



RESEARCH ARTICLE

SURVEILLANCE AT SEA: LEGAL ASPECTS OF OFFSHORE INSTALLATION'S UTILIZATION

Arie Afriansyah¹, Salsabila Siliwangi Surtiwa²

¹ Department of International Law, Faculty of Law, Universitas Indonesia, Depok, Indonesia

² Faculty of Law, Universitas Indonesia, Depok, Indonesia

✉ arie.afriansyah@ui.ac.id

Submitted: June 9, 2020 Revised: August 28, 2020 Accepted: October 24, 2020

ABSTRACT

As the sea possesses rich variations of resources, it also imposes threats to the security and defense interests of a nation. Oil and gas exploration is one of the most important economic activities in the sea. In Indonesia, hundreds of offshore oil and gas platforms comprise thirty percent of the total oil and gas production. This signifies the importance of their establishment to the economy. However, their potentials do not stop there. As Indonesia is comprised of a very vast water area, the surveillance system still needs improvement. The article proposes to combine these interests into manifesting a simple surveillance system in offshore oil and gas platforms to improve defense and security systems, both for maritime routes in general and also the installations. The proposal prioritizes installations that are no longer operating, shifting their functions for other beneficial means. This is supported by the current law and regulations of the sea, both at the international and national levels. The international law of the sea implies that surveillance and data collection is allowed within the jurisdictional and territorial waters, whereas national levels allow functional shifting and defense system improvement in installations as long as it is coordinated with relevant ministries.

Keywords: Legal Enforcement; Offshore Installation; Surveillance, UNCLOS.

TABLE OF CONTENTS

ABSTRACT	419
TABLE OF CONTENTS	420
INTRODUCTION	420
REGULATION OF OFFSHORE OIL AND GAS INSTALLATIONS.....	423
I. International Law	423
II. National Law.....	426
NATIONAL INTERESTS IN OFFSHORE OIL AND GAS INSTALLATIONS.....	429
I. Economic Interests.....	430
II. Defense Interests.....	430
III. Security and Safety Interests.....	431
EFFORTS IN INCREASING DEFENSE AND SAFETY ISSUES THROUGH OIL AND GAS OFFSHORE INSTALLATIONS.....	432
RELEVANT CASES.....	438
I. US-Iran Oil Platforms Case.....	438
II. France-NZ Rainbow Warrior Case.....	440
CONCLUSION	442
REFERENCES	443



Copyright © 2020 by Author(s)

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License. All writings published in this journal are personal views of the authors and do not represent the views of this journal and the author's affiliated institutions.

HOW TO CITE:

Afriansyah, A., & Surtiwa, S. S. (2020). Surveillance at Sea: Legal Aspects of Offshore Installation's Utilization. *JILS (Journal of Indonesian Legal Studies)*, 5(2), 419-448. <https://doi.org/10.15294/jils.v5i2.38943>

INTRODUCTION

Maritime strength often determines a nation's power. This statement is undeniable, as the sea gives a significant contribution to the country. Not

only the sea possesses a vast amount of resources, but it also serves a fundamental purpose as a nation's sovereignty front-line.¹

However, with high potentials, come high-security risks; the vaster the sea, the bigger the threats a nation encounter. Indonesia, as the biggest archipelagic state, is demanded to have strong maritime security and defense. Several efforts include frequent political participation, both at the international and national levels; and procurement of military personnel, transport and weaponry through Indonesian Naval Forces (TNI AL). However, the scope of waters is undoubtedly very vast, that the system may be limited in ensuring optimum security and defense in the sea.²

One of the security fields in discourse is oil and gas exploration at sea. Oil and gas, considered by their economic value, is one of the biggest maritime industries in the world. The potentials can be up to USD 300 billion.³ Oil and gas can be considered as essential energy resources, as they support many fields, including a state's military units. In other words, these maritime resources may trigger conflicts between parties, both public and private sectors.

On the other hand, oil and gas facilities across the seas are abundant, approximately more than 6000 offshore installations, serving the purpose of providing energy to the entire country.⁴ Some of them are operating while others are not in operation anymore. The latter installations create "homework" for the coastal states on what to do with them. The narrative raises opportunities for the installations to operate for purposes other than they are initially meant to do.

Several legal discourses have previously emerged regarding the status of the offshore installations. Hossein Esmaeili mapped out the legal status of offshore platforms—specifically oil rigs—in the realm of international law and multidimensional issues that may revolve around them.⁵ Elizabeth Nyman has highlighted the trend of oil exploitation alongside maritime

¹ Tommy Hendra Purwaka, *Tinjauan Hukum Laut Terhadap Wilayah Negara Kesatuan Republik Indonesia*, MIMB. HUK. - FAK. HUK. UNIV. GADJAH MADA (2015).

² Diko Oktara, *TNI: Kekuatan Angkatan Laut Masih Kurang*, TEMPO, Jan. 26, 2016, <https://nasional.tempo.co/read/739441/tni-kekuatan-angkatan-laut-masih-kurang/full&view=ok>.

³ Assaf Harel, *Preventing Terrorist Attacks on Offshore Platforms: Do States Have Sufficient Legal Tools?*, HARVARD NAT. SEC. JOURNAL (2012): 134.

⁴ Marcel Hendrapati, *PEMBONGKARAN INSTALASI DAN KESELAMATAN PELAYARAN DI INDONESIA* (2014), 2.

⁵ HOSSEIN ESMAEILI, *THE LEGAL REGIME OF OFFSHORE OIL RIGS IN INTERNATIONAL LAW* (2017).

conflicts that play a substantial part in its development.⁶ Several pointed out long-time issues within the Exclusive Economic Zone (EEZ), including military presence and its activities and what they mean for maritime security.⁷ These discourses have long stood out individually and rarely considered as relevant to one another. However, it appears that there is more to analyze beyond the borders of these stand-alone matters.

The article tries to highlight the intersectional issues and potentials for better security and defense, especially in Indonesia. One of the potentials at hand is the possibility to utilize existing commercial infrastructures to improve security and defense system. These includes both operational and no longer in operation (abandoned). With the numerous amounts of offshore infrastructures available, vast waters and the need for security and defense system improvement, Indonesia can initiate an incorporative and collaborative approach to the highlighted problems. This proposal may be worth to consider as additional resources to strengthen Indonesia's capacity to control its vast maritime jurisdiction.

This paper starts by analyzing the legal status, both at the national and international level, regarding offshore oil and gas installations. It also identifies the role of these offshore installations in ensuring the economic, security and defense interests of Indonesia. The context would include measuring the possibility of utilizing existing offshore installations as a complementary defense system. Lastly, the authors analyze their findings in respect of maritime security and defense with similar previous cases as a reference, specifically in the EEZ and territorial waters.

⁶ Elizabeth Nyman, *Maritime energy and security: Synergistic maximization or necessary tradeoffs?*, ENERGY POLICY (2017).

⁷ Hyun-Soo Kim, *Military Activities in the Exclusive Economic Zone: Preventing Uncertainty and Defusing Conflict*, 80 INT. LAW STUD. 9 (2006); and James E. Bailey, *The Exclusive Economic Zone: Its Development and Future in International and Domestic Law*, 45 SYMP. LAW OF THE SEA (1985).

REGULATION OF OFFSHORE OIL AND GAS INSTALLATIONS

I. INTERNATIONAL LAW

Provisions related to offshore oil and gas installations can be found in the 1982 United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS divides the water into several zones, including territorial waters, contiguous zone, high seas, continental shelf and EEZ. This division implies different rights, duties and consequences of any installations established within each area, including oil and gas installations.

According to Article 56 and 58 of the UNCLOS, EEZ is a water zone within 200 miles from the line drawn from the land of a coastal State, where—evident to its name—the coastal State may enjoy resources within EEZ for commercial and exploration purposes. EEZ, in other words, can be conceived as an extension of the coastal State's jurisdiction.⁸ Thus, the law of the coastal State governs any establishment and use of artificial islands, installations and other structures within the EEZ. Other States or parties shall receive freedom of overflight, freedom to lay submarine cables and pipelines in the exclusive zone and freedom of navigation.⁹ Article 60 of the UNCLOS states as follows:

1. In the exclusive economic zone, the coastal State shall have the exclusive right to construct and to authorize and regulate the construction, operation and use of:
 - a. artificial islands;
 - b. installations and structures for the purposes provided for in article 56 and other economic purposes;
 - c. installations and structures which may interfere with the exercise of the rights of the coastal State in the zone.
2. The coastal State shall have exclusive jurisdiction over such artificial islands, installations and structures, including

⁸ James E. Bailey, *The Exclusive Economic Zone: Its Development and Future in International and Domestic Law*, 45 SYMP. LAW OF THE SEA (1985): 1271.

⁹ Hyun-Soo Kim, *Military Activities in the Exclusive Economic Zone: Preventing Uncertainty and Defusing Conflict*, 80 INT. LAW STUD. 9 (2006): 258.

jurisdiction with regard to customs, fiscal, health, safety and immigration laws and regulations.¹⁰

UNCLOS leaves it up to the coastal State to further regulate the establishment, use and removal of any installations and offshore rigs. The regulation shall be following the existing international norms and principles which UNCLOS establishes and as long as it does not violate the rights and duties of other States.¹¹ This also occurs to provisions regarding the protection of the installations. UNCLOS gives coastal State jurisdiction, thus sovereign rights to exercise their laws and policies over installations. One of the rights is to establish safety zone around installations within the EEZ. However, since the specific regulation is left for coastal States to decide upon, the practice taken up by States is not in a uniformed manner.¹²

Not only in EEZ, the establishment and use of artificial installations are also regulated within the continental shelf. The provision is *mutatis mutandis* to what is regulated within the EEZ, as reflected on Article 80 of the UNCLOS.¹³ Oil and gas exploration activity within the continental shelf is also governed by the law of the coastal State, for any circumstances.¹⁴ In other words, the regulation for oil and gas installations in both areas is very diverse across the globe, as the coastal States govern it.

Even so, oil and gas installations take up many variations and sizes. These installations have very different levels of mobility, implying that some are permanent while another temporary. For temporary installations, the regulation is not the same with permanent installations explained above. They belong to the vessel category, as they possess similar features with vessels. The different categorizations may raise an issue of legal implication of the installation establishment. Contrary to permanent installations, temporary installations are governed by the law of the flag country during mobile and do not engage in any exploration activities within the waters. However, the drilling vessel shall be governed by the law of the coastal State

¹⁰ Convention on the Law of the Sea, Dec. 10., 1982, art. 60 (1)-(2).

¹¹ Deanna Fowler, "Offshore Oil: A Frontier for International Lawmaking," *JOURNAL OF INT. & COMP. LAW XII* (2012): 182-183.

¹² YOSHIFUMI TANAKA, *THE INTERNATIONAL LAW OF THE SEA* (2019), 156.

¹³ Convention on the Law of the Sea, Dec. 10., 1982, art. 80.

¹⁴ *Id.*, Art. 81.

upon exploring such resources. Thus, inconsistency in the application of the law for mobile drilling vessels is apparent.¹⁵

Another concern in regulating oil and rig installations is when they are no longer operating. If the installations have reached a certain age when its productivity becomes less effective, several technical steps are in order. Decommissioning aims to restore the quality of the environment surrounding the oil and gas exploration.¹⁶ Decommissioning, however, is not explained in details within several international legal instruments, including Geneva Convention on the Continental Shelf 1958 (Geneva Convention), UNCLOS, International Maritime Organizations (IMO) Guidelines and Standards, nor Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR).¹⁷

UNCLOS, for example, only obliges partial decommissioning with a minimum standard set by the competent international organization.¹⁸ In this context, the international organization regarded is IMO. In 1989, IMO adopted Resolution A.672 (16) on Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone. It instructed the removal of abandoned installations under the jurisdiction and further regulation of the coastal State.¹⁹

This provision is contrary to the Geneva Convention, where parties are required to do a full decommissioning. However, as States have the option to regulate further their management of EEZ and continental shelf, more specific procedures on how to practice decommissioning and its standards rely on the availability of national regulations.²⁰

The issue pertaining to abandoned installations may, in fact, lead to environmental issues, health and safety implications and encourage

¹⁵ HOSSEIN ESMAEILI, *THE LEGAL REGIME OF OFFSHORE OIL RIGS IN INTERNATIONAL LAW* (2017), 26.

¹⁶ Erdina Arianti & Abd Ghofur, *Teknologi Decommissioning Anjungan Lepas Pantai Terpancang Pasca-Operasi*, INOVTEK POLBENG (2019), 272.

¹⁷ B. A. Hamzah, *International rules on decommissioning of offshore installations: Some observations*, MAR. POLICY (2003), 339.

¹⁸ Convention on the Law of the Sea, Dec. 10., 1982, art. 60 (3).

¹⁹ International Marine Organization Resolution A.672 (16), *Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone* (19 October 1989) available at [http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Assembly/Documents/A.672\(16\).pdf](http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Assembly/Documents/A.672(16).pdf).

²⁰ E.D. Brown, "Decommissioning of Offshore Structures: Progress Report on Legal Obligations," *1 OIL AND PETROCHEMICAL POLLUTION* (1982): 139.

dumping platforms. Sadly, this practice is done oftentimes, without actual follow-ups regarding the liability.²¹ However, the existence of abandoned oil and gas offshore installations may open a possibility to utilize the installations for purposes other than oil and gas exploration.

These issues revolving offshore installations within international law continues as a discourse in the national legal system of the coastal State. In the context of Indonesia, it is crucial to highlight to what extent its national law governs the matter of oil and gas regulation utilization. It is further discussed in the following sub-section of the paper.

II. NATIONAL LAW

Philosophically, Indonesia concedes that all resources available should be used for the utmost prosperity of the people under the management of the State.²² It is according to the economic constitution of a nation, in which assets ownerships are different between which can be monopolized by the State and which can be operated by private sectors.²³ Indonesia, among many others, has adopted UNCLOS. The ratification of UNCLOS is further realized through national and regional regulations. They may impose these regulations with the notion that it does not imply that the coastal State owns the EEZ. However, even the distinction between ownership and sovereignty in UNCLOS is quite unclear.²⁴ Nevertheless, such concept of sovereign right within the EEZ, in practice has quite clear self-explanation.²⁵ Thus, Indonesia as a coastal State should not be in doubt to utilize its rights on this area as it has solid legal basis under national and international law.

Indonesia regulates its activities in EEZ through Law No. 5 of 1983 concerning Exclusive Economic Zone. The content is similar to the provision of UNCLOS regarding EEZ, as the law is its direct derivation. It highlights exploration and exploitation activities and how to obtain permission in doing so. However, it limits activities other than exploration and

²¹ Seline Trevisanut, *Decommissioning of Offshore Installations: a Fragmented and Ineffective International Regulatory Framework*, in THE LAW OF THE SEABED (2020), 432.

²² Indonesia, *Undang-Undang Dasar Negara Republik Indonesia 1945*, Ps. 33 (3).

²³ JIMLY ASSHIDDIQIE, *KONSTITUSI EKONOMI* (2006), 208-209.

²⁴ WILLIAM E. HUGHES, *FUNDAMENTALS OF INTERNATIONAL OIL & GAS LAW*, (2016), 231.

²⁵ Arie Afriansyah, Dila Paruna, Rania Andiani, *(Un)Blurred Concept of Sovereign Rights at Sea: Implementation Context*, 16 *LAW REFORM* (2020), 133-143.

exploitation within the EEZ to only scientific research, bio-conservation and maritime environmental protection.²⁶ The law also does not specifically mention the legal status of specific installations within the EEZ, including offshore oil and gas installations.

Under Indonesian law, offshore oil and gas installations are mentioned in Law No. 32 of 2014 concerning the Sea. This law regulates them generally as Installation at the Sea. As a derivative of the Law, recently, the government issues Government Regulation No. 6 of 2020 concerning Installation at the Sea (Government Regulation No. 6 of 2020). Government Regulation No. 6 of 2020 distinguishes the different legal standings of installations in accordance with the water area they are located. The area is categorized based on UNCLOS water categories. Among the functions mentioned, oil and gas exploration is included. According to Government Regulation No. 6 of 2020, buildings and/or installations related to oil and gas exploration includes offshore platforms, floating platforms, underwater platforms, pipelines and other supporting facilities.²⁷

The establishment of these installations should pay attention to safety zone determined by the minister in charge of navigation affairs to ensure both the safety of navigation and the installations.²⁸ This provision is in support of Article 60(4) of UNCLOS. However, unlike UNCLOS, Government Regulation No. 20 of 2020 translates safety zone into two derivative zones; a restricted zone is placed within 500 meters of the outer side of the installations and a limited zone in a distance of 1,250 meters from the restricted zone.²⁹ The regulation is still acceptable under UNCLOS, as it still allows the establishment of other installations or any navigational support facilities—as long as it is permitted by the Minister.³⁰

Government Regulation No. 20 of 2020 also allows the utility of installations other than their main purposes if they no longer serve them, as long as the means are communicated and permitted by relevant Ministers.³¹ A review shall be conducted prior to the shift of the purposes by Ministers

²⁶ Indonesia, *Undang-Undang tentang Zona Ekonomi Eksklusif Indonesia*, UU No. 5 Tahun 1983, LN. 44, TLN. 3260 (1983), art. 1.

²⁷ Indonesia, *Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut*, PP No. 6 Tahun 2020, LN. 26, TLN. 6459 (2020), *see Art. 3 (9)*.

²⁸ Indonesia, *Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut*, *see Art. 27 (1)*.

²⁹ Indonesia, *Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut*, *see Art. 27 (3)*.

³⁰ Indonesia, *Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut*, *see Art. 27 (6)*.

³¹ Indonesia, *Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut*, *see Art. (1)*.

in charge of these affairs and of the maritime and fishery affairs.³² This is to ensure the safety and security of navigation, as well as the location of the installation in question.

Meanwhile, offshore oil and gas installations are regulated explicitly in Regulation of Minister of Transportation No. 129 of 2016 concerning Shipping Lanes at Sea and Constructions and/or Installations in Waters as one of the offshore installations and buildings. The general provision of this regulation mentions specific types of infrastructure which are considered as offshore exploration and exploitation installations. The regulation highlights the relation between the establishment of these installations to the safety of shipping and navigation lanes.

In regard to their functions and safety, these installations are regulated through Regulation of Minister of Energy and Mineral Resources No. 18 of 2018 concerning Safety Inspections of Installations and Equipment in Oil and Gas Business Activities (Regulation 18/2018). In this Regulation, oil and gas installations are defined as a set of integrated tools in a system that operates in oil and gas activities.³³ Other related laws and regulations—though not directly—to offshore oil and gas installations include Law No. 22 of 2001 concerning Oil and Gas (Oil and Gas Law). In this Law, offshore installations are not explicitly mentioned. They are referred to as Upstream Oil and Gas Management instead. The central State company in charge of conducting the function is *Pertamina*, but this provision does not limit the State to issue permits or make contracts with other private companies through open tender by Minister of Energy and Mineral Resources.³⁴ This shows that not only Indonesian offshore oil installations, but foreign installations are also allowed to be established in Indonesian waters as long as the Indonesian government permits it.

In addition to general regulations related to offshore oil installations, there are also specific regulations for certain areas. One of the regulations includes Government Regulation No. 23 of 2015 concerning Collaborative Management of Oil and Natural Gas Resources in Aceh. As a special region,

³² Indonesia, Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut, *see Art. 30 (2)*.

³³ Menteri Energi dan Sumber Daya Mineral, Peraturan Menteri tentang Pemeriksaan Keselamatan Instalasi dan Peralatan pada Kegiatan Usaha Minyak dan Gas Bumi, Permen ESDM No. 18 Tahun 2018, BN. 356 (2018) *see Art. 1 (6)*.

³⁴ Hanan Nugroho, *Pengembangan Industri Hilir Gas Bumi Indonesia: Tantangan Dan Gagasan*, PERENC. PEMBANG. NO. IX (2004). 3.

Aceh won the trust to manage natural resources together with the central government.

Decommissioning in the territory of Indonesia is regulated in several legal products. They include Law No. 17 of 2008 concerning Shipping, Government Regulation No. 17 of 1974 concerning Supervision of Offshore Oil and Gas Exploration and Exploitation and Regulation of the Minister of Energy and Mineral Resources No. 1 of 2011. The first two instruments instruct full decommissioning of installations that are no longer operating. Meanwhile, the latter provides detailed technicalities and procedures of decommissioning.

The recently introduced Government Regulation No. 6 of 2020 brings into light the full direction of decommissioning. The regulation recognizes partial and full decommissioning, relocating and functional shifting.³⁵ It elaborates conditions where decommissioning is considered necessary, criteria of installations to decommission, the authority responsible in decommissioning and the coordination chains that have to be established upon decommissioning the platforms.³⁶

NATIONAL INTERESTS IN OFFSHORE OIL AND GAS INSTALLATIONS

The regulation of offshore oil and gas installations is inseparable from the vital role of oil and gas in aspects of life in Indonesia. As a large oil and gas exporter, Indonesia is considerably dependent on its offshore oil and gas installations. Hundreds of petroleum installations themselves have branched out in Indonesia. As of 2019, there are 613 fixed offshore installations in Indonesian waters.³⁷ A hundred of them have been declared no longer functional.³⁸ In this section, the national interests related to oil and gas installations are divided into three main discussion points, namely economic interests, security interests and defense interests.

³⁵ Indonesia, Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut (2020), *see Art. 28*.

³⁶ Indonesia, Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut (2020), *see Art. 29*.

³⁷ Arianti & Ghofur, "Teknologi *Decommissioning*," 272.

³⁸ Vadhia Lidyana, "10 Rig Migas di Laut Jawa dan Kalimantan Mau Dibongkar," *DETIK*, Sep 6, 2019, <https://finance.detik.com/energi/d-4699078/10-rig-migas-di-laut-jawa-dan-kaltim-mau-dibongkar>.

I. ECONOMIC INTERESTS

As the country with the largest waters area in the world, Indonesia has much potential at sea. It is undoubted that the sea has become one of the most significant contributors to the country's economic development, ranging from the utilization of marine biota such as fish to oil exploitation. It is well known that Indonesia has abundant fishery resources in the EEZ. Within this zone, Indonesia having hard times to safeguard its benefits.³⁹ Indonesia has 60 (sixty) ocean basins that have the potential to contain petroleum. Of the total basins, 40 (forty) ocean basins are offshore. All of these basins can produce oil totaling 11.3 billion barrels.⁴⁰

In Indonesia alone, investment in oil and gas has reached 20 billion US dollars in 2016 and is predicted to increase in 2017.⁴¹ Offshore installations produce more than 30 percent of the total oil and gas production.⁴² With these abundant natural resources such as oil and gas, the country must be present to regulate related exploration and economic activities in the form of energy or resources. This State's control consists of several aspects, namely mineral rights, mining rights and economic rights.⁴³

It is predicted that the number of oil and gas offshore installations in Indonesia will soon decrease, as the majority of them have reached the age of 20 years and over, the maximum span of age for an offshore installation to maintain its productivity. This is concerning, as it would indicate the decrease in oil and gas production offshore.

II. DEFENSE INTERESTS

Offshore installation is considered vulnerable to attacks, either from other countries, terrorists, or non-State actors. These subjects then give rise to a

³⁹ Arie Afriansyah, *Claiming Fish in the Disputed Exclusive Economic Zone: Indonesian Practice*, ASIA-PACIFIC J. OCEAN LAW POLICY (2019): Arie Afriansyah, *Indonesia's Practice in Combatting Illegal Fishing: 2015–2016*, in ASIAN YEARBOOK OF INTERNATIONAL LAW (2019).

⁴⁰ Ridwan Lasabuda, *Pembangunan Wilayah Pesisir dan Lautan dalam Perspektif Negara Kepulauan Republik Indonesia*, J. ILM. PLATAX (2013). 94.

⁴¹ PwC, *Oil and Gas in Indonesia. Taxation Guide* (2016). 10.

⁴² HENDRAPATI, *PEMBONGKARAN INSTALASI*, 12.

⁴³ Cut Asmaul Husna TR, *Strategi Penguatan Pengelolaan Bersama Minyak dan Gas Bumi di Wilayah Laut*, J. KONSTITUSI (2018). 154.

complex response where, unlike the position between State and terrorists, most of the non-State actors are civil society.⁴⁴ With the substantial amount of distance from the coast, offshore installations have a very minimal level of security. This is compounded by the increasingly sophisticated devices and resources possessed by terrorists or parties who threaten offshore installations.

In a different context, oil and gas have been some of the most contested resources in the world. This is due to its high demand despite its limited availability. As oil will be scarce in such a short amount of time, it is not surprising for conflicts to emerge as the outcome. The conflict of natural resources may or may not reopen old wounds of the war and jeopardize a nation's sovereignty once more. That is why an enhanced defense mechanism, especially in the water for an archipelagic State like Indonesia, is necessary.

This issue is also accompanied by the activities done by foreign vessels that may appear to threaten the territorial integrity of the coastal State. Offshore installations can be found in both Indonesia archipelagic sea lanes (ALKI) and EEZ. As they are very close with international shipping and travel routes, they are prone to threats, thus becomes victims of armed robberies and violent attacks.⁴⁵

It is undeniable that defense and naval power have been strengthened over the past few years. However, the effort cannot be optimum to protect all kinds of installations and vessels in Indonesia's vast waters. This situation calls for a remote system which helps in monitoring the area in real-time. Several suggestions include drones and underwater vessels; however, this system is still not enough to protect these vessels and installations.

III. SECURITY AND SAFETY INTERESTS

In addition to defense issues, security issues are also an essential discussion in the procurement of offshore installations. This is the case as the offshore installation conducts exploration activities. This activity is related to

⁴⁴ Elizabeth Nyman, *Maritime energy and security: Synergistic maximization or necessary tradeoffs?*, ENERGY POLICY (2017). 313.

⁴⁵ Patrik Kristhøpe Meyer, Achmad Nurmandi & Agustiyara Agustiyara, *Indonesia's swift securitization of the Natuna Islands how Jakarta countered China's claims in the South China Sea*, ASIAN J. POLIT. SCI. (2019), 3.

substances that are flammable in large quantities. The absence of adequate action or response in responding to these two main problems then exacerbates the situation.⁴⁶

Offshore platforms are very vulnerable, complicated and expensive to construct. The positioning of offshore platforms should be strategic and safe. However, many sites considered safe and potential for offshore platforms are established lie within the archipelagic sea lanes.⁴⁷ An example of this situation is the establishment of 16 offshore oil installation between *Seribu Islands* and Sumatra Island. As explained in the previous sub-section, the platforms are within the risk of being interfered with and, vice versa, interfering with the international shipping routes.⁴⁸

In the realm of national law, Government Regulation No. 129 of 2016 has determined several types of security and safety areas around offshore buildings and installations. These areas include prohibited areas and restricted areas. The prohibited area is at 500 (five hundred) meters from the outer side of the building, while the restricted area is in the area of 1250 meters from the outer side of the restricted zone - equivalent to 1750 meters from the outermost point of the building.⁴⁹ However, this restricted zone might not be enough to determine the threats these platforms may encounter.

EFFORTS IN INCREASING DEFENSE AND SAFETY ISSUES THROUGH OIL AND GAS OFFSHORE

It is understood that welfare and safety are inseparable. Security and safety threats may interfere with productivity.⁵⁰ Based on the high level of vulnerability, problems arise in relation to efforts in increasing security and

⁴⁶ Assaf Harel, *Preventing Terrorist Attacks on Offshore Platforms: Do States Have Sufficient Legal Tools?*, HARVARD NAT. SEC. JOURNAL (2012): 134-135.

⁴⁷ Rafli Maulana & Khomsin Khomsin, *Studi Tentang Optimasi Peletakan Anjungan Minyak Lepas Pantai*, J. TEK. ITS (2017), 213.

⁴⁸ Anita Musliana, "Analisis Hukum Terhadap Aktivitas Pelayaran di Kawasan ALKI Ditinjau dari Perspektif UNCLOS 1982 dan PP No. 37 Tahun 2002," (Bachelor of Law Program Universitas Hasanuddin in Makassar, 2015), 75.

⁴⁹ Menteri Perhubungan, *Peraturan Menteri Perhubungan tentang Alur-Pelayaran di Laut dan Bangunan dan/atau Instalasi di Laut*, Permenhub No. PM 129 Tahun 2016, BN. 1573 (2016), ps. 80.

⁵⁰ Safril Hidayat & Arlan Sidhha, *INDONESIA'S MARITIME DEFENCE PARADIGM SINE QUA NON GLOBAL MARITIME FULCRUM*, J. PERTAHANAN (2018), 137.

defense in offshore installations. The situation around these offshore installations do not only concern their own aspects, but also the international obligations coastal States uphold as maritime nations, including to identify vessels, ensure safe distances between installations and passing vessels and, in a bigger context, ensure compliance of laws and policies of the coastal State.⁵¹

These points have led to the importance of surveillance system established. Today, many maritime nations use layered and complex surveillance system, especially within the EEZ. But the idea does not only call for more advanced technology, but also effectivity on space utility and resources.⁵² One consideration is the use of offshore installations themselves for the implementation of defense and security activities, including offshore oil platforms.

When this idea is contextualized with the interests and plans mapped by the government, it may become a compelling idea in upgrading the maritime surveillance system as a whole. In 2015, Indonesia announced its intention to increase its military power in terms of safeguarding the nation in the waters by establishing more military posts in the EEZ.⁵³ This is aligned to the main goal for Indonesia to become the Global Maritime Fulcrum, which encourages the installation of a monitoring system that is incorporated with existing benign and military constabulary functions.⁵⁴ As the maritime defense system in Indonesia is collaborative between different agencies and the military organ itself, this also calls for cooperation between the State and private sectors.

In regard to the freedom of navigation and maritime traffic in general, The Indonesian Maritime Security Board (IMSB/Bakamla) has established several Maritime Regional Coordinating Center (MRCC) and Regional Coordinating Center (RCC) in 3 (three) area of waters. These MRCC and

⁵¹ A. M. Ponsford, Ian A. D'Souza & T. Kirubarajan, *Surveillance of the 200 nautical mile EEZ using HFSSWR in association with a spaced-based AIS interceptor*, in 2009 IEEE CONFERENCE ON TECHNOLOGIES FOR HOMELAND SECURITY, HST 2009 (2009), 87.

⁵² Rahul Roy-Chaudhury, *Maritime surveillance of the Indian EEZ*, STRATEG. ANAL. (1998), 49.

⁵³ Mohd Agoes Afiya, *Indonesia's Global Maritime Fulcrum: Contribution in the Indo-Pacific Region*, ANDALAS J. INT. STUD. (2017), 144.

⁵⁴ Safril Hidayat & Arlan Sidhha, *Indonesia's Maritime Defence Paradigm Sine Qua Non Global Maritime Fulcrum*, J. PERTAHANAN (2018), 141-142.

RCC are equipped with Electronic Navigation Chart (ENC) and Automated Identification System (AIS).⁵⁵

AIS, mainly, has used the Integrated Maritime Surveillance System (IMSS) since 2008 with the aid from the United States. The system turned out to be challenging to operate as the system requires high maintenance and its further care should be coordinated with the United States. Furthermore, this system relies upon the radar emitted by the vessel.⁵⁶ The radar consists includes the vessel's identification, thus it is important for the vessels to keep transmitting their sensors or signals, as it does not only help surveillance centers to locate these vessels, but also to identify them.⁵⁷ It is undoubted that AIS contributes substantially in monitoring and surveillance system of States, especially those qualified as maritime nations. However, as the system is considerably dependant, once a foreign vessel turns its signal off during its navigation, it is not only threatening surrounding installations, but also international traffic in general.

If this surveillance system is applied in offshore oil and gas platforms, Bakamla will receive an advantage in surveying mobilization and routes taken by foreign ships and other vessels. Intelligence data can be gathered easier and with a more specific outcome. In addition, the maintenance of this surveillance system is relatively more affordable, as it is also assisted by private sectors.

This initiative is justifiable under international law. The international law of the sea iterates that every State has the authority to make decisions regarding its maritime security and defense. As a note, UNCLOS and other international law of the sea instruments do not explicitly explain the scope of authority coastal States have in terms of determining their security other than mentioning limits of military activities in certain waters. Therefore, the authors conduct analysis through the interpretation of the articles contained in international sea law instruments that are implicit and negative.

⁵⁵ SUSANTO & DICKY R. MUNAF, KOMANDO PENGENDALIAN KEAMANAN DAN KESELAMATAN LAUT (2015), 162-163.

⁵⁶ I Gusti Bagus Dharma Agastia & Anak Agung Banyu Perwita, *Building Maritime Domain Awareness as an Essential Element of the Global Maritime Fulcrum: Challenges and Prospects for Indonesia's Maritime Security*, 6 JURNAL HUB. INT. (2018): 6-7.

⁵⁷ A. M. Ponsford, Ian A. D'Souza & T. Kirubarajan, *Surveillance of the 200 nautical mile EEZ using HFSSWR in association with a spaced-based AIS interceptor*, in 2009 IEEE CONFERENCE ON TECHNOLOGIES FOR HOMELAND SECURITY, HST 2009 (2009), 88.

The matter of regulating exploration and installations in EEZ is provided in Article 56 of the UNCLOS, which states:

1. In the exclusive economic zone, the coastal State has:
 - a. sovereign rights for the purpose of exploring and exploiting [...] with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
 - b. jurisdiction as provided for in the relevant provisions of this Convention with regard to:
 - i. the establishment and use of artificial islands, installations and structures;
 - ii. marine scientific research;
 - iii. the protection and preservation of the marine environment;
 - c. other rights and duties provided for in this Convention.⁵⁸

In a simpler understanding, coastal States can decide upon the use of artificial islands, installations and structures. From the article, it can be inferred that UNCLOS regulates marine scientific research. Marine scientific research would include survey activities. However, the law does not define in detail what constitutes as 'survey activities', whether it is 'hydrographic surveys' or 'military surveys'.⁵⁹

In fact, the discourse on whether survey activities are a part of marine scientific research is quite controversial. The ambiguity brought by this provision somewhat implies that any type of monitoring or research is allowed in the EEZ, including military surveys.⁶⁰ However, there is quite an opposition to this view. Several experts believe that while military data collection is allowed within waters whose coastal State claims sovereignty, UNCLOS has made a clear distinction between hydrographic surveys and military surveys in international waters; this includes EEZ. Such a survey is

⁵⁸ Convention on the Law of the Sea, Dec. 10., 1982, art. 56.

⁵⁹ Robert Beckman & Tara Davenport, *Imprimis - The EEZ Regime: Reflections after 30 Years*, LOSI CONF. PAP. (2012), 27.

⁶⁰ Sam Bateman, *The regime of the exclusive economic zone: Military activities and the need for compromise?*, in LAW OF THE SEA, ENVIRONMENTAL LAW AND SETTLEMENT OF DISPUTES: LIBER AMICORUM JUDGE THOMAS A. MENSAH (2007), 576.

governed by international law and not under the jurisdiction of the coastal States; thus, the consent of the foreign State whose vessels are navigating through the EEZ is required upon conducting surveillance.⁶¹

Despite the two different viewpoints, the coastal State can still carry out military activities in the form of monitoring in EEZ, including in artificial installations in the zone. In addition, although UNCLOS does not explicitly regulate military activities or what forms of defense can be carried out at EEZ, Articles 56 and 58 governing EEZ have the same reference as Articles 88-115 of the UNCLOS governing offshore. Thus, some forms of defense or regulated military activities related to offshore can be applied to EEZ.⁶²

Interestingly, the national law appears to support the idea of strengthening the maritime defense system through such engagement. Government Regulation allows initiations of related activities or interests other than the primary function of the building or installation. This is referred to in Article 81 paragraph (6) Government Regulation No. 129 of 2016:

“Dalam hal terdapat kegiatan/kepentingan lain di sekitar bangunan dan/atau instalasi yang sudah terpasang, maka kegiatan/kepentingan tersebut wajib mendapat persetujuan tertulis dari pemilik/operator pelaksana bangunan/instalasi dengan memperhatikan zona keamanan dan keselamatan bangunan dan/atau instalasi yang telah ditetapkan.”

(In the event that there are other activities/objectives surrounding the building and/or installation that have been installed, then the activity/objectives must obtain written approval from the owner/implementing operator of the buildings/installations by taking into account the security and safety zone of the building and/or the designated installation).

The implicit meaning of this article is the permissibility of other activities other than oil and earth exploration activities around the building or installation. Military activities in the form of monitoring (surveillance)

⁶¹ Raul (Pete) Pedrozo, *Military Activities in the Exclusive Economic Zone: East Asia Focus*, 90 INTERNATIONAL LAW STUDIES (2014): 525-526.

⁶² Jing Geng, *The Legality of Foreign Military Activities in the Exclusive Economic Zone under UNCLOS*, UTR. J. INT. EUR. LAW (2012), 24-25.

may not be prohibited, as long as they get approval from the building owner or manager and pay attention to the existing arrangements related to security zones and buildings/installations. This system can be encouraged through Public-Private Partnership (PPP) scheme, allowing private sectors to benefit from the surveillance system.⁶³

As for non-operating installations, the innovation to reuse the installations for other purposes is encouraged. Several proposals include creating fishery conservation sites, fishery cages⁶⁴, artificial coral reef tourism sites⁶⁵, maricultural sites, power and water desalination stations⁶⁶ and many others. This proposal is allowed by the recent Government Regulation No. 6 of 2020, where non-operating installations are allowed to be functionally shifted for other beneficial means, including for the defense and security interests.⁶⁷ The proposal may be coordinated with relevant Ministers, including the Minister of Defense.⁶⁸ This way, the maintenance will also be optimum for both functions. The innovation will not only benefit the Indonesia military force in the matter of defense but also help in enhancing security and safety for the installations.

The benefits of this proposal extend to other sectors of maritime issues. The system will help to protect the sovereign rights of the coastal State—Indonesia—in the EEZ. As one of the most frequent issues encountered within the EEZ is illegal, unreported and unregulated (IUU) fishing, the surveillance system will ensure better monitoring of such activity. It is commonly known that poor control and surveillance system (MCS) has contributed to the excessive numbers of IUU fishing activities.⁶⁹ Indonesia is not foreign to IUU fishing issues while also having the need to optimize its maritime security and defense system.

⁶³ Ema, Amiruddin Saleh, Heri Budianto, *Development Discourse of The World maritime Axis: Study on Critical Policy*, 16 JURNAL KOMUNIKASI PEMBANGUNAN (2018): 50.

⁶⁴ Pebrianto Eko Wicaksono, "Anjungan Migas Lepas Pantai Mangkrak Bakal Disulap jadi Keramba Ikan," LIPUTAN 6, Sep 9, 2019. <https://www.liputan6.com/bisnis/read/4058589/anjungan-migas-lepas-pantai-mangkrak-bakal-disulap-jadi-keramba-ikan>.

⁶⁵ GEDE SUANTIKA & HANDAYANU, PEMANFAATAN ANJUNGAN MINYAK DAN GAS LEPAS PANTAI PASCAPRODUKSI, (2003), 33.

⁶⁶ *Id.*, at, 47-49.

⁶⁷ Indonesia, Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut (2020), *see Art. 29(1)d*.

⁶⁸ Indonesia, Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut (2020), *see Art. 33(1)f*.

⁶⁹ David J. Douman, "Role of the Port State in Combating IUU Fishing and Promoting Long-Term Sustainability in Fisheries," in FAO/FFA REGIONAL WORKSHOP TO PROMOTE THE FULL AND EFFECTIVE IMPLEMENTATION OF PORT STATE MEASURES TO COMBAT IUU FISHING NADI (Fiji), 28 August-1 September 2006), 1.

To answer the issue at hand, there has been a system to integrate ports and offshore terminals, namely Port State Measures (PSM). PSM attempts to establish a coordinated port control that will involve existing fishing vessels. PSM will help coastal States to easier determine the measures taken.⁷⁰ The proposed system will provide better surveillance and safety measurements that align with the PSM to prevent IUU fishing activities occurring in EEZ, especially those around offshore installations.

RELEVANT CASES

Several international cases can be a reference to learn more about security and defense interests in existing marine installations. Among these cases are the US-Iran Oil Platforms Case and Rainbow Warrior Case.

I. US-IRAN OIL PLATFORM CASE

The Oil Platforms Case is one of the series of military-related incidents in the Persian Gulf region in 1987 and 1988, at which time there was an armed conflict between Iran and Iraq. This incident began with the explosion of an oil tanker belonging to Kuwait. The tanker was lent to the United States, an alliance from Iraq, at the Port of Kuwait. The United States, assuming that Iran was responsible for the attack, retaliated by blowing up two Iranian oil installations, Reshadat and Resalat. The United States argued to the UN Security Council that its actions constituted a form of self-defense and that it had notified the crew of the oil installation.⁷¹ Afterward, a United States ship, Samuel B Roberts, was exploded by mines in international waters. This triggered the United States to attack more Iranian oil installations, namely Salman and Nasr.⁷²

⁷⁰ Judith Swan, *Port State Measures to Combat IUU Fishing: International and Regional Developments*, SUSTAIN. DEV. LAW POLICY (2010), 38.

⁷¹ William H. Taft IV, *Self-Defense and the Oil Platforms Decision*, 29 YALE JOURNAL OF INTERNATIONAL LAW (2004): 297.

⁷² Andrew Garwood-Gowers, *Case Concerning Oil Platforms (Islamic Republic of Iran v United States of America): Did the ICJ Miss the Boat on the Law on the Use of Force?*, 5 MELBOURNE JOURNAL OF INTERNATIONAL LAW (2004): 3.

This case was brought by Iran to the International Court of Justice. Iran argued that the United States had violated Article X (1) of the 1955 Treaty of Amity related to freedom of doing commercial activities. Meanwhile, the United States of America defended its actions as self-defense, in the United States of America also accused that the Iranian platforms were utilized for military surveillance against American military forces.⁷³ In regards to this claim, the Court considered that the evidence of the existence of military activity within this installation is insufficient. Even if some military activity had been conducted, the attack by the United States was not justified.⁷⁴ This ruling sees that the two US attacks on Iran's oil installations are not necessary and not proportional because the installation is not a legitimate military object and the size of the attack is larger than the initial offense.⁷⁵

In addition to self-defense, the International Court of Justice also examined the definition of freedom of commerce. This review was carried out by conducting a distinction between existing commercial forms, namely commercial in general or commercial areas between Iran and the United States. The International Court of Justice saw the commerce in this matter only existed in the regions of Iran and was limited to those who exported oil directly in the regions of Iran and the United States. The four oil installations attacked by the United States were not included in that category. The International Court of Justice adjudicated this case with the opinion that the actions of the United States did not interfere with commercial activities in the region.⁷⁶

What is considered as self-defense is an action that has a balanced scale with previous attacks and is indeed considered necessary to conduct. However, in the case of these two international customs juxtaposed with Article 51 of the UN Charter, which reads:

⁷³ Caroline E. Foster, *The Oil Platforms Case and the Use of Force in International Law*, Singapore 7 JOURNAL OF INTERNATIONAL LAW (2003): 581.

⁷⁴ Caroline E. Foster, *The Oil Platforms Case and the Use of Force in International Law*, Singapore 7 JOURNAL OF INTERNATIONAL LAW (2003): 583-584.

⁷⁵ Andrew Garwood-Gowers, *Case Concerning Oil Platforms (Islamic Republic of Iran v United States of America): Did the ICJ Miss the Boat on the Law on the Use of Force?*, 5 MELBOURNE JOURNAL OF INTERNATIONAL LAW (2004): 3.

⁷⁶ William H. Taft IV, *Self-Defense and the Oil Platforms Decision*, 29 YALE JOURNAL OF INTERNATIONAL LAW (2004): 295.

"Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security."⁷⁷

The precedent of this case highlights that oil platforms may become targets in the case of the use of force by another state. Moreover, a state may exercise its inherent right to take necessary measures to protect its territorial integrity and security. The surveillance system proposed does not have any offense capability but the benefit of intelligence data gathering. As the means to install the system is not to actively intervene with other states' sovereignty and only to secure both the installations as a part of its national infrastructures, the proposal may be justifiable under international law.

II. FRANCE-NZ RAINBOW WARRIOR CASE

The second case that may become a reference to use offshore installations in the defense system is the bombing of Greenpeace's ship by the French government agents at the Port of Waitematā, Auckland, on July 10, 1985. This case was known as the Rainbow Warrior Case. New Zealand is an anti-nuclear nation and the ship was anchored nearby to protest at a series of nuclear tests conducted by France in the Pacific Ocean. In addition to the protest against the nuclear test, they also protested against 'Kanaky Merdeka' in New Caledonia. Previously, France had blown up 193 of the 210 total nuclear tests in the world. The location of the explosion was concentrated in the southern Pacific Ocean, precisely on the coral islands Moruroa and Fangataufa.⁷⁸

⁷⁷ United Nations Charter, art. 51.

⁷⁸ David Robie, *The Rainbow Warrior, secrecy and state terrorism: A Pacific journalism case study*, PACIFIC JOURNAL. REV. (2016), 192.

In that incident, a Dutch-Portuguese photographer, Fernando Pereira, died. Although France claimed not to have been involved in the incident, France gave several trade concessions and financial compensations post bombing to New Zealand.⁷⁹ Two agents from *Direction Générale de la Sécurité Extérieure* (DGSE), Major Alain Mafart and Captain Dominique Prieur were arrested and tried. They also confessed to the act on November 4, 1985 and were sentenced to 10 (ten) years in prison.⁸⁰ However, they were released prematurely and resumed their former position afterward.⁸¹

The case was settled in an arbitration proceeding and it raises the question of whether the award truly reflected.⁸² The arbitration stated that:

"Unlawful action against non-material interests, such as acts affecting the honor, dignity or prestige of a State, entitle the victim State to receive adequate reparation, even if those acts have not resulted in a pecuniary or material loss for the claimant state."⁸³

However, the focus of discourse in the arbitration tribunal is the state responsibility, distress and state of necessity principles contained in Articles 31-33 of ILC. Even though the perpetrators had been arrested, the position of the state was somewhat questionable. The bombing was undoubtedly a violation of international law.⁸⁴ The incident was a portrayal of crime done by a state's governmental agency in another state's jurisdiction. Furthermore, it raised a question on how the international legal system perceived these principles in the accident.⁸⁵ Furthermore, it opened more discussions on the matter of terrorism. Though Rainbow Warrior Case was

⁷⁹ Sarah Bradley, "New Zealand, France and New Caledonia: Changing relations and New Caledonia's road to independence," (Master's Thesis, Victoria University of Wellington, 2011), 28.

⁸⁰ Micaela Frulli, *On the Existence of a Customary Rule Granting Functional Immunity to State Officials and Its Exceptions: Back to Square One*, 26 DUKE JOURNAL OF COMP. & INT. LAW (2016): 483.

⁸¹ J. Scott Davidson, *The rainbow warrior arbitration concerning the treatment of the french agents mafart and prieur*, INT. COMP. LAW Q. (1991), 446.

⁸² *Id.*, at. 105.

⁸³ UNRIAA, Vol. XX (Sales No. E/F.93.V.3) (1990) 215 and 267, para. 109 in *Regulating a Revolution: Small Satellites and the Law of Outer Space*, Neta Palkovitz (Kluwer Law International, 2019).

⁸⁴ Geoffrey Palmer, *Perspectives on International Dispute Settlement from a Participant*, VICTORIA UNIV. WELLINGT. LAW REV. (2012), 59.

⁸⁵ Christopher Harding, *Vingt Ans Apres: Rainbow Warrior, Legal Ordering, and Legal Complexity*, 10 SING. YEARBOOK OF INTL. LAW AND CONT. (2006): 100.

conducted by a governmental agency, it evolved security studies regarding threats coming from non-state actors and state-backed terrorism.⁸⁶ This incident may as well become lessons learned for New Zealand and any other states in protecting waters under their jurisdiction.

Both of the cases above stress the importance of safety zone as part of the jurisdiction of the coastal state. Though the effect safety zone imposes on freedom of navigation remains a controversy⁸⁷, it is undeniable that past incidents show the need for coastal states to be granted rights similar to sovereign rights within the EEZ. As long as the setting of these safety zones are compliant with IMO recommendations and other generally accepted international standards, in which the coastal states must pay attention to the safety of navigation and the installation itself⁸⁸, coastal states should be given the right to determine safety zones.

Oil and gas installations are among the most important assets in the sea, whether they are state-owned or private establishments. The need to integrate defense and security mechanism owned by the state and private sector, as well as determining safety zones surrounding them, are deemed necessary. The idea proposed by the authors of this paper may fulfill the needs to do so.

CONCLUSION

A modern problem always requires a modern solution. Indonesia, to face defense issues in the sea, cannot rely on traditional ways only. The opportunities brought by the increasing activity of oil and gas exploration should be welcomed when deemed necessary to enhance Indonesia's maritime defense system. Implementing a surveillance system in offshore oil and gas installations will not only benefit the state logistically but the private sectors and international maritime traffic safety in general. Having a clear and solid legal basis both national and international, this initiative can be applied in abandoned installations, which will be reused for other

⁸⁶ David Robie, *The insecurity legacy of the Rainbow Warrior affair: A human rights transition from nuclear to climate-change refugees*, 1 JOURNAL OF INTERDISCIPLINARY (2017): 35.

⁸⁷ Sebastian Tho Pesch, *Coastal state jurisdiction around installations: Safety zones in the law of the sea*, INT. J. MAR. COAST. LAW (2015), 513.

⁸⁸ Roberto Virzo, *Coastal State Competences Regarding Safety of Maritime Navigation: Recent Trends*, SSRN ELECTRON. J. (2016), 36.

beneficial purposes. Nevertheless, this potential initiative should pay attention to rights and the sovereignty of other states and the technicality of the safety of the installations.

REFERENCES

- Afriansyah, A. (2016). Indonesia's Practice in Combatting Illegal Fishing. *Asian Yearbook of International Law*, 22, 283–300. https://doi.org/10.1163/9789004379633_015.
- Afriansyah, A. (2019). Claiming Fish in the Disputed Exclusive Economic Zone: Indonesian Practice. *Asia-Pacific Journal of Ocean Law and Policy*, 4(2), 291–297. <https://doi.org/10.1163/24519391-00402015>.
- Afriansyah, A., Paruna, D. & Andiani, R. (2020). (Un)Blurred Concept of Sovereign Rights at Sea: Implementation Context. *Law Reform*, 16(1), 133-143. <https://doi.org/10.14710/lr.v16i1.30310>.
- Agastia, I. G. B. D. & Perwita, A.A.B. (2017-2018). Building Maritime Domain Awareness as an Essential Element of the Global Maritime Fulcrum: Challenges and Prospects for Indonesia's Maritime Security. *Jurnal Hubungan Internasional*, 6(2), 113-123. <https://doi.org/10.18196/hi.61109>.
- Arianti, E. & Ghofur, A. (2019). Teknologi *Decommissioning* Anjungan Lepas Pantai Terpancang Pasca-Operasi. *Jurnal Inovtek Polbeng*, 9(2), 271-279. <https://doi.org/10.35314/ip.v9i2.1040>.
- Asshiddiqie, J. (2006). *Konstitusi Ekonomi*. Jakarta: Kompas.
- Aufiya, M. A. (2017). Indonesia's Global Maritime Fulcrum: Contribution in Indo-Pacific Region. *Andalas Journal of International Studies*, 6(2), 143-159. <https://doi.org/10.25077/ajis.6.2.143-158.2017>.
- Bailey, J. E. (1985). The Exclusive Economic Zone: Its Development and Future in International and Domestic Law. *Louisiana Law Review*, 45(6), 1269-1297.
- Bateman, S. (2007) in Ndiaye, T.M. & Wolfrum, R. (Eds.). *Law of the Sea, Environmental Law and Settlement of Disputes*. Leiden: Martinus Nijhoff.
- Beckman, R., & Davenport, T. (2012, May). The EEZ regime: reflections after 30 years. In *LOSI Conference papers* (Vol. 27).

- Bradley, S. (2011). New Zealand, France and New Caledonia: Changing relations and New Caledonia's road to independence. *Master's Thesis*, Victoria University of Wellington.
- Brown, E.D. (1982). Decommissioning of Offshore Structures: Progress Report on Legal Obligations. *Oil and Petrochemical Pollution*, 1(2), 139-141.
- Davidson, J. S. (1991). The Rainbow Warrior Arbitration concerning the Treatment of the French Agents Mafart and Prieur. *The International and Comparative Law Quarterly*, 40(2), 446-457.
- Ema, E., Saleh, A. & Budianto, H. (2018). Development Discourse of the World maritime Axis: Study on Critical Policy. *Jurnal Komunikasi Pembangunan*, 16(1), 43-53. <https://doi.org/10.46937/16201825122>.
- Esmaeili, H. *The Legal Regime of Offshore Oil Rigs in International Law*. Abingdon: Routledge.
- Foster, C.E. (2003). The *Oil Platforms* Case and the Use of Force in International Law. *Singapore Journal of International Law*, 7, 579-588.
- Fowler, D. (2012). Offshore Oil: A Frontier for International Lawmaking. *Journal of International & Comparative Law*, XII, 182-183.
- Frulli, M. (2016). On the Existence of a Customary Rule Granting Functional Immunity to State Officials and Its Exceptions: Back to Square One. *Duke Journal of Comparative & International Law*, 26(3), 479-502.
- Garwood-Gowers, A. (2004). Case Concerning Oil Platforms (Islamic Republic of Iran v United States of America): Did the ICJ Miss the Boat on the Law on the Use of Force? *Melbourne Journal of International Law*, 5, 3. <https://law.unimelb.edu.au/mjil/issues/issue-archive/51>.
- Geng, J. (2012). The Legality of Foreign Military Activities in the Exclusive Economic Zone under UNCLOS. *Merkourios*, 28(74), 22-30. <http://doi.org/10.5334/ujiel.ax>.
- Hamzah, B.A. (2013). International rules on decommissioning of offshore installations: some observations. *Marine Policy*, 27(4), 339-348.
- Harding, C. (2006). Vingt Ans Apres: *Rainbow Warrior*, Legal Ordering, and Legal Complexity. *Singapore Yearbook of International Law and Contributors*, 10, 99-116.

- Harel, A. (2012). Preventing Terrorist Attacks on Offshore Platforms: Do States Have Sufficient Legal Tools? *Harvard National Security Journal*, 4, 131-184.
- Hendrapati, M. (2014). *Pembongkaran Instalasi dan Keselamatan Pelayaran di Indonesia*. Makassar: Pustaka Pena Press.
- Hidayat, S. & Sidhha, A. (2018). Indonesia's Maritime Defence Paradigm Sine Qua Non Global Maritime Fulcrum. *Jurnal Pertahanan*, 4(3), 136-144. <http://dx.doi.org/10.33172/jp.v4i3.406>.
- Hughes, W. E. (2016). *Fundamentals of International Oil & Gas Law*. Tulsa: Pennwell Books.
- Husna, C. A. (2018). Strategi Penguatan Pengelolaan Bersama Minyak dan Gas Bumi di Wilayah Laut. *Jurnal Konstitusi*, 15(1), 140-163.
- Indonesia (1945). Undang-Undang Dasar Negara Republik Indonesia 1945.
- Indonesia (1983). Undang-Undang tentang Zona Ekonomi Eksklusif Indonesia. UU No. 5 Tahun 1983, LN. 44, TLN. 3260.
- Indonesia, Menteri Energi dan Sumber Daya Mineral (2018). Peraturan Menteri tentang Pemeriksaan Keselamatan Instalasi dan Peralatan pada Kegiatan Usaha Minyak dan Gas Bumi, Permen ESDM No. 18 Tahun 2018, BN. 356.
- Indonesia, Menteri Perhubungan (2016). Peraturan Menteri Perhubungan tentang Alur-Pelayaran di Laut dan Bangunan dan/atau Instalasi di Laut. Permenhub No. PM 129 Tahun 2016, BN. 1573.
- Indonesia. (2020) Peraturan Pemerintah tentang Bangunan dan Instalasi di Laut. PP No. 6 Tahun 2020, LN. 26, TLN. 6459.
- Kim, H. (2006). Military Activities in the Exclusive Economic Zone: Preventing Uncertainty and Defusing Conflict. *International Law Studies*, 80, 258.
- Lasabuda, R. (2013). Pembangunan Wilayah Pesisir dan Lautan dalam Perspektif Negara Kepulauan Republik Indonesia. *Jurnal Ilmiah Platax*, 1(2), 92-101.
- Lidyana, V. (2019, September 9). 10 Rig Migas di Laut Jawa dan Kaltim Mau Dibongkar. *Detik.com*, <https://finance.detik.com/energi/d-4699078/10-rig-migas-di-laut-jawa-dan-kaltim-mau-dibongkar>
- Maulana, R. & Khomsin (2017). Studi Tentang Optimasi Peletakan Anjungan Minyak Lepas Pantai. *Jurnal Teknik ITS*, 6(1), 213-216. 10.12962/j23373539.v6i1.22024

- Meyer, P.K., Nurmandi, A. & Agustiyara. (2019). Indonesia's swift securitization of the Natuna Islands how Jakarta countered China's claims in the South China Sea. *Asian Journal of Political Science*, 27(1), 70-87.
- Musliana, A. (2015). Analisis Hukum Terhadap Aktivitas Pelayaran di Kawasan ALKI Ditinjau dari Perspektif UNCLOS 1982 dan PP No. 37 Tahun 2002. *Undergraduate Thesis*, Universitas Hasanuddin, Makassar.
- Nugroho, H. (2004). Pengembangan Industri Hilir Gas Bumi Indonesia: Tantangan dan Gagasan. *Perencanaan Pembangunan*, IX(September), 3.
- Nyman, E. (2017). Maritime energy and security: Synergistic maximization of necessary tradeoffs? *Energy Policy*, 106, 310-314.
- Oktara, D. (2016, January 26). TNI: Kekuatan Angkatan Laut Masih Kurang. *Tempo.co*, <https://nasional.tempo.co/read/739441/tni-kekuatan-angkatan-laut-masih-kurang>
- Palkovitz, N. (2019). *Regulating a Revolution: Small Satellites and the Law of Outer Space*. Alphen aan den Rijn, The Netherlands: Kluwer Law International.
- Palmer, G. (2012). Perspectives on International Dispute Settlement from a Participant. *Victoria University of Wellington Law Review*, 43, 39-76. <https://doi.org/10.26686/vuwlr.v43i1.5046>.
- Pedrzo, R.P. (2014). Military Activities in the Exclusive Economic Zone: East Asia Focus. *International Law Studies*, 90, 525-526.
- Pesch, S.T. (2015). Coastal State Jurisdiction around Installations: Safety Zones in the Law of the Sea. *The International Journal of Marine and Coastal Law*, 30(3), 512-532.
- Ponsford, A.M., D-Souza, I. & Kirubarajan, T. (2009). 'Surveillance of the 200 Nautical Mile EEZ Using HFSWR in Association with A Space-based AIS Interceptor'. *IEEE Conference on Technologies for Homeland Security*, Boston, pp. 87-92.
- Purwaka, T.H. (2014). Tinjauan Hukum Laut terhadap Wilayah Negara Kesatuan Republik Indonesia. *Mimbar Hukum*, 26(3), 355-365.
- Robie, D. (2016). The Rainbow Warrior, secrecy and state terrorism. *Pacific Journalism Review: Te Koako*, 22(1), 187-213.

- Robie, D. (2017). The insecurity legacy of the Rainbow Warrior affair: A human rights transition from nuclear to climate-change refugees. *Pacific Dynamics: Journal of Interdisciplinary Research*, 1(1), 133-152.
- Roy-Chaudhury, R. (1998). Maritime Surveillance of the Indian EEZ. *Strategic Analysis*, 22(1), 49-59.
- Suantika, G. & Handayanu (2003). *Pemanfaatan Anjungan Minyak dan Gas Lepas Pantai Pascaproduksi*. Jakarta: Pusat Riset Teknologi Kelautan.
- Susanto & Munaf, D. R. (2015). *Komando Pengendalian Keamanan dan Keselamatan Laut*. Jakarta: Gramedia Pustaka Utama.
- Swan, J. (2006). Port State Measures to Combat IUU Fishing: International and Regional Developments. *Sustainable Development Law & Policy*, 7(1), 38-82.
- Taft IV, W.H. (2004). Self-Defense and the Oil Platforms Decision. *Yale Journal of International Law*, 29(2), 295-306.
- Tanaka, Y. (2019). *The International Law of the Sea*. 3rd Ed. Cambridge: Cambridge University Press.
- Trevisanut, S. (2020) in Banet, C. (Ed). *In The Law of the Seabed*. Leiden: Brill Nijhoff.
- United Nations. *United Nations Charter*.
- United Nations. *United Nations Convention on the Law of the Sea*. 1833 UNTS 397, 21 ILM 1261 (1982).
- Virzo, R. (2015). Coastal State Competences Regarding Safety of Maritime Navigation: recent trends. *Seqüência (Florianópolis)*, 71(1), 19-42.
- Wicaksono, P. E. (2019, September 9). Anjungan Migas Lepas Pantai Mangkrak Bakal Disulap jadi Keramba Ikan. *Liputan6.com*, <https://www.liputan6.com/bisnis/read/4058589/anjungan-migas-lepas-pantai-mangkrak-bakal-disulap-jadi-keramba-ikan>

QUOTE

It is time to get rid of the harmful and dangerous practice of offshore drilling once and for all.

Jeff Van Drew

ABOUT AUTHORS

Arie Afriansyah, S.H., M.I.L., Ph.D. is a lecturer at the Faculty of Law Universitas Indonesia. Besides teaching duties, currently, he is also the Chairman of Djokosoetono Research Center Faculty of Law Universitas Indonesia; the Editor in Chief of Indonesia Law Review (www.ilrev.ui.ac.id), and the Senior Associate Editor for Indonesian Journal of International Law (www.ijil.ui.ac.id).

Salsabila Siliwangi Surtiwa is a research intern at the Center for International Law Studies. She previously served as a legal fellow at Justice Without Borders and was involved in the Conference of Indonesian Diaspora Youth 2018 as a member of the drafting committee. She also took up the role of Deputy Head of the Journalism Bureau at Lembaga Kajian Keilmuan (LK2) FHUI in 2018, after formerly serving as a staff in the previous year. Her research interests include Public International Law, Adat Law, as well as Law, Society and Development.