

Chapter 8

Protecting Offshore Energy Installations under International Law of the Sea

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I. INTRODUCTION

Thousands of installations and platforms have been erected in areas within and beyond the territorial sea, mostly to explore and exploit natural resources. Offshore oil and gas production is the world's biggest marine industry and an extremely important source of energy.² At the same time, due to their isolation and distance from shore, offshore platforms are difficult to protect and thus extremely vulnerable to the threat of terrorist attacks. Imagine for a moment the scenario of terrorists reaching the platform aboard a vessel and attacking the platform, either by boarding and planting explosives aboard, or by ramming the platform with their vessel.³ It goes without saying that such a terrorist attack may have potentially devastating effects, both economic and environmental.⁴ Such

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² See Lawrence 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 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 terminal; see Patrick J. McDonnell, *Suicide Boats Attack Iraqi Oil Installations in Gulf*, L.A. TIMES, Apr. 24, 2004. 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; see Philipp Wendel, *STATE RESPONSIBILITY FOR INTERFERENCES WITH THE FREEDOM OF NAVIGATION IN PUBLIC INTERNATIONAL LAW* 26 (2007).

⁴ 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 M. T. Okorodudu-Fubara, *Oil in the Persian Gulf War: Legal Appraisal of an Environmental Warfare*, 23 ST. MARY'S L.J. 123, 134 (1991). More 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. U.S. Environmental Protection Agency (EPA), *Giant Oil Rig Sinks*, 5 OIL DROP 1, 1-3

concerns were at their height in the wake of the attacks on the United States on September 11, 2001 and they still loom large.⁵

In addition, recent cases, such as the *Arctic Sunrise* incident, where the Russian Federation arrested Greenpeace activists and seized their vessel after a peaceful protest against an oil platform in the Arctic Sea,⁶ highlight the growing issue of environmental protest at sea and the lingering controversy about the extent to which coastal States can exercise jurisdiction around their installations. The incident has attracted significant public attention, largely as a result of Greenpeace's media campaign calling for the release of the so-called "Arctic 30."⁷ With the release of the crew in December 2013, public attention waned but the legal proceedings initiated by the Netherlands continued. The Arbitral Award on the Merits of the case was issued in August 2015 and addressed a host of interesting legal questions which will inform our analysis further on.⁸ In any event, as human activities multiply in the oceans, similar environmental protests are expected to occur in the future.⁹

Besides the threats of maritime terrorism or environmental attacks, oil platforms may be the target of attacks in the context of an armed conflict or other international tensions. Suffice it to note the *Oil Platforms case*: on November 2, 1992, the Islamic Republic of Iran instituted proceedings against the United States of America concerning a dispute arising out of the attack on three offshore oil production complexes. The complexes were owned and operated for commercial purposes by the

(2001), <https://www.epa.gov/nscep> (search "Search Publications" for "Giant Oil Rig Sinks"; then follow "540N01007" hyperlink). A blowout on the Deepwater Horizon oil rig on April 20, 2010 resulted in the loss of 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, *inter alia*, EPA, Deepwater Horizon - BP Gulf of Mexico Oil Spill, <https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill>.

⁵ See, e.g. Stuart Kaye, *International Measures to Protect Oil Platforms, Pipelines, and Submarine Cables from Attack*, 31 TUL. MAR. L.J. 377 (Summer 2007); Assaf Harel, *Preventing Terrorist Attacks on Offshore Platforms: Do States Have Sufficient Legal Tools?* 4 HARV. NAT'L SEC. J. 131 (2012).

⁶ For an excellent coverage of the facts giving rise to the dispute see Alex Oude Elferink, *The Arctic Sunrise Incident: A Multi-faceted Law of the Sea Case with a Human Rights Dimension*, 29 INT'L J. MARINE & COASTAL L. 244 (2014).

⁷ See, e.g., Greenpeace International, Meet the Arctic 30, <http://www.greenpeace.org/international/en/campaigns/climate-change/arctic-impacts/Peace-Dove/Arctic-30/>.

⁸ See Arctic Sunrise Arbitration (Neth. v. Russ.), (Award on the Merits of 14 August 2015) (Perm. Ct. Arb. 2015) [hereinafter *Arctic Sunrise* [Merits]] available at <http://www.pcacases.com/web/view/21>. For commentary see James Harrison, *Current Legal Developments The Arctic Sunrise Arbitration (Netherlands v. Russia)*, 31 INT'L J. MARINE & COASTAL L. 145 (2016).

⁹ On environmental protesting at sea see, *inter alia*, G. Plant, *International law and direct action protests at sea: twenty years on*, 33 NETH. Y.B. INT' L. 75 (2002), Joanna Mossop, *Protests against Oil Exploration at Sea: Lessons from the Arctic Sunrise Arbitration*, 31 INT'L J. MARINE & COASTAL L. 60 (2016).

National Iranian Oil Company and were destroyed by several warships of the United States Navy on October 19, 1987 and April 18, 1988, allegedly, in response to a series of Iran's actions in the Gulf from 1987-1988 which, among other things, involved mining and other attacks on U.S.-flag or U.S.-owned vessels. In its Judgment of 6 November 2003, the Court found that it could not uphold the submissions of either Government.¹⁰

This Chapter examines what authority coastal States have under international law of the sea to protect their offshore platforms from the dire consequences of such attacks. It argues that States have sufficient legal authority to take measures for protecting offshore platforms as well as for suppressing unlawful acts against them. The *Arctic Sunrise case* was particularly helpful in ascertaining some grey areas in the 1982 UN Law of the Sea Convention (UNCLOS).¹¹ Yet, there are certain issues that invite discussion, especially as regards the regime of the safety zone around offshore platforms as well as the legal parameters of hot pursuit.

Accordingly, the Chapter will canvass the current state of the international law of the sea with regard to the protection of offshore platforms. It will, first, scrutinize the legal regime of offshore platforms in the territorial waters, and then will revert to the Exclusive Economic Zone (EEZ)/continental shelf and discuss the provisions of UNCLOS and the jurisdictional powers conferred upon coastal States in this regard in view also of the *Arctic Sunrise case*.¹² Additionally, it will endeavor to propose solutions for the shortcomings of the current legal regime concerning the protection of offshore platforms. Needless to say that there are other rules that may find application in the context of the present enquiry, such as the right of self-defense, the law of armed conflict at sea in respect of the protection of offshore platforms during wartime, the plea of necessity under the law of State responsibility, and so forth. However, this Chapter will focus solely on the law of the sea parameters of the question of energy offshore platforms.

II. OFFSHORE PLATFORMS IN THE TERRITORIAL SEA

The territorial sea is the belt of sea adjacent to a State's land territory and internal waters, extending up to twelve nautical miles from the State's

¹⁰ See *Oil Platforms (Iran v. U.S.)*, 2003 I.C.J. 161 (Nov. 6) and commentary in A. Laursen, *The Judgment of the International Court of Justice in the Oil Platforms case*, 73 *NORDIC J. INT'L L.* 135 (2004).

¹¹ United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3 [hereinafter: UNCLOS].

¹² The UNCLOS also guarantees the right of all States to construct an installation on the high seas. *Id.* art. 87(l)(d). However, given the paucity of installations in waters beyond national jurisdiction, i.e. on the high seas, there is little reason to address offshore platforms thereon.

baselines and is subject to the sovereignty of the coastal State.¹³ In the territorial sea, vessels of all States enjoy a “right of innocent passage through the territorial sea.”¹⁴ As regards offshore installations, the UNCLOS has no explicit rules. Nevertheless, as part of its sovereignty therein, the coastal 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.¹⁵ Thus, it may erect platforms in its territorial sea subject, however, to the condition not to hamper the right of innocent passage, especially in sea lanes designated according to the recommendations of the International Maritime Organization (IMO).¹⁶

The UNCLOS alludes only twice to installations in the territorial sea: first, according to Article 19(2):

[p]assage of a foreign ship shall be considered to be prejudicial to the peace, good order or security of the coastal State if in the territorial sea it engages in any of the following activities: . . . (k) any act aimed at interfering with any systems of communication or any other facilities or *installations of the coastal State*.¹⁷

This “term” is broad enough to include all offshore platforms in the territorial sea.¹⁸ 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. As Harel notes, “[i]n 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.”¹⁹

¹³ See UNCLOS arts 2-3. For a discussion on the historical evolution of the territorial sea, see JAMES HARRISON, *MAKING THE LAW OF THE SEA: A STUDY IN THE DEVELOPMENT OF INTERNATIONAL LAW* 27-61 (2011); Yoshifumi Tanaka, *THE INTERNATIONAL LAW OF THE SEA* 20-38 (2012); ROBIN CHURCHILL & VAUGHAN LOWE, *THE LAW OF THE SEA* 58-71 (1999).

¹⁴ See Article 17 of UNCLOS and *Corfu Channel* (U.K. of Gr. Brit. and N. Ir. v. Alb) 1949 I.C.J. 4, 28 (Apr. 9).

¹⁵ See M. Gavouneli, *Energy installations in the marine environment*, in *LAW OF THE SEA: UNCLOS AS A LIVING TREATY* 187, 189 (Jill Barrett & Richard Barnes eds., 2016); DONALD ROTHWELL & TIM STEPHENS, *THE INTERNATIONAL LAW OF THE SEA* 75 (2010).

¹⁶ See Articles 24 and 22(3) of UNCLOS and 2 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA 1982: A COMMENTARY 176, 212 (Myron Nordquist et al. eds., 1993) [hereinafter: *Virginia Commentary*]. See also Article 44 of UNCLOS in relation to respective duties of the coastal State in relation to the transit passage regime.

¹⁷ Emphasis added.

¹⁸ See *Virginia Commentary*, *supra* note 16, at 200; Hossein Esmaeili, *The Protection of Offshore Oil Rigs in International Law (Part I)*, 18 *AUSTL. MINING & PETROLEUM L.J.* 241, 244 (1999).

¹⁹ Harel, *supra* note 5, at 141.

In addition, the coastal State may invoke for the purpose of protecting its offshore platforms the right to temporarily suspend innocent passage of foreign vessels in specified areas of its territorial sea.²⁰ Such suspensions are allowed only if they are “essential for the protection” of the coastal State’s security. 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, albeit only temporarily. Noteworthy is also that a coastal State may require foreign vessels in its territorial sea to use designated sea lanes and prescribed traffic schemes. Accordingly, a coastal State could use this authority to prevent vessels from approaching the close vicinity of its offshore platforms.

Besides preventing such “non-innocent passage,” the coastal State may also exercise prescriptive and enforcement jurisdiction²¹ over acts aiming at destroying or damaging offshore platforms in the territorial sea. By virtue of Article 21 of UNCLOS,

[t]he coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following: . . . (b) the protection of navigational aids and facilities and other facilities or *installations*. . . .²²

Hence, once the coastal State adopts the relevant legislation, it may also enforce it against the delinquent vessels within its territorial sea. The assertion of enforcement jurisdiction by the coastal State within its territorial sea is universally accepted.²³ It follows that the coastal States do have the necessary legal tools both for preventing and suppressing unlawful acts, including terrorist threats, against offshore platforms.

²⁰ See UNCLOS art. 25(3) and CHURCHIL & LOWE, *supra* note 13, at 87.

²¹ Under international law, there is a basic distinction between legislative or prescriptive jurisdiction, i.e. the power to make laws and regulations and enforcement jurisdiction, i.e. the power to take executive or judicial action in pursuance of or consequent on the making of decisions or rules; see JAMES CRAWFORD, *BROWNIE’S PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 486 (2012). On jurisdiction in general see, *inter alia*, Frederick A. Mann, *The Doctrine of Jurisdiction in International Law*, 111 RECUEIL DES COURS 1 (1964); CEDRIC RYNGAERT, *JURISDICTION IN INTERNATIONAL LAW* (2015).

²² Emphasis added.

²³ In the famous *Lotus* case, the Permanent Court of International Justice held as to enforcement jurisdiction: “[T]he first and foremost restriction imposed by international law upon a State is that – failing the existence of a permissive rule to the contrary – it may not exercise its power in any form in the territory of another State. In this sense jurisdiction is certainly territorial”; see *SS Lotus* (Fr. v. Turk.), 1927 P.C.I.J. (ser. A) No. 10, at 18–19 (Sept. 7). See also MARIA GAVOUNELLI, *FUNCTIONAL JURISDICTION IN THE LAW OF THE SEA* 11–12 (2007).

A final question is whether a coastal State may establish safety zones around its offshore platforms in a manner similar with the platforms in the EEZ/continental shelf and prohibit unauthorized access to those zones. According to one commentator, "because the coastal State exercises full sovereignty over the territorial sea, a special permissive norm is unnecessary. Hence, it can establish safety zones of any size as long as it grants other States the right of innocent passage."²⁴ While there is no doubt that coastal States may establish safety zones around platforms located in the territorial sea, their size or breadth may elicit controversy. The present author is not totally convinced that a coastal State is absolutely free to establish safety zones of any size; quite to the contrary, the obligation of the coastal States under Article 24 of UNCLOS not to hamper the right of innocent passage imposes a corollary duty not to establish safety zones unreasonable and disproportionate in size. This does not mean that these safety zones should necessarily be of 500 meters, but rather that States are not absolutely free in this respect. State practice also corroborates this, since coastal States usually do not distinguish as per the breadth of safety zones between offshore platforms in the territorial sea and in the EEZ/continental shelf.²⁵

III. OFFSHORE PLATFORMS IN THE EEZ/CONTINENTAL SHELF

While the UNCLOS does not regulate the right of coastal States to install offshore platforms in the territorial sea, it does so with an identical provision for the EEZ²⁶ and the continental shelf.²⁷ Prior to UNCLOS, the

²⁴ Sebastian tho Pesch, *Coastal State Jurisdiction around Installations: Safety Zones in the Law of the Sea*, 30 INT'L J. MARINE & COASTAL L. 512, 518 (2015).

²⁵ See, e.g., Article 11 of the pertinent Greek Law No. 2289/1995, *On Prospecting, Exploration and Exploitation of Hydrocarbons, and Other Provisions*, as amended by Law No. 4001/2011, *On the Operation of Electricity and Natural Gas Energy Markets, the Exploration, Production and Transport Networks of Hydrocarbons and Other Provisions*, Official Gazette No. 179, Part A, 22.8.2011.

²⁶ In accordance with Article 57 of UNCLOS and customary law, coastal States may claim an EEZ up to 200 nautical miles from the baselines. There, first and foremost, coastal States exercise sovereign rights for the purposes of 'exploring and exploiting, conserving and managing' both its living and non-living resources. On EEZ see F. ORREGO-VICUÑA, *THE EXCLUSIVE ECONOMIC ZONE: REGIME AND LEGAL NATURE UNDER INTERNATIONAL LAW* (1989).

²⁷ The coastal State has sovereign rights in the seabed and the subsoil of its continental shelf for the purpose of exploring it and exploiting its natural resources. Although not accepted by all States, Article. 76 of UNCLOS stipulates that the continental shelf extends to: (a) 200 miles from the baselines, or (b) to the outer edge of the continental margin, whichever of the two is further. The outer lines based on the latter option cannot be drawn more than 350 miles from the baselines or more than 100 miles from a point at which the depth of the water is [greater than?] 2,500 meters. On continental shelf see J-F Pulvenis, *The Continental Shelf Definition and Rules Applicable to Resources*, in 1 A HANDBOOK ON THE NEW LAW OF THE SEA 315 (R.J. Dupuy & Daniel Vignes eds., 1991).

1958 Geneva Convention on the Continental Shelf 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.²⁸ The Convention also created a fixed limit of 500 meters for the breadth of such safety zones.²⁹

Closely modeled on the regime of the 1958 Geneva Convention on the Continental Shelf, Article 60 of UNCLOS contains the framework for the construction and operation of "artificial islands, installations and structures" in the EEZ and on the continental shelf.³⁰ Article 60(2) provides that the coastal State has exclusive jurisdiction over such installations, "including jurisdiction with regard to customs, fiscal, health, safety and immigration laws and regulations." Article 60(4) authorizes a coastal State, "where necessary," to establish "reasonable safety zones" around its offshore platforms. These safety zones "shall not exceed a distance of 500 metres around them . . . except as authorized by generally accepted international standards or as recommended by the competent international organization [IMO]."³¹ As the IMO has not recommended such standards,³² the exception is currently irrelevant. Furthermore, the coastal State has to give due notice of the extent of the safety zone.³³ Additionally, Article 60(4) sets forth that the coastal State may take "appropriate measures" to ensure safety both of navigation and of the platform itself. Article 60(8) clarifies that these installations do not possess the status of islands, i.e. they are not entitled to territorial sea of their own or other maritime zones.

A. Protection of Offshore Installations Under Articles 60 and 80 UNCLOS

The first question is what measures may the coastal State use to protect its offshore installation. The answer inevitably rests with the authority of the State concerned to establish safety zones around the platforms, whose task is primarily to protect the platform *per se* and secondarily to protect international navigation. The UNCLOS provides that all ships are required to respect the safety zone around an installation.³⁴ A ship entering the safety zone is in violation of this

²⁸ See Convention on the Continental Shelf art. 5, Apr. 29, 1958, 499 U.N.T.S. 311.

²⁹ See comments on the drafting history of the 500 meters breadth of the safety zone in Harel, *supra* note 5, at 144-5 and further references therein.

³⁰ 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 UNCLOS art. 80.

³¹ *Id.* art. 60(5).

³² See Harel, *supra* note 5, at 149-152 and Elferink, *supra* note 6, at 256.

³³ UNCLOS art. 60(5).

³⁴ *Id.* art. 60(6).

provision of the UNCLOS and cannot invoke the freedom of navigation as a justification for this infraction. Article 58(3) of the UNCLOS explicitly provides that States in exercising the freedom of navigation “shall comply with the laws and regulations adopted by the coastal State in accordance with the provisions of [UNCLOS].” As Oude Elferink rightly points out:

[t]he fact that the requirement to respect the safety zone implies an obligation to refrain from entering the zone is confirmed by a number of considerations. First, Article 60(6) makes reference to respecting the zone as such and not to respecting measures inside the zone. Second, Article 60(6) requires ships to comply with generally accepted standards regarding navigation in the vicinity of safety zones, thus making a distinction between the safety zone itself and the area beyond the zone. Finally, an IMO Resolution on this issue³⁵ explicitly recommends governments to ‘take all necessary steps to ensure that, unless specifically authorized, ships flying their flags do not enter or pass through duly established safety zones.’³⁶

Besides the establishment of safety zones and measures taken therein, the UNCLOS does not afford any other legal basis on which coastal States may protect their offshore installations. It comes as no surprise that this has been criticized by many commentators, especially the limited breadth of the safety zones. As Stuart Kaye notes, “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.”³⁷ Indeed, 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.³⁸ Thus, Harel contends that “500-meter safety zones are clearly insufficient for preventing terrorist attacks on offshore platforms . . . especially . . . 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.”³⁹ Notwithstanding these concerns, which the present author also shares, the IMO has neither authorized safety zones larger than 500 meters nor adopted any guidelines

³⁵ International Maritime Organization [IMO] Res. A.671(16), *Safety zones and safety of navigation around offshore installations and structures*, para. 1(d), IMO Doc. A 16/Res.671 (Oct. 19, 1989).

³⁶ Elferink, *supra* note 6, at 256.

³⁷ Kaye, *supra* note 5, at 405

³⁸ *Id.*

³⁹ Harel, *supra* note 5, at 157.

or procedures for evaluating requests for larger safety zones, and it seems very unlikely to do this in the foreseeable future.⁴⁰

States in their practice have developed solutions like the establishment of “warning areas” around the offshore platforms, in which vessels are monitored and warned to ask the permission of the platform’s operator prior to their entry therein. Such a zone of 3 nautical miles was established by the Russian Federation around the offshore platform *Prirazlomnaya*, which was attacked by the Greenpeace activists in September 2013. In more detail, according to Notice to Mariners No. 51/2011, which was in effect in 2013, Russia had declared an area with a radius of three nautical miles around the *Prirazlomnaya* to be “dangerous to navigation,” with the following “caution note”: “Vessels should not enter a safety zone of the marine ice-stable platform without permission of an operator of the platform.”⁴¹ Truly, the *Arctic Sunrise* was clearly “advised” by the Russian Coast Guard vessel *Ladoga* that this 3-mile zone was “deemed dangerous to navigation.”⁴²

The Netherlands challenged the lawfulness of this 3-nautical-mile zone, but the Court took a different view:

Russia’s Notices to Mariners Nos. 51/2011 and 21/2014, however, do not purport to create a zone in which Russia may enact safety laws and regulations and enforce them, nor do they themselves impose mandatory rules on foreign ships. The Notices’ “caution note” does not bear a mandatory character; it is, rather, in the nature of a recommendation, the thrust of which is to inform ships that a danger to navigation may exist in a three-nautical mile area surrounding the platform and that it would be *preferable* for ships to seek the permission of the platform operator before entering this zone.⁴³

This holding, in dictum, makes possible the use of such warning areas which may alleviate the misgivings of the insufficient breadth of the safety zones according to Article 60(5) of UNCLOS. It would certainly be preferable if the IMO adopted recommendations expanding their breadth, but until it does so (if it does so), warning zones such as Russia’s seem like the best solution.

⁴⁰ See, *inter alia*, IMO, Subcommittee on Safety of Navigation, *Report To the Maritime Safety Committee*, para. 4.6, IMO Doc. NAV 56/20 (Aug. 31, 2010) and further discussion in Harel, *supra* note 5, at 149–152.

⁴¹ *Arctic Sunrise* [Merits], para. 207. This was modified on 24 May 2014 by Notice to Mariners No. 21/2014 to read: “Vessels are not recommended to enter a safety zone of the offshore ice-resistant platform (OIRP) (69° 15’56.9” N 57° 17’17.3”E) without the platform operator permission.” *Id.* para 208.

⁴² *Id.* para. 80.

⁴³ *Id.* para 212.

B. *Suppression of Unlawful Acts Against Offshore Platforms in the EEZ/Continental Shelf*

Under Article 60(2) of UNCLOS, the coastal State has exclusive jurisdiction over platforms in the EEZ/continental shelf. Such jurisdiction inevitably includes both prescriptive and enforcement jurisdiction over acts committed on the platform, including in relation to safety matters.⁴⁴ Thus, for example, there is no doubt that the Russian authorities were entitled to exercise enforcement jurisdiction and arrest the two activists that tried to climb onto the platform *Prirazlomnaya*.⁴⁵

The question, however, is whether the coastal State may equally exercise enforcement jurisdiction over respective acts within the 500-meter safety zone. Article 60(4) stipulates that “[t]he coastal State may, where necessary, establish reasonable safety zones around such artificial islands, installations and structures in which it may take appropriate measures to ensure the safety both of navigation and of the artificial islands, installations and structures.” Article 60 does not further specify what the term “appropriate” means. According to Oude Elferink, “in view of the coastal state’s jurisdiction over installations and the safety zones around them, the coastal state in the first instance has the competence to determine what constitute appropriate measures and in this respect will have a margin of discretion.”⁴⁶ Nevertheless, it is submitted that on the face of the relevant provision, the assertion of both prescriptive and enforcement jurisdiction over acts within such zones must be specifically linked either to the protection of the platform or the safety of navigation. The object and purpose of the norm limits the extent of the measures that the coastal State may take.⁴⁷

Needless to say, in case of terrorist or other violent acts against the platform, the coastal State does have the authority to take the requisite law enforcement measures and arrest the suspects within the safety zone. The Tribunal in the *Arctic Sunrise case* was very clear about this:

a coastal State is entitled to take law enforcement measures in relation to possible terrorist offences committed within a 500-metre zone around an installation or structure in the same way that it can enforce other coastal State laws applicable in such a zone. This can include measures taken within the zone, including the boarding, seizure, and detention of a vessel, where the coastal State has reasonable grounds to suspect the vessel is engaged in

⁴⁴ See also Elferink, *supra* note 6, at 257.

⁴⁵ See further information in *Arctic Sunrise* [Merits], paras 88–89.

⁴⁶ Elferink, *supra* note 6, at 257.

⁴⁷ See also Pesch, *supra* note 5, at 525.

terrorist offences against an installation or structure on the continental shelf.⁴⁸

Of relevance will also be the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (**SUA Protocol**).⁴⁹ The SUA Protocol applies to “fixed platforms,” including artificial islands, installations, and structures engaged in exploration or exploitation of the seabed or some other economic purpose and it should be read together with the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (**SUA Convention**).⁵⁰ Article 7 of the SUA Convention empowers a State to take an offender into custody or take other measures to ensure his or her presence for such time as is necessary to enable any criminal or extradition proceedings to be instituted, when the State is satisfied that the circumstances so warrant. Such circumstances include when an offender is suspected of committing terrorist offences on board or against a fixed platform located on the continental shelf.⁵¹

The next question is whether the coastal State is entitled to take law enforcement measures even beyond the safety zones. Articles 60 and 80 do not provide for any enforcement power beyond them, nor does the SUA Protocol actually. Indeed, in stark contrast to the 2005 SUA Convention,⁵² the Protocol to the SUA Protocol falls short of granting any boarding rights to coastal States against vessels that have been engaged in a proscribed activity under the Protocol. Moreover, the UNCLOS is clear that in exercising their rights and duties under the Convention in the EEZ, coastal States must have “due regard to the rights and duties of other States and shall act in a manner compatible with the provisions of this Convention.”⁵³ Articles 92(1) and 58(2) of the Convention provide for the exclusive jurisdiction of a State over ships flying its flag in the EEZ. As a result of the

⁴⁸ *Arctic Sunrise* [Merits], para. 278.

⁴⁹ 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 1988], as amended by the Protocol of 2005 to the Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, Oct. 14, 2005, 1678 U.N.T.S. 000, IMO Doc. LEG/CONF.15/22 (hereinafter SUA Protocol 2005). See further analysis of the Protocol in Kaye, *supra* note 5, at 389–395.

⁵⁰ Convention on the Suppression of Unlawful Acts against the Safety of Maritime Navigation, Mar. 10, 1988, 1678 U.N.T.S. 222 (SUA 1988), as amended by the Protocol of 2005 to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, Oct. 14, 2005, IMO Doc. LEG/CONF.15/21 (SUA 2005). See also Glen Plant, *The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation*, 39 INT'L & COMP. L.Q. 27 (1990).

⁵¹ See SUA Protocol 1988 art. 2.

⁵² See 2005 SUA Convention art. 8(bis) and commentary in Natalie Klein, *The Right of Visit and the 2005 SUA Protocol*, 35 DENV. J. INT'L L. & POL'Y 287 (Spring 2007).

⁵³ UNCLOS art. 56(2).

exclusive jurisdiction of the flag State over ships in the EEZ, a coastal State may only exercise jurisdiction, including law enforcement measures, over a ship, with the prior consent of the flag State. This also applies for platforms over the continental shelf when the coastal State has not declared an EEZ.

Accordingly, as the Tribunal stated in the *Arctic Sunrise case*, there is no right to seize or board vessels in the EEZ in relation to such offences where such action would not otherwise be authorized by the Convention,⁵⁴ *i.e.* the right of visit under Article 110⁵⁵ and the right of hot pursuit under Article 111.⁵⁶ The only pertinent provision in this regard is the latter, *i.e.* hot pursuit, as was discussed in the above case.

Before, however, turning to the right of hot pursuit, it is worth making reference first, to whether the coastal State does have enforcement jurisdiction over non-living resources in the EEZ/continental shelf, and second, to the possible utility of the environmental provisions of UNLCOS in this regard. With respect to the former, it is true that there is no provision in the Part of the Convention concerning the continental shelf granting such enforcement jurisdiction to the coastal State concerned, while Article 73 of the Convention deals expressly with the enforcement of laws relating to *living* resources in the EEZ. Article 73(1) confers authority on a coastal State to board, inspect, arrest, and commence judicial proceedings against a ship where that may be necessary to ensure compliance with its laws and regulations over its *living resources*. There is no equivalent provision relating to *non-living resources* in the EEZ.

That said, however, the Tribunal seems to have a different view in this respect, *i.e.* that the coastal States do have the right to enforce their laws relating to non-living resources in the EEZ, although it declined to expand on the extent of the right.⁵⁷ The Arbitral Tribunal rejected the viewpoint that an enforcement right does not exist because there is no express right in the UNCLOS to enforce laws in relation to non-living

⁵⁴ *Id.* para 278.

⁵⁵ On this right see, *inter alia*, EFTHYMOS PAPASTAVRIDIS, INTERCEPTION OF VESSELS ON THE HIGH SEAS 50 et seq. (2013) and Robert Reuland, *Interference with Non-National Ships on the High Seas: Peacetime Exceptions to the Exclusivity Rule of the Flag State Jurisdiction*, 22 VAND. J. TRANSNAT'L L. 1161 (1989).

⁵⁶ See NICHOLAS M. POULANTZAS, THE RIGHT OF HOT PURSUIT IN INTERNATIONAL LAW (2nd ed. 2002); E.J. Molenaar, *Multilateral Hot Pursuit and Illegal Fishing in the Southern Ocean: The Pursuits of the Viarsa 1 and the South Tomi*, 19 INT'L J. MARINE & COASTAL L. 19–42 (2004).

⁵⁷ "Although the Tribunal does not find it necessary to reach a view on the extent of the coastal State's right to enforce its laws in relation to non-living resources in the EEZ, it is clear that such a right exists." *Arctic Sunrise* [Merits], para 284. See also *id.* para 324, where the Tribunal found that "[a] coastal State has the right to take measures to prevent interference with its sovereign rights for the exploration and exploitation of its non-living resources. . . ."

resources. It noted that during the negotiations of the UNCLOS, it was proposed that Article 73 contain a reference to non-living resources, but that this was rejected.⁵⁸ This did not prevent the Tribunal from finding that an enforcement jurisdiction nevertheless exists, primarily premised on the International Law Commission's view in its Commentary on the draft Convention on the Continental Shelf (1956) that concept of "sovereign rights" included jurisdiction "in connexion [sic] with the prevention and punishment of violations of the law."⁵⁹ In addition, as Mossop rightly observes, "Article 111 supports the argument by providing for hot pursuit regarding violations 'on the continental shelf, including safety zones around continental shelf installations.' This implies that there is an enforcement right over the continental shelf that extends beyond safety zones."⁶⁰

It is regrettable, however, that the Tribunal did not dwell more upon the extent of such enforcement powers. Besides the right of hot pursuit and most probably the *in situ* arrest of a vessel caught "red-handed" to interfere with oil and gas exploration and exploitation in the area,⁶¹ it is questionable to what extent may a coastguard vessel of the coastal State board a foreign-flagged vessel on the high seas upon the suspicion of being engaged in such acts.

With respect to the environmental provisions of UNCLOS, it seems that they are of limited utility for present purposes. For example, the right of enforcement by a coastal State against a ship in the EEZ for environmental harm under Article 220 appears to assume that the ship will be the source of the pollution. Thus, in the case where terrorists occupy a platform, destroy it, and flee, there would be no pollution from a vessel. On the other hand, Article 221 gives States an expansive power to deal with environmental damage outside their territorial sea arising from maritime casualties. The definition of "maritime casualty" in Article 221(2) of the Law of the Sea Convention appears sufficiently wide to deal with an instance where a ship deliberately rams an installation, and may cover, in the context of some "other occurrence" external to the vessel, terrorist action against an installation launched from a vessel. Accordingly, it can be argued that a coastal State, facing an environmental disaster from an

⁵⁸ *Id.* para 281.

⁵⁹ *Id.*

⁶⁰ Mossop, *supra* note 9, at 72. See also Joanna Mossop, *Regulating Uses of Marine Biodiversity on the Outer Continental Shelf*, in *LAW, TECHNOLOGY AND SCIENCE FOR OCEANS IN GLOBALISATION* 319, 329–335 (Davor Vidas ed., 2010).

⁶¹ For example in the South China Sea Arbitration between Philippines and China, the Tribunal found that Chinese actions to induce *M/V Veritas Voyager* to cease operations and to depart from an area that constitutes part of the continental shelf of the Philippines was in violation of Article 77 of UNCLOS. See *Philippines v. China*, para 708 (Perm. Ct. Arb. 2016) (Award of July 12) available at <https://pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Award.pdf>.

attack on its installation ought to be able to undertake some enforcement action against individuals who have perpetrated the action while they remain within a zone where the State possesses jurisdiction over environmental protection.⁶²

Indeed, the Tribunal considered this possibility in the *Arctic Sunrise* case as follows:

Article 221 of the Convention allows coastal States to take preventive action against foreign vessels and their crews with respect to marine pollution. The enforcement measures are to be “proportionate to the actual or threatened damage” to protect the coastal State’s 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.”⁶³

Nevertheless, insofar as the boarding of the *Arctic Sunrise* was concerned, the Tribunal rightly found that:

here was no “maritime casualty” of the kind envisaged by Article 221—*i.e.*, 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—that could have justified Russia taking measures to protect its interests in the EEZ at that time.⁶⁴

C. *The Right of Hot Pursuit*

It follows from the foregoing that the only means that the coastal State may avail in order to enforce its laws beyond the safety zone of an offshore platform located in the EEZ/continental shelf is the right of hot pursuit, as reflected in Article 111 of UNCLOS. This seemed also the main argument of the Russian authorities with regard to the arrest of the *Arctic Sunrise* and thus it was considered in detail by the Arbitral Tribunal.

In short, hot pursuit is the right of warships, military aircrafts and other duly authorized vessels or aircrafts of a coastal State to pursue on the high seas (and in the EEZ) a foreign flagged vessel, provided that they have good reason to believe that the ship has violated the laws and regulations of that State and the pursuit is without interruption (“hot”).⁶⁵ Hot pursuit is subject to certain conditions according to Article 111 that are

⁶² See Kaye, *supra* note 5, at 412.

⁶³ *Arctic Sunrise* [Merits], para 308.

⁶⁴ *Id.* para 312.

⁶⁵ See *supra* note 55.

“cumulative,” i.e. “each of them has to be satisfied for the pursuit to be legitimate under the Convention.”⁶⁶

The first prerequisite that was under scrutiny in the *Arctic Sunrise case* is that the competent authorities of the coastal State must have good reason to believe that the vessel being pursued has violated the laws or regulations of that State, *in casu* those applicable in safety zones established around artificial islands, installations, and structures in the EEZ.⁶⁷ In the case of a terrorist threat or other unlawful act against the platform such as the one attempted against *Prirazlomnaya*, there is no doubt that the condition of “good reason to believe” will have been met.⁶⁸

In addition, under Article 111(4), pursuit may only be commenced “after a visual or auditory signal to stop has been given at a distance which enables it to be seen or heard by the foreign ship.” Further, pursuant to Articles 111(1) and 111(4), the pursuit must be commenced when the foreign ship or, in application of the doctrine of constructive presence incorporated in Article 111(4),⁶⁹ its boats or other craft working as a team and using the pursued ship as a mother ship, are within the relevant area. In the present context, the mother ship or its boats must be within the safety zone of the offshore platform.

The Tribunal in the *Arctic Sunrise case* made certain very interesting points in this regard: first, it found that the VHF radio messages by which the order to stop was first submitted sufficed as “a visual or auditory signal to stop.” According to the Tribunal, “VHF messages presently constitute the standard means of communication between ships at sea and can fulfil the function of informing the pursued ship.”⁷⁰ It is therefore significant that the Tribunal in the present case assumed an evolutionary interpretation of the UNCLOS, stating that:

given the large areas that now must be policed by coastal States and the availability of more reliable advanced technology (sea-bed sensors, satellite surveillance, over-the-horizon radar, unmanned aerial vehicles), it would not make sense to limit valid orders to stop to those given by an enforcement craft within the proximity required for an audio or visual signal that makes no use of radio communication.⁷¹

As to whether the vessels were still in the safety zone when the pursuit commenced and the signal to stop was given, the Tribunal

⁶⁶ M/V “SAIGA” (No. 2) (St. Vincent v. Guinea), 1999 I.T.L.O.S.10, para. 146 (July 1).

⁶⁷ See UNCLOS art. 111(1), 111(2).

⁶⁸ See also the analysis of the *Arctic Sunrise* [Merits], paras. 247-251.

⁶⁹ See also William Gilmore, Hot Pursuit: The Case of R v Mills and others, 44 INT’L & COMP. L.Q. 949-958 (1995).

⁷⁰ *Arctic Sunrise* [Merits], para. 259.

⁷¹ *Id.* para 260.

continued its flexible approach. It gave some margin of appreciation to the Russian authorities in deciding that the signal was given at the appropriate time noting that Article 111(4) requires a coastal State to satisfy itself "by such means as may be available" that the pursued vessel was still in the relevant maritime zone.⁷²

The final condition addressed by the Tribunal in the case under discussion was whether the pursuit is continuous in accordance with Article 111(1) of UNCLOS. It is this particular condition that was not considered to be met by the Russian authorities in the *Arctic Sunrise case*, since there was a gap of almost twenty-four hours between the last communication from the *Ladoga* and the boarding operation as such. During that time, according to the Tribunal, "the *Ladoga* remained in proximity to the *Arctic Sunrise* not as part of an ongoing pursuit, but rather to ensure that the Greenpeace ship did not undertake any further actions at the platform and in the expectation of further instructions from a higher authority."⁷³ In other words, the pursuit was held to be interrupted.

This finding of the Tribunal has been met with controversy. For example, as Harrison notes,

it is doubtful whether the mere pause in an attempt to actively arrest a vessel can alone be classified as an interruption of the pursuit. Such an interpretation would not fit easily with the operational reality of maritime enforcement, where it may be necessary for a state to take time to consider its tactics and call in appropriate support.⁷⁴

It is true that there was no interruption *stricto sensu* since the *Arctic Sunrise* was within the radius of the *Ladoga*. Additionally, the Tribunal seems inconsistent in its approach, assuming on the one hand a flexible interpretation in the examination of the other conditions and on the other, espousing such a strict position in respect of the continuity of the pursuit. It is the view of the present author that the critical point in this regard is whether the Russian authorities ceased to intend to arrest the vessel in question. If the delay was due to second thoughts on their part, then it would be clear that the pursuit was interrupted. Contrarily, if this delay was due to other operational concerns and given the fact that the *Ladoga* stayed in the proximity of the "pursued vessel," the conclusion should have been that the pursuit had never been interrupted. It is in this last respect that the non-participation of the Russian authorities in the proceedings can be considered to be significant, as they would have shed light upon their intentions.

⁷² *Id.* para 267.

⁷³ *Id.* para 272.

⁷⁴ Harrison, *supra* note 9, at 153.

IV. CONCLUDING REMARKS

Energy installations have been with us for many years and are bound to proliferate as the energy requirements of our societies multiply. This inevitably brings an array of new challenges, including the need to adequately protect them from terrorist and other unlawful acts and safeguard their smooth operation. UNCLOS does prescribe the power of coastal States to take measures to protect installations within the territorial sea as well as within the limited extent of 500 meters around such installations located in the EEZ or on the continental shelf. However, as was extensively argued, these provisions, especially the 500 meters' breadth of safety zones, fall short of adequately protecting offshore platforms from modern threats. It is either up to the competent international organization, i.e. the IMO, to foster changes in respect of safety zones or up to States individually, like Russia, to come up with other solutions, such as warning zones.

In a similar vein, UNCLOS is not very progressive as per the enforcement powers of coastal States to suppress unlawful activities against offshore platforms, particularly beyond territorial waters. Hot pursuit seems to be the only means available to coastal States should they want to enforce their laws and regulations beyond the narrow belt of the safety zone. Nor has the SUA Protocol brought significant changes in this regard. It was only the dictum of the 2015 Award in the *Arctic Sunrise case* opening up the possibility of law enforcement measures in respect of non-living resources that may be of use in the future.

As Professor Maria Gavouneli has very recently written:

[a]s the industry expands, it will become significantly more difficult to consider the almost primitive rules of UNCLOS as adequate for the task ahead. On the other hand, their general nature does allow for their rapid evolution and adjustment in response to the exigencies of the day. In addition, as more specialized legal regimes develop, designed to cater to one or another category of energy installations, the question will inevitably arise as to whether UNCLOS will still be as a general point of reference for such rules, or whether the required specialization will generate practical solutions that depart from the core obligations of UNCLOS.⁷⁵

These words could not be more apposite as to the question of the protection of offshore platforms.

⁷⁵ Gavouneli, *supra* note 15, at 208.

