

**RECENT LEGAL DEVELOPMENTS ON DEEP SEABED MANAGEMENT
AND ITS RELATIONSHIP WITH INDONESIA****Tri Widiastuti**University of Indonesia
JL. Salemba Raya No. 4, Jakarta Pusat, 10430, Indonesia
Telp./Fax: +62 21 31909008 Email: triwidiastuti1996@gmail.com*Submitted: Mar 02, 2021; Reviewed: Oct 27, 2022; Accepted: Dec 15, 2022***Abstract**

The latest legal developments in deep-seabed management are stipulated in the provisions of the 1982 Law of the Sea Convention. Chapter XI of the 1982 Law of the Sea Convention specifically regulates the authority of the State for the use and utilization of a wealth of mineral resources of economic value over a deep seabed outside its jurisdiction. The authority is tangible in the management of deep-seabed activities in conducting prospecting, exploration, and exploitation aimed at the benefit of mankind based on the common heritage of mankind. This activity is regulated by the International Seabed Authority as an authority body that functions to control such activities under the rules and procedures provided as part of the obligations of the parties in maintaining the protection and preservation of the deep seabed environment after carrying out mining in the international seabed area. The participation of countries in the world, one by one has shown its encouragement to conduct deep-seabed mining activities because it knows the benefits for humans in the future. No exception with Indonesia itself that has seen the great potential for deep seabed management, but Indonesia has not also participated in the management of deep seabed in the international seabed area. Whereas Indonesia has supported this authority in its national policy based on Article 33 paragraph (3) of the 1945 Constitution with the mechanism of legislation in its implementation.

Keywords: *Deep Seabed Management; Indonesia; Legal Developments***INTRODUCTION**

The concept of the deep seabed arises because of the human tendency towards excessive exploration and exploitation of natural resources on land switching to natural resources located on the seabed and the land below. With the technological capabilities possessed by developed countries,

they can explore and exploit natural resources on the deep seabed. This situation is estimated to be very detrimental to other countries that do not have the capability or do not have the technology as possessed by developed countries, among which are developing countries.¹ Therefore, Arvido Pardo as Ambassador of Malta at the

¹ Ariadi Ahmad, "Peranan Indonesia Sebagai Anggota Internasional Sea-Bed Authority Dalam Pengelolaan Sumber Daya Alam Dasar Laut Dalam Menurut Konvensi

Hukum Laut 1982", Skripsi Universitas Andalas, 2017, hlm. 1, <http://scholar.unand.ac.id/20614/>, diakses 6 Mei 2020.

International Sea Law Conference III said the deep seabed in the Area is a common heritage of mankind with the principles of its use and utilization for the benefit of all mankind.²

Departing from its use and utilization for the benefit of all mankind, deep seabed in the legal regime of the Area is part of the seabed that is outside the national jurisdiction has the content of natural resources including mineral wealth then naturally many countries and private entities who want to do mining on this mineral deposit. In its management according to the Law of the Sea Convention 1982 concerning unlimited membership throughout they are actively involved in the exploration and exploitation of mineral mining and in carrying out such activities each country needs the existence of a sponsoring state in operational financing for cooperation between countries and international organizations.³

The establishment of an international organization specifically, an independent body by the Convention on the Law of the Sea 1982 is the International Seabed Authority (ISA) its established function to regulate mineral mining operations in 1994

and its main function is to regulate the prospecting, exploration, and exploitation of deep seabed with the regulatory and procedural requirements of the ISA granted permission to non-mining countries. The requirements of mineral mining activities are stipulated in the provisions of Chapter XI of the 1982 Law of the Sea Convention on the development and development in mining requiring non-mining States to maintain the protection of the marine environment in the Area without overdoing it by maintaining the same size as it would be required to compete with private entities, transfer technology, enact free market enterprise economic models, and ensure access to deep seabed resources in the future and include voting structures against all nations in equal control regardless of technological capabilities or contributions to deep seabed exploration and exploitation.⁴

However, the implementation of such required mining activities has failed to materialize given the large cost of prospecting and exploration plus other reserve costs such as commercial recovery costs in development-related exploitation. This led to non-mining countries as developed

² H. Ruhulesin, "Kemungkinan Terjadinya Pencemaran Akibat Penambangan Dasar Laut Dalam Di Laut Banda Ditinjau Dari Segi Hukum Lingkungan", *Jurnal Hukum dan Pembangunan*, Vol. 18, No. 2, 1988, hlm. 117, <http://jhp.ui.ac.id/index.php/home/article/download/1248/1171>, diakses 6 mei 2020.

³ Mardianis, "Status Hukum Sumber Daya Alam di Luar Yurisdiksi Nasional dan Posisi Negara Maju di Bidang Keantariksaan", *Padjajaran Jurnal Ilmu Hukum*, Vol. 3, No. 3, 2016, hlm. 577, <http://jurnal.unpad.ac.id/pjih/article/view/10933/5427>, diakses 6 Mei 2020.

⁴ Ibid.

countries such as America and other industrialized countries refused to ratify the 1982 Law of the Sea Convention. Thus, the provisions contained in Chapter XI of the 1982 Law of the Sea Convention are considered burdensome to developed countries, especially those provisions considered too favorable and favorable to developing countries when it has been clear that the establishment of the 1982 Law of the Sea Convention is intended for all countries and the international community that is universal and impossible to enforce the 1982 Law of the Sea Convention for some Countries only. Thus, this rejection invites ISA's importance as the Authority continues to grow proportionally in identifying the importance of discovery and for the economic development of deep seabed resources.

Therefore, as a form of compromise between developed and developing countries, an agreement will be made that will benefit all parties contained in United Nations General Assembly Resolution No. 48/263 on Agreement relating to the implementation of part XI of the United Nations Convention on the Law of the Sea 10

December 1982 or commonly called Agreement Implementing 1994.

The 1994 Implementation Agreement means that the application of the 1982 Law of the Sea Convention shall be conducted under the rules of Chapter XI of the 1982 Law of the Sea Convention based on the Annexes and provisions adopted by the Authority including regulations and procedures for the exploration and exploitation of deep seabed minerals in the Area. The Authority adopts these rules to realize its responsibility to ensure the scope of this principle is not changed through the proper functioning of its authority organs or the activities of the State. This embodiment is stated in the instrument framework on the prospecting, exploration, and exploitation of mineral resource activities on the deep seabed / Area is the Mining Code (The Mining Code) the result of the Consensus for 3 (three) years in negotiating. The subject in the establishment of this Code is a rule that must be followed by a State, company, or other entity when exploring the deep seabed.⁵

While the object of marine resources in question is minerals located on the seabed within the scope of the area derived

⁵ Yasin Nur A H A S, dkk, "Pengelolaan Kekayaan Hayati Kawasan "The Area" Menurut KONVENSI HUKUM LAUT 1982 [Studi Tentang Nodul Polimetallik (Polymetallic Nodules)], *Jurnal Hukum Bisnis Bonum Commune*, Vol. 3, No. 1,

2020, hlm. 33-34, <https://jurnal.untag-sby.ac.id/index.php/bonumcommune/article/view/3073>, diakses 6 Mei 2020.

from the process of scraping continental rocks caused by natural events in the sea formed in deposits in the form of minerals containing economically valuable elements such as polymetallic nodules, polymetallic sulfide, and cobalt crusts currently found by ISA. The management of mineral resources is carried out using the necessary technology and operations in deep-seabed mining activities.⁶

The development of deep seabed management in the provisions of the law in this article can be said to be the latest legal development established by the United Nations General Assembly in the form of a Resolution of the United Nations General Assembly held by the UN Seabed Committee in the International Sea Law Conference III which in its implementation is increasingly seen in developed countries and developing countries in the 21st century. The hunt for minerals of economic value for some countries is an important issue in meeting human needs in the future. Therefore, management control over deep seabed for parties in conducting prospecting activities, exploration, and exploitation of mineral resources today under the framework of the ISA. The authority in the provisions

of Part XI of the 1982 Law of the Sea Convention and the 1994 Implementation Agreement contains an Attachment also contained in the national policy in the management of deep seabed in Indonesia where the implementation is carried out based on a special mechanism of legislation.

This article will begin the discussion with the understanding of the conception of the deep seabed, the legal status of the Area and resources, the international seabed authority, the regulation of activities in the Area, commercial exploitation, protected areas, sponsorship by the State, and dispute resolution. This aims to make the understanding of this conception the basis of the next discussion on deep seabed management under the latest developments in international law, deep seabed management in Indonesia, and exploration activities that Indonesia has not yet undertaken.

Deep Seabed Part of the Area

Deep Seabed

The source of international law on which deep-seabed management is based in the Area's legal regime is the United Nations Convention on the Law of the Sea 1982 or the United Nations Convention on the Law of the Sea in 1982. Chapter XI of

⁶ M Ilham F Putuhena, "Urgensi Pengaturan Mengenai Eksplorasi dan Eksploitasi Pertambangan Di Kawasan Dasar Laut Internasional (International Sea Bed Area)", *Jurnal Rechtsvinding*, Vol. 8, No. 2, hlm. 139,

<https://rechtsvinding.bphn.go.id/ejournal/index.php/jrv/article/view/316>, diakses 6 Mei 2020.

the 1982 Law of the Sea Convention governs mining on the seabed and the land beneath it which is outside the jurisdiction subject to the international regime herein-after referred to as "The Area" contained in the provisions of Articles 133 to 191 of the Law of the Sea Convention 1982.

Article 1 paragraph (1) number 1 states: "*The area means the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction*" means the area means the seabed, the ocean floor, and the soil layer beneath it outside the boundaries of national jurisdiction. While the definition of wealth in the Area is contained in Article 133 which states: "*resources mean all solid, liquid, or gaseous mineral resources in situ in the Area or beneath the sea-bed including polymetallic nodule*" means all mineral wealth that is solid, liquid, or gas in the area or under the seabed including polymetallic nodules. The wealth generated from the Area is called minerals.

Legal Status Areas and Resources

Departing from the conflict of interests between developed and developing countries regarding the determination of the status of seabed between the freedom of

the free sea and/or the common heritage of mankind, prompting Malta's ambassador Avid Pardo to submit a seabed issue to the United Nations General Assembly in 1967, he proposed: "Declaration and Treaty concerning the reservation exclusively for peaceful purposes of the sea bed and ocean floor underlying the seas beyond the present limit of national jurisdiction and the use of their resources in the interest of mankind". This is intended to prevent seabed demilitarization and prevent land-grab for minerals in the seabed.⁷

Furthermore, developing countries delivered on the committee's debate report on General Assembly Resolution 2574 on the "Moratorium Resolution" which reads:⁸

"Pending the establishment of (an international regime including appropriate machinery): States and persons, physical or judicial are bound to refrain from all activities of exploitation of the resources of the area of the seabed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction; No claim to any part of that is or its resources shall be recognized".

⁷ Dhiana Puspitawati, *Hukum Laut Internasional*, Cet.1, Jakarta: Kencana Prenada, 2017, hlm. 93,

<https://scholar.google.co.id/citations?user=BCUQg1EAAAIA&hl=id>, diakses 18 Mei 2020.

⁸ Ibid., hlm. 94.

In the end, United Nations General Assembly Resolution 2749 of 1970 resulted in a "Declaration of Principles Governing the Sea Bed and Ocean Floor and the Subsoil Thereof, beyond the Limits of National Jurisdiction" where the principles of the use and utilization of deep seabed in the Area are intended for the benefit of all mankind and the manifestation of this declaration is contained in the Convention of the Law of the Sea 1982 specifically Article 136 explains that the Area and natural resources contained therein constitute a "common heritage for mankind".

International Seabed Authority

The consequences of the common heritage of mankind in deep seabed management outlined in the provisions of Chapter XI of the 1982 Law of the Sea Convention interpret that the Area regime regulates all activities related to the exploration and exploitation of mineral resources in the Area. This provision is contained in Article 134 paragraph (2) of the Law of the Sea Convention 1982; The area means the deep seabed and the ocean floor and the layers of the land beneath it that are outside the boundaries of national jurisdiction, and the natural resources contained therein are a common heritage of mankind;

All exploration and exploitation activities of mineral resources in the area are carried out by the International Seabed Authority (ISA) with the help of "Enterprise" and "Commercial Operator" whose results are used for the benefit of mankind taking into account developing countries. This provision is contained in Article 140 of the Law of the Sea Convention 1982.⁹

Therefore, to carry out all such general principles in the management of the Area by the Convention is submitted to an authority body named the International Seabed Authority (ISA) or the International Seabed Authority hereinafter referred to in the Convention as the "Authority". The Authority is an organization in which the State Parties¹⁰ to the Convention regulate control activities in the Area primarily to manage resources in the Area.¹¹

The International Seabed Authority (ISA) has successfully established specific regulations on deep seabed mining in the Area which is the basic mandate of the 1982 Law of the Sea Convention. This regulation contains comprehensive rules that include types of minerals originating from the Area aimed at environmental protection and contract management in implementing the Law of the Sea Convention of 1982.

⁹ Ibid., hlm. 95.

¹⁰ Negara-negara anggota Konvensi Hukum Laut 1982 secara otomatis bergabung dengan keanggotaan ISA dan

wajib mematuhi semua peraturan ISA terkait dengan pengelolaan dasar laut.

¹¹ Ariadi Ahmad, hlm. 5.

This set of rules came to be known as "The Mining Code" or Mining Code which became a legal instrument for ISA member states in conducting exploration projects in the Area.¹²

Through this Mining Code, a company with a sponsoring State may enter a contract for deep-seabed exploration for a particular Area and certain years on condition that it must qualify as a Contractor and comply with the Mining Code established by the ISA.¹³

Regulation of Activities in the Area

As mentioned above, the Main Function of the Authority is to regulate the entrance of activities in the area that can be carried out by eligible parties or entities. Activities in the Area are defined in the provisions of Article 1 paragraph (1) number 3 of the Law of the Sea Convention 1982 as all activities of exploration and exploitation of Area resources. Activities in the Area will be carried out by a meaningful qualified entity under the official written work plan drawn up under Annex III in the 1994 Implementation Agreement and approved by the Board upon review by the Legal and Technical Commissions. The work plan in question must be in the form

of a contract that will provide security of control over the Area covered by the contract. Therefore, the Authority, in this case, will control the activities in the area as necessary for securing and complying with the relevant provisions of Chapter XI of the Convention and Annex III as well as the provisions, regulations, and procedures of the Authority.

Liability for States Parties is obliged to assist the Authority by taking all necessary steps to comply with Article 139 of the Law of the Sea Convention 1982 as follows:

1. Participating states shall be responsible for ensuring that activities in the region, whether carried out by participating countries or state companies or legal entities or individuals who have the nationality of participating countries or are effectively controlled by them or by their citizens, shall be carried out under this chapter. The same responsibility applies to international organizations for activities carried out by such organizations in the region.
2. Without prejudice to the entry into force of the provisions of

¹² Arif Satrio Nugroho dan Ika Riswanti Putranti, "International Seabed Regime in Southeast Asia: The Lack of ASEAN Member States' Role in Seabed Mining", *Indonesian Prespektif*, Universitas Diponegoro, Vol. 3, No. 1,

(September, 2018), hlm. 5, <https://ejournal.un-dip.ac.id/index.php/ip/article/view/20177>, diakses 18 Mei 2020.

¹³ Ibid.

international law and in Appendix III to Article 22, losses caused by the negligence of a participating country or international organization to perform its obligations under this Chapter shall result in an obligation to indemnify, the States Parties or international organizations acting jointly shall bear together and responsive the obligation to indemnify. However, the participating state shall not be obliged to bear any losses caused by an omission by a person sponsored by him under Article 153 paragraph (2 b) if the participating country has taken all necessary and appropriate measures to ensure its compliance effectively according to Article 153 paragraph (4), and Annex III, Article 4, paragraph (4).

3. Participating countries that are members of international organizations must take appropriate measures to ensure the implementation of this article to the organization. To avoid damage resulting from exploration and exploitation activities of the region, coastal countries must jointly take necessary measures about activities in the region to ensure effective protection of the marine environment

from adverse consequences that may arise from such activities.

The above means that the prospecting, exploration, and exploitation activities contained in Appendix III outline the provisions of Article 153 by describing the procedures by which states, state companies, and other entities may apply for proselytization, exploration, and exploitation in the Area; procedures for approval of work plans for exploration and exploitation; and the legal basis for the contract attached to the work plan.

Commercial Exploitation

The 2013 ISA Regulation in its Appendix states: "*Exploitation*" means the recovery for commercial purposes of polymetallic nodules in the Area and the extraction of minerals therefrom, including the construction and operation of mining, processing, and transportation systems, for the production and marketing of metals."

The 1982 Law of the Sea Convention has not technically governed the deep-sea-bed mining exploitation phase, it only establishes detailed and prescriptive policies for conducting commercial mining including provisions relating to financial

information and contractual provisions as enacted by this Convention in 1994 by issuing its Implementation Agreement. As a result of the 1994 Implementation, the provisions of the Convention no longer apply, otherwise, this Agreement sets out the principles intended to guide the ISA in the development of regulations for commercial mining. These Terms are contained in Chapters 6, 7, and 8 of the Appendix to the Agreement.

Chapter 6 states the production policy emphasizes that the development of Area resources will take place under sound commercial principles and that neither will the tone of subsidies in activities in the Area nor will the tone of discrimination between minerals originating from the Area and other sources. The most important provision contained in Chapter 8 paragraph (1) states that the financial provisions of the contract layout the general principle under which this principle includes payment terms to the Authority within the applicable range concerning the mining of the same or similar minerals on land. This is to avoid seabed mining imposing competitive advantages or competitive losses and at the same time, this system should not be complicated and should not impose substantial

administrative costs on the Authority and/or on the Contractor.¹⁴

Protected Area

The essence of the Area regime established by Chapter XI of the 1982 Law of the Sea Convention and the 1994 Treaty relating to the Implementation of Chapter XI of the 1982 Law of the Sea Convention is called the parallel system outlined in Article 153 of the Convention. An important element of the parallel system is where, in the case of polymetallic nodules, the application must be large enough and have sufficient value to accommodate two mining operations with "the same estimated commercial value". One part will be allocated to the applicant and the other is to be the reserved area. This reserved area is set aside for activities by developing Countries or by the Authority through its Enterprise Banking System the site described in appendix III, article 8 of the Convention, in the Agreement (appendix, section 3, paragraph 11 (b), and in the Regulation on Prospecting and Exploration for Polymetallic Nodules in the Area (regulations 15 to 17).

Each application for exploration for polymetallic nodules must cover a total area, which does not need to be a single continuous area, large enough and with sufficient approximate commercial value

¹⁴ 1994 Implementation Agreement, Annex, Section 8.

to accommodate two mining operations and to be divided into two parts of the "same estimated commercial value". The designation of the reserved area can precede the application for approval of the work plan for exploration or, it can be simultaneously with the application.

The application must contain sufficient data and information to enable the Board to designate the reserved area based on the estimated commercial value of each section. The Board, based on the data and information submitted by the applicant, if deemed satisfactory, and considering the recommendations of the Legal and Technical Commission, appoints the part of the area being applied that will be the reserved area. The designated area becomes a reserved area as soon as the work plan for the unprotected area is approved and a contract is signed.¹⁵

In recent years, developing countries have taken advantage of the available provisions to actively participate in activities in the Area. For the most part, this has been done in partnership with larger commercial entities through joint ventures or similar business regulators. At the time of writing,

exploration contracts in the reserved area have been issued to entities sponsored by Nauru, Tonga, Kiribati, Singapore, and the Cook Islands. It can be said that, while the implementation of the provision of the 1982 Law of the Sea Convention Session has different from what was originally envisaged, the spirit of the parallel system has been maintained by allowing developing countries to participate in activities in the Area.¹⁶

Sponsorship by State Parties

Within the Area regime, one of the most important factors in conducting deep seabed mining activities must meet the requirements. The Terms contain that entities wishing to conduct activities in the Area shall be sponsored by the State Convention Party. This Provision as provided under Appendix III, Article 153 paragraph (2) letter b of the Convention declares "Activities in the Area shall be carried out as prescribed in paragraph 3: "...*(b) in association with the Authority by States Parties, or state enterprise or natural or juridical persons which possess the nationality of States Parties or are effectively controlled by them or their nationals, when sponsored by such States, or any group of the foregoing*

¹⁵ ISA, "Reserved Areas", *Current Status of the Reserved Areas with the International Seabed Authority*, <https://www.isa.org.jm/contractors/reserved-areas>, diakses 18 Mei 2020.

¹⁶ Michael W Lodge, "Chapture 11 The Deep Seabed", *The Oxford Handbook of the Law of the Sea: Donald R.*

Rothwell, dkk, United Kingdom: Oxford University Press, 2015, hlm. 245, <https://www.oxfordhandbooks.com/view/10.1093/law/9780198715481.001.0001/oxfordhb-9780198715481>.

which meets the requirements provided in this Part and Annex III”.

The decision to sponsor an entity that is declared eligible is submitted at the discretion of the Contracting State. In the words of the Seabed Disputes Chamber, because:¹⁷

.... the Convention does not consider the links of nationality and effective control sufficient to obtain the result that the contractor conforms with the Convention and related instruments, it requires a specific act emanating from the will of the State or States of nationality and of effective control. Such act consists in the decision to sponsor.

The actions that prove the sponsor is a certificate containing the Applicant State for the work plan for exploration are:

1. a citizen of a sponsoring State; or
2. subject to effective control of the Sponsoring

State or its citizen's sponsorship requirements by a Contracting State is not distinguished between developing and developed countries.

Equal treatment between developed and developing countries is consistent with the need to prevent the establishment of commercial companies in developed countries of companies in developing countries, gain their citizenship and obtain their sponsorship in the hope of being subjected to less burdensome regulation and control. The deployment of sponsoring the State of convenience would jeopardize the uniform application of the highest standards of marine environmental protection, the development of safe activities in the Area, and the protection of the common heritage of mankind.¹⁸

Dispute Settlement

Because of the emergence of the Area regime due to advances, especially in the field of marine

¹⁷ Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, ITLOS Case No. 17 (Advisory Opinion), 2011, Rep 10, 78,

https://www.itlos.org/fileadmin/itlos/documents/cases/case_no_17/adv_op_010211.pdf, diakses 18 Mei 2020.

¹⁸ Michael W Lodge, *The Oxford Handbook of the Law of the Sea: Donald R. Rothwell, dkk*, hlm. 247.

technology in developed countries. Of course, this causes anxiety for developing countries because developed countries can easily explore the sources of natural wealth contained in the Area. Moreover, the principle that applies to the deep seabed is the shared heritage of mankind. The presence of natural resources in the Area in the future raises the possibility of a conflict of interest between developed and developing countries. Thus, in this case, the Law of the Sea Convention 1982 has governed in the event of a dispute between States Parties.¹⁹

The terms of dispute resolution are found in Chapter XI which is specific and relevant to the deep-seabed mining regime in Articles 186 to 191 of the Law of the Sea Convention 1982. The body authorized in this provision is the Seabed Disputes Chamber as a special Chamber of the International Tribunal on the Law of the Sea established under Appendix VI (Statute of the Tribunal). Furthermore, the

jurisdiction owned by the Seabed Dispute Room is set out in Article 187 and in section 189 it also contains jurisdictional restrictions on the Seabed Dispute Room on decisions issued by the Authority. In certain cases, disputes between States Parties concerning the interpretation or application of Part XI and its related annexes may be subject to binding commercial arbitration, which by default of other treaties shall be conducted under the United Nations Commission on International Trade Law (UNCITRAL) arbitration rules. In line with the requirements in Article 153, Article 190 of the Law of the Sea Convention of 1982 states that the entity at odds as referred to in Article 187, the Sponsoring State must also give notice to it and is entitled to participate in the process. Finally, the Seabed Dispute Chamber has jurisdiction to provide an advisory opinion at the request of the Assembly or the ISA Council on legal questions arising within the scope of their activities.²⁰

¹⁹ Suhrowardi, "Penyelesaian Sengketa Di Area Menurut UNCLOS 1982", Skripsi Universitas Airlangga, 1988, <http://repository.unair.ac.id/13538/1/SUHRO-WARDI.pdf>, diakses 18 Mei 2020.

²⁰ Michael W Lodge, *The Oxford Handbook of the Law of the Sea*: Donald R. Rothwell, dkk, hlm. 249.

Development of International Law

The latest legal developments on deep seabed management are stipulated in United Nations General Assembly Resolution No. 2749 (XXV) on December 17, 1970, which states the principles concerning the seabed outside the national jurisdiction of the common heritage of mankind and states that exploration and exploitation should bring benefits to all mankind. The resolution was enacted at the United Nations Sea Law Conference in 1973 organized by the UN Seabed Committee.²¹

As a result of the adoption of the Resolution, the Area is defined in Article 1 paragraph 1 (1) of the Law of the Sea Convention 1982 as the seabed and ocean floor and the soil layer beneath it outside of national jurisdiction. The area's legal regime applies to deep seabed outside the continental shelf boundaries set out under Article 76 and the Appendix. This indicates that the accurate level of the Area cannot be determined until all coastal States have set their continental shelf limits under the provisions of the Convention. In the practice of proof of this provision, there is a dispute that occurs in several countries regarding the dispute over the boundary of the

continental shelf at the point of arc submission and supported by the inability of international organizations authorized to resolve the issue, namely the Continental Shelf Boundary Commission (CLCS). Nevertheless, the discovery of more important mineral resources caught the attention of ISAs such as polymetallic nodules, polymetallic sulfides, and cobalt-rich crusts where the mineral's richness was found beyond the arc of the potential continental shelf. So, it is possible that the ISA turns to the field of the discovery of mineral resources beyond the arc of the continental shelf and begins to identify on the field obtained by the Authority in any way that it obtains from the exploitation of non-biological resources on the continental shelf exceeding 200 nautical miles listed in Article 82 chapter IX of the convention.²²

The Law of the Sea Convention governs the management of deep seabed in the area and its resources are shared heritage of mankind "common heritage of mankind". The application of this principle has been established since 1970 in the Declaration of the principles governing the seabed and oceanic seabed and its underground layers beyond the boundaries of national

²¹ Endang Purwaningsih, "Penambangan Di Dasar Samudra Dalam: Suatu Kontroversi Yang Menghambat Berlakunya Konvensi Hukum Laut 1982", *Mimbar Hukum*, Vol. 11, 1990, hlm. 54, <http://i->

lib.ugm.ac.id/jurnal/download.php?dataId=7349, diakses 10 Mei 2020.

²² Michael W Lodge, *The Oxford Handbook of the Law of the Sea: Donald R. Rothwell, dkk*, hlm. 228.

jurisdiction affirming the relationship with other conventions and international treaties (Article 311 paragraph 6) for states to which there shall be no amendment to the basic principles relating to the common heritage of mankind outlined in article 136 and that they shall not be parties to any agreement in contempt of it which is fundamentally defined the consequences of the common heritage principle of mankind which is only repeated in Chapter XI of the Convention as follows:²³

- a. That the seabed and the land beneath it and all its natural riches that are outside the boundaries of national jurisdiction are the legacies of all mankind's "common heritage of mankind". (Article 136 of the Law of the Sea Convention 1982).
- b. That the direction of this seabed and the land beneath it should not be owned, should not be prosecuted as sovereign territory, or burdened with sovereign rights by any country. (Article 137 paragraph (1) of the Law of the Sea Convention 1982).
- c. That all exploration and exploitation activities of natural wealth in the seabed area and the land beneath it will be governed by an international provision to be held. (Article 137 paragraph (2) of the Law of the Sea Convention 1982).
- d. That the seabed area will only be used for peaceful purposes. (Article 141 of the Law of the Sea Convention 1982).
- e. That wise measures need to be taken to maintain and protect the sustainability of the marine environment, ecological stability, flora, fauna, and others. (Article 139 of the Law of the Sea Convention 1982).

Deep seabed activity arrangements include principles in its management including Article 137 paragraph (2) of the 1982 Law of the Sea Convention granting all rights in Area resources to mankind as a whole and stating that these rights must be exercised through the International Seabed Authority, on behalf of mankind. Article 137 paragraph (2) prohibits the transfer of seabed resources other than under the provisions of the Convention. Article 137

²³ Hasyim Djalal, "Perjuangan Indonesia Bidang Hukum Laut", *BPHN*, 1979, hlm. 54.

paragraph (3) further underlines the fact that to claim, acquire, or exercise mineral-related rights obtained from the seabed by any State (not just a State Party) or a natural or juridical person he must acknowledge other than under Chapter XI. Article 37 substantially qualifies the application of the principle of shared inheritance outlined in Article 136 by limiting its scope to the 'resources' Area.²⁴

For Chapter XI purposes, 'resources' are defined as 'solid, liquid or in situ mineral resources in areas on or below the seabed, including polymetallic nodules. This does not include biological resources, including so-called marine genetic resources, from the scope of Article 137. Article 140 stipulates that activities in the Area (essentially an art term for seabed mining) shall be carried out for the benefit of mankind, regardless of the geographical location of the States, whether coastal or landlocked and considering specifically the interests and needs of developing countries and those who have not yet achieved full independence or the status of self-government.²⁵

To affect these aspirations, the International Seabed Authority was tasked

with developing a mechanism to provide a fair division, on a non-discriminatory basis, of other financial and economic benefits gained from deep seabed mining. Article 140 provides a rule that the Area will be opened for special use for peace and under Article 301 this peace-aimed provision is understood to prohibit the use of deep seabed for aggressive activities within the meaning of Article 2 of the United Nations Charter affirming a complete prohibition against all military activities.²⁶

As under the introduction in this article, the legal status, and all rights to the wealth of deep-seabed mineral resources in the Area have explicitly been discussed as an introduction to understanding in advance. Therefore, the implementation of the provisions of Chapter XI of the 1982 Law of the Sea Convention and the Appendix contained in the 1994 Implementation Agreement and the provisions, ISA rules and procedures concerning the management of deep seabed especially for participating Countries shall be responsible for ensuring that deep seabed activities in the Area whether carried out by participating countries or legal entities or individuals who have the nationality of participating

²⁴ Convention on the Law of the Sea, Jamaica, 10 December 1982, *United Nations*, enter in force 16 November 1994, hlm. 70, https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf, diakses 12 Mei 2020.

²⁵ *Ibid.*, art. 137 and art. 140.

²⁶ Michael W Lodge, *The Oxford Handbook of the Law of the Sea: Donald R. Rothwell, dkk*, hlm. 230.

countries or are effectively controlled by them or by their citizens shall be carried out under applicable legal regulations mentioned above. This means that the same responsibility applies to international organizations for the activities carried out by these organizations while in the Area.²⁷

Given those deep seabed activities in the Area are intended for the benefit of mankind, regardless of the geographical location of the countries, either coastal or non-coastal countries and with particular attention to the interests and needs of the developing countries and nations that have not achieved full independence or self-government recognized by the United Nations under General Assembly Resolution No. 1514 (XV) and relevant General Assembly Resolutions.²⁸

Control of activities in deep seabed management is governed by the International Seabed Authority (ISA) as appropriate in Article 153 paragraph 2 which states that deep seabed activities in the Inner Area shall be carried out as described in paragraph 3 i.e. by the Company and together with the Authority by participating countries or state companies, or legal entities or individuals who have the nationality of participating countries or who are effectively

controlled by them if sponsored by such countries, or by any pre-mentioned group that meets the conditions specified in Chapter XI and Appendix III and without compromising the ISA rules, regulations, and procedures.²⁹

The authority, function, and institutional structure of ISA are listed in Chapter XI Articles 156 to 185 and the relevant provisions of the 1994 Implementation Agreement. As ISA's main function is to regulate deep-seabed mining.³⁰

Deep Seabed Management in Indonesia

Deep seabed arrangements as part of the seabed that are outside the national jurisdiction of the so-called Area, inseparable from the regulation of this legal regime from the success of the International Law of the Sea Conference III in the period of struggle for more than 10 years sought. Considering earlier, Indonesia's struggle in fighting for the territory of the Republic of Indonesia into a unified territory in the principles of the island nation is enough to give a mark on the difficulty of negotiating the international law regime of the sea. Indonesia's participation in the international law of the sea regime began its participation in the 1958 United Nations Conference on the Law of the Sea in Geneva but the

²⁷ Endang Purwaningsih, hlm. 55.

²⁸ Ibid.

²⁹ Ibid., Endang Purwaningsih, hlm. 56.

³⁰ Michael W Lodge, *The Oxford Handbook of the Law of the Sea: Donald R. Rothwell, dkk*, hlm. 231.

results obtained by the Indonesian delegation have not been successful in determining the territorial sea width of a coastal country.³¹ Not giving up until there, Indonesia managed to gain recognition of its territorial waters in the signing of the 1957 Djuanda Declaration which was strengthened by the enactment of Law No. 4 Laws and Regulations year 1960 on Indonesian waters. Until 2 (two) years after this declaration, Indonesia again improved the politics of sea law diplomacy in the 1960 United Nations Conference on the Law of the Sea held in Geneva.³²

The outcome of these negotiations raised concerns for the Indonesian delegation over the territorial sea width and Indonesia's sovereignty as an island nation. Therefore, the momentum was not wasted by the Indonesian delegation by increasing the politics of sea law diplomacy to realize the claim of the island nation recognized by the international world. This effort then contributed positively to the commencement of the 1973 United Nations Conference on the Law of the Sea based on United Nations General Assembly Resolution No.

3067 (XXVIII)³³ taken during the United Nations Conference III between 1973 and 1982 with the same determination adopted by the 1958 Convention on the Law of the Sea. This determination has not yet returned the results for the unification of the Republic of Indonesia. Furthermore, the implementation carried out by Indonesia in the enactment of the provisions of the Continental Shelf, namely Law no. 1 of 1973 but preceded by the Announcement of the Government of Indonesia on the Continental Shelf in 1969 and the enactment of Law No. 5 of 1980 on Exclusive Economic Zones.³⁴

Finally, the struggle of the Indonesian delegation in fighting for the island nation succeeded in the signing of the 1982 Law of the Sea Convention by 119 delegates from representatives of the countries in Jamaica. The concept of this archipelago is contained in Chapter IV of the 1982 Law of the Sea Convention under the title the Archipelagic States and Indonesia ratified the 1982 Law of the Sea Convention through Law No. 17 of 1985 concerning

³¹ Indonesia meratifikasi Konvensi Hukum Laut 1958 melalui Undang-Undang Nomor 19 Tahun 1961(LNRI Nomor 276 Tahun 1961, TLNRI Nomor 2318) dan tidak meratifikasi Konvensi Hukum Laut 1960.

³² Undang-Undang Nomor 4 Prp Tahun 1960 diperbarui dengan Undang-Undang Nomor 6 Tahun 1996 tentang Perairan Indonesia (LNRI Nomor 73 Tahun 1960, TLNRI Nomor 3647).

³³ Bernado Zuleta, *Introduction, United Nations Convention on the Law of the Sea*, New York: United Nations Publication, 1983, hlm. xxi.

³⁴ Mochtar Kusumaatmadja, *Masalah Lebar Laut Teritorial pada Konperensi-Konperensi Hukum Laut Jenewa (1958 dan 1960)*, Bandung: Pusat Studi Wawasan Nusantara dan Pembangunan, 1995.

the Ratification of the United Nations Convention on the Law of the Sea.³⁵

Thus, the acquisition of Indonesia in the recognition of sovereignty over Indonesia's territorial waters from the international world and the establishment of Law No. 4 Laws and Regulations year 1960 which has been updated by Law No. 6 of 1996 on Indonesian waters contains the intention that all marine natural resources contained in Indonesian territorial waters including natural resources contained on the seabed so that the arrangement is based on utilization for the interests of the nation and the country under the mandate of the supreme constitution Article 33 paragraph (3) of the Constitution of the Republic of Indonesia In 1945. The greatest utilization for the nation and the country so today to support the utilization of marine natural resources is characterized by the expansion of the management area and of course has been done by developed countries such as mining of non-biological natural resources on the deep seabed.

Implementation in deep-seabed management in Indonesia is realized in the implementing regulations in the Laws and Regulations that specifically govern the provisions. Based on Law No. 11 of 1967

concerning The Basic Provisions of Mining that has been updated by Law No. 4 of 2009 concerning Mineral and Coal Mining in a definite and clear Indonesian mining jurisdiction covering the whole of Indonesia, the underwater lands of Indonesia and the continental shelf of the Indonesian archipelago, the mining jurisdiction also covers areas outside the boundaries of Indonesian waters.³⁶

Non-biological natural resources referred to mineral resources where the position of the State as a stakeholder on sovereignty where the authority of the State includes the power in making policies for the management of mineral natural resources, making regulations, and implementing them which is the essence of the mandate of Article 33 paragraph (3) of the Constitution of the Republic of Indonesia year 1945. In the implementation regulation, in line with the issuance of Law No. 1 of 1967 on Foreign Investment known as UUPMA and Law No. 11 of 1967 on The Basic Provisions of Mining because Indonesia entering the era of economic globalization, especially the development of investment in mining. But on the other hand, we know the basics of both Laws under Article 33 paragraph (3) of the 1945 Constitution, but the

³⁵ Tommy Hendra.P, "Tinjauan Hukum Laut Terhadap Wilayah Negara Kesatuan Republik Indonesia", *Mimbar Hukum*, Vol 26, No. 3, (Oktober, 2014), hlm. 358,

<https://jurnal.ugm.ac.id/jmh/article/view/16024>, diakses 12 Mei 2020.

³⁶ H. Ruhulesin, hlm. 119.

provision positions the state as a party to the agreement of foreign investment in the field of mining given that the other side of the country as the sovereignty of the earth, water, and all its contents must comply with the agreement or contract that has been made.³⁷

Concerning the contract in the management of deep seabed referred to has been affirmed in international law contained in Chapter XI of the Law of the Sea Convention 1982 gave birth to the rights and obligations of coastal countries to conduct prospecting activities, exploration, and exploitation of mineral resources in the Area with the format of cooperation agreements between countries and international organizations. Forms of cooperation that can be done by the following parties:³⁸

a. between Countries

Countries including deep-sea-bed management cooperation in the Area include bilateral cooperation conducted by 2 (two) countries, multilateral cooperation conducted by several countries between different regions, and regional cooperation

conducted by several countries in one region.

b. between Countries and International Organizations

Cooperation between countries with international organizations can establish regional cooperation (region) in various areas is focused on facilitating the implementation and supervision because it is in a managed area, with the record of such management must still be under the control of the ISA as an authority body (Article 153 of the Law of the Sea Convention 1982).

c. regional and global cooperation

This cooperation shall be subject to the general principles of deep seabed management as stipulated in Article 197 of the International Law of the Sea Convention 1982.

The embodiment of the deep seabed management authority of the 1982 Law of the Sea Convention is outlined in the national policy which is the first step taken by Indonesia through Law No. 17 of 1985 concerning the Ratification of the United

³⁷ Agus Lanin, "Kedaulatan Negara Atas Sumber Daya Mineral Dalam Pengaturan Penanaman Modal Asing Bidang Pertambangan Di Indonesia", *Tadulako Law Review*, Vol. 1, No. 1, (Juni, 2016),

<http://jurnal.untad.ac.id/jurnal/index.php/TLR/article/view/6269>, diakses 10 Mei 2020.

³⁸ Heryandi, hlm. 360-361.

Nations Convention on the Law of the Sea has determined the territory subject to the sovereignty of the country, the jurisdiction of the country and the international sea territory. Within the international sea area, the prevailing legal regime is the Area governing deep seabed management where Indonesia also has the right to explore and exploit mineral and energy resources in the Area. Therefore, Indonesia's rights are exercised equally and fairly under the control of ISA. To be able to cultivate such natural wealth, the Government of Indonesia must develop a comprehensive legal framework so that it can be realized as a national policy that becomes the basis and guide the country in cooperating with other countries that have exploration and exploitation capabilities.³⁹

So based on the above provisions, if we look at the implementation in Indonesia related to the regulation of deep seabed management legislation specifically listed in Law No. 32 of 2014 on Marine governing the International Seabed Area where Article 10 paragraph (2) states "The International Seabed area is the seabed and the land beneath it located outside the boundaries of national jurisdiction" and Article 12 paragraph (1) states "in the International Seabed Area as referred to in Article 10

paragraph (2), the Government is authorized to make agreements or cooperate with relevant international agencies. Then Article 12 paragraph (2) stipulates that the agreement or cooperation as referred to in paragraph (1) shall be implemented under the provisions of the laws and regulations of the international sea in this case the Convention on the Law of the Sea 1982 which has previously been described to include Article 137, Article 140, and Article 142 (relating to the rights and interests of coastal states).⁴⁰

Based on the management of deep seabed in Indonesia the basis of legislation in its implementation is given by the Convention on the Law of the Sea 1982 where Indonesia as a state party that has rights and interests in realizing national development that today has shifted in the progress of management over the deep seabed in the Area. Given that Indonesia has gained international recognition as an island nation, this provision is contained in the 1982 Law of the Sea Convention. Therefore, Indonesia has the same rights as other countries to conduct prospecting, exploration, and exploitation of mineral resources of economic value under the mandate of Article 33 paragraph (3) of the 1945 Constitution aimed at the interests of the nation and the

³⁹ M Ilham F Putuhena, hlm. 170.

⁴⁰ Ibid., hlm. 173-174.

country. However, the purpose of deep seabed management can shift towards the principles of the common heritage of mankind in its application and subject to the international law of the sea, and due to the rapid development of science and technology its implementation is increasingly seen in developed countries and other developing countries in the period of the 21st century is dominant in hunting for minerals of economic value for some countries become an important problem in meeting human needs in the future. Therefore, Indonesia is expected to participate in deep seabed mining activities in the Area, not closing the possibility before the management of deep seabed in the realization that Indonesia must prepare a qualified and more comprehensive national legal policy in its arrangements to operate under the principles of the Convention and meet the rules and procedures of the ISA and provide great benefits for Indonesia itself.

Indonesia has not Participated in Exploration Activities

Indonesia has been offered cooperation for mineral management in the Area by maritime cooperation partner countries but does not yet have a national legal framework governing Indonesia's

participation in the Area. The government, The Ministry of Maritime Affairs encourages the preparation of legal instruments governing Indonesia's participation. Referring to the 1982 Law of the Sea Convention, countries have the right to explore and exploit the Area through the International Seabed Authority (ISA). Meanwhile, Indonesia does not yet have a legal framework governing Indonesia's active participation in the Area. It is currently being pursued to establish a national regulation that can provide the basis for this.⁴¹

Deputy Purbaya in the national policy coordination meeting of Indonesia's participation in mineral management in the seabed area outside the national jurisdiction (the Area) said "It is important for Indonesia to immediately have a legal framework governing Indonesia's active participation in the Area because otherwise, we will only be spectators for other countries and some developing countries such as Nauru and Kiribati in the Pacific Ocean and Singapore have gained access to mineral management in the region". (Maritim.go.id, 2018)

In addition to the potential for economic mineral management, the importance of the rule of law on mineral

⁴¹ Siaran Pers, "Tak Miliki Instrumen Hukum, Indonesia Tertinggal Dalam Eksplorasi Mineral di the Area Laut Internasional", Kemaritiman dan Investasi,

<https://maritim.go.id/tak-miliki-instrumen-hukum-indonesia-tertinggal-dalam-eksplorasi-mineral-di-area-laut-internasional/>, diakses 18 Mei 2020.

management in the Area is to protect Indonesia from the negative impacts of exploration and exploitation of mineral resources in the Area. Furthermore, Deputy Purbaya asserted that "Indonesia is directly adjacent to the Area so that it is economically and environmentally vulnerable to exploration and exploitation activities of minerals and biological resources in the Area". (Maritime.go.id, 2018)

Indonesia needs to participate in deep seabed management in the Area because:⁴²

- a. Indonesia is the largest archipelago with a large sea area in the world. Indonesia needs to participate both in the aspects of mineral resource utilization arrangements on the international seabed as well as operational activities to ensure the running of international rights and obligations of the relevant parties. It is also a form of responsibility as one of the countries with the largest sea area in the world.
- b. As a signatory State and Party to the 1982 Law of the Sea Convention since long ago until now, Indonesia is known to be

active in the discussion of international sea law issues including the use of minerals on the international seabed. Indonesia is one of the signatories to the United Nations Convention on the Law of the Sea, 1982 (LOSC) in 1982 in Montego Bay, Jamaica, and the party that ratified the Convention through Law No. 17 of 1985.

- c. As a Member of the International Seabed Authority (ISA) to benefit from the joining of Indonesia as a party to the 1982 Law of the Sea Convention is to become a member of the ISA. As a member of the ISA, Indonesia is quite active in its role, where, in 1996 it has been elected as the first president of the ISA Assembly and continued to be a member of the ISA Council (to date), the Isa Legal and Technical Commission (2002-2011), as well as the ISA Financial Commission (2002-2011).
- d. Indonesia has a vision as the World Maritime Axis State

⁴² Muhammad Taufan, "Indonesia dalam Eksplorasi Dasar Laut Internasional, Mungkinkah?", [https://kumparan.com/muhammad-](https://kumparan.com/muhammad-taufan1530163979173/mungkinkah-indonesia-turut-serta-memanfaatkan-harta-karun-di-dasar-laut-internasional-27431110790542942/full)

[taufan1530163979173/mungkinkah-indonesia-turut-serta-memanfaatkan-harta-karun-di-dasar-laut-internasional-27431110790542942/full](https://kumparan.com/muhammad-taufan1530163979173/mungkinkah-indonesia-turut-serta-memanfaatkan-harta-karun-di-dasar-laut-internasional-27431110790542942/full), diakses 18 Mei 2020.

through a speech by President Joko Widodo at the East Asia Summit in Nay Phi Taw in 2014, Indonesia is determined to continue to increase its participation in various international maritime forums including ISA. Under the pillars of maritime diplomacy, given that the activities of mineral resource utilization and ISA are closely related to maritime issues, Indonesia needs to continue to increase its active role in various discussions on mining on the international seabed.

CONCLUSION

The latest legal developments on the management of deep seabed are stipulated in the provisions of Chapter XI of the Law of the Sea Convention 1982 which specifically regulates the authority of the State for the use and utilization of mineral resource wealth of economic value over deep seabed located outside its jurisdiction. The authority is tangible in the management of deep-seabed activities in conducting prospecting, exploration, and exploitation aimed at the benefit of mankind based on the common heritage of mankind. Deep seabed management in Indonesia is the basis of legislation in its implementation given by

the Convention on the Law of the Sea 1982 where Indonesia as a state party that has rights and interests in realizing national development that today has shifted in the progress of management over the deep seabed in the Area. Given that Indonesia has gained international recognition as an island nation, this provision is contained in the Convention. Therefore, Indonesia has the same rights as other countries to conduct prospecting, exploration, and exploitation of mineral resources of economic value under the mandate of Article 33 paragraph (3) of the 1945 Constitution aimed at the interests of the nation and the country. Indonesia is expected to participate in deep seabed mining activities in the Area, not closing the possibility before the management of deep seabed in the realization Indonesia must prepare a national law policy that is qualified and more comprehensive in its arrangements to operate under the principles of the Convention and meet the rules and procedures of the ISA and provide great benefits for Indonesia itself.

BIBLIOGRAPHY

- Ahmad, Ariadi. 2017. "e-Skripsi Universitas Andalas." *Scholar Unand*. Februari 6. Accessed Mei 6, 2020.
<http://scholar.unand.ac.id/20614/>.
- Heryandi. 2013. "Kerjasama Internasional Pengelolaan Sea Bed Area dan Implikasinya Bagi Negara Pantai." *Jurnal Dinamika Hukum* 364.
- Investasi, Kementerian Koordinator Bidang Kemaritiman dan. 2018. *Maritim.go.id*. Agustus 16. Accessed Mei 18, 2020.
<https://maritim.go.id/tak-miliki-instrumen-hukum-indonesia-tertinggal-dalam-eksplorasi-mineral-di-area-laut-internasional/>.
- Lanin, Agus. 2016. "Kedaulatan Negara Atas Sumber Daya Mineral Dalam Pengaturan Penanaman Modal Asing Bidang Pertambangan di Indonesia." *Tadulako Law Review*.
- Lodge, Michael W. 2015. "Chapture 11 The Deep Seabed." In *The Oxford Handbook of the Law on the Sea*, by et. al Donald R Rothwell, 245. United Kingdom: Oxford University Press.
- Mardianis. 2016. "Status Hukum Sumber Daya Alam di Luar Jurisdiksi Nasional dan Posisi Negara Maju di Bidang Keantariksaan." *Padjadjaran Jurnal Ilmu Hukum* 577.
- Puspitawati, Dhiana. 2017. *Hukum Laut Internasional*. Jakarta: Kencana Prenada.
- Putranti, Arif Satrio Nugroho dan Ika Riswanti. 2018. "International Seabed Regime in Southeast Asia: The Lack of ASEAN Member States' Role in Seabed Mining." *Indonesian Perspektif*.
- Putuhena, M Ilham F. 2019. "Urgensi Pengaturan Mengenai Eksplorasi dan Eksploitasi Pertambangan Di Kawasan Dasar Laut Internasional (International Sea Bed Area)." *Jurnal Rechtsvinding* 139.
- Ruhlessin, H. 1988. "Kemungkinan Terjadinya Pencemaran Akibat Penambangan Dasar Laut Dalam Di Laut Banda Ditinjau Dari Segi Hukum Lingkungan." *Jurnal Hukum dan Pembangunan* 117.
- Taufan, Muhammad. 2018. *Kumparan*. Juli 11. Accessed Mei 18, 2020.
<https://kumparan.com/muhammad-taufan1530163979173/mungkinkah->

indonesia-turut-serta-
memanfaatkan-harta-karun-di-dasar-
laut-internasional-
27431110790542942.

(Studi Tentang Nodul Polimetalik /
Polymetallic Nodules)." *Jurnal
Hukum Bisnis Bonum Commune* 33-
34.

Yasin Nur A H A S, dkk. 2020.
"Pengelolaan Kekayaan Hayati
Kawasan "The Area" Menurut
KONVENSI HUKUM LAUT 1982
