

## **Arrangement of Submarine Cables and Pipelines as Part of Marine Spatial Planning in Indonesia**

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### **Abstract**

As a country with many islands, Indonesia is also surrounded by an ocean that is two-thirds wider than the territory of its own country. So Indonesia must be able to manage and organize the sea regularly to be used for the welfare of the people. Marine spatial planning is not only done to organize what is above the sea but also to organize what is under the sea. One of the activities used under the sea is laying submarine cables and pipelines used for various sectors. There are many irregularities in laying submarine cables and pipelines in the Indonesian sea conditions. It can lead to fatal accidents at sea and damage the facilities needed by the community, so a comprehensive and integrated arrangement is required. In addition to preventing maritime accidents, marine spatial planning can also serve as a reference and guide for all parties using the ocean to prevent conflicts between users. Marine spatial planning is also the primary foundation to support and realize Indonesia's ideals as the Global Maritime Fulcrum. This study examines several existing regulations related to the arrangement of submarine pipelines/ cables in Indonesia. It finds several problems where some aspects have not been regulated in the regulation. This research provides recommendations on these problems by looking at the needs of stakeholders for the implementation of an orderly Indonesian marine layout.

**Keywords:** Submarine Pipelines; Submarine Cables; Spatial Marine Planning; Global Maritime Fulcrum.

## A. Introduction

President Jokowi Widodo initiated the concept of the Global Maritime Fulcrum (GMF) at the 9th East Asia Summit meeting in Nay Pyi Taw, Myanmar, 13 November 2014<sup>1</sup>, was based on the physical condition of Indonesia, which is located at the equator, which makes Indonesia very rich in marine biota diversity, and its land area is surrounded by oceans, thus providing access to natural resources such as fish, coral reefs, renewable energy sources, oil, natural gas and rare minerals<sup>2</sup>. In addition, in the course of history, the Indonesian nation has also experienced glory in the maritime field, which can be seen from historical records that the ancestors of the Indonesian people controlled the seas of the archipelago<sup>3</sup> as well as maritime kingdoms that controlled “World Ports” based on the trade and shipping sector<sup>4</sup>. Therefore, the GMF can also be considered the basis for reviving Indonesia's maritime glory, considering the nation's identity as a maritime nation.

The wealth of natural resources, the advantage of a strategic position, and the concept of the GMF require Indonesia to manage marine potential by considering the principles of sustainable development, humanity, and justice. One of the efforts to manage the sea is marine spatial planning.

To organize marine space, it is necessary to plan both spatially<sup>5</sup>

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- 1 Rendi A. Witular, “Presenting Maritime Doctrine”, <https://www.thejakartapost.com/news/2014/11/14/presenting-maritime-doctrine.html>, accessed 1 March 2021.
  - 2 Benhard Limbong, *Poros Maritim (Maritime Fulcrum)*, Jakarta: Margaretha Pustaka, 2015, p. 15.
  - 3 Muhammad Novan Prasetya, *Membangun Kembali Budaya Martim Indonesia: Melalui Romantisme Negara (Pemerintah) dan Civil Society (Rebuilding Indonesian Maritime Culture: Through the Romanticism of the State (Government) and Civil Society)*, *Jurnal PIR*, Vol. 1, No. 2, 2017, p. 177.
  - 4 Sartika Intaning Pradhani, *Sejarah Hukum Maritim Kerajaan Sriwijaya dan Majapahit dalam Hukum Indonesia Kini (The History of Maritime Law of the Sriwijaya and Majapahit Kingdoms in Indonesian Today's Law)*, *Jurnal Lembaran Sejarah*, Vol. 13, No 2, 2017, p. 189.
  - 5 Law Number 4 of 2011 concerning Geospatial Information explains that spatial is the spatial aspect of an object or event, including its location and position.

and non-spatially in a comprehensive and integrated manner and based on the principles of spatial planning<sup>6</sup>. Comprehensive means that planning must look at various physical, economic, environmental, and socio-cultural aspects. Integrated means that planning involves inter-sector, region, ecosystem, and various disciplines. One of the results of spatial planning is a marine spatial plan. The marine spatial plan is a mandate from Article 43, paragraph 1 of Law Number 32 of 2014 concerning the Ocean. In addition, marine spatial planning is also included in the objectives of the Indonesian Marine Policy as outlined in Presidential Regulation Number 16 of 2017 concerning Marine Policy. Marine spatial planning will provide legal certainty and space allocation to utilize marine resources. There is no overlapping utilization in the exact location.

Indonesia has optimized its maritime potential by utilizing the existing marine space within its jurisdictional zone, above and under the sea. One activity used under the sea is laying underwater pipes and/or cables for telecommunications functions and oil and gas resources. In Indonesia, laying pipelines and submarine cables is not new. This has been known since the 1990s when telecommunications operators used submarine cables to connect islands in Indonesia.<sup>7</sup> However, it is unfortunate that the legal arrangements are inadequate and still inter-sectoral. It makes the deployment of the pipeline and or submarine cables chaotic, creating vulnerability to damage to natural factors and human activities on the sea and can cause accidents. Whereas international law through the United Nations Convention on the Law of the Sea (hereinafter referred to as UNCLOS 1982) has also given legitimacy to the State to make arrangements regarding the laying of pipelines and or submarine cables. Installation of sub-

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6 Law Number 26 of 2007 concerning Spatial Planning Article 2 states that there are nine principles of spatial planning, including the principle of integration; harmony, harmony and balance; continuity; usability and effectiveness; openness, togetherness and partnership; protection of public interest; legal certainty and justice; and accountability.

7 Administrators, *Submarine Cable, Sejarah Panjang Penuh Liku* (Submarine Cable, A Long History of Twists, [https://www.listrikindonesia.com/submarine\\_cable\\_sejarah\\_panjang\\_Full\\_liku\\_132.htm](https://www.listrikindonesia.com/submarine_cable_sejarah_panjang_Full_liku_132.htm) accessed 14 May 2021.

marine pipes and or cables must also be regulated in terms of their arrangement not to cause any problems. The problem often occurs due to the unorganized installation of submarine cables and/or pipes caught by ship anchors thrown carelessly.<sup>8</sup> Therefore, it is essential to regulate the arrangement of submarine cables and or pipes, primarily since UNCLOS 1982 only regulates general maritime zones.

Regarding to the issue of marine spatial planning, a study in 2010<sup>9</sup> examined the spatial planning model for marine areas in the archipelago, especially in Maluku, based on the basic principles of Integrated Coastal Management (ICM). This study found that the spatial arrangement of marine areas in the archipelago is based on the ICM principle due to differences in geographical aspects and the urgency of regulation aspects. In 2021<sup>10</sup>, a study was conducted to examine the implications of the conception of the suitability of marine space activities and the policy direction of sustainable marine space utilization in Indonesia. This study found that the concept of the use of marine space is in the strengthening and position of the marine zoning plan. These two studies have the same findings regarding marine zoning in terms of marine spatial planning.

Based on the above, this article examines and analyzes the rules for arranging the submarine pipelines/cables in Indonesia concerning international legal instruments and existing regulations, both statutory regulations and implementing regulations. This study begins

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- 8 Iskandar. *Triasmitra temukan penyebab putusnya kabel laut di Perairan Indonesia* (Triasmitra found the cause of the break in the submarine cables in Indonesian waters), <https://www.liputan6.com/tekno/read/3585482/triasmitra-tekan-penyebab-breaking-Kabel-laut-di-perairan-indonesia> accessed 17 May 2021.
  - 9 Sherlock H. Lekipiouw, *Model Penataan Ruang Laut Daerah Berdasarkan Integrated Coastal Management Sebagai Acuan Penyusunan Penataan Ruang Laut Pada Wilayah Kepulauan* (Regional Marine Spatial Planning Model Based on Integrated Coastal Management as a Reference for Marine Spatial Planning in Archipelagic Regions), *Jurnal Sasi*, Vol. 16, No. 4, 2010, p. 7.
  - 10 Maret Priyanta, *Implikasi Konsep Kesesuaian Kegiatan Pemanfaatan Ruang Laut dalam Pengelolaan Sumber Daya Kelautan Berkelanjutan* (Implications of the Concept of Suitability of Marine Spatial Utilization Activities in Sustainable Management of Marine Resources), *Wawasan Yuridika*, Vol. 5, No.1, 2021, p. 20.

the discussion by reviewing the development of marine spatial planning of the zoning arrangements in coastal areas and small islands. It then discusses the arrangement of submarine cables and pipelines in terms of the relevant Indonesian legislation. They are Law No. 26 of 2007 on Spatial Planning, Law No. 27 of 2007 on Management of Coastal Areas and Small Islands, Law No. 32 of 2014 on Marine Affairs, Law No. 1 of 2020 on Job Creation, and Government Regulation No. 32 of 2019 on the Marine Spatial Plan and other implementing regulations.

## **B. Marine Spatial Planning and Its Development**

The word space comes from the Latin "*Spatium*", or in English "space" and or "Spatial". Space in Law Number 26 of 2007 concerning Spatial Planning is defined as a place that includes land space, sea space, and air space, including space within the earth as a unitary area, where humans and other creatures live, carry out activities, maintain survival. This means that "space" has a broad meaning that includes three dimensions: land, sea, and air, highlighted vertically and horizontally with various economic, ecological, social, and cultural interests.<sup>11</sup>

Meanwhile, spatial planning is a process of activities to efficiently and effectively organize or arrange structures and patterns of space utilization efficiently and effectively. Based on this definition, there are several meanings. First, in spatial planning, there is a process of activities. Second, the activity organizes and arranges the structure and pattern of space utilization. Third, some activities are more efficient and effective, thus avoiding excessive use of space.<sup>12</sup> Spatial planning in the form of planning, utilization, and control<sup>13</sup> is needed to create a safe, comfortable, productive, and sustainable

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11 Yunus Wahid. *Pengantar Hukum Tata Ruang* (Introduction to Spatial Law), Jakarta: Kencana, 2016, p. 2.

12 Subandono Diposaptono, *Membangun Poros Maritim Dunia in Perspektif Tata Ruang Laut* (Build the Global Maritime Fulcrum in Marine Spatial Perspective), Jakarta: Ministry of Marine Affairs and Fisheries, Directorate General of Marine Spatial Management, 2017, p. 173.

13 Law Number 26 of 2007 concerning Spatial Planning, Article 1 number 5.

space based on the insight of the archipelago and national security created through harmony between the natural and the artificial environment, integration in the use of natural and artificial resources due regard to human resources, as well as protecting of the functions and preventing of negative impacts on the environment due to the use of space.<sup>14</sup> In addition, the preparation of spatial plans must pay attention to the carrying capacity and capacity of the environment<sup>15</sup> which will improve the harmony and balance of the subsystem.<sup>16</sup>

Law No. 26 of 2007 is an essential instrument for implementing spatial planning. However, it only focuses on land spatial planning and mandates rules regarding marine and air space management to be further regulated in a separate law.<sup>17</sup> There are several classifications based on administrative areas in spatial planning for the national area, known as RTRWN, spatial planning for the province and spatial planning for the district/city.<sup>18</sup>

Whereas in practice, marine spatial planning in Indonesia includes a mapping process consisting of two components, namely: a coastal zone zoning map as far as 12 nautical miles from the coastline and small islands (referred to as the Coastal Zone and Small Island Zoning Plan) (hereinafter referred to as RZWP3K), and national marine spatial planning for marine areas of 12 to 200 miles (National Marine Spatial Planning) (hereinafter referred to as RTRLN). The two components will fully describe the national archipelago's exclusive economic zone (EEZ) and provide the basis for granting license allocations for various users.<sup>19</sup> Therefore with the birth of Law Num-

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14 Public Relations of the Cabinet Secretariat of the Republic of Indonesia. *RZWP-3-K Kepastian Hukum bagi Pesisir dan Pulau-pulau Kecil* (RZWP-3-K Legal Certainty for Coastal and Small Islands)", <https://setkab.go.id/rzwp-3-k-kepastian-Hukum-bagi-pesisir-dan-island-is-small/> accessed 4 March 2021.

15 Law Number 26 of 2007 concerning Spatial Planning Article 19.

16 Hasni. *Hukum Penataan Ruang dan Penatagunaan Tanah dalam Konteks UUPA, UUPR, UUPLH*, (Law on Spatial Planning and Land Use in the Context of the UUPA, UUPR, UUPLH), Jakarta: Raja Grafindo Persada, 2013, p. 81.

17 Law No. 26 of 2007 on Spatial Planning Article 6 paragraph (5).

18 *Ibid.* Article 5 paragraph (3).

19 Thibault Josse, Marthin Hadiwinata, Henrikus Prata, Zoe W. Brent &

ber 27 of 2007 as amended by Law Number 1 of 2014 concerning Management of Coastal Areas and Small Islands (hereinafter referred to as UU PWP3K), which includes planning, utilization, supervision, and control activities on human interaction in the utilization of coastal areas and small islands to improve people's welfare and maintain the integrity of the Unitary State of the Republic of Indonesia<sup>20</sup> which mandates the Regional Government to prepare the Provincial and District Zoning Plans for Coastal Zone and Small Islands (RZWP3K).<sup>21</sup> RZWP3K is positioned as a separate management document that contains detailed allocations of marine areas according to the needs of WP3K management, which can then be input for the process of drafting or reviewing the RTRW, specifically for marine spatial planning.<sup>22</sup> Marine spatial planning is also known as marine spatial planning (hereinafter MSP).<sup>23</sup>

MSP is defined as “a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process”<sup>24</sup>. Marine spatial plan-

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Mads Barbesgaard, *Perencanaan Tata Ruang Laut: Menyelesaikan atau Memperkuat Konflik di Atas dan di Ruang Laut? (Sea Spatial Planning: Resolving or Strengthening Conflicts Over and in Ocean Space?) Indonesian Traditional Fishermen Association (KNTI)*, 2019, p. 8.

20 Yerrico Kasworo, *Urgensi Penyusunan Pengaturan Rencana Zonasi Wilayah Pesisir dan Pulau-Pulau Kecil (The Urgency of Setting Up a Zoning Plan for Coastal Areas and Small Islands)*, *Rechtsvinding Article Online*, 2017, p. 1.

21 Law Number 27 of 2007 concerning Coastal Areas and Small Islands Article 9 paragraph 5.

22 Iman Soedradjat, *Penyelarasan Rencana Zonasi Wilayah Pesisir dan Pulau-Pulau Kecil (RZWP3K) dan Rencana Tata Ruang Wilayah (RTRW) (Alignment of Zoning Plans for Coastal Zone and Small Islands (RZWP3K) and Regional Spatial Planning (RTRW))*, *Buletin Tata Ruang & Pertanahan*, Vol. 1, 2013, p. 15.

23 Gilbert, Alison J, Karen Alexander, Rafael Sardá, Raminta Brazinskaite, Christian Fischer, Kira Gee, Mark Jessopp, Peter Kershaw, Hans J. Los, David March Morla, Cathal O'Mahony, Mia Pihlajamäki, Siân Rees, dan Riku Varjopuro. *Marine Spatial Planning and Good Environmental Status: A Perspective on Spatial and Temporal Dimensions, Ecology and Society* Vol. 20, No. 1, 2015. p. 1.

24 Charles N. Ehler, dan Fanny Douvere, *Marine Spatial Planning, A Step-by-step Approach toward Ecosystem based Management*, Paris: *Intergovernmental Oceanographic Commission UNESCO*, 2009, p. 18.

ning is a public authority process in analyzing and allocating human activities' spatial and temporal distribution in marine areas. This spatial planning has ecological, economic, and social goals. Marine spatial planning is a process of regulating, managing, and protecting the marine environment from all potential conflicts arising from the use of the sea.<sup>25</sup>

In addition, MSP can also be interpreted as:

“...a strategic, forward looking, planning tool for regulating, managing and protecting the marine environment, including through the allocation of space, that addresses the multiple, cumulative and potentially conflicting uses of the sea ideally through a series of nested 20-year plans at different spatial scales, focused around marine regions and based on an ecosystem approach”.<sup>26</sup>

From some of these definitions, marine spatial planning can have the following characteristics:<sup>27</sup> as an approach to integrated coastal management planning and ecosystem-based management, namely:

- a. Integrated and multi-objective, meaning across sectors and institutions and between levels of government, and includes social and economic and ecological goals
- b. Sustainable and adaptive, able to learn from experience
- c. Strategic and anticipatory, focusing on the long term
- d. Participatory stakeholders are actively and effectively involved in the process
- e. Place-based or region based, focus on a specific area or ocean place; and
- f. Ecosystem-based, balancing ecological, economic, and social goals and objectives towards sustainable development.

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25 Nova Vincentia Pati, *Perencanaan Tata Ruang Maritim (Marine Spatial Planning)* di Indonesia dalam buku *Mengamankan Laut: Tata Ruang dan Keamanan Maritim (Marine Spatial Planning in Indonesia in the book Securing the Sea: Spatial Planning and Maritime Security)*, Yogyakarta: Aswaja Pressindo, 2017, p. 175.

26 Smith, Hance D., Frank Maes, Tim A. Stojanovic, and Rhoda C. Ballinger. *The Integration of Land and Marine Spatial Planning*, *Journal of Coastal Conservation*, Vol. 15, No. 2, 2011, p. 291-303

27 Charles N. Ehler. *Coral Triangle Initiative: An Introduction to Marine Spatial Planning*, Jakarta: USAID/CTSI, 2013, p. 15.



Effective marine spatial planning has three essential attributes.<sup>28</sup> First, multi-purpose. This means that marine spatial planning must balance ecological, social, economic, and governmental objectives. However, the more important goal is to increase sustainability. Second, clear spatial focus. The marine area to be managed must be clearly defined. Ideally, it should be large enough to accommodate the relevant ecosystem processes at the ecosystem level. Third, integration. The planning process should address the interdependencies of each component within a defined management area. It includes natural processes, activities, and authorities.

In its current form, as implemented in various parts of the world, marine spatial planning focuses on the efficient allocation of marine space for various marine activities, including nature conservation.<sup>29</sup> The critical element in the definition of spatial planning is the core of the allocation of space, and this is seen as a continuous process, not just a stage. Marine spatial planning is expected to be a conflict mitigation process through the rational allocation of space by minimizing conflicts of interest and, if possible, maximizing synergies between sectors.<sup>30</sup> Marine spatial planning is also seen as an approach that can respond to the increasing understanding of the complex socio-ecological interrelationships associated with the ocean, moreover, for issues related to fragmented governance patterns such as overlapping and conflicting sectoral objectives and a lack of linkage between authorities and maritime-related responsibilities and impacts.<sup>31</sup>

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28 Subandono Diposaptono, *Op.Cit*, p. 179.

29 li Jay, W. Flannery, J. Vince et al. *International Progress in Marine Spatial Planning*, In: in *Ocean Yearbook 27*, Leiden: Martinus Nijhoff Publishers. 2013, p. 176.

30 Charles N. Ehler & Fanny Douvere. *Visions for a Sea Change*. Report of the First International Workshop on Marine Spatial Planning, Paris: UNESCO, 2006, p. 13.

31 Sue Kidd and Dave Shaw. *The Social and Political Realities Of Marine Spatial Planning: Some Land-Based Reflections*, *ICES Journal of Marine Science*, Vol. 71, No. 7, 2014, p. 1538.

### C. RZWP-3-K as the First Step in Indonesian Marine Spatial Planning

Coastal areas are transitional areas between land and sea ecosystems affected by changes in land and sea.<sup>32</sup> By looking at this definition, the sustainable use of coastal space must pay attention to two territorial aspects: the land space and the water (sea) space. The coastal and marine spatial planning approach with a territorial approach is essential for the sustainability of natural resource management. There is a very complex interaction of ecological, social, and economic phenomena between the two regions at this level.<sup>33</sup> This approach is known as the "Integrated Coastal Management" approach. Integrated Coastal Management is a new approach outlined in Chapter 17, Agenda 21. The marine environment (The Marine Environment) is an essential component of the global life support system. The need for regulation regarding the management of coastal and marine areas in Indonesia emerged after implementing the Global Agenda 21 in Indonesia's Agenda 21 in 1996. It is recognized that Indonesia's coastal and marine areas have essential meanings for economic development. However, on the other hand, coastal and marine areas also save several issues related to ecology, socioeconomics, and institutions.<sup>34</sup>

Based on the existing regulation in UU PWP3K—as *lex specialis*—coastal areas and small islands are prioritized for specific activities, such as conservation; education and training; research and development; marine cultivation; tourist; fishery and marine business

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32 Law Number 1 of 2014 concerning Amendments to Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands, Article 1 point 3.

33 Mujio, Luki Adrianto, Kadarwan Soewardi and Yusli Wardiatno. *Analisis Potensi Konflik Pemanfaatan Ruang Kawasan Pesisir: Integrasi Rencana Tata Ruang Darat dan Perairan Pesisir* (Analysis of Potential Conflicts in Coastal Spatial Utilization: Integration of Land and Coastal Water Spatial Plans). *Sodality: Jurnal Sosiologi Pedesaan*. Vol. 4, No. 2, 2016, p. 139.

34 Dina Sunyowati, *Penataan Ruang Laut Berdasarkan Integrated Coastal Management* (Sea Spatial Planning Based on Integrated Coastal Management). *Jurnal Mimbar Hukum*, Vol. 20, No. 3, 2008, p. 426.

and fishery industry in a sustainable manner; organic agriculture; husbandry and/or national defence and security.<sup>35</sup> Also, referring to the law, marine spatial planning in Indonesia can be termed a zoning plan.<sup>36</sup>

In Law No. 27 of 2007, as amended by Law No. 1 of 2014 in Chapter I Article 1, it is stated that:

“The zoning plan is a plan that determines the direction of the use of resources for each planning unit accompanied by the determination of the structure and spatial pattern<sup>37</sup> in the planning area, which contains activities that may and may not be carried out and activities that can only be carried out after obtaining a permit.”

The zoning plan for coastal areas and small islands is intended to determine the direction of resource use. Each planning unit is accompanied by determining the spatial structure and pattern in the planning area. It contains activities that may and may not be carried out and involve the community in the preparation process.<sup>38</sup> In addition, it was also stated that the planning of the RZWP3K was carried out, taking into<sup>39</sup> harmony, harmony, and balance with the carrying capacity of the ecosystem, utilization and protection functions, space and time dimensions, technological and socio-cultural dimensions, and defense and security functions; the integrated use of various types of resources, functions, environmental aesthetics,

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35 Law Number 1 of 2014 concerning Amendments to Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands Article 23 paragraph (2).

36 Subandono Diposaptono, *Op.Cit.*, p. 179.

37 In Law Number 26 of 2007 concerning Spatial Planning, it is explained that the definition of Spatial Planning is the spatial structure and Spatial Pattern.

38 Rivanlee Anandar, and Bambang Shergi Laksmo, *Perubahan Kebijakan Rencana Zonasi Wilayah Pesisir dan Pulau-pulau Kecil (RZP3K) serta Dampaknya pada Kelompok Nelayan Pulau Pari, Kepulauan Seribu Selatan, Kepulauan Seribu* (Policy Changes in the Zoning Plan for Coastal Zone and Small Islands (RZP3K) and Its Impact on Fisherman Groups on Pari Island, South Seribu Islands, Seribu Islands), *Jurnal Pembangunan Manusia*, Vol. 1, No. 2, 2020, p. 170.

39 Law Number 1 of 2014 concerning Amendments to Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands Article 9 paragraph 3.

and quality of coastal land; and the obligation to allocate space and community access in the use of coastal areas and small islands that have social and economic functions. RZWP3K is also stipulated in a Regional Regulation and is valid for 20 (twenty) years and can be reviewed every 5 (five) years.<sup>40</sup> RZWP3K must be harmonized and balanced with the Regency/City Spatial Planning (RTRW). The RZWP3K is a planning document that can be called the most determinative in spatial planning.<sup>41</sup>

The RZWP3K legal framework contains the following elements<sup>42</sup>: allocation of space in public use areas, conservation areas, certain national strategic areas, and sea lanes; linkages between terrestrial ecosystems and marine ecosystems, determining the use of marine space and, in particular, prioritizing marine areas for socio-cultural, economic, marine, strategic, and defense and security conservation purposes. RZWP3K is the basis for granting location permits for spatial use in coastal areas and small islands.<sup>43</sup> Sea lanes, as described in the explanation of the PWP3K Law, are waters that are used for laying marine pipes/cables. As stated in Article 19 of the PWP3K Law, everyone utilizes coastal and small island water resources for activities, one of which is the installation of pipes and cables sea.

In addition to realizing the mandate of Article paragraph (5) of the PWP3K Law, considering the urgency of the formation of a Regional Regulation on RZWP3K, which is needed to realize harmony and synergy in the use of coastal areas and small islands between

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40 Law Number 1 of 2014 concerning Amendments to Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands Article 9 paragraphs 4 and 5.

41 Ananda Prima Yurista and Dian Agung Wicaksono, *Kompatibilitas Rencana Zonasi Wilayah Pesisir dan Pulau-Pulau Kecil (RZWP3K) sebagai Rencana Tata Ruang yang Integratif* (Compatibility of Zoning Plans for Coastal Areas and Small Islands (RZWP3K) as an Integrative Spatial Plan), *Jurnal Rechts Vinding*, Vol. 6, No. 2, 2017, p. 187.

42 Law Number 1 of 2014 concerning Amendments to Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands Article 10.

43 Rivanlee Anandar, *Op. Cit*, p. 76.

local governments and related sectors<sup>44</sup>, as of June 2020, it has been reported by the Directorate General of Marine Spatial Management, Ministry of Maritime Affairs and Fisheries, that 27 provinces already have local regulations on RZWP3K. Next is<sup>45</sup>:

1. North Sulawesi through Regional Regulation No. 1 of 2017 (14 March 2017)
2. West Sulawesi through Regional Regulation No. 6 of 2017 (30 October 2017)
3. West Nusa Tenggara through Regional Regulation No. 12 of 2017 (10 November 2017)
4. NTT through Regional Regulation No. 4 of 2017 (13 November 2017)
5. Central Sulawesi through Regional Regulation No. 10 of 2017 (22 December 2017)
6. East Java through Regional Regulation No. 1 of 2018 (5 February 2018)
7. Lampung through Regional Regulation No. 1 of 2018 (15 January 2018)
8. West Sumatra through Regional Regulation No. 2 of 2018 (26 February 2018)
9. Maluku through Regional Regulation No. 1 of 2018 (7 August 2018)
10. North Maluku through Regional Regulation No. 2 of 2018 (27 August 2018)
11. North Kalimantan through Regional Regulation No. 4 of 2018 (14 August 2018)
12. DIY through Regional Regulation No. 9 of 2018 (24 September 2018)
13. South Kalimantan through Regional Regulation No. 13 of 2018 (16 July 2018)

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<sup>44</sup> Yerrico Kasworo, *Op.Cit.*, p. 3.

<sup>45</sup> Directorate of Marine Spatial Planning. *Perda RZWP-3-K bertambah lagi, kali ini Provinsi Aceh* (The regional regulation on RZWP-3-K has been added again for Aceh Province) <https://kkp.go.id/djprl/prl/article/21699-perda-rzwp-3-k-berikut-again-kali-ini-provinsi-aceh> accessed 3 April 2021.

14. Gorontalo, through Regional Regulation No. 4 of 2018 (26 September 2018)
15. Central Java through Regional Regulation No. 13 of 2018 (21 December 2018)
16. West Kalimantan through Regional Regulation No. 1 of 2019 (16 January 2019)
17. Central Kalimantan through Regional Regulation No. 1 of 2019 (8 January 2019)
18. West Java through Regional Regulation No. 5 of 2019 (25 February 2019)
19. North Sumatra through Regional Regulation No. 4 of 2019 (18 March 2019)
20. Southeast Sulawesi through Regional Regulation No. 9 of 2018 (31 December 2018)
21. South Sulawesi through Regional Regulation No. 2 of 2019 (8 May 2019)
22. Bengkulu through Regional Regulation No. 5 of 2019 (2 July 2019)
23. Jambi through Regional Regulation No. 20 of 2019 (9 December 2019)
24. West Papua through Regional Regulation No. 13 of 2019 (31 December 2019)
25. South Sumatra through Regional Regulation No. 2 of 2020 (9 April 2020)
26. Bangka Belitung Islands through Regional Regulation No. 3 of 2020 (27 April 2020)
27. Aceh Province through Aceh Regional Regulation/*Qanun* No. 1 Ye2020 (17 April 2020)

RZWP3K planning has become the first step in marine planning because the arrangement must begin with spatial planning as a critical initial phase. This is because planning in spatial planning is a very vital fundamental element for controlling and utilizing space at the same time. Some of the factors considered in this planning include the economic activities of marine and coastal communities, including cultivation areas and conservation of protected areas. All

interests can ideally be accommodated in the spatial planning process. There are no problems in utilizing marine space.<sup>46</sup>

Later, after planning for coastal areas to realize marine spatial planning, Law Number 32 of 2014 clarifies marine spatial planning as the zoning planning for coastal areas and small islands.<sup>47</sup> Marine area zoning planning is a plan to produce a national strategic area zoning plan, a zoning plan for certain national strategic areas, and an inter-regional zoning plan.<sup>48</sup> National marine spatial planning includes territorial waters and jurisdictions<sup>49</sup>. territorial waters, which include inland waters; archipelagic waters; and the territorial sea, while the jurisdictional areas covering the Additional Zone, the Indonesian Exclusive Economic Zone and the Continental Shelf need to be managed with a national marine space plan<sup>50</sup> which then produces a National Marine Spatial Plan. It is further regulated in Government Regulation Number 32 of 2019 concerning Marine Spatial Plans.

As mentioned above, the arrangement is not only done for those above the sea. However, what is under the sea also needs to be arranged. In the multiplying information and communication technology era, submarine pipes and cables have been increasingly carried out. Indonesia has also looked at structuring underwater pipes and cables in accordance with existing regulations.

#### **D. Laying of Submarine Cables and/or Pipes According to UNCLOS 1982**

The United Nations Convention on the Law of the Sea (hereinafter

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46 Sujadmi and Bahjatul Murtasidin. *Perencanaan Tata Ruang Laut: Konflik, Negosiasi dan Kontestasi Kepentingan Ekonomi Politik Lokal di Bangka Belitung* (Sea Spatial Planning: Conflict, Negotiation and Contest of Local Political Economy Interests in Bangka Belitung), *JIIP: Jurnal Ilmiah Ilmu Pemerintahan*, Vol. 5, No. 2, 2020, p. 165.

47 Law Number 32 of 2014 concerning Marine Article 43 paragraph (1) letter b.

48 Mujio, et al. *Op. Cit*, p. 140.

49 Law Number 32 of 2014 concerning Marine Article 7.

50 Law Number 32 of 2014 concerning Marine Article 43 paragraph (2).

referred to as UNCLOS 1982) has also provided a framework for the world regarding sea space allocation. Indonesia has ratified UNCLOS through Law Number 17 of 1985.<sup>51</sup> As a coastal country, Indonesia is given the authority to make its national regulations related to the use of the sea in a predetermined maritime zone.

The convention divides the sea into two parts of maritime zones, namely, under and outside national jurisdiction.<sup>52</sup> Maritime zones under full sovereignty in inland waters, archipelagic waters and territorial seas, and maritime zones under the authority and special rights of the coastal State are contiguous zones, exclusive economic zones, and continental shelves. The zones outside the national jurisdiction are the high seas and the international seabed area.

The laying of submarine cables and/or pipelines is mentioned several times in UNCLOS 1982, divided into each marine zoning. One of them states that the coastal State can make laws and regulations regarding the protection of submarine pipes and cables in accordance with the provisions of the convention.<sup>53</sup> The coastal State has full sovereignty and jurisdiction over its archipelagic, territorial, and inland waters. The regulation of submarine cables and pipelines deployed, built or used in these areas is entirely subject to the national policy of the coastal State. The same applies to archipelagic States. They must respect cables and pipes in their waters and allow maintenance and replacement.<sup>54</sup>

Based on the provisions of article 57 of UNCLOS 1982, each coastal State has the right to determine its exclusive economic zone (EEZ). Its width may not exceed 200 nautical miles measured from the same baseline to measure the width of its territorial sea. This regime regulates the rights and jurisdiction of the coastal State and the rights and freedoms that other countries can enjoy.<sup>55</sup> All coun-

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51 Nova Vincentia Pati, *Op. Cit.*, p. 175.

52 Dikdik Mohamad Sodik, *Hukum Laut Internasional dan Pengaturannya di Indonesia* (International Law of the Sea and its Regulations in Indonesia), Bandung: Refika Aditama, 2011, p. 19.

53 UNCLOS 1982, Article 21.

54 UNCLOS 1982 Article 51.

55 Dikdik Mohamad Sodik, *Op. Cit.*, p. 81.



tries, both coastal and non-coastal states, can enjoy freedoms, one of which is laying submarine cables and pipelines.<sup>56</sup> Therefore, Indonesia, a coastal state, must respect the submarine cables or pipelines from other countries installed across its territory. Countries that exercise this freedom must also recognize the coastal State's rights. However, it is also stated in Article 60, paragraph 4 of UNCLOS 1982 that the coastal State, if necessary, can establish an appropriate safety zone around the installation. The aim is both for the safety of shipping and the safety of the installation structure (submarine cables and pipes).

In the continental shelf provisions, based on the definition stated in Article 76, paragraph 1 of UNCLOS 1982, the continental shelf of a coastal state includes the seabed and land under the exclusive economic zone, either in whole or in part.<sup>57</sup> Regarding submarine cables and pipelines, it is explained in detail in Article 79 of UNCLOS 1982, paragraphs 1 to 5. Paragraph 1 states that all countries (what is meant are all countries party to the convention, whether coastal or not) have the right to lay submarine cables and pipelines on the continental shelf in accordance with the provisions of the convention. Accordingly, paragraph 2 stipulates that in exercising its right to explore and exploit the natural resources of the continental shelf and regulate the prevention, reduction and control of pollution originating from pipelines, the coastal State may not prevent the installation of cables and pipelines over the continental shelf. However, paragraph 3 requires the approval of the coastal State for the installation of pipelines. On that basis, paragraph 4 gives the coastal State the right to determine requirements regarding the installation of cables and pipes crossing its land or territorial sea<sup>58</sup>. Furthermore, in paragraph 5, it is stated that countries must pay proper attention to the existing cables and/or pipes in installing submarine pipeline cables. Also, the repair of the existing pipe cables is not to be harmed if the

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<sup>56</sup> UNCLOS 1982, Article 58.

<sup>57</sup> Heru Prijanto. *Hukum Laut Internasional* (International Law of the Sea), Malang: Bayumedia Publishing, 2007, p. 29.

<sup>58</sup> Dikdik Mohamad Sodik, *Op. Cit.*, p. 120.

coastal State wishes to install pipes or submarine cables. The coastal State is obliged to notify and coordinate with the State that owns the existing cables and or pipes or vice versa so that there is no cutting or overlapping of installations and is obliged to maintain the installation of such marine structures so as not to cause disturbances to shipping lanes, fisheries and the anchor lego groove is in accordance with the safety zone set by UNCLOS 1982.

International law jurisdiction applies to the high seas area. However, each country has the freedom to install submarine cables and or pipes outside the continental shelf area.<sup>59</sup> However, this freedom still considers the rights of other countries as regulated in this convention. Article 113 of UNCLOS 1982 states that every country must establish regulations that stipulate that the termination of submarine cables or pipelines due to intentional / negligence is a punishable offence. Each country can establish rules governing liability for damage caused to pipes and or cables that already exists when performing pipe installation or repair or compensation to ship owners. It prevents damage to marine cables and or pipes, such as sacrificing anchors and nets mentioned in Article 114 and Article 115 of UNCLOS 1982.

## **E. Arrangement of Submarine Cable and/or Pipelines in Indonesia**

Underwater pipes and/or cables in Indonesian national regulations were first mentioned in Law Number 5 of 1983 concerning Exclusive Economic Zones in article 4, paragraph 2 regarding sovereign rights, other rights, jurisdictions, and obligations. Then in 2007, through the PWP3K Law, marine pipes and cables were one form of utilization of sea lanes. Moreover, in addition to discussing marine spatial planning in coastal areas, the Maritime Law also implicitly mentions submarine pipes/cables, defined as building and installation at sea.<sup>60</sup>

In Indonesia's marine layout, which has been regulated in Government Regulation Number 32 of 2019 concerning Marine Spatial

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<sup>59</sup> UNCLOS 1982, Article 112.

<sup>60</sup> Government Regulation Number 27 of 2021 concerning the Implementation of the Marine and Fisheries Sector, Article 1 point 11.

Planning, underwater pipes and or cables are included in the arrangement of sea lanes. Sea lanes are waters that are used for shipping lanes, pipelines and/or underwater cables and the migration of marine life. However, problems related to laying pipelines and/or sea cables regarding cross-sectoral authority. The regulation of the marine area is not necessarily only under the control of the marine sector but various sectors such as transportation, especially in maritime transportation, the communication and information technology sector, oil and gas and other related sectors. With so many sectors that must work together integrally,

This Government Regulation Number 32 of 2019 concerning Marine Spatial Planning then becomes the reference frame in the preparation of the national long-term development plan in the Marine sector; preparation of the national medium-term development plan for the Marine sector; the embodiment of the integration and harmony of development as well as cross-sectoral and cross-regional interests in utilizing and controlling the utilization of marine space; determination of the location and function of marine space for activities of national strategic value; zoning planning for coastal areas and small islands; marine area zoning planning; and as a direction in granting water location permits and water management permits in coastal areas and small islands as well as in the sea.<sup>61</sup>

In the territorial waters, the Government, through this government regulation, stipulates two marine spatial plans consisting of a marine spatial structure plan and a marine spatial pattern plan.<sup>62</sup> The marine spatial structure plan is divided into a Growth Center Arrangement (Marine and Fishery Growth Center and a Marine Industry Center) and a Marine Facilities and Infrastructure Network Structure (National Port Arrangement and a Fishery Port Arrangement). While the Marine Spatial Pattern Plan is divided into four areas, namely:

a. Public Utilization Zone which aims to allocate sea space used for

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61 Government Regulation Number 32 of 2019 concerning Marine Spatial Planning Article 5.

62 *Ibid.* Article 13 and Article 21.

economic, social, and cultural interests which includes Fisheries Zone, Tourism Zone, Mining Zone, Energy Development Zone, Marine Industry Zone, Defense and Security Zone and transportation Zone<sup>63</sup>.

- b. Conservation Area, which aims to protect the sustainability of marine, coastal and small island ecosystems and maritime customs and culture, includes First Aid Conservation Areas, Aquatic Conservation Areas, and Maritime Conservation Areas.<sup>64</sup>
- c. Sea Channel, which is intended for shipping lanes, submarine cable pipelines and marine biota migration routes,<sup>65</sup> and
- d. Certain National Strategic Areas aim to allocate marine space related to state sovereignty, environmental control, or world heritage sites.<sup>66</sup>

The Maritime Law and Government Regulation No. 32 of 2019 do not mention submarine pipes or cables, even though underwater pipes and cables have different meanings and cannot be equated. Furthermore, it is also not very significant to discuss the regulation of pipelines and submarine cables. Explanation of subsea pipelines and cables is only limited to the use of space for sea lanes. The regulation on the use of sea space for sea lanes in the form of subsea pipelines/ cables is prepared by taking into account the following criteria: location suitability; protection and preservation of Marine Resources; security against disasters at sea; shipping safety and environmental protection; community protection; Area Defense security; and. Cruise Lines in the Sea.<sup>67</sup> Judging from the criteria mentioned above, there is no doubt that the regulation regarding submarine cables and pipelines is initiated by many sectors that are not only in charge of the marine sector. Even the telecommunications sector, the mineral resources sector, the transportation sector, the environment sector and even the security sector are involved.

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63 *Ibid.* Article 22.

64 *Ibid.* Article 31.

65 *Ibid.* Article 37.

66 *Ibid.* Article 38.

67 *Ibid.* Article 96 paragraph (1).

Then through Government Regulation Number 6 of 2020 concerning Buildings and Installations at Sea<sup>68</sup> which in its preamble states that this regulation is made to carry out regulations related to the demolition of buildings and installations at sea, but this Government Regulation defines underwater pipes which are hollow tubes with varying diameters and lengths located at or embedded in the bottom of the sea.<sup>69</sup> However, it still does not mention the definition of an underwater cable. However, submarine cables can be used for various functions, such as telecommunications functions, it can be in the form of telecommunications cables,<sup>70</sup> for electrical functions, it can be in the form of overhead cables and underwater power cables.<sup>71</sup>

In Indonesia, underwater fiber optic cable known as the Marine Cable Communication System (SKKL) is a telecommunication transmission system using cable media. They stretched in the oceans and or oceans to connect several cable stations in each country through which it passes.<sup>72</sup> Moreover, in international arrangements that refer to UNCLOS 1982, the word "undersea cables and pipes" is mentioned several times but does not have a clear definition. There are two main types of submarine cables: submarine communication cables used to transmit data communications and underwater power cables used to transmit electric power. On the other hand, undersea pipelines transport crude oil and natural gas resources. Although they are all designed for underwater use and are usually laid on or

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68 This regulation has been revoked and replaced by Government Regulation Number 27 of 2021 concerning the Implementation of the Marine and Fisheries Sector.

69 Government Regulation Number 27 of 2021 concerning the Marine and Fisheries Sector Implementation Article 1 11.

70 Government Regulation Number 27 of 2021 concerning implementing the Marine and Fisheries Sector Article 9 paragraph 7.

71 *Ibid.* Article 9 paragraph 11.

72 Supartono, Adnan Madjid, and Rosyidan Syah, *Pengamanan Sistem Komunikasi Kabel Laut pada Alur Laut Kepulauan Indonesia 1 dalam Rangka Keamanan Maritim* (Securing the Marine Cable Communication System in the Indonesian Archipelago Sea Line 1 in the Context of Maritime Security), *Jurnal Prodi Keamanan Maritim*, Vol. 4, No, 2, 2018, p. 4.

buried under the seabed, underwater communication cables, power lines, and pipes are of different sizes, consist of different materials, have different functions, and have different importance. -different for the international community.<sup>73</sup>

Seeing the importance of the function of underwater pipes and cables, coupled with the era of increasingly sophisticated technology, the Government of Indonesia also immediately fixed regulations related to this matter, both from marine spatial planning, which includes subsea pipelines and permits. Previously, the President had set 5 (five) main directions as a strategy in implementing the Nawacita mission and achieving the targets of Vision Indonesia 2045. One of them was the simplification of regulations with the Omnibus Law approach<sup>74</sup> one of the outputs is Law Number 11 of 2020 concerning Job Creation, divided into 11 clusters.<sup>75</sup> One of them is about the Marine Cluster in which it discusses Spatial Planning and Zoning<sup>76</sup> by integrating sea and land spatial planning through spatial planning documents.<sup>77</sup>

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73 Anonymous. *Proposal for Establishment of a New ILA Committee on Submarines Cables and Pipelines Under International Law*, <https://ila.vettoreweb.com/Storage/Download.aspx?DbStorageId=11805&StorageFileGuid=d8210a23-a4f8-492e-a1b7-b0938b618a2f>, accessed 13 May 2021.

74 Attachment to Presidential Regulation of the Republic of Indonesia Number 18 of 2020 concerning the 2020-2024 National Mid-Term Development Plan. p. I.5.

75 Ministry of Investment/BKPM. *UU Cipta Kerja: Dorong Investasi, Ciptakan Lapangan Kerja* (Job Creation Law: Encouraging Investment, Creating Job Opportunities), <https://www.bkpm.go.id/id/publikasi/detail/berita/uu-cipta-karya-tangan-investasi-ciptakan-field-kerja>, accessed 14 March 2021.

76 Indonesian Ocean Justice Initiative, *Analisis UU Cipta Kerja Sektor Kelautan dan Perikanan* (Analysis of the Law on the Creation of Marine and Fisheries Sector), <https://oceanjusticeinitiative.org/wp-content/uploads/2020/10/IOJI-Analisis-UU-Cipta-Kerja-Sektor-Kelautan-dan-Perikanan.pdf>, accessed 13 May 2021.

77 Coordinating Ministry for Maritime Affairs and Investment. *Kemenko Marves Siapkan Rencana Integrasi Tata Ruang Laut dan Darat pada Tahun 2021. Siaran Pers No.SP-13/HUM/ROKOM/SET.MARVES/I/2021* (The Coordinating Ministry for Maritime Affairs and Fisheries Prepares a Plan for Sea and Land Spatial Integration in 2021. Press Release No. SP-13/HUM/ROKOM/SET.MARVES/I/2021), <https://maritim.go.id/kemenko-marves-prepare-plan-integration-tata-ruang-laut/> accessed 13 January 2021.

Through the Job Creation Law, the government claims it will realize sustainable development and solve problems in the marine and fisheries sector.<sup>78</sup> To obtain the suitability of spatial planning activities, the Government simplifies the basic requirements for Business Licensing. The Job Creation Law makes several changes. Either in the form of the abolition of several articles and/or stipulates new arrangements for several provisions on Marine Spatial Planning, including those regarding submarine pipelines and cables as follows:<sup>79</sup>

- a. Law Number 26 of 2007 concerning Spatial Planning;
- b. Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands as amended by Law Number 1 of 2014 concerning Amendments to Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands;
- c. Law Number 32 of 2014 concerning the Marine Affairs;
- d. Law Number 4 of 2011 concerning Geospatial Information.

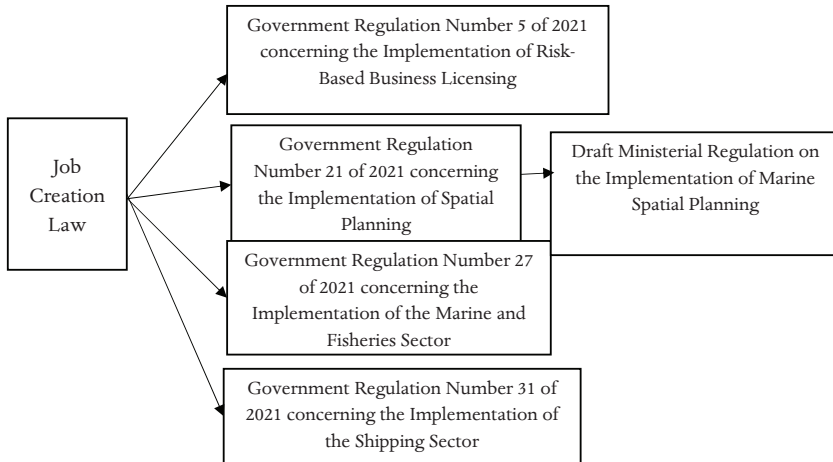
In line with changes or abolition of marine spatial planning arrangements, the Job Creation Law mandates the making of implementing regulations. Some of which have been realized in 2021, which are described in Diagram 1.

Looking at the definitions that have been described, it is explicitly seen how necessary submarine cables and/or pipes are in supporting human life so that a significant arrangement is needed. Therefore, the Ministry of Maritime Affairs and Fisheries as the holder of the marine sector, which is closely related to licensing and technical regulation of submarine pipelines and cables, has stipulated the Decree of the Minister of Marine Affairs and Fisheries Number 14 of 2021 concerning Pipelines and or Underwater Cables. The issuance of this Ministerial Decree can guarantee that the arrangement of submarine cables in the future will be even better. This is a follow-up to the Job Creation Law and Government Regulation Number 21 of

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78 Agil Oktaryal, *Kertas Advokasi Kebijakan atas UU No. 11 Tahun 2020 tentang Cipta Kerja Bidang Kelautan dan Perikanan* (Policy Advocacy Paper on Law no. 11 of 2020 concerning Job Creation in the Marine and Fisheries Sector), *Center for Indonesian Law & Policy Studies* (PSHK), 2020, p. 7.

79 Law No. 11 of 2020 regarding Job Creation, Article 16.



**Diagram 1.** Implementing regulations of Job Creation Law

2021 concerning the Implementation of Spatial Planning.<sup>80</sup> In addition, Decree of the Minister of Marine Affairs and Fisheries Number 14 of 2021 concerning Pipelines and or Underwater Cables was born based on the results of the formulation of the national team formed through Decree of Coordinating Ministry for Maritime and Investments Affairs Number 107 of 2020 concerning the National Team for Structuring Underwater Pipelines and Cables, chaired by the Coordinating Minister for Maritime Affairs and Investment as the Steering Team, Minister of Maritime Affairs and Fisheries as Daily Chair of the Steering Team and Head of the Indonesian Navy's Hydro Oceanographic Center as Chief Executive. Members of the national team consist of ministries and institutions, namely the Ministry of Transportation, Ministry of Communication, and Information, Ministry of Marine and Fisheries (hereinafter referred to as KKP), Ministry of Energy and Mineral Resources, Ministry of Defense, Chief of Staff

80 Ministry of Maritime Affairs and Fisheries of the Republic of Indonesia. *KKP Jamin Penataan Alur Pipa dan Kabel Bawah Laut Lebih Baik. Siaran Pers Kementerian Kelautan dan Perikanan Nomor: SP.251/SJ.5/III/2021* (KKP Guarantees Better Arrangement of Subsea Pipelines and Cables. Ministry of Marine Affairs and Fisheries Press Release Number: SP.251/SJ.5/III/2021), <https://kkp.go.id/article/27986-kkp-jamin-penataan-alur-pipa-dan-Kabel-Bawah-Laut-baik-baik>, accessed 3 June 2021.



of the Navy, and the Geospatial Information Agency.<sup>81</sup> Then the National Team was renewed with the Decree of the Minister of Marine Affairs and Fisheries Number 46 of 2021 regarding the arrangement of pipelines and/or submarine cables.<sup>82</sup>

The attachment to Decree of the Minister of Marine Affairs and Fisheries Number 14 of 2021 concerning Pipelines and or Underwater Cables contains the Map and Coordinates of the Submarine Pipeline as well as the map and coordinates of the submarine cable path as a complement to the rules of the National Marine Spatial Plan. The pipeline consists of 281 planned and existing pipelines from 27 Contractor partnership contracts, compiled into 43 subsea pipeline segments. Meanwhile, the submarine cable lines consist of 218 existing cable lines belonging to the Marine Cable Communication System, 46 existing cable lines from the State Electricity Company, 3 Tsunami cable lines belonging to the Agency for the Assessment and Application of Technology, and 62 new lines belonging to Marine Cable Communication System. With 329 cable lines compiled into 217 cable segments under the sea and set 4 landing stations spread across several regions of Indonesia, namely Batam, Kupang, Manado, and Jayapura. However, the cable line does not include the international cable line that crosses Indonesian waters.<sup>83</sup>

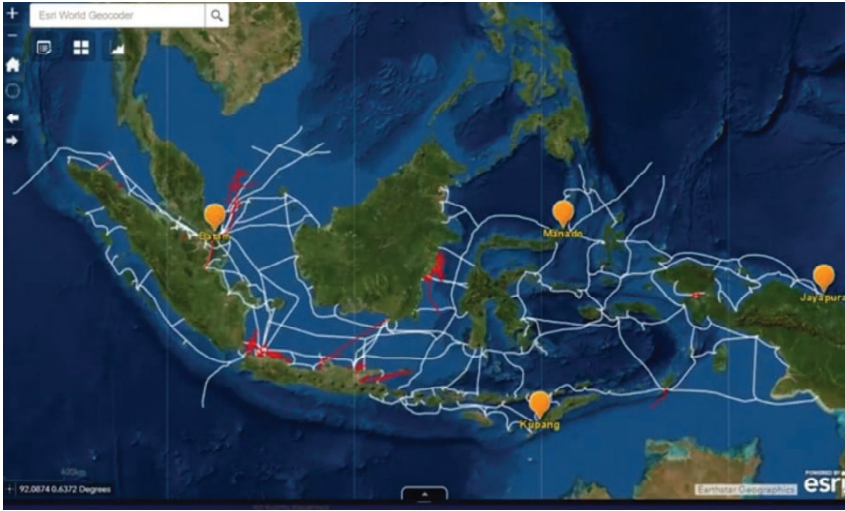
Following up on the stipulation of the Ministerial Decree, the KKP launched a marine spatial planning information system called One Map. It can be accessed in real-time to ensure the arrangement

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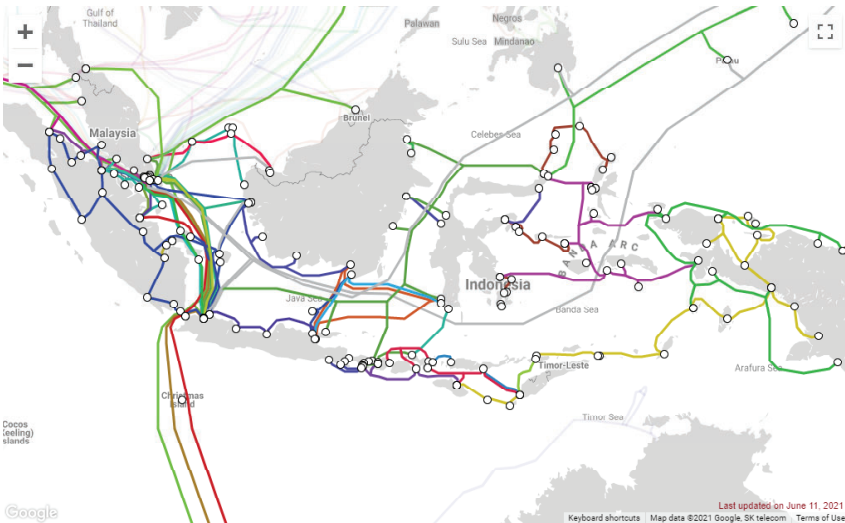
81 *Ibid*

82 CNN Indonesia. *Luhut Soal Kabel Bawah Laut Semrawut: Jangan Pura-pura Bodoh* (Luhut Regarding Chaotic Underwater Cables: Do not Play Stupid), <https://www.cnnindonesia.com/economy/20210322111336-92-620391/luhut-kode-elektron-Bawah-laut-semrawut-jangan-pura-pura-dumb>, accessed 8 June 2021.

83 Material exposure Danpushidrosal Vice Admiral TNI Dr Agung Prasetiawan, MAP regarding the Socialization of KP Ministerial Decree No. 14 of 2021 concerning Underwater Pipelines and Cables Regarding the Waypoint Segment on Submarine Cable and Pipelines in Disseminating the Policy on Underwater Cable and/or Pipeline KP Ministerial Decree No. 14 of 2021 accessed through the Ministry's Youtube Channel Marine and Fisheries [https://www.youtube.com/watch?v=JH7TEfkoq38&t=3180s\\_on](https://www.youtube.com/watch?v=JH7TEfkoq38&t=3180s_on) 9 June 2021.



**Figure 1.** Map of Indonesian underwater cables (white) and pipes (red) and 4 Landing Stations (Batam, Kupang, Manado, and Jayapura). Source: <http://satupeta.kkp.go.id/>



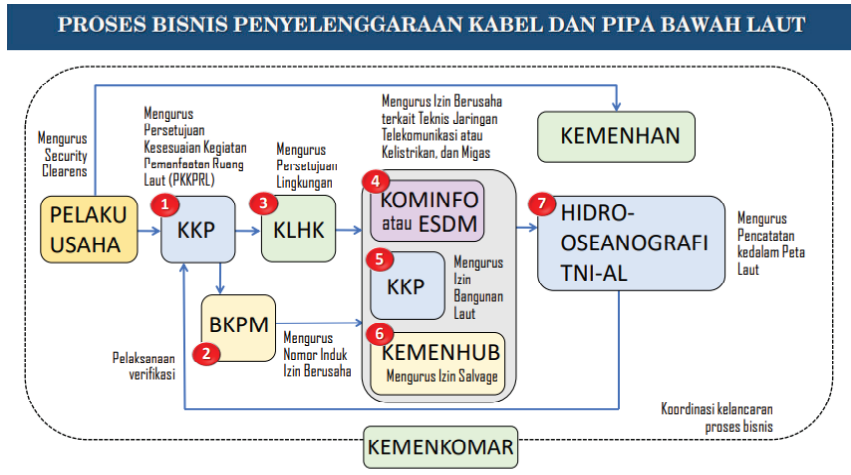
**Figure 2.** Map of connected submarine cables in Indonesia  
Source: <https://www.submarinecablemap.com>

of pipelines and submarine cables in national waters. It also strengthens marine spatial planning to provide legal certainty for businesses

using marine space.<sup>84</sup> One of the information obtained in this information system is pipelines and submarine cables in Indonesia.

Regarding granting permits to operate submarine pipes and cables, as previously explained, many sectors are involved in operating submarine cables and pipes. It can be seen clearly in the business process scheme below.

Information:<sup>85</sup>



Source: Director General of Marine Spatial Management, Dr TB Haeru Rahayu in the Socialization of Minister of Marine Affairs and Fisheries Decree No. 14 of 2021 concerning Determination of Marine Pipelines/ Cables, on 22 March 2021

84 Ministry of Maritime Affairs and Fisheries of the Republic of Indonesia. *KKP Luncurkan Sistem Informasi Dukung Penataan Alur Pipa dan Kabel bawah Laut. Siaran Pers Kementerian Kelautan dan Perikanan Nomor: SP.310/SJ.5/III/2021* (KKP Launches an Information System to Support the Arrangement of Subsea Pipelines and Cables. Ministry of Marine Affairs and Fisheries Press Release Number: SP.310/SJ.5/III/2021), <https://kkp.go.id/article/28440-kkp-laukan-system-information-support-penataan-alur-pipa-dan-kabel-Bawah-laut>, accessed 8 June 2021.

85 Reexplained during the dissemination activity of Decree of the Minister of Marine Affairs and Fisheries Number 14 of 2021 concerning Pipelines and/or Underwater Cables by the Directorate General of PRL, accessed 22 March 2021, accessed via <https://www.youtube.com/watch?v=JH7TEfkoq38&t=12339s> 2 May 2021.

- a. Business actors who wish to carry out the operation of submarine cables and pipelines take care of security clearance by the Ministry of Defense as a security sector in accordance with Minister of Defense Regulation No. 26 of 2013 concerning Survey and Mapping Security. Security Clearance is an approval document, not a permit, issued by the Minister of Defense after considering aspects of state sovereignty, defense and administration, containing the type, location of activities, personnel, vehicles, equipment and a set period of time, as a manifestation of the policy of the Minister of Defense in the field of securing surveys and mapping, for the sake of national defense, by synergizing military and non-military defense, as the basis for a survey and mapping activity carried out by the Petitioner.
- b. If approved, the business actor will arrange the approval of the suitability of marine space utilization activities (hereinafter referred to as PKKPRL). It is reviewed by the Ministry of Marine Affairs and Fisheries as the executor of the marine sector based on Government Regulation Number 21 of 2021 concerning Implementation of Spatial Planning which refers to Law Number 11 of 2020 concerning Job Creation in conjunction with Law Number 32 of 2014 concerning marine affairs, Government Regulation Number 32 of 2019 concerning National Marine Spatial Planning, and Government Regulation Number 5 of 2021 concerning Implementation of Risk-Based Business Licensing.
- c. After the KKP has approved the PKKPRL, the KKP will coordinate with the Investment Coordinating Board to take care of the Administration of the Business License Registration Number in accordance with Government Regulation Number 5 of 2021 concerning the Implementation of Risk-Based Business Licensing.
- d. In line with letter c, KKP coordinates with the Ministry of Environment and Forestry as the environmental sector to obtain environmental permits / Environmental Impact Analysis (hereinafter referred to as AMDAL) based on Law Number 11 of 2020 concerning Job Creation in conjunction with Law

Number 32 of 2009 concerning Protection and Management Environment, Government Regulation Number 2012 concerning Environmental Permits and Government Regulation Number 22 of 2021 concerning Implementation of Environmental Protection and Management.

- e. After obtaining the AMDAL permit, it will then be technically reviewed to obtain a Business Permit:
- if the installation of pipes/cables related to telecommunications will be reviewed by the Ministry of Communication and Information based on Law Number 11 of 2020 concerning Work Creation in conjunction with Law Number 36 of 1999 concerning Telecommunications and also Government Regulation Number 46 of 2021 concerning Post, Telecommunications and Broadcasting in conjunction with Government Regulation Number 52 of 2000 concerning the implementation of Telecommunication.
  - If the installation of pipes/cables related to electricity or oil and gas will be reviewed by the Ministry of Energy and Mineral Resources based on Law Number 11 of 2020 concerning Job Creation in conjunction with Law Number 22 of 2001 concerning Oil and Gas in conjunction with Law Number 30 of 2009 concerning electricity and related regulations.
  - suppose it is related to buildings and other marine installations. In that case, it will be reviewed by the KKP based on Government Regulation Number 27 of 2021 concerning the Implementation of the Marine and Fisheries Sector.
  - when activities related to salvage<sup>86</sup> will be reviewed by the Ministry of Transportation in accordance with Law Number 11 of 2020 concerning Job Creation in conjunction with Law Number 27 of 2008 concerning Shipping, Government

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86 Salvage is a job to assist ships and or their cargo that has a ship accident or is in danger in the waters. It includes lifting the ship's skeleton, underwater obstacles, or other objects. Article 1 point 4 of the Minister of Transportation Regulation Number 71 of 2013 concerning salvage and or work underwater.

Regulation Number 31 of 2021 concerning the Implementation of the Shipping Sector, Minister of Transportation Regulation Number 38 of 2018 concerning the Second Amendment to Minister of Transportation Regulation Number 71 of 2013 Regarding Salvage and or Underwater Works and Minister of Transportation Regulation Number 129 of 2016 concerning Shipping Routes at Sea and buildings and or Installations in Waters.

- f. After that, a record was made for marine mapping by the Hydro-Oceanography of the Indonesian Navy based on Presidential Regulation Number 66 of 2019 concerning the Organizational Structure of the Indonesian National Armed Forces. It will then coordinate again with the KKP to verify marine space permits.

## **F. Conclusion**

The space includes land, air and sea. It is undoubtedly vital to be arranged and appropriately managed where natural resources are obtained. Moreover, Indonesia, which has a broader sea space than its land space, must manage its marine potential to realize its ideals as the GMF and return to its national identity, the maritime nation. The enactment of many regulations governing marine spatial planning shows that the Indonesian government has made efforts and is ready to manage its natural resources and marine potential. Referring to Government Regulation Number 21 of 2021 as an implementing element of Law Number 11 of 2020 concerning Job Creation, the government integrates marine space technical content into one spatial plan product (with one spatial planning document). This gives a positive impression because the government distinguishes spatial planning and natural resource management regulations.

Regarding the improvement of submarine cables and pipelines, it is also evident with Government Regulation Number 27 of 2021 concerning the Implementation of the Marine and Fisheries Sector and Government Regulation Number 5 of 2021. They regulate the implementation of risk-based business licensing. In addition, with

the presence of Ministerial Decree KP Number 14 of 2021 concerning Pipelines and or Underwater Cables,

However, several recommendations regarding the arrangement of submarine cables and pipelines. First, considering various stakeholders in various sectors, the Government should issue regulations either in the form of circulars or higher regulations than the Ministerial Decree as the technical executor of the marine sector to provide flow maps in the arrangement of cables and pipes underwater and not just a business map. Second, the Decree of the Minister of Marine Affairs and Fisheries Number 14 of 2021 concerning Pipelines and or Underwater Cables has not significantly regulated installations that have been installed outside the corridors of the lanes that these regulations have determined. Thus, the government should pay more attention to whether the existing installation is moved or dismantled, considering the costs and consequences that may arise in the future. Finally, third, the Government should clarify Article 33 paragraph (2) Government Regulation Number 27 of 2021 concerning the Implementation of the Marine and Fisheries Sector. The initiator will dismantle buildings and installations at sea without reference to those with no clear ownership.

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