E-ISSN: 2964-2221 P-ISSN: 2963-2471

Legal Regulation on Nuclear-Powered Ships Activity in Indonesian Waters Territory

Elieser Ginting¹ Pujo Widodo² Bayu Setiawan³

Peace Studies and Conflict Resolution Program, Faculty of National Security, Universitas Pertahanan Republik Indonesia, Bogor Regency, West Java Province, Indonesia^{1,2,3} Email: elieserginting3@gmail.com pujowidodo78@gmail.com² bayu.setiawan1961@gmail.com³

Abstract

On 17 September 2021, Australia, the United Kingdom and the United States signed the AUKUS agreement legitimizing the ownership and development of Australian nuclear-powered submarines. This has direct implications for Indonesia, which has a strategic position as a trade route. In response to this, Indonesia has taken several political steps at the regional level as well as in multilateral forums. This research is intended to analyze legal steps that can be taken by Indonesia to regulate the navigation and safety of nuclear-powered submarines considering that international maritime law instruments do not accommodate these concerns. Through a normative legal approach, using the theory of Critical Legal Studies and the Concept of Legal Politics, this research finds that Indonesia needs to regulate provisions for the navigation and safety of nuclear-powered submarines at the national level.

Keywords: AUKUS, International Maritime Law, Critical Legal Studies, Political Law



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

INTRODUCTION

On 17 September 2021, the Australian Prime Minister, Scott Morrison; British Prime Minister, Boris Johnson; and the President of the United States (US), Joe Biden agreed on a strategic partnership between the three countries in the form of a trilateral defense partnership Australia-United Kingdom-United States (AUKUS trilateral defense pact) (Putro: 2021). This defense pact aims to maintain security and stability in the Indo-Pacific. To realize this goal, AUKUS will provide a fleet of nuclear powered submarines to Australia. In a broader aspect, the agreement that underlies this defense pact also binds the three allied countries to cooperate in the development of important technologies, including the cyber domain, artificial intelligence and the development of underwater military capabilities (Laura: 2021).

Basically, AUKUS can be categorized as a security alliance in traditional international politics, but from a historical perspective, this defense pact is the only multilateral military alliance born in Asia-Pacific in the last three decades. The US and UK's commitment to facilitating the ownership of at least eight nuclear-powered submarines to replace their aging fleet of Collins-class submarines will make Australia the seventh-ranked country in the world in terms of military strength (Manqing: 2020).

From the dynamics above, it can be understood that one of the main implications of the AUKUS defense pact is Australia's ownership of nuclear-powered submarines. Directly, Australia's ownership of nuclear-powered submarines will have a major impact on Indonesia's security aspects, especially in the maritime domain, because these submarines will cross Indonesian waters. This is considering Indonesia's central position between the Indian and Pacific Oceans as well as Australia and Asia. This is because the Southeast Asia Sea Communications Lines (Sea Lane of Communications-SLOCs) are important maritime highways for world trade and international law does not allow Indonesia to obstruct or

E-ISSN: 2964-2221 P-ISSN: 2963-2471

hinder foreign ships in the designated lanes, including nuclear-powered submarines (Rusli: 2022).

It is important to pay attention to the shipping of nuclear-powered submarines crossing Indonesian waters because this type of submarine is not completely safe. At least nine nuclear-powered submarines have sunk in the world. The submarine contained radioactive fuel and the waste eventually leaked into the surrounding marine environment. The waste pollutes the sea permanently. For example, K-278, the Soviet Union's nuclear-powered submarine that sank to the bottom of the Norwegian Sea in 1989 after catching fire. A joint expedition in 2019 found leaks hundreds of thousands of times normal radiation levels. Radioactive waste in the sea can affect global fish migration, fisheries, human health and ecological security (Rusli: 2022).

In addition, two USS Steamship (USS) Thresher and USS Scorpion are currently still at the bottom of the Atlantic Ocean, at a depth of more than two kilometers, having sunk during the 1960s. Another case also shows that more than 200 sailors died in the disaster, and neither the ship's reactor, nor the nuclear weapons on board the Scorpion, were ever found (Daniel: 2022).

Learning from these incidents, a country should have special attention in terms of navigation and navigation of submarines in its territorial sea. If viewed from the aspect of national law which has implications for the shipping activities of nuclear-powered submarines, a country has the sovereignty to determine policies regarding this matter. For example, New Zealand with its New Zealand Nuclear-Free Zone. The policy is based on the New Zealand Nuclear Free Zone, Disarmament and Arms Control Act 1987. This policy is considered the world's leading domestic anti-nuclear weapons legislation in the world. Through this policy, New Zealand prohibits nuclear weapons and propulsion from crossing land, sea and air territories within 12 miles of its territorial boundaries (Hanly: 2022).

If analyzing Indonesia's policy in terms of responding to Australia's plans to build nuclear-powered submarines after the AUKUS agreement, Indonesia submitted 5 official statements, namely:

- 1. Indonesia pays close attention to the Australian Government's decision to acquire nuclear powered submarines.
- 2. Indonesia is very concerned about the continuation of the arms race and the projection of power in the region.
- 3. Indonesia emphasizes the importance of Australia's commitment to continue to fulfill all of its nuclear non-proliferation obligations.
- 4. Indonesia asked Australia to maintain its commitment to regional peace, stability and security in accordance with the Treaty of Amity and Cooperation (TAC).
- 5. Indonesia encourages Australia and other related parties to promote dialogue in resolving any differences peacefully. In this case, Indonesia underlines respect for international law, including UNCLOS 1982, in maintaining peace and security in the region (Ministry of Foreign Affairs: 2021).

If you observe Indonesia's political response above, it can be understood that Indonesia fully relies on UNCLOS regarding the regulation of navigation and safety of nuclear-powered submarines. According to UNCLOS, even archipelagic countries do not have direct rights to prevent/prohibit the implementation of these crossings (Bateman: 2007). Meanwhile, routes outside the sea lanes are subject to the cross-peace regime because they are sovereign areas that can be suspended based on the considerations of the coastal state. This is because archipelagic waters are not inland waters as a subject of state sovereignty, in archipelagic waters there is an obligation to accommodate the interests of the international community in

E-ISSN: 2964-2221 P-ISSN: 2963-2471

the form of granting innocent passage rights and passage rights through archipelagic sea lanes (Agus: 2021). Even though Article 49 (4) of UNCLOS 1982 states that the existence of archipelagic sea lanes does not affect the status and sovereignty of archipelagic states, in fact the existence of archipelagic sea lanes passage affects the implementation of state sovereignty.

From the explanation above, there are at least two interesting things in relation to the implications of Australia's ownership of nuclear-powered submarines from the AUKUS agreement with Indonesia. First, UNCLOS guarantees the right of passage in the sea and air of archipelagic countries, which underlies the existence of ALKI in Indonesia. In this regard, no special attention was paid to nuclear-powered submarines. That is, this type of ship is the same as ships in general. Second, UNCLOS is not sufficient to accommodate regulations on the navigation and safety of nuclear-powered submarines. Furthermore, as previously explained, there are technical aspects that have not been regulated by international law. For example, Article 53 of UNCLOS 1982 states that ships and aircraft can cross routes in archipelagic state waters and international straits in "normal mode". The term "normal mode" is often debated whether the normal mode in a submarine is when the ship is submerged or when it appears on the surface.

From the explanation above, in general, Indonesia has shown serious attention to plans for the development and development of nuclear-powered submarines due to the implications of AUKUS. However, there have been no clear political, legal or diplomatic steps regarding Indonesia's stance on this matter.

Theory of Critical Legal Studies

CLS views law and legal reasoning as a political part that is inseparable from power-relations (McLeod: 1999). This view generally differs from conventional legal theory, such as Natural Law or Positivism which states that law has autonomous, neutral, objective values and has a universal foundation (McCourbrey: 1999). In other words, meaning, doctrine, and legal truth from the CLS perspective, are purely social constructions that are closely related to politics. It can also be understood that legal understanding and truth is a game of truth. In other words, meaning, doctrine and legal truth are not absolute and are always relative according to the context behind them (Binder: 1999).

Conceptually, as the antithesis of positivism and legal formality, CLS has at least three main core ideas, namely: (Lili and Ira: 2007)

- 1. The critical paradigm expressed by Roberto M. Unger seeks the integration of two competing paradigms, namely the paradigm of conflict (opposition) and the paradigm of consensus (agreement). Law can be formed from two aspects, sometimes the law is formed due to conflict and sometimes the law is formed by agreement (resultante). In this regard, Unger seeks that the law must be seen as a projection of social reality in the form of a collective agreement to reduce conflict between individuals and groups of people.
- 2. The critical paradigm put forward by David Kairys views liberal law as a law that oppresses the weak and strengthens the capitalists, causing high social inequality. Here the law is seen as the most powerful and main tool for the continuity of the capitalist system. David Kairys's thoughts are also dominantly influenced by the Marxist thought tradition.
- 3. The critical paradigm expressed by Duncan Kennedy is based on the eclectic method he uses, namely the blending of a structural-phenomenological perspective with a neo-Marxist perspective. In this case, Kennedy brought together these two perspectives to participate in reconstructing the thought of Critical Legal Studies.

E-ISSN: 2964-2221 P-ISSN: 2963-2471

However, even though there are three different currents of critical paradigms, the thinkers of Critical Legal Studies remain in one perception and argument that the main core of Critical Legal Studies is dissatisfaction with the liberal legal paradigm with its criticism through the Critical Legal Studies. In this case, Samekto describes the six basic patterns that exist in this CLS based on the theses of previous thinkers, including namely:

- 1. Rejection of Liberalism. In this context, CLS tries to reject the concept of liberalism which has deviated far from the concept of a whole society. The basic understanding of liberalism that is criticized is the value of subjectivity which tends to be adopted more dominantly than collectivity values. The domination of subjectivity is considered to have the potential to disrupt the stability of social values that exist in society. Indirectly, this certainly has direct implications for the legal products that are formed.
- 2. Emphasis on Fundamental Contradictions. In this case, CLS seeks to suppress the fundamental contradictions which in liberal theory are often expressed as liberation of individuals to fulfill their interests. This is very contrary to the principle of justice because if one individual can freely fulfill his interests, it is not impossible to sacrifice other individuals in fulfilling these interests. If this is related to the law, it will greatly make the law devoid of the authority of justice.
- 3. Marginalization and Delegitimization. Critical Legal Studies seeks to marginalize in the sense of discarding liberalism in the context of life, especially in the legal aspect. This is because the law must be a projection of the morals of society, not only used as a means to protect or legitimize individual interests by establishing legal principles and applicable laws.
- 4. Rejection of Formalism. Critical Legal Studies, as stated in the introduction, rejects the existence of formalism in law. Law must be based on social reality, law is not only limited to textual domains such as jurisprudence or law. This is the main criticism for Critical Legal Studies thinkers.
- 5. Rejection of Positivism. Similar to formalism, Critical Legal Studies also rejects the concept of positivism in law. Friedmann put forward the principles of legal positivism including that law is the commandments of human beings (commands of human beings); there is no relationship between das sein (existing laws) and das sollen (should be laws); there is a distinction between analysis of legal concepts and research on legal origins; legal decision-making refers to the legal hierarchy regardless of the reality that occurs; and judgment must be made rationally, not based on moral considerations (Friedmann: 1993). It is the principles of positivism that are opposed by the legal school of thought, Critical Legal Studies.
- 6. Upholding Integration between Politics and Law. In this case, Critical Legal Studies views that law does not stand alone, but that law is a product of politics. In the concept of legal politics, Critical Legal Studies views that politics is a determinant of law, law is always influenced by politics. These six basic patterns are the focal point of Critical Legal Studies' thinking in reviewing, rejecting and reconstructing legal principles and existing laws.

Law Politics Concept

Law is considered as the goal of politics so that legal or rechtsidee ideas such as freedom, justice, certainty, and so on are placed in positive law and implementation in part or as a whole, from that legal idea is the goal of the political process and law is at the same time a tool of politics. Politics uses positive law (statutory regulations) to achieve its goals. In this case, politics is used to realize legal ideas. Politics can direct and shape society towards the goal of solving societal problems where politics is a dynamic aspect and law is a static aspect (Friedmann: 1993).

E-ISSN: 2964-2221 P-ISSN: 2963-2471

Politics and law are the basis of legal politics with the provision that the implementation of legal political development cannot be separated from the implementation of political development as a whole. Or it can be said, the basic principles used as provisions for political development will also apply to the implementation of legal politics embodied through statutory regulations.

Padmo Wahjono defines legal politics as a basic policy that determines the direction, form, and content of the law to be formed. This definition is still abstract and is supplemented by an article entitled Examining the Process of Forming Legislation, which says that legal politics is the policy of state administrators regarding what is used as a criterion for punishing something (Wahjono: 1996). In this case the policy can be related to the establishment of the law, the application of the law, and its own enforcement. According to Wahjono, the formation, application and enforcement of law is something important and one of the leading causes is the problem of the legislation itself. The formulation of explicit legal norms in the form of legislation often seems rigid and limiting, even though in its implementation there are still opportunities for judges to make interpretations, bearing in mind that any codification of legal norms is created in conditions that are always incomplete. Therefore, in its application to concrete cases in court, these legal norms or rules often raise various problems which lead to the difficulty of realizing substantial justice for the seekers (Wahjono: 1996).

Meanwhile, according to Soedarto, legal politics is the policy of the state through state agencies authorized to establish the desired regulations, which are expected to be used to express what is contained in society and to achieve what is aspired to. In another book entitled Law and Criminal Law, it is explained that legal politics is an attempt to realize good regulations in accordance with the circumstances and situation at a time (Soedarto: 1983). Soedarto's opinion led to an understanding of the importance of the existence of state power to realize the collective aspirations of society. Power is generally defined as an ability to influence other people/groups according to the power holders themselves in a state government (Soedarto: 1986).

RESEARCH METHODS

The research method that will be used in this study is Normative Legal Research.

- 1. Primary legal materials, namely binding legal materials, consisting of:
 - a. United Nations Convention on the Law of the Sea (UNCLOS) 1982
 - b. Convention on the Liability of Operators of Nuclear Ships 1962
 - c. New Zealand Nuclear Free Zone, Disarmament, and Arms Control Act 1987
 - d. International Convention for the Safety of Life at Sea (SOLAS) 1974
 - e. South Pacific Nuclear Free Zone Treaty (Raratonga Treaty) 1985
 - f. Statute of The International Court of Justice, December, 16, 1960
 - g. Treaty On The Southeast Asia Nuclear-Weapon-Free Zone. (1997)
 - h. Law No. 17 of 2008 concerning Shipping
 - i. Law No. 6 of 1996 concerning Indonesian Waters
 - i. United Nations Convention On The Law Of The Sea 1982
 - k. Law No. 43 of 2008 concerning State Territories
 - l. The United Nations Charter and other relevant principles of international law, as well as national legal instruments related to this research theme
- 2. Secondary legal materials, which provide an explanation of primary legal materials, such as draft laws, research results, works from legal circles.
- 3. Tertiary legal materials, namely materials that provide instructions and explanations of primary legal materials and secondary legal materials.

E-ISSN: 2964-2221 P-ISSN: 2963-2471

RESEARCH RESULTS AND DISCUSSION

The results of this study found that the results of the analysis of this study found that UNCLOS and SOLAS as the main international legal instruments that regulate the navigation of nuclear-powered submarines have not accommodated several important matters in the navigation of nuclear-powered submarines. These two conventions only regulate general provisions such as the right of innocent passage, shipping documents, crew, passenger or public safety. With regard to nuclear propulsion, there is a crucial issue regarding the use of nuclear energy on ships that has not been regulated. First, issues of fuel disposal and environmental protection, secondly, access to and location of ports, and finally, liability in the event of an accident regardless of the cause (negligence in construction, or a terrorist attack). In addition, as explained in the previous section, 30 of the US SSNs are equipped with 12 Vertical Launch Systems to fire Tomahawk cruise missiles. This indicates that even though Australia's development of submarines is the SSN class, this does not guarantee that these nuclear-powered submarines are not equipped with weapons systems.

The absence of regulation on the crucial matters above will certainly pose a high risk to Indonesia, which has a strategic position as a navigation route for nuclear-powered submarines. The analysis conducted on Law no. 6 of 1996 concerning Indonesian Waters has also not accommodated regulations on the navigation of nuclear-powered submarines at the domestic level. Even the regulation of nuclear-powered ships in the Act only contains an affirmation of compliance with applicable international law.

Discussion

Located between the Pacific and Indian Oceans, Indonesia has a central route for international shipping, including nuclear-powered submarines. To reach the Indian Ocean from the Pacific Ocean and vice versa, the first route runs northeast or southwest connecting the two American bases on the Pacific island of Guam and Diego Garcia in the Indian Ocean, nuclear-powered submarines pass through the Celebes, Maluku and Banda Seas, before crossing Wetar and the Ombai Strait near Timor Island. Having a depth of more than 3,000 meters, the straits support navigation of nuclear-powered submarines in dive mode (dive). Since 2013, this route has not only been crossed by US-owned submarines, but also Chinese nuclear-powered submarines (Bonnet: 2020).

In addition, the Mindoro and Balabac Routes which meet in the Sibutu Strait (off the coast of Tawi-Tawi) head to the Sulawesi Sea, then the Makassar Strait, before entering the Lombok Strait which leads to the Indian Ocean. The Makassar and Lombok straits which connect the Sulawesi and Java Seas and the outer Indian Ocean have an average depth of over 1,018 meters and 400 meters, respectively. Due to their depth and width, these two straits can also accommodate ships weighing more than 200,000 tons which are prohibited from passing through the Malacca Strait (Bonnet: 2020). The bases and routes of nuclear-powered submarines can be seen in Figure 1.

E-ISSN: 2964-2221 P-ISSN: 2963-2471



Figure 1. Bases and Routes of Nuclear Powered Submarines in Southeast Asia

Source: François-Xavier Bonnet. (2020). "Charting Submarine Routes In Southeast Asia". Herodote, 176 (1):25-41, p. 31.

The legitimacy of Australia's ownership and development of nuclear-powered submarines in the AUKUS agreement will certainly have implications for the navigational activities of nuclear-powered submarines crossing Indonesia. If you review the follow-up to the AUKUS agreement, Australia plans to build and develop nuclear-powered submarines. Essay by Max Blenkin in Australian Defense Magazine, Australia is preparing to build a new nuclear powered submarine port. At least 19 locations are considered in this infrastructure development. Three locations considered the most potential, including, Brisbane, Newcastle and Port Kembla. PM Morrison stated that further consultations would be held with the New South Wales (NSW) and Queensland governments with plans for work until 2023 (Max: 2022). This is Australia's seriousness in developing nuclear-powered submarines.

In general, supervision of foreign ships exercising the right of innocent passage in Indonesian waters can be carried out properly, and to ensure shipping safety, the Indonesian government establishes sea lanes and traffic separation schemes in its territorial sea and archipelagic waters. Innocent passage through designated channels is especially necessary for passage of tankers, nuclear-powered ships, and ships carrying dangerous or toxic cargo, including radioactive waste (UU No 6: 1996).

Article 16 Law no. 6 of 1996 concerning Indonesian Waters states that: Nuclear-powered foreign ships and ships carrying nuclear or other materials which are dangerous or toxic due to their nature, when exercising the right of innocent passage must bring documents and comply with special precautions stipulated by international agreements (UU No. 6: 1996).

Article 16 Law no. 6 of 1996 above shows that Indonesia submitted technical regulations to the applicable source of international law. In this case, Indonesia does not yet have a

E-ISSN: 2964-2221 P-ISSN: 2963-2471

technical framework, particularly in terms of special precautions against nuclear-powered foreign ships or foreign ships with nuclear cargo and other dangerous and toxic goods. This is also seen again in the Elucidation of Article 16 of Law no. Year 1996 states that: Every nuclear-powered foreign ship and foreign ship that transports nuclear materials or other substances that are dangerous or toxic in nature, must comply with applicable international rules and standards (UU No. 6: 1996).

The above article again shows that Indonesia does not yet have a domestic regulatory framework that can accommodate the navigation and safety of nuclear-powered submarines or ships transporting or carrying nuclear materials and other dangerous materials. If an analysis is carried out on other laws and regulations, Article 9 paragraph (2) PP no. 37 of 2002 states that, "foreign nuclear-powered ships ... must carry documents and comply with special precautions established by international agreements for such ships" (PP 37: 2002). The verse also shows that Indonesia is fully dependent on international law in terms of shipping and the safety of nuclear-powered ships and ships carrying nuclear cargo. From a more technical aspect, the Phrase can currently only refer to IMO instruments which are not applicable to warships. As explained in the previous chapter, even though Australia is planning to build a nuclear-powered submarine of the SSN type, the submarine is still categorized as a warship.

Observing the dynamics of Indonesian legislation, the Directorate of Political and Security Law and Agreements of the Ministry of Foreign Affairs recommends a number of things, including:

- 1. Provide obligations through laws and regulations for nuclear-powered submarines to only use ALKI in exercising innocent passage.
- 2. Form a bilateral agreement with the flag state regarding the terms and obligations of a nuclear-powered submarine wishing to cross Indonesian waters (Ministry of Foreign Affairs: 2022

Based on the description in the previous section, the two points of the Ministry of Foreign Affairs' recommendations mentioned above are not fully effective in guaranteeing the safety of the navigation of nuclear-powered submarines. First, as previously explained, in the absence of law regarding special handling of nuclear-laden ships, it is certainly not completely safe even if it only passes through ALKI. It has been described that the danger of radiation exposure in the event of an accident is not only for humans, but also for the environment and marine biota. Second, submarines were created because of their secrecy, meaning that it would be very difficult to detect and monitor submarine voyages crossing Indonesian waters.

On the other hand, in the territorial sea, Article 17 UNCLOS regulates that foreign ships have the right of innocent passage in the territorial sea of a country, provided that the ship must sail continuously (continuous and expeditious). The "right of innocent passage" only applies in the territorial sea. In other words, a ship cannot enter internal waters or stop at port facilities outside internal waters; or proceed to or from inland waters (Ministry of Foreign Affairs: 2022).

As previously explained, Indonesia is dependent on international arrangements for the navigation of nuclear powered submarines. If an analysis of several existing international legal instruments is carried out, there are at least two legal instruments relating to the voyage of nuclear-powered submarines, namely UNCLOS and SOLAS. It cannot be denied that there are gaps in international law regarding nuclear-powered submarines. In a more specific aspect, Indonesia also does not yet have legal instruments that can accommodate the safety of the navigation of these nuclear-powered submarines.

E-ISSN: 2964-2221 P-ISSN: 2963-2471

In this regard, Indonesia, through the Director General of Multilateral Cooperation at the Ministry of Foreign Affairs, Tri Tharyat, said that Indonesia would propose setting up a nuclear-powered submarine program at the UN forum to build awareness of the risks it poses. According to Tri, the proposal entitled Nuclear Naval Propulsion (NNP) was presented at the 10th Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT RevCon) which was held August 1-26 2022 in New York. NPT RevCon is a conference held every five years since 1975 to review the implementation of the agreement on limiting the possession of nuclear weapons (Persistent: 2022).

In closing the NPT RevCon on August 26 2022, Indonesia succeeded in mainstreaming the issue of nuclear-powered submarines at the United Nations. Indonesia's aim to raise awareness of the NPT has been achieved. Many countries pay attention to this issue. Indonesia will continue to oversee so that the momentum of the discussion continues. This achievement is important considering that the issue of the NNP program has not been discussed in any international forum. Even though the NNP program is related to the nuclear issue and has the potential to pose a big risk to world peace and safety (Ministry of Foreign Affairs: 2022).

CONCLUSION

In fact, many countries even challenge the principle of freedom of navigation which is the main principle in UNCLOS. However, the stipulated freedom of navigation, if applied to nuclear-charged ships will pose a very high potential risk. Portugal, South Africa, Chile and several small countries in the Pacific islands, especially New Zealand have shown the courage to challenge mainstream law, in this case UNCLOS. Indonesia as a non-nuclear country also certainly has a high bargaining position to be able to regulate ships, especially nuclear-powered submarines in Indonesian waters.

The absence of laws that regulate nuclear-powered submarines as described above will certainly make Indonesia very vulnerable to bad things caused by accidents and negligence in the navigation of nuclear-powered submarines. Thus, the authors recommend 3 steps that can be taken by Indonesia, including: Issuing regulations governing the safety of Indonesia's marine environment, especially from the threat of radiation or nuclear-powered submarine accidents. Formulate a bilateral agreement with Australia on the navigation and safety of nuclear-powered submarines crossing Indonesian waters. Carry out multilateral agreements involving countries in the Region as well as countries that have ratified UNCLOS to formulate in more detail the navigation and safety of nuclear-powered submarines crossing archipelagic countries. At a practical level, Indonesia needs to equip and advance a system that can detect nuclear-powered submarines, as well as strengthen a rapid response agency that can be deployed in the event of accidents and emergencies in the passage of nuclear-powered submarines.

BIBLIOGRAPHY

Binder, Guyora. CLS, A Companion to Philosophy of Law and Legal Theory. Edd.2, Cet.1. Oxford: Blackwell Publisher. 2010.

Cheng, Manqing. "AUKUS: The Changing Dynamic and Its Regional Implications". European Journal of Development Studies, Vol. 2, No. 1 (2020)

Direktorat Hukum Dan Perjanjian Kewilayahan Kemenlu. 2022. "Pengaturan Hukum atas Aktivitas Pelayaran Kapal Selam Bertenaga Nuklir di Wilayah Pearairan Indonesia". Hasil Wawancara Pribadi: 23 September 2022, Kementerian Luar Negeri RI.

Friedmann, Wolfgang. Teori Dan Filsafat Hukum: Susunan I [Legal Theory]. Diterjemahkan oleh Mohamad Arifin. Jakarta: Rajagrafindo Perkasa. 1993.

E-ISSN: 2964-2221 P-ISSN: 2963-2471

- Gigih, Rayi. "Indonesia proposes nuclear submarine program regulation for the sake of humanity," Independent Observer, 1 Agustus 2022.
- Hanly, Gil. "History of NZ Legislation," Disarmament & Security Centre, 28 Juli 2018.
- International Convention for the Safety of Life At Sea (diadopsi November 1974, mulai berlaku 25 Mei 1980) 1184 UNTS 3.
- Keane, Daniel. "Nuclear-powered submarines have 'long history of accidents', Adelaide environmentalist warns," ABC News, 17 September 2022.
- McCourbrey, Hillaire dan Nigel D. White, Textbook On Jurisprudence. Ed. 3. Cet. 1. London: Blackstone Press Ltd., 1993.
- McLeod, Ian . Legal Theory. London: MacMillan Press. 1999.
- New Zealand Nuclear Free Zone, Disarmament, and Arms Control Act. Public Act 1987 No.86.
- Peraturan Menteri Perhubungan Tentang Alur-Pelayaran di Laut, PM No. 68 Tahun 2011.
- Peraturan Pemerintah Tentang Hak dan Kewajiban Kapal Asing dalam Melaksanakan Lintas Damai Melalui Perairan Indonesia, PP No. 36 Tahun 2002.
- Peraturan Pemerintah tentang Hak Dan Kewajiban Kapal Dan Pesawat Udara Asing Dalam Melaksanakan Hak Lintas Alur Laut Kepulauan Melalui Alur Laut Kepulauan Yang Ditetapkan, PP No. 37 Tahun 2002
- Putro, Yehuda . "Menyikapi Potensi Eskalasi Konflik Di Kawasan Indo-Pasifik Sebagai Dampak Dari Kesepakatan Aukus," Sekretariat Kabinet Republik Indonesia, 17 November 2021.
- Rasjidi, Lili dan Ira Thania Rasjidi. Pengantar Filsafat Hukum. Bandung: CV. Mandar Maju. 2007.
- Rusli, Mohammad. "Indonesia and Malaysia Must Protect Their Seas,". Asia & The Pacific Policy Society, 27 Mei 2022.
- Soedarto, Hukum Pidana dan Perkembangan Masyarakat dalam Kajian Hukum Pidana. Bandung: Sinar Baru. 1983. Keputusan Kepala Badan Pengawas Tenaga Nuklir, Kepka No. 04/Ka-BAPETEN/V-99.
- Soedarto. Hukum dan Hukum Pidana. Bandung: Alumni. 1986.
- South Pacific Nuclear Free Zone Treaty (diadopsi 6 Maret 1985, mulai berlaku, 11 Desember 1986). 24592, Pasal 5
- Southgate, Laura. "AUKUS: The View from ASEAN: The New Trilateral Security Partnership has Highlighted the Bloc's Inability To Speak with One Voice," The Diplomat, 23 September 2021.
- Statute of The International Court of Justice (diadopsi Juni 1945, mulai berlaku 24 Otober 1945) 3 Bevans 1179.
- Treaty On The Southeast Asia Nuclear-Weapon-Free Zone (diadopsi 15 Desember 1995, mulai berlaku 27 Maret 1997),DEC/76/517
- Undang-Undang Tentang Ketenaganukliran, UU Nomor 10 Tahun 1997, LN Tahun 1997 No. 23. TLN No. 3676
- Undang-Undang Tentang Pelayaran, UU Nomor 17 Tahun 2008. LN Tahun 2008 No.64 TLN No.4849.
- Undang-Undang Tentang Perairan Indonesia, UU Nomor 6 Tahun 1996 tentang Perairan Indonesia, LN Tahun 1996 No. 73 TLN No. 3647
- United Nations Convention on the Law of the Sea (diadopsi 10 Desember 1982, mulai berlaku 16 November 1994) 1833 U.N.T.S. 397.
- Wahjono, Padmo. Kerangka Landasan Pembangunan Hukum. Jakarta: Sinar Harapan. 1996.