there is definite information that its operators intend to attack the platform in the near future, proportionate force may be used to remove the threat. In reality, however, the security forces will not always have prior information of a vessel's hostile intent. In order to prevent such attacks, it is therefore important to identify the threat as early as possible.

As will be demonstrated below, the law of self-defense and the law of naval warfare may allow the imposition of restrictions on navigation more than 500 meters away from the platforms in order to increase the response time and improve the ability to counter threats to the platforms. Measures of this type, however, can only be taken for short periods of time, and only in relatively extreme circumstances of hostilities or in the face of an imminent threat. In exercising authority of this type, operations in the territorial waters of neutral states should be avoided, and the effect of this activity on the freedom of navigation of foreign vessels should be reduced to the minimum. The fact that the exercise of this authority is liable to arouse international criticism on the grounds of excessive interference with the freedom of

navigation, even if exercised in compliance with the rules, should also be taken into account.

Warning of an expected attack on platforms

Self-defense law confers the authority to temporarily restrict navigation beyond the 500-meter range in a scenario where there is an established warning of an imminent attack against the platforms. These measures are aimed at making it possible to identify a hostile vessel at a relatively early stage, so that the attack can be thwarted.²⁷ Such restrictions may, for example, take the form of a general ban on navigation within a range of a few miles from the platforms, making entry into the area conditional on compliance with a security check, and so on. Nevertheless, use of this authority requires satisfaction of the criteria applicable to actions in self-defense (discussed above).

First, the threat at hand must be imminent. Such restrictions can therefore only be imposed temporarily. Second, the restrictions imposed in the proximity of the platforms and the means used to enforce them must fulfill the principle of necessity. For example, if it is possible to settle for making entry into the relevant area conditional on a security check, instead of preventing entry altogether, this should be preferred. Furthermore, before using force against a vessel suspected of violating the restrictions, security forces should exhaust the non-forceful means available to them, such as effective advance warning and warning shots into the air.

Third, the measures taken must be reasonably related to the threat they are designed to meet. For example, a state should limit the area in which restrictions are imposed to the essential minimum. Similarly, force used against a specific vessel in order to impose the restrictions must be gradual and proportional in relation to the threat posed by the vessel. Finally, advance notice of restrictions of this type should be given to all the parties liable to be affected by them, including the states in the region, port authorities, and vessels traveling in the area.²⁸

Another way of coping with a general warning regarding an expected attack on the platforms is through the authority to conduct a “visit and search” on suspicious vessels – an authority originating in the law of naval warfare. Israel may exercise this authority against a vessel when, for example, there are reasonable grounds for suspecting that it is operated by a party to an armed conflict with Israel (such as Hamas or Hizbollah). When such a

vessel is spotted it may be stopped for the purpose of conducting a search onboard. This authority may be exercised at a considerable distance from the platforms, provided this occurs outside the territorial waters of neutral states.²⁹ If a suspicious vessel resists the implementation of this authority, reasonable force may be used in order to enforce compliance.

In essence this means that the more limited the measures that a state takes, in time and space, and the better founded and more imminent the threat they are designed to meet, the better the chances of proving that the imposition of restrictions and the degree of force used to enforce them are legal. In this context, the difficulty of subsequently justifying the use of force against a vessel in breach of the restrictions, if it turns out that it was not involved in hostile acts, should be taken into account. In such scenarios, the state would generally be required to prove to the international community that it had indeed perceived a real and imminent threat, and that the means employed met the requirements of necessity and proportionality. Proving such a claim is likely to be difficult given the complications involved in revealing the intelligence on which such warnings are typically based.

Restricting navigation in areas in which naval operations are taking place

The law of naval warfare provides a state with the power to impose additional restrictions on navigation in the proximity of drilling platforms. One option is to declare an “exclusion zone” – an area of the sea in which a party to an armed conflict is authorized to prevent the entry of vessels due to military necessity. Whether an authority to declare exclusion zones exists nowadays is a controversial matter among international legal scholars.³⁰ Nevertheless, the San Remo Manual recognizes the legality of this measure “as an exceptional measure.”³¹ According to the Manual, a party to an armed conflict that declares an exclusion zone is authorized to take enforcement actions against vessels that act in breach of the restrictions on navigation in the zone.³² A prominent example of the use of this authority is the UK’s declaration of a 200 nautical mile exclusion zone around the Falkland Islands during the conflict between the UK and Argentina in 1982. The international community’s response to this measure was rather mild.³³

The declaration of an exclusion zone is subject to a number of conditions. First, the size of the zone, its location, duration, and the means of enforcement must be in reasonable proportion to the military necessity for which the zone is declared. Proportionate force may be used in order to enforce the

restrictions, yet unauthorized access in itself would not constitute grounds for attacking a vessel. Second, neutral states should be notified of the zone's commencement, duration, location, its dimensions, and the means used to enforce it. Third, safe access should be provided to the ports of neutral states. In addition, due regard must be given to the rights of these states, in particular freedom of navigation.

In any event, the legality of exclusion zones in international law is a controversial matter. Therefore, it appears that only circumstances of active and significant hostilities would justify the use of such authority.

Aside from declaring exclusion zones, a state is also entitled to impose restrictions on navigation in a zone in which naval operations are taking place, i.e., an area of hostilities or one in which the belligerent forces are actually operating.³⁴ Insofar as a vessel is in breach of these restrictions, proportionate force may be used to detain it, providing that the restrictions were not set arbitrarily. For example, to the extent that the Israel Defense Forces must carry out naval operations in the proximity of the platforms, restrictions may be imposed on navigation around them. In this context, operational activity designed to protect the drilling platforms against attack when hostilities are taking place may in itself justify the imposition of restrictions on navigation under this authority.³⁵

*Restrictions under the law of self-defense and the law of naval warfare:
The bottom line*

The law of naval warfare and the law of self-defense are likely to provide additional legal tools for protecting offshore platforms against terrorist attacks – but these tools are limited and are mainly practical for dealing with scenarios in which warning of an attack has been received or when actual hostilities affecting the vicinity of the platforms is ongoing or underway. These sources of authority do not provide a genuine solution for the routine task of guarding the platforms in the absence of such warning or of hostilities in the vicinity.

Possible Solutions

Israel is not the only state facing the challenge of protecting drilling platforms against terrorist attacks. A complete legal solution to this threat will require international cooperation in amending UNCLOS to enable the establishment of safety zones greater than 500 meters, or at least the formulation of IMO

recommendations that will permit the extension the safety zones. Since such solutions are not expected to be achieved in the foreseeable future, states such as Israel will have to find practical solutions for protecting their platforms, considering their limited ability, under international law, to interfere with navigation in areas beyond a 500-meter radius from the platforms.

In addition to technological means for prior identification of threats, “soft” tactics may be employed to assess the potential risk posed by vessels navigating in the vicinity of the platforms. One example is requesting information from vessels coming within a certain distance of the platforms.³⁶ As part of this questioning, which may be conducted via radio from ships, aircraft, or the platforms themselves, the vessel would be asked to provide information that will make it possible to determine the potential level of threat that it poses. For example, this information may include the vessel’s port of origin and destination, ports it has recently visited, its planned course, the identity of its crew members, and so forth.³⁷ The information provided during the questioning may be verified using information available from other sources, such as automatic systems installed on a vessel (for example, AIS and LRIT).³⁸ In addition, the information may be verified by contacting the vessel’s flag state or the port and destination states, insofar as time allows. Based on the information obtained from the vessel or its willingness to cooperate with the questioning, the level of potential threat may be estimated, allowing security forces to determine whether the vessel’s activity requires special attention (e.g., tracking or a higher alert on the platform).

Similarly, a state may establish “warning zones” of several nautical miles around its platforms and issue a recommendation to vessels to refrain from entering those zones.³⁹ A vessel that nevertheless enters a warning zone will be questioned along the lines described above.

A vessel’s refusal to comply with such warnings or its unwillingness to cooperate with questioning may not by itself constitute grounds for restricting its freedom of navigation. Assuming, however, that operators of civilian vessels would usually have no reason to refuse to cooperate with questioning, this method is likely to make it easier for a state to identify potential threats in advance.

The use of questioning methods and the establishment of warning zones may contribute to the ability to identify threats in the vicinity of offshore platforms. Nevertheless, without cooperation between states on the issue, the effectiveness of such means is liable to erode with time. A mechanism

for international cooperation in this context – for example, an international treaty obligating ships to provide the coastal state with information when approaching its drilling platforms – could upgrade the effectiveness of these means. Additionally, guidelines for rapid cooperation between the coastal state and the flag state when dealing with noncompliant vessels should be established in the framework of such a treaty. Such rapid cooperation may, for example, provide the coastal state with the flag state's consent to stop and search the noncompliant vessel. Promoting mechanisms of this type is liable to prove a difficult task, yet far easier than obtaining international agreement on the extension of safety zones around drilling platforms.

Conclusion

Protecting offshore drilling platforms poses a significant challenge to Israel. Dealing with this challenge is influenced to a large extent by the legal limitations on coastal state authority in the EEZ, where the platforms are located.

When a state possesses well-founded information about a vessel's intent to attack a drilling platform, it enjoys relatively broad authority to take action to remove the threat under the law of self-defense or the law of naval warfare. However, dealing with general threats that are not based on specific intelligence information poses a far greater challenge. While the law of the sea gives a state the authority to restrict entry to safety zones surrounding the platforms, the maximum breadth of those zones is limited to 500 meters from the platform, a distance that does not allow security forces ample response time to remove threats.

The law of self-defense and the law of naval warfare may allow the imposition of restrictions on navigation beyond the 500-meter range for the purpose of increasing the response time and improving the ability to thwart threats to the platforms. The tools provided by these laws, however, are limited and are mainly suitable for addressing scenarios in which there is a warning about an imminent attack, or when actual hostilities are taking place in the vicinity of the platforms. These sources of authority do not provide a genuine solution to the routine task of securing the platforms in the absence of warning or naval operations in the area.

Israel is not the only state to encounter the challenge of protecting drilling platforms against terrorist attacks. A comprehensive legal solution to this threat will require international cooperation in amending UNCLOS to

enable the establishment of safety zones wider than 500 meters, or at least the formulation of IMO recommendations that broaden safety zones. Since such solutions are not expected to be achieved in the foreseeable future, states like Israel will have to find practical solutions for protecting their platforms considering their limited ability, under the law, to interfere with navigation in areas beyond a 500-meter range of the platforms.

The use of “soft” defensive tactics, such as questioning vessels in the proximity of the platforms and establishing “warning zones,” may contribute to the ability to spot threats in advance. Nevertheless, without cooperation between states, the effectiveness of these means is liable to erode with time. A mechanism for international cooperation could significantly improve the effectiveness of these methods. While promoting mechanisms of this type is liable to prove a difficult task, it will certainly be easier than attempting to obtain international agreement on the enlargement of safety zones surrounding offshore drilling platforms.

Notes

- 1 Amiram Barkat, *The State Will Pay Compensation for Drilling Platforms Damaged in Hostile Operations*, GLOBES, February 25th, 2013, <http://www.globes.co.il/news/article.aspx?did=1000825022>.
- 2 Lecture by Brigadier General (res.) Noam Feig at the *Natural Gas Discoveries: Strategic Implications* conference held by the Institute for National Security Studies (INSS) on November 23, 2010. A summary of the conference appears on the INSS website, <http://www.inss.org.il/index.aspx?id=4480&eventid=2967>; Gili Cohen & Itai Trilnick, *Navy Demands NIS 3billion to protect Mediterranean Drilling Platforms*, HAARETZ, July 9th, 2012.
- 3 Lecture by Brigadier General (res.) Noam Feig, *supra* note 2.
- 4 International law consists of two kinds of rules – treaty and customary: a treaty rule is one that is legally binding on a particular state as a party to an international treaty that establishes the rule, while a customary rule is binding on all states. A state is therefore obligated to observe a customary rule, even if the rule is not stated in any of the treaties that it is party to.
- 5 United Nations Convention on the Law of the Sea (UNCLOS), Dec. 10, 1982.
- 6 As of the time of writing, 166 states have signed UNCLOS. States that have not signed include the US, Turkey, Iran, Syria, Thailand, and North Korea. From among Israel’s neighboring states, parties to the convention include Cyprus, Lebanon, Egypt, Jordan and Saudi Arabia.
- 7 UNCLOS, Articles 17-19.
- 8 List of Geographical Coordinates for the Delimitation of the Northern Limit of the Territorial Sea and Exclusive Economic Zone of the State of Israel, July 12th, 2011, http://www.un.org/depts/los/LEGISLATIONANDTREATIES/PDFFILES/isr_eez_northernlimit2011.pdf; Agreement between the Government of the State of Israel

and the Government of the Republic of Cyprus on the Delimitation of the Exclusive Economic Zone, signed in Nicosia on December 17, 2010, http://www.un.org/depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/cyp_isr_eez_2010.pdf. Note that following the depositing of these documents, the government of Lebanon filed a complaint to the UN Secretary-General claiming that the border submitted by Israel encroached into Lebanon's EEZ and illegally annexed approximately 860,000 square kilometers. The Lebanese Foreign Minister's letter of September 3, 2011 can be found at http://www.un.org/depts/los/LEGISLATIONANDTREATIES/PDFFILES/communications/lbn_re_isr_listofcoordinates_e.pdf.

- 9 The continental shelf is a geological term that refers to the seabed of the moderate incline starting at the coastline and ending at the point at which the angle of the incline changes sharply.
- 10 A distinction should be made between proportionality under the law of self-defense, which involves a balance between the gravity of the threat and the degree of force necessary to thwart it, and proportionality under the law of armed conflict, which involves a balance between the military advantage anticipated from a given attack and the anticipated collateral damage to civilians and civilian objects resulting from it. The term "proportionality" used in this article refers to the first type.
- 11 On this subject, note that according to the U.S. DEPARTMENT OF THE NAVY, COMMANDER'S HANDBOOK ON THE LAW OF NAVAL OPERATIONS (hereinafter, US Navy Handbook), "'imminent' does not necessarily mean immediate or instantaneous," see US Navy Handbook, section 4.4.3.1 (2007).
- 12 SAN REMO MANUAL ON INTERNATIONAL LAW APPLICABLE TO ARMED CONFLICTS AT SEA 73 (Louise Doswald-Beck ed., 1995). The manual was written by an international group of experts in the years 1988-1994. It should be noted that although the manual represents to a great extent the customary international law regarding naval warfare, some of its rules reflect *lex ferenda*, which does not bind states legally.
- 13 Assaf Harel, *Preventing Terrorist Attacks on Offshore Platforms: Do States Have Sufficient Legal Tools?*, 4 HARVARD NATIONAL SECURITY JOURNAL 131, 164-165 (2012).
- 14 This position was supported by a series of Supreme Court rulings. For example, see Israel High Court of Justice Case 769/02 *Public Committee against Torture in Israel v. the Government of Israel*.
- 15 For example, the law of naval warfare is the normative source regulating the Israeli naval blockade on the Gaza Strip; see THE TURKEL COMMISSION, PUBLIC COMMISSION TO EXAMINE THE MARITIME INCIDENT OF MAY 31, 2010; Report Part I, 42-45 (2011), SECRETARY-GENERAL'S PANEL OF INQUIRY, *Report on the 31 May Flotilla Incident* (September 2011), 41-42.
- 16 Given, among other things, that the 2006 war did not end in a ceasefire, and that Hizbollah continues its terrorist attacks against Israel (for example, Hizbollah is strongly suspected of having organized the attack on Israeli tourists in Burgas, Bulgaria on July 18th, 2012).
- 17 A state's port is an area completely under its sovereignty. As a rule, a vessel anchoring in the port of a state is therefore subject to the laws of that state (other than government ships, which enjoy immunity in certain respects). Accordingly, insofar as local law allows, the port state can prevent a vessel involved in terrorism from leaving the port.

- 18 Under the law of armed conflict, a “military objective” is an object that by its nature, location, purpose, or use makes an effective contribution to the enemy’s military action, and whose destruction, capture or neutralization, under the circumstances, offers a military advantage to the attacking side. *See* Article 52(2) of the 1977 Additional Protocol I to the Geneva Conventions.
- 19 Convention on the Continental Shelf, April 29th, 1958. Under the treaty, the rights of states to exploit the natural resources of the seabed were acknowledged for the first time. The provisions of this treaty were included under Part VI of UNCLOS.
- 20 Geir Ulfstein, *The Conflict Between Petroleum Production, Navigation and Fisheries in International Law*, 19 OCEAN DEVELOPMENT AND INTERNATIONAL LAW. 229, 244 (1988); Harel, *supra* note 13, at 144-145.
- 21 Note that there is a decades-long conflict between states seeking to apply broad sovereign rights in the EEZ, extending beyond the resource-related rights specified in UNCLOS (such as China, Peru, and Ecuador) and states opposed to such measures (headed by the US) in the name of preserving freedom of navigation. *See* J. ASHLEY ROACH & ROBERT W. SMITH, UNITED STATES RESPONSES TO EXCESSIVE MARITIME CLAIMS, 166-171 (2nd edition, 1996).
- 22 UNCLOS, Article 60(5).
- 23 The IMO is a UN agency whose main task is developing international regulations in the fields of international shipping, maritime safety, preventing sea pollution, and maritime security. The organization, composed of representatives of its member states, fosters progress on these issues by convening international conferences, and through discussions in the committees operating in its framework.
- 24 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 (February 26, 2006 53/3).
- 25 IMO Maritime Safety Committee, Subcommittee on Safety of Navigation, Report on its 56th Session, paragraph 4.6, IMO (Doc. NAV 56/20, August 31, 2010).
- 26 For example, it was previously reported that both Hamas and Hizbollah possessed the Kornet anti-tank missile, which according to JANE’S DEFENSE WEEKLY has a range of five kilometers; *see* Roni Sofer, *Chief of Staff: Kornet Missile Penetrates Tank in Gaza for First Time*, YNET, December 21st, 2010, <http://ynet.co.il/articles/0,7340,L-4002468,00.html>. It was also reported that the two terrorist organizations also had RPG-29 anti-tank missiles, which according to JANE’S DEFENSE WEEKLY have a range of 500 meters; *see* Roe Nahmias, *Hamas Has Same Power as Hezbollah Before the War*, YNET, December 13th, 2009, <http://www.ynet.co.il/articles/0,7340,L-3827244,00.html>; JANE’S INFANTRY WEAPONS 410 (Terry J. Gander & Charles Q. Cutshaw eds., 27th ed. 2001-02).
- 27 This approach was implemented by the US Navy. *See* U.S. NAVAL WAR COLLEGE, MARITIME OPERATIONAL ZONES 1-5-6 (2006).
- 28 For example, such notice may be given through a Notice to Mariners system used to distribute notices to all vessels navigating in a certain area, to port authorities, and to the public at large.
- 29 Article 146(c) of the San Remo Manual, *supra* note 11.

- 30 See Christopher Michaelsen, *Maritime Exclusion Zones in Times of Armed Conflict at Sea: Legal Controversies Still Unresolved*, 8 JOURNAL OF CONFLICT AND SECURITY LAW, 363.
- 31 San Remo Manual, *supra* note 11, 181-182.
- 32 *Ibid.*
- 33 Condemnations were made mostly by Argentina and the Soviet Union; *see* Michaelsen, *supra* note 29, 372-374.
- 34 San Remo Manual (*supra* note 11), para. 180.
- 35 In 2004, Coalition forces, led by the US, imposed restrictions on navigation at a radius of up to three kilometers around two oil terminals off the Iraqi shore, following a terrorist attack aimed at the terminals. *See* US Navy Handbook, *supra* note 10, at C1-C2.
- 36 International law permits a warship or military aircraft to request the identification details of a vessel navigating in an EEZ. For example, according to the US Navy Handbook, a warship or military aircraft is authorized to approach a vessel in international waters in order to verify its nationality (*supra* note 10, 3-4).
- 37 Australia adopted this practice of questioning vessels in its EEZ as part of a program that it had implemented in 2004 for the purpose of protecting its drilling platforms and ports against the threat of a terrorist attack. *See* Natalie Klein, *The Right of Visit and the 2005 Protocol on the Suppression of Unlawful Acts Against the Safety of Marine Navigation*, 35 DENVER JOURNAL OF INTERNATIONAL LAW & POLICY 287, 314 (2007).
- 38 The AIS (Automatic Identification System) is a VHF-based system that provides information about the location of ships. The LRIT (Long Range Identification and Tracking) system provides states with information about the identity, location, and navigational courses of ships within a range of 1,000 nautical miles of their shores. The IMO rules impose a duty to install systems of this type on ships of various categories, particularly passenger ships and large ships.
- 39 Following the terrorist attack on the US Marines headquarters in Beirut in 1983, the US Navy declared warning zones around its vessels navigating in the Middle East. A notice issued in this regard advised vessels and aircraft to identify themselves and provide information about their intentions before approaching US forces. Additionally, vessels and aircraft were advised to maintain a distance of five nautical miles from US vessels, and it was stated that vessels failing to keep such a distance could mistakenly be perceived as a threat, leading to the exercise of protective measures. The US Navy has used such warning zones on a number of other occasions since then; *see* Operational Zones, *supra* note 25, at 2-3, 2-4, and 3-2.