



Maritime Safety and Security Policies to Support Marine Transportation Systems

Febriansyah¹, Maghdalena Febriani², and Elfita Agustini³

Abstract

All users of sea transportation in Indonesia in particular and in the world in general, always prioritize safety and security issues, which are then followed by aspects of affordable costs, speed and timeliness, and aspects of comfort. The occurrence of ship accidents such as drowning, burning, etc. are issues related to the safety and security of marine transportation. For the implementation of this sailing safety improvement, the Directorate General of Sea Transportation has issued policies in the prevention of ship accidents such as making shipping announcements about improving shipping safety supervision for passenger ships, making announcements about marine weather conditions in Indonesia such as telegrams regarding bad weather readiness at sea. This study aims to analyze maritime safety and security policies in supporting the marine transportation system. This study used a descriptive method, because the data were collected in the form of words, pictures, and not numbers. The data comes from interview scripts, field observations/notes, Focus Group Discussion, videotapes, photos, notes or memos, and other official documents. Data analysis using ethical and emic approaches and triangulation processes. Determination of informants using purposive technique. Research results: Sea transportation in Indonesia has not been optimally developed, but has a strong potential to be developed, given its characteristics that are capable of mass transportation. Therefore, the safety and security system is a key factor that must be considered and as a basis and benchmark for decision makers. Government policies in the maritime sector, both the fishing industry and the shipping industry have not been implemented consistently in accordance with the applicable law. So far, the development of maritime potential has been hit by structural problems, and there has been no national political awareness of how great this economic, fishery and maritime potential is. Mas little is known about the potential content of Indonesia's marine resources, thus opening the door for various researches and development of such biodiversity.

Keywords: Policy; Safety; Security; Maritime; Transportation.

1. Introduction

All users of sea transportation in Indonesia in particular and in the world in general, always prioritize safety and security issues, which are then followed by aspects of affordable costs, speed and timeliness, and aspects of comfort. The occurrence of ship accidents such as drowning, burning, etc. are issues related to the safety and security of marine transportation. For the implementation of this sailing safety

¹ Lecturer of Politeknik Transportasi Sungai, Danau & Penyeberangan Palembang, E-Mail: febriansyah@dephub.go.id

² Librarian of Politeknik Transportasi Sungai, Danau & Penyeberangan Palembang, E-Mail: lenamaghda98@gmail.com

³ Staff of Politeknik Transportasi Sungai, Danau & Penyeberangan Palembang, E-Mail: elfitaagustini@gmail.com



improvement, the Directorate General of Sea Transportation has issued policies in the prevention of ship accidents such as making shipping announcements about improving shipping safety supervision for passenger ships, making announcements about marine weather conditions in Indonesia such as telegrams regarding bad weather readiness at sea.

Since 2011 until now there has been fluctuation in the development of the number of accidents, on average there has been a decrease in the number of accidents by 6.95% per year, but on the other hand the number of fatalities has increased by 46.71% per year (Ditjen Hubla, 2017). It is emphasized here, that shipping which is part of the means of sea transportation as mandated by Act No. 17 of 2008, is a very strategic part of the Indonesian national perspective, as well as being a vital means that supports the goals of the unity and integrity of the Republic of Indonesia as a maritime State.

Shipping or sea transportation, which is a part of transportation that cannot be separated from parts of other means of transportation with the ability to face future changes, has certain characteristics because it is capable of carrying out mass transportation. Can connect and reach one area to another through waters, so that it has a strong potential to be developed and its role both nationally and internationally and is able to encourage and support national development in order to improve people's welfare in accordance with the mandate of Pancasila and the 1945 Constitution.⁴

Maritime safety and security here are the main policies that must get priority in shipping in supporting the smooth running of sea transportation in Indonesia as an archipelago. Indonesia has sovereignty over the entire Indonesian sea area, so that the sea has a significant role both as a means of unifying the nation and territory of the Republic of Indonesia, as well as the sea as an invaluable national asset and Indonesia's future. Control over the sea has the consequence that the Government is obliged to carry out governance in the field of law enforcement at sea, both against the threat of violations, utilization of waters, as well as maintaining and creating optimal shipping safety. Based on Act No. 17 of 1985 concerning the Ratification of an Archipelago State for Indonesia by the UN convention.

He emphasized that most of Indonesia's territory is a sea with an area of 5.8 million km² of waters and approximately 17,000 islands, so it can be interpreted that in the future the sea is a natural resource (SDA) that is very potential and provides a lot of hope and the welfare of the community. In addition to having large amounts of biological resources such as plants or marine animals, coral reefs and tourist parks, the sea is also a producer of non-living natural resources such as minerals and mining goods as well as treasures and ship frames and luggage buried in them (Sumardjono, 2000). The sea is also a producer of various maritime industries such as the fishing industry, marine tourism, the shipping industry and dock services, port services as well as mineral and energy resources. As a consequence of these activities, then, It is necessary to determine the sea lanes of the Indonesian archipelago for the benefit of local and international shipping, along with shipping safety facilities such as shipping navigation aids (SBNP) and various other infrastructure. Thus, it is important to emphasize maritime safety and security policies in Indonesia, namely a condition that guarantees the safety and security of various activities at sea including shipping, exploration and exploitation of natural and biological resources and environmental preservation. Therefore, it is necessary to have a marine system and law enforcement in the sea in ensuring the safety, security, order and protection of the marine environment

⁴ Bratakusumah, Deddy., Supriady & Dadang Solihin. (2003). *Otonomi Penyelenggaraan Pemerintahan Daerah*. Jakarta: Gramedia Pustaka Utama. p.11



so that it remains clean and sustainable as the source of life for all Indonesian people and supports the smooth running of shipping traffic.⁵

He emphasized that the safety and security of shipping is a very essential factor in supporting the smooth running of sea transportation and preventing accidents. Related to the issue of maritime security trends, illegal fishing and other natural resources are still rampant, which can threaten the socio-economic life of the Indonesian people). Apart from the theft of natural resources, it is also exacerbated by the presence of a number of violence at sea in the form of piracy, piracy and sabotage. It was stated, that acts of violence that occurred in Indonesian waters had an increasing trend, and as a result of these conditions, Indonesia's losses as a result of illegal fishing were estimated at IDR 30 trillion per year). However, it is necessary to be aware that until now Indonesia still has to deal with a lot of data published by foreigners related to crimes at sea which are sometimes exaggerated. The disparity in maritime development in Indonesia is related to the condition that maritime security is inseparable from national policies and strategies that cover issues of law enforcement at sea, search and rescue, navigation safety,

The functions of law enforcement, security and safety that have not been optimally carried out by related agencies in accordance with statutory regulations, are expected to be overcome through the institution or the Maritime Security Agency (Bakamla) which has now been formed. However, the limited budget support for defense and security in Indonesia is also an important issue in improving maritime security performance. There are also problems, including regulations and institutions related to law enforcement and security in Indonesia, which are still not optimal, as well as the lack of coordination between institutions that have a stake in the maritime sector. In addition, there is overlapping tasks that intersect between agencies, such as the Water Police, Airud, Navy, Marine and Coast Guard Unit (KPLP), Customs and Excise,⁶

State sovereignty is territorial security, therefore unsafe sea indicates that the country is not sovereign. In reality, the current institutional system condition that occurs is that there are many agencies involved or interested in the implementation of law enforcement, safety and security at sea. Therefore, the purpose of the research here is to analyze maritime safety and security policies in supporting the marine transportation system. This study used a descriptive method, because the data were collected in the form of words, pictures, and not numbers. The data comes from interview scripts, field notes, focus group discussions (FGD), videotapes, photos, notes or memos, and other official documents. All the data collected is likely to be the key to what has been researched.

This study used a descriptive method, because the data were collected in the form of words, pictures, and not numbers. The data comes from interview scripts, field observations/notes, Focus Group Discussions, videotapes, photos, notes or memos, and other official documents. Data analysis using ethical and emic approaches and triangulation processes. Determination of informants using purposive technique. Research results: Sea transportation in Indonesia has not been optimally developed, but has a strong potential to be developed, given its characteristics of being able to carry out mass

⁵ Byatt, A. Fothergill & M. Holmes (2001). *The Blue Planet: A Natural History of the Oceans*, London, BBC Worlwide Ltd. Accessed on August, 2020

⁶ Dahuri, Rokhmin. (2003). *Keanekaragaman Hayati Laut, Aset Pembangunan Berkelanjutan Indonesia*. Jakarta: Penerbit Gramedia Pustaka Utama. p.22



transportation.⁷

2. Research Methods

This study aims to analyze maritime safety and security policies in supporting the marine transportation system. This study used a descriptive method, because the data were collected in the form of words, pictures, and not numbers. The data comes from interview scripts, field observations/notes, Focus Group Discussion, videotapes, photos, notes or memos, and other official documents. Data analysis using ethical and emic approaches and triangulation processes. Determination of informants using purposive technique. Research results: Sea transportation in Indonesia has not been optimally developed, but has a strong potential to be developed, given its characteristics that are capable of mass transportation. Therefore, the safety and security system is a key factor that must be considered and as a basis and benchmark for decision makers. Government policies in the maritime sector, both the fishing industry and the shipping industry have not been implemented consistently in accordance with the applicable law. So far, the development of maritime potential has been hit by structural problems, and there has been no national political awareness of how great this economic, fishery and maritime potential is. Mas little is known about the potential content of Indonesia's marine resources, thus opening the door for various researches and development of such biodiversity.

analyzed through a mix-method approach using the Soft System Methodology (SSM) method as an effort to combine data. From this method, it is hoped that a comprehensive picture will be obtained. The mix-method method has the advantage of being able to expand the discussion by mixing the two methods at once.⁸ Meanwhile, SSM makes it easier to take various inputs rather than identifying other paths that are summarized in the analysis of a line of thought/policy. The quantitative approach is used to find the relationship between social change factors.⁹

3. Results And Discussion

3.1 Guarantee of safety and security of shipping activities

In discussing this matter, the results of the FGD confirmed that the safety of shipping here is a condition that is realized from the operation of smooth shipping, in accordance with operating procedures and technical feasibility requirements for facilities and infrastructure and their supports. Meanwhile, shipping security is a condition that is manifested in the operation of shipping that is free from disturbances and/or actions against the law. Referring to the mandate of Act No. 17 of 2008, that shipping here is part of sea transportation facilities that are very strategic for national insight as well as being a vital means that supports the goals of national unity and integrity, because it can support and facilitate access to links and regional reach one another through the water.

Furthermore, the results of the FGD explained that in Act No. 17 of 2008, to be precise Article 1 point 32

⁷ Haeruman, Herman. (2001). *Meningkatkan Peranan Lautan dalam Pembangunan Nasional*, dalam buku John Pieris. (2001). *Pengembangan Sumberdaya Kelautan*. Jakarta: Pustaka Sinar Harapan. p.30

⁸ Creswell, J.W. (2014). *Research Design; Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar. p.307

⁹ Williams, B & Hummelbrunner R. (2011). *Systems concepts in action: a practitioner's toolkit*. California: Stanford University Press. p.242



affirms that the safety and security of shipping is a condition of fulfilling safety and security requirements regarding transportation in waters, to ports, and the maritime environment. Whereas Article 1 point 33 of Act No. 17 of 2008 states that shipworthiness is the condition of the ship that meets the requirements for ship safety, prevention of water pollution from ships, manning, loading lines, cargo, crew welfare and passenger health, legal status of ships, safety management. and prevention of pollution from ships, as well as ship security management for sailing in certain waters. It was stated that Indonesian sea area is approximately 3,257,483 km² or $\frac{3}{4}$ of the land area, so that 70 percent of Indonesia's territory is water territory.

This information is supported by the results of in-depth interviews with Key Informants and Supporting Informants that in order to face changes in the future, shipping or sea transportation has a strong potential to be developed, given its characteristics of being able to carry out mass transportation in Indonesia. Thus, the safety and security system is a key factor that must be considered and as a basis and benchmark for decision makers in determining the feasibility and safety of shipping. These two aspects can be seen from the side of the facilities in the form of ships and infrastructure such as navigation systems and the Human Resources (HR) involved in it. In addition, the safety policy in shipping or sea transportation is also regulated by an international institution, namely the International Maritime Organization (IMO) and is under the United Nations (UN).

This international institution is in charge of taking care of matters concerning the safety of the lives of passengers on the ship and its crew, marine assets, and environmental sustainability at sea¹⁰. Furthermore, the results of the triangulation process between Key Informants and Supporting Informants are presented with each other and are confronted with existing formal evidence in the form of documents or other letters such as a Decree, Ship Letter, etc. as follows. It was stated that one of the important factors in realizing the safety and preservation of the marine environment is the skills, knowledge and skills of human resources related to ship operations. However sturdy the construction of the ship, Furthermore, the triangulation results explain that in fact 80 percent of accidents at sea are caused by human error. Therefore, to ensure the safety of shipping as a support for the smooth flow of ship traffic at sea, it is necessary to have a work load analysis which is appropriate for carrying out its duties and responsibilities on board the ship. Based on his position by considering the size of the ship, the arrangement of ships and shipping areas. Act No. 17 of 2008, Article 1 point 40 states that a ship crew is a person who works or is required on board by the ship owner or operator to perform tasks on the ship according to their position. The results of the observation show that the safety factor of shipping is an important factor in supporting the function of marine transportation. Therefore, the government annually carries out a shipping safety campaign to provide awareness to the public, especially for operators and regulators. This is important for Indonesia which has an extensive sea $\frac{3}{4}$ than the nearly inhabited land 250 million people. He emphasized that in every IMO session, Indonesia is always active and gives initiatives on issues of maritime safety, security and protection. In addition, the Government of Indonesia always carries out various coaching through regulations for both crew members, ships, and ship cargo). Here the regulator becomes the determinant of whether the development runs or not, because it depends on the guidance, facilities and infrastructure, as well as

¹⁰ Kusumaatmadja, Mochtar. (2002). *Perlindungan dan Pelestarian Lingkungan Laut, Dilihat dari Sudut Hukum Internasional dan Nasional*. Jakarta: Pusat Studi Wawasan Nusantara bekerjasama dengan Penerbit Sinar Grafika. p.25



law enforcement. In addition to this guidance, observations in the research field show that the Government also supports it by enforcing regulations and punishments in order to create discipline from all parties involved in shipping at sea.¹¹ The observations further explained that currently the government has 288 patrol boats throughout Indonesia with various classes serving 55% of the sea area.

Thus, the International Safety Management Code (ISM Code) as an international safety management regulation for safety and safety of ship operations and pollution prevention stipulated by the IMO Maritime Safety Council, is still possible to be amended according to the needs in the field. Based on accident data analyzed by IMO, it is known that ship accidents in Indonesian waters are caused by human error of $\pm 80\%$, and of all these human errors it is also known that about 80% of them are caused by poor management of shipping company. The management system of shipping companies or ship operators has a strong influence on the marine condition of the ship (Humas Dithubla, 2017).

What needs to be further elaborated is that in order to avoid this management system gap, ISM Code is implemented. ISM code is defined as an integral part of the convention The Safety of Life at Sea (SOLAS), (1974). SOLAS was based on an agreement at the Maritime Safety Committee meeting, IMO on May 24, 1994. The ISM code formulation initiative was carried out by the same committee as the formulator and refiners of SOLAS from 1960 to 1974/1978, namely the Maritime Safety Committee (MSC). ISM code is designated as Chapter IX SOLAS with consideration of ease of implementation effectiveness considering that SOLAS itself has been ratified by member countries of the IMO including Indonesia (Presidential Decree Number 65 of 1980).

Government policy for nearly five decades, namely without a Ministry that specifically handles the maritime sector, this has turned out to be a fatal flaw for a government structure that has sea area of approximately 3,257,483 km² or $\frac{3}{4}$ of the land area. This is a challenge that should be able to be accommodated by the Coordinating Ministry for Maritime Affairs, and rectify wrong perspectives about maritime affairs.¹²

3.2 The Guarantee of Exploration and Exploitation of Natural and Living Resources in the Sea

Related For discussion of this indicator, the following are the results of in-depth interviews with key informants that one of the important issues in planning national marine policy is the exploration that is, field investigations to collect as complete a data as possible about the existence of natural resources in certain seas (Supriharyono, 2002). In addition, the nature of caution is also to reduce the risk of failure, material loss, work accidents and environmental damage (Kerap, 2002).

Meanwhile, the results of interviews with the Supporting Informants confirmed that exploitation here is a mining business with the aim of producing minerals and utilizing them. Meanwhile, these activities can be distinguished based on the nature of the minerals, namely solid mining and liquid and gas minerals. For both activities, both exploration and exploitation, it is necessary to support the safety factor, namely the condition that is realized from the smooth operation of exploration and exploitation, in accordance with the operating procedures and technical feasibility requirements for facilities and infrastructure and their supports. It is emphasized here, that in general marine resources in Indonesia are divided into

¹¹ 2002. *Hukum Laut Internasional*. Bandung: BPHN - Binacipta. p.10

¹² Tribawono, H. Djoko. (2002). *Hukum Perikanan Indonesia*. Bandung: Citra Aditya Bakti. p.19



three groups, namely: a) Resources can be recovered (renewable resources),

It was further explained that those included in the resource group could recover, among others: 1) Mangrove forests (mangroves); 2) Marine fisheries, both aquaculture and capture fisheries; 3) Coral reefs (coral reef); 4) Seagrass and seaweed (seagrass); Bioactive substances. Resources that cannot be recovered (non-renewable resources) include all mineral and geological resources. Minerals consist of three classes, namely class A (strategic minerals: petroleum, natural gas, and coal), class B (vital minerals: gold, tin, nickel, bauxite, iron ore, and cromite); and class C (industrial minerals: covering construction and mining materials such as granite, lime, clay, kaolin and sand). Meanwhile, environmental services include the functions of coastal and marine environmental areas as a means of recreation, transportation and communication media, energy sources, education and research facilities, defense and security, waste storage, climate regulators, protection areas (conservation). and preservation)¹³, Meanwhile, the results of the triangulation process show that marine resources are often classified into two groups, namely living resources and non-living resources (Dahuri, 2003). This kind of grouping is found in Act No. 5 of 1983 concerning Indonesia's Exclusive Economic Zone (EEZ). Article 1 point (a) and (b) Act No. 5 of 1983 provides the following definitions: (a) Living natural resources are all types of animals and plants including their parts found in the seabed and the Indonesian EEZ water space; (b) Non-living natural resources are natural elements that are not living natural resources found on the seabed and the land beneath them as well as Indonesia's EEZ space.

It was further argued that after the ratification of the 1982 Sea Law Convention with Act No. 17 of 1985, the total area of Indonesian waters became 5.8 million km², consisting of 0.3 million km² of territorial waters, 2.9 million km² of archipelagic waters, and the Exclusive Economic Zone. Indonesia 2.7 million km². In addition, the number of islands recorded is 17,508 and the Indonesian coastline stretches 81,000 km² (Dahuri et al, 2015). First, marine resources, especially resources biological and non-biological properties contained in coastal and marine areas which have a very high potential to be further utilized. Second, Indonesia's geographical position, which is very strategic, both physically and economically, has been and will continue to be the center of attention of the world community, both from an economic and scientific perspective. Third, the high level of biodiversity (biodiversity) in the coastal areas and marine waters of Indonesia opens the door for various researches and development of coastal and marine biodiversity in the world (Humas Dithubla, 2017).

Meanwhile, the results of the FGD provide an explanation that until now, the marine sector in Indonesia has not been developed optimally in national development. Most of the marine potential is still utilized by mining (32.4 percent of the total development investment in the oceans), transportation (28.6 percent), industry (20.8 percent), and fisheries (16.1 percent), while the role of marine tourism only 1.9 percent. Biological resources that have been utilized or utilized are: a. Fishery resources, both through capture fisheries and aquaculture. The sustainable potential of fishery resources from Indonesian waters and EEZ that can be utilized is 6.7 million tons/year; b. Non-fish resources, such as pearl mussels and other types of shellfish for jewelry; c. Marine animals and plants for bioactive drugs. d. Coral reefs and mangroves as ecosystems are mainly used as marine tourism attractions. Furthermore, it was explained that the non-living marine resources that have been exploited to date, such as oil and natural gas, still play a very important role in supporting Indonesia's national development. However, this resource is a

¹³ Tebbit, Mark. (2000). *Philosophy of Law*. London: Reutledge. p.23



non-renewable marine resource, so it needs to be fully utilized in the future. Furthermore, it was explained that the non-living marine resources that have been exploited to date, such as oil and natural gas, still play a very important role in supporting Indonesia's national development. However, this resource is a non-renewable marine resource, so it needs to be fully utilized in the future. Furthermore, it was explained that the non-living marine resources that have been utilized to date, such as oil and natural gas, still play a very important role in supporting Indonesia's national development. ¹⁴However, this resource is a non-renewable marine resource, so it needs to be fully utilized in the future.

Apart from that, utilization of resource this must be done where the resource is found and cannot be moved. Sea area 5.8 million km² (75% of the area), namely 0.3 million km² Territorial Sea; 2.9 million km² of archipelagic waters; and 2.7 million km² of EEZ, Coastline 81,000 km. Estimated Potential of Sustainable Marine Fish 6.7 million tons/year, namely the potential of Indonesian waters: 4.4 million tons/year; EEZ: 2.3 million tons/year. The actual fishing rate was 3.6 million tons/year; Fishery exports US \$ 2.2 million/year; The estimated value of illegal, Unregulated and Unreported (IUU) fishing is US \$ 2 billion per year.

The progress that has been made in development to improve the standard of living and welfare of the Indonesian people has been accompanied by a decline in the renewable capacity of natural resources as a guardian of order. Whereas the 1945 Constitution emphasizes that SDA is a national asset that is subject to the State authority. This means that the potential for marine environmental resources and services should be managed in an integrated manner for the interests and prosperity of all Indonesian people. He further explained that the sea area with the coast is a very attractive area where the concentration of agricultural products/land and sea products is the most productive, because it is located along the equator with a hot, humid tropical climate with high rainfall.

In addition to not being proportional to the attention given to the potential of the sea, various obstacles in carrying out development in the marine sector still have to be faced, among others. namely: a) The involvement of various Ministries and agencies across sectors which require the best possible coordination; b) Technical obstacles to exploration and management that still have to be faced and resolved; c) The sea seems to be less attractive to investors, both foreign and domestic; d) There is still a lack of human resources capable of utilizing and empowering marine potential (Byatt, et al, 2001) in accordance with the latest science and technology developments.

Another problem found in managing marine potential is the Government's policies that have been announced, but in practice it is not as easy as planned. Marine empowerment is currently managed by various Departments and agencies related to maritime potential, each of these Departments and institutions has their own plans, programs and policies so that conflicts of interest often occur, overlapping and not in the same direction.

Efforts to coordinate, integrate and socialize programs and marine management activities have been initiated by the National Oceanic Council (DKN), but they are still limited to inventorying problems in opinion meetings, workshops and national seminars. This is because the authority of a Council does not extend to the implementation in the field, DKN carries out the function of formulating policies, giving consideration to the President and coordinating with related departments or institutions. DKN products

¹⁴ Wahyono, Ary et. al. (2000). *Hak Ulayat Laut Di Kawasan Timur Indonesia*. Jakarta: Media Pressindo. p.17



in the form of national policies are implemented by technical ministries, but in their implementation there are still many obstacles that are still difficult to immediately implement, including the legal aspects of each department that feel the most entitled to determine their authority at sea.

Damage to coral reefs from bomb fishing, that is, the illegal use of explosives for fishing, the use of acid poisoning, coral mining and pollution. Bleaching of coral reefs, which is allegedly the result of rising sea water temperatures, and other natural phenomena such as earthquakes also play a role in the destruction process. According to the Center for Development and Oceanology Studies, LIPI (2001) only 7% of the coral rock was still in good condition, while 70% was badly damaged. Other official data states that of the total area of coral reef in Indonesia which reaches 60,000 square meters, only 6% is in good condition. Bomb fishing is a crime with a sentence of 10 years in prison and a fine of IDR 100 million under Act No. 15 of 1985 on Fisheries. However, this practice has become a common phenomenon in almost all Indonesian territorial waters. In fact, the previous practice of bombing fish has also had a devastating effect on a number of other fish.

3.3 Management Guarantee of Environmental Conservation at Sea

In the discussion about guarantee of environmental conservation management in the sea, the following explains the results of the FGD that the term management is a translation of the term management, which includes planning, structuring, implementing, utilizing and controlling activities. In this context, there is a definition that approaches the subject matter discussed, namely in Act No. 23 of 1997 concerning Management Living environment. Article 1 point (2) of this Law states that the formulation of environmental management is an integrated effort to preserve the functions of the environment which includes policies for environmental management, utilization, development, maintenance, restoration, supervision and control.

One of the main weaknesses of Act No. 23 of 1997 is in the legal process of environmental pollution and destruction. This law and its derivatives are too procedural in apprehending the perpetrators of pollution. So, legally, someone who commits defamation, it is very easy to prove that they are not legally proven to be wrong. In addition, the procedure for proving environmental pollution is too complex and complicated.

The observation result confirms that the principles of natural resource management have actually been stipulated in the Stockholm Declaration 1972 (Declaration of the United Nations Conference on the Human Environment). Principle 17 of the Declaration addresses the issue of natural resource management, by stating: "Appropriate national institutions must be entrusted with the task of planning, managing or controlling the environmental resources of States with a view to enhancing environmental quality". This confirms the prevention and control of pollution originating from ships. It is further explained that Act No. 6 of 1996 concerning Indonesian Waters regulates the boundaries of the sea which are included as Indonesian waters, which consists of a territorial sea as wide as 12 nautical miles from the baseline,

From the results of in-depth interviews with informants, it is confirmed that the three components of the Indonesian waters are the sovereign territory of the Republic of Indonesia vertically to the airspace above and to the seabed and even on the earth below, including the natural resources contained therein with the Indonesian Exclusive Economic Zone (ZEEI) of 200 nautical miles measured from the



straight base line of the archipelago. The Republic of Indonesia is sovereign to explore and exploit the economic zone, management and conservation of living and non-living natural resources from the seabed and the soil beneath it and from the water above it.

The sea and existing resources are protected from pollution and damage to the marine environment. For this reason, Indonesian waters and ZEEI must be protected by national and international pollution laws. It is emphasized that Act No. 21 of 1992 concerning Shipping requires efforts to prevent and overcome pollution originating from ships in articles 65, 66, 67, 68 and the criminal provisions in articles 119, 120, and 121 as summarized as follows: Resume Ps 65- 68 Shipping Law. Each ship is prohibited from disposing of waste or other materials if it does not meet the requirements. Must be equipped with pollution prevention equipment as part of the ship's marine eligibility requirements.

Furthermore, the results of the triangulation process explained that each skipper is obliged to prevent pollution originating from his ship. Obligation to tackle pollution originating from the ship. Obligated to report marine pollution originating from the ship or from other ships. Each operator is responsible for the pollution that comes from the ship. Obligated to insure responsibility for pollution originating from the ship. Resume ps 119-121 of the Shipping Law, that individuals/unscrupulous, disposing of waste will be sentenced to 5 years imprisonment or a fine of IDR 120,000,000. Disposing of waste results in environmental damage with a penalty of 10 years or a fine of IDR 240,000,000. The master, who does not control the pollution that comes from his ship, will be sentenced to 2 years imprisonment or a fine of IDR 48 million. Ship operator.

4. Conclusion

He emphasized that the safety and security of shipping is a very essential factor in supporting the smooth running of sea transportation and preventing accidents. Regarding the issue of maritime security trends, illegal fishing and other natural resources are still rampant, which can threaten the socio-economic life of the Indonesian people (Ministry of Transportation Public Relations, 2017). Apart from the theft of natural resources, it is also exacerbated by the presence of a number of violence at sea in the form of piracy, piracy, and sabotage. It was stated, that acts of violence that occurred in Indonesian waters had an increasing tendency, and as a result of these conditions, Indonesia's losses as a result of illegal fishing were estimated at IDR 30 trillion per year (Ditjen Hubla, 2017). However, it is necessary to be aware that until now Indonesia still has to deal with a lot of data published by foreigners related to crimes at sea which are sometimes exaggerated. The disparity in marine development in Indonesia is related to the condition that maritime security is inseparable from national policies and strategies that cover issues of law enforcement at sea, search and rescue,

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