

Indonesia Maritime Security (Study on Interoperability Inter Institution Indonesia Sea Border Security in Malacca Strait)

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Abstract:

Interoperability is the ability of various systems to work together and the ability of a system to work or be used by other systems. The purpose of this study is to examine the use of information technology owned by maritime border security institutions in carrying out tasks at the Malacca Strait border between Indonesia and Malaysia, as well as to evaluate and discover new concepts in the context of interoperability between marine border security institutions. The research was carried out using a descriptive qualitative method with a research design that included conducting interviews and observations, as well as analyzing primary and secondary data. According to the findings of this study, there are currently 17 institutions that deal with marine areas, each with their own duties and functions, but they do not understand the territorial element, where the sea is not viewed as a whole. From the results of this study, it can be concluded that it is necessary to harmonize, synergize and collaborate between agencies so that coordination can be well established when securing the Malacca Strait with coastal countries, such as Malaysia and Singapore, as well as improving coordination between institutions within the government.

Keywords: Indonesia Maritime Security, Interoperability, Sea Border Security, Malacca Strait

1 Introduction

1.1 Background

The Territory of the Unitary State of the Republic of Indonesia is one of the elements of the state which constitutes a unitary area of land, inland waters, archipelagic waters and the territorial sea along with the seabed and the land below it, as well as the air space above it, including all sources of wealth contained therein (Law of the Republic of Indonesia No. 43 of 2008, 2008: 2).

Meanwhile, the land area is 1,910,931.32 square kilometers (Ramdhan & Arifin, 2013), or about one third of the water area. Of these islands, in terms of administration and management, they are divided into 34 provinces in order to facilitate the control function, including in terms of supervision and development of border areas for provinces that are neighbors with other countries and have direct borders, both land and sea (Aditya, 2020). One of the 34 provinces is Riau Province, which part of its territory, namely the Malacca Strait, is directly adjacent to Malaysia. Apart from being directly adjacent to Malaysia,

Indonesia is also bordered by Australia, India, Palau, Singapore, Papua New Guinea (PNG), Vietnam, the Philippines, Thailand, and Timor Leste.

According to Hasibuan that "Indonesia's maritime boundaries include: Territorial Sea Boundary (BLT), Exclusive Economic Zone Boundary (EEZ), Continental Shelf Boundary (BLK), Additional Zone Boundary (BZT) and Special Fisheries Zone (SFZ) boundaries (Hasibuan, 2018). The distance of the first three sea boundaries is measured from the reference point/baseline of the archipelago, and its determination depends on the presence of the outermost islands.

Currently, there are at least 92 islands in the outermost islands, including several small islands, some of which are very far away (Saragih, 2015). It needs more intensive regulation and management, because it may be questioned by neighboring countries.

From the beginning of the 15th century to the beginning of the 21st century, the geopolitical situation of the Malacca Strait has not changed much or has remained relatively unchanged. Therefore, the Malacca Strait remains a very strategic shipping lane that must be controlled and managed, both politically and economically. In 1511, the Portuguese imposed this situation when they controlled the Sultanate of Malacca. Singapore was positioned as a defense center by the British to protect British territory in South Asia (Indian Ocean) and block the southern entrance of the Strait of Malacca so that Japan would not easily enter Australia and New Zealand during World War I and World War II.

Contrary to geopolitical issues, the concentration of economic activity in countries crossing the Malacca Strait (namely Indonesia (especially the Riau Islands), Singapore, Malaysia and Thailand) has undergone very dynamic changes. The geographic economic landscape of the Straits of Malacca has undergone major changes. The main characteristics and patterns of changes that occur in the Malacca Strait are very important to study (Sangkoyo et al., 2011).

Economically, the Malacca Strait is not only of strategic value, but also has security problems, for example, maritime piracy that can endanger the national security of the three coastal countries, namely Singapore, Indonesia and Malaysia, as well as harm the countries that use the strait. Based on reports from the International Maritime Bureau (IMB), the percentage of piracy activities tends to increase. The waters of the Asian region which are quite vulnerable with a significant increase are the waters of East Asia, the South China Sea and the Malacca Strait.

IMB also explained that the Malacca Strait is one of the areas with the highest intensity of violent attacks against ships in the world. This problem occurs because of the weak marine protection in the surrounding coastal countries (Djelantik, 2016).

The Malacca Strait shipping lane is the most vulnerable route in the world and a hot spot for maritime security in the world (Prabowo, 2014). This situation is caused by the increasing level of crime in the Malacca Strait, namely cases of piracy. Throughout 2019, based on the records of the Regional Cooperation Agreement to Combat Piracy and Armed Robbery against Ships in Asia (ReCAAP ISC), there have been as many as 31 piracies along the Malacca Strait, this figure is higher than in 2018 (Rusdi, 2020).

Piracy is not only detrimental to the parties involved, but piracy as a whole can interfere with the safety of ships sailing along the Malacca Strait. In addition, the occurrence of piracy cases can lead to tensions between coastal countries, restrictions on trade volume and higher insurance costs (Oktaveri, 2013). The high number of piracy cases in the Malacca Strait, in addition to threatening relations between the three coastal countries, can also threaten maritime security and international relations between the three coastal countries and user countries who really want to maintain the conduciveness of the Malacca Strait to ensure the safety of their ships' shipping. The conduciveness of the Malacca

Strait shipping lane is a problem that is not easy to realize for the three coastal countries that have interests in the Malacca Strait. Various efforts and efforts have been made, both bilaterally and trilaterally, by working together in various fields, but still have not shown satisfactory results.

The maritime sector has a very dominant influence on security, so maritime security is the obligation of all countries to make it happen in order to anticipate and prevent all forms of threats (including piracy). Maritime security does not only discuss law enforcement against illegal actions at sea, but in general maritime safety refers to an atmosphere where the sea is a comfortable area that users can use, there are no threats and obstacles from various activities of sea users. The high level of piracy activity in the Malacca Strait is a threat to maritime security in the region, which in turn will affect the relationship between the coastal state and the user country. Therefore, Indonesia will always try to take part in every effort to maintain maritime security in the Malacca Strait, because the Malacca Strait has a very strategic value for the interests of the legitimacy of sovereignty and national security defense. This is important considering that Indonesia has the largest area in the Malacca Strait when compared to Malaysia and Singapore.

For example, the user countries that use the Malacca Strait the most are China and Japan. This is because the two countries are actively carrying out a massive industrial revolution in their respective countries in order to align them with other developed countries. The Strait of Malacca is the shortest route for China to import fuel oil from Middle Eastern countries. More than 50% of China's oil imports and 90% of Japan's imports pass through the Malacca Strait each year (Ajengrastri, 2018). Petroleum occupies the largest percentage of all goods imported from the Middle East. Oil fuel is transported by tankers through the Malacca Strait, thus the Malacca Strait must be guarded and protected from various kinds of disturbances and threats that can disrupt the supply of energy sources in order to protect the interests of China and Japan.

The issue of the national border area has become one of the political issues of national defense at the internal and bilateral levels between countries, even now it has become a multilateral issue of an international nature. This problem comes to the surface because of economic interests, politics, technological progress, the development of globalization of a country and the interests of border countries. The lack of clarity about the institution that is the leading sector in charge of the border area has resulted in the planning and implementation of border area defense management seeming to be running individually because each institution is busy with their respective main tasks and functions by ignoring the main tasks of other institutions (Kartika, 2014).

The roles and responsibilities of the TNI, BAKAMLA, local government, police, immigration, customs and other border security institutions have not been optimally coordinated (Kadar, 2015). Border security related to defense issues is indeed the responsibility of the TNI, but border issues related to law, geography, demography, and social conditions of the community must be controlled by a command that is under coordination between the regional government and the central government and related agencies.

The coordination mechanism is not yet integrated, the inter-agency communication system is not yet integrated, the maritime and border security patrol equipment is not yet available, the management of the law enforcement system in the border areas is not yet integrated, the availability of software is inadequate and overlapping, and there is no information technology available. Integrating these problems into a priority that must be addressed immediately.

Potential violations of border areas should be responded to and followed up with law enforcement through increased interoperability of border area security as mandated in

the Act (UU) and the provisions of state law that have been agreed upon. Meanwhile, the National Border Management Agency (BNPP) is in charge of establishing border development program policies, determining budget needs plans, coordinating implementation, and carrying out evaluation and supervision of the management of State Boundaries and Border Areas (Setkab, 2010).

Problems that occur at the border, especially the sea border, require a truly integrated handling involving various elements of the government, Ministries/Agencies and the TNI. Currently, there are 17 institutions that deal with marine areas, each of which has their respective functions and jobs, but do not understand the territorial element, where the sea is not seen as a whole (Djalal, 2018). There needs to be harmonization, synergy and collaboration between these agencies, coordination can be well established when securing the Malacca Strait with coastal countries, namely Malaysia and Singapore, but coordination between institutions within the government is very poor.

The number of agencies that have the authority to maintain security at sea, including the Navy, Air and Water Police (Polairud), Customs and Excise (BC), Supervision of Marine and Fishery Resources (PSDKP), and the Marine and Coast Guard Unit (KPLP), has not yet been established. can promise to find a solution and the best way out of the chaotic problems that occur in the Malacca Strait, but instead raises new problems because of the reluctance to coordinate.

The current condition, the coordination function in accordance with Law No. 32 of 2014 concerning Marine Affairs and Presidential Regulation No. 178 of 2014 concerning BAKAMLA, rests with BAKAMLA. The results of early literacy and research, currently there are 12 stakeholders who have collaborated in sharing marine-related information as mentioned above and added the National Narcotics Agency (BNN), Search and Rescue Agency (BPP), State Intelligence Agency (BIN), TNI Headquarters, National Cyber and Crypto Agency (BSSN) and LAPAN.

In practice, each institution has a different Standard Operating Procedure. Although cooperation already exists, in practice each institution has confidential information to convey to other institutions and limited personnel who are the liaisons in BAKAMLA. Referring to these conditions, in order to be able to create security in the border areas in the context of realizing the sovereignty of the Unitary State of the Republic of Indonesia, a coordination system concept is needed to ensure the integration between related institutions. For this reason, it is necessary to prioritize efforts to realize the concept of a technology-based coordination system in order to realize the interoperability of securing maritime border areas.

Previous articles that reviewed the use of other vehicles in border security and surveillance efforts have been carried out by several experts (Haddal & Gertler, 2010; Pedrozo, 2017; Rambe, 2016; Saifudin et al., 2018). Experts write and recommend the use of equipment or rides that are driven remotely / remotely, for example drones or UAVs, satellites, as a substitute for conventional equipment that is still being used, where officers must be present on the spot to carry out patrols, while if using a vehicle without a crew, the task will be carried out very effectively and efficiently because it does not require the presence of officers and does not know the time or at any time it can be carried out and can even be monitored for a full 24 hours.

The researchers only discussed the use of the vehicle, but did not discuss how the interoperability of institutions that handle security and border supervisors could access the data obtained and use it. In addition, several previous studies have discussed the Malacca Strait on cooperation in handling crimes that occur, such as piracy, smuggling, and others, between coastal countries (Kurnia, 2009; Muradi, 2015; Natalia, 2013; Panduwinata,

2016; Yakti & Susanto, 2018). These studies generally discuss how the coastal countries cooperate in dealing with problems that occur in the Malacca Strait, for example joint sea patrols in order to deal with piracy, piracy or other problems. Indonesia as one of the littoral states which has the largest area in the Malacca Strait, has a greater responsibility when compared to other countries, namely Singapore and Malaysia.

In this study only discussed how cooperation between countries (extra nation), meanwhile for the research to be carried out is regarding the interoperability of government institutions or institutions that are given the authority to handle maritime border security, namely BNPP, TNI AL, TNI AU, BAKAMLA, Polairud, Customs, KPLP (Ditjen Hubla), KKP, and others, where until now still experiencing problems in coordination and communication in handling problems that occur at sea borders, especially in the Malacca Strait. So, this research is more intra nation.

The handling of problems that occur in the Malacca Strait is very interesting to study, considering the many institutions involved in it with their respective authorities and duties (Muhamad, 2012; Pengestu, 2017; Senoputro, 2005; Song, 2007; Tarigan & Sihombing, 2019). These studies only examine one particular field, such as defense, law, and others, so that the recommendations or suggestions submitted are not comprehensive and do not reflect an integrated solution to the problems faced. While the institutions in charge of supervising and securing the border have specificities according to the tasks they carry out, for example the TNI is related to the issue of territorial violations related to state defense in order to maintain sovereignty, Customs is concerned with the illegal entry of goods from outside which have the potential to harm country. So it has not mentioned how each institution synergizes in an integrated manner in dealing with problems that arise.

Research on interoperability is mostly done in the field of technology or data in one agency (Amin, 2014; Hutabarat et al., 2021; Wardana & Rahman, 2016; Zahara, 2017), so the emphasis is on using data together in a work environment or agency to make it easier to complete a job. Meanwhile, the research that will be carried out is the use of data jointly by several institutions that handle the same field, namely maritime border security, by utilizing technological developments. How interoperability of all border security agencies can access/obtain data from other agencies or institutions. Not only data, but how the command and control in the field from all institutions synergize in solving problems that are faced together.

Problems that occur at national borders are not only due to mismanagement and how to protect territorial areas from enemies, but more fundamentally also involve delimitation and demarcation involved in the negotiation process (Muradi, 2015). The issue of the border between Indonesia and Malaysia in the Malacca Strait is still subject to disputes and disagreements. Internally, various problems also arise in the Malacca Strait that require more coordinated and comprehensive handling. Handling a problem that arises in the Malacca Strait, is not only the responsibility of one institution, but all institutions that have been appointed in accordance with applicable laws.

However, what happened in the field was still far from expectations. This is because the coordination mechanism regarding border security in the Malacca Strait has not been integrated. In addition, the communication system between agencies that carry out security in the Malacca Strait has not been integrated (Prabowo, 2014). Each institution is still prioritizing their respective duties without heeding the duties of other institutions, so that maritime border security in the Malacca Strait is not optimal, which is indicated by the many incidents or violations.

Another phenomenon that is currently being discussed is the issue of environmental pollution. This also happened in the Malacca Strait which is the busiest strait in the world with approximately 90,000 large and small ships crossing this strait (Rahman, 2017). It is undeniable that every company that uses its fleet of ships to conduct trade through the Malacca Strait will try to reduce its operational costs, so that most of them do things that are prohibited or illegal, namely throwing waste into the sea, either waste oil or waste of daily needs. day. This is mostly done because when they officially dispose of their waste, they have to dock or dock first to the port and it costs a lot of money. In addition, in terms of effectiveness, it is much easier and more effective if it is disposed of at sea because it does not require docking time.

However, they do not realize that their actions can endanger other people and marine life along the Malacca Strait shipping lanes. Apart from being intentional, environmental pollution can also occur as a result of accidents at sea, for example a ship sinking. Regardless of the cause of environmental pollution, the focus of the problem is how to handle the pollution, who does the handling, who imposes sanctions, and so on. Until now, the Indonesian government as the owner of most of the Malacca Straits does not yet have clear and definite rules to deal with these problems (Tarigan & Sihombing, 2019).

From the various problems and dynamics that occur in the Malacca Strait, ranging from transnational crimes (transnational crimes) to the issue of environmental pollution, it is still not visible that there is an integration of all institutions that deal with border issues to solve problems that arise, even though they already exist. If a problem occurs, it is usually handled by one institution alone, without involving other institutions. This is what causes the handling of a problem to seem very slow in solving it because it is not implemented comprehensively.

In addition, the existence of a Standard Operation Procedure (SOP) from each agency makes coordination at the implementing level even more difficult. Each agency will always adhere to the SOP in carrying out its duties. The limited facilities and infrastructure also contributed to the slow handling of the resolution of the problems that occurred in the Malacca Strait. It would be nice if the resolution of the problems that occurred could involve other institutions or agencies so that the handling of the problem could be viewed as a whole from various points of view.

For this reason, synergy and integration or interoperability between institutions or agencies that deal with border issues are needed. It is undeniable that each institution has its own authority or specialty, however, with these differences, they can complement each other. The use of technological developments is very helpful in realizing interoperability between institutions that handle borders. With this interoperability, it is hoped that they can exchange information, improve coordination, realize joint SOPs and avoid sectoral egos in handling a problem.

1.2 Research Question

Based on the description that has been presented above, a research formulation is made into the question "How is interoperability between border security institutions in the Malacca Strait?"

1.3 Research Objectives

Referring to the formulation of the problem above, this research aims to

- Describe and analyze the use of information technology owned by maritime border security institutions in carrying out their duties at the border between Indonesia and Malaysia, namely the Malacca Strait.
- Evaluating and at the same time finding new concepts in the context of interoperability between maritime border security institutions.

2 Research Method

2.1 Research Steps

The purpose of this qualitative study is to provide an overview and recommendations on interoperability between institutions in the Malacca Strait. In this study, data was gathered by studying literature from various sources such as official documents, journals, books, and website pages. Furthermore, observations were made on the phenomena that occurred between the two institutions, and informants were contacted by phone to obtain the information needed to support the research. The inductive method is used in this study, along with the concept of facility utilization and the interoperability approach.

2.2 Data Collection Techniques

Interview. The interview technique used in this research is structured interviews and the information gathered in the form of primary and secondary data. Primary data was gathered by observing activities in the field, conducting interviews with informants, and holding discussions. Meanwhile, secondary data was obtained from literacy, documentation, and literature studies of books or documents from various existing sources, as well as the results of previous researchers' research. Aside from books and journals, secondary data can be obtained via the internet in the form of meeting minutes and seminar results reports that are officially uploaded by the institution that hosted the seminar.

Survey. The survey will be conducted by compiling a questionnaire in the form of a list of questions which was then distributed to the respondents directly so that the results of the filling would be clearer and more accurate. Researchers distributed questionnaires to respondents using a list of questions related to the knowledge, skills, abilities and performance of employees.

3 Result and Discussion

3.1 Sea Border Management in Indonesia

Sea border management in Indonesia is currently carried out by agencies that has been appointed by the government to carry out this task. Security is carried out by conducting patrols along the Malacca Strait, both by air and by sea, monitoring with equipment owned by implementing units and establishing security posts on small islands along the Malacca Strait.

This activity is carried out independently by each agency in accordance with their respective schedules and needs, as well as jointly, both between institutions and agencies and in cooperation with coastal countries that have an interest in and are responsible for the Straits of Malacca. However, with all the limitations and lack of coordination, the results achieved are less than optimal. For example, on an extra nation basis, the government has carried out various collaborations with other coastal countries, namely Singapore,

Malaysia, and Thailand, in order to provide a sense of security for user countries crossing the Malacca Strait. For example, joint operations are carried out between the Indonesian Air Force and the Air Force. Malaysia, Singapore, and Thailand by carrying out joint patrols codenamed "Eyes in the Sky" (EiS). On a larger scale, with the involvement of the Navy and intelligence, the operation codenamed the Malacca Strait Patrol (MSP), which consists of elements of the Malacca Strait Sea Patrol (MSSP), Eyes in the Sky (EiS), and the Intellegent Expert Group (IEG).

Currently, Indonesia is seen as one of the countries with fairly rapid and stable economic growth and is predicted to be one of the developed countries with very good economic growth. This situation has an influence on the overall security aspect, including maritime security. One area that is prone to various kinds of disturbances and threats at sea is the Malacca Strait, which is the lifeblood of the world economy with many large and small ships passing through carrying various kinds of basic needs and industrial needs from the Indian Ocean to the Pacific Ocean and vice versa. On the one hand, this condition is very beneficial for the coastal countries in the Malacca Strait region economically, but from the security and defense aspect, it becomes a threat that can disrupt regional stability and the sovereignty of the Republic of Indonesia. The threats that may arise at this time are dominated by non-traditional threats, such as piracy, smuggling, human trafficking, theft of marine resources, environmental pollution, and so on. Indonesia, as a coastal country with the largest area, has an obligation to maintain the stability of the Malacca Strait region with other coastal countries, namely Malaysia and Singapore, in order to ensure the security and safety of every ship that passes. Maritime security that is implemented at sea borders, especially the Malacca Strait, must involve all stakeholders who have been appointed together to achieve common goals. Indonesia must be able to guarantee safety as long as navigation activities in the Malacca Strait can run safely and smoothly, the management and exploration of maritime resources do not cause harm to other people or other countries around the Malacca Strait, and ensure the maintenance of the maritime environment. Maritime security is not only law enforcement at sea, but has a broader meaning, namely that the sea or shipping lanes are safe for users to traverse and free from various threats that may arise.

In addition, Indonesia is an archipelagic country that has thousands of large and small islands with an area covering the entire land and sea, including the waters between the islands. This condition is very vulnerable to various problems that may arise, especially in border areas, both land and sea, that are directly adjacent to neighboring countries, for example, social, economic, security, and other problems. The problems that arise are strongly influenced by the development of science and technology and the strategic environment, which is an external factor. With increasingly sophisticated technology, various facilities are obtained to make life easier in everyday life and work. Utilization of technology appropriately and proportionally will bring benefits to mankind, but if it is used for the benefit of certain groups, it will have a negative impact on the state and society. In addition to external factors, the development of the domestic economic, political, and socio-cultural situation also contributed to the triggering of problems at the border. The gap that occurs in the border area, for example, can set a bad precedent for the government on how bad the border management is. The occurrence of criminal acts in border areas also shows how weak the supervision of border crossers is.

The sea border in the Malacca Strait, with a length of approximately 800 km, is very vulnerable to various illegal and criminal acts, such as piracy, smuggling, theft, and others. The number of small islands along the Malacca Strait that can be used as hiding places for pirates or smugglers is a challenge for border management agencies to secure. Realizing

this, the government in 2010 established the National Border Management Agency (BNPP), which is tasked with managing state borders, both land and sea. In addition, the government has also established the Republic of Indonesia Maritime Security Agency (BAKAMLA), which basically has the task of supervising and securing maritime borders by conducting patrols throughout Indonesia's territorial waters and national jurisdiction. In addition to these two institutions, the government has also appointed several other institutions to carry out maritime border security, including the TNI, POLRI, Immigration Office of the Ministry of Law and Human Rights, Ministry of Maritime Affairs and Fisheries, Customs and Excise, Ministry of Sea Transportation and Regional Government. The collaboration of these institutions in carrying out their duties in accordance with the will of the people is very necessary to achieve the expected common goals. The implementation of tasks must cover all aspects, from planning and implementation to termination and evaluation.

3.2 Interoperability as Important Factor of Sea Border Management

Interoperability is derived from interoperability and consists of the basic words "inter," which means "between," "operable," which means "operable," and "ability," which means "ability."

As a result, when combined with interoperability, which refers to the ability of a system, equipment, organization, or regulation to be operated between institutions or systems, The term interoperability is typically used in technical contexts, but it is increasingly being used in other fields to describe or state that an activity can be carried out by all institutions or agencies involved in an activity process. Alternatively, describe the existence of a regulation or SOP that can be used by institutions or agencies working together to solve a problem, even if they are different in the fields handled due to their respective main tasks.

Interoperability between institutions has become a requirement in developed countries. It aims to provide the best service possible to the public in an open manner, with no data manipulated or engineered. As a result, public trust will grow, and the government's credibility will be widely acknowledged.

The phenomenon of interoperability development in various fields in developed countries has an impact in Indonesia as well, particularly in government institutions. It is hoped that the information system infrastructure will provide better services. It is hoped that the information system infrastructure will improve public services all while allowing for interoperability. Interoperability must consider technological factors as well as procedures and content because it is based on making services faster and more efficient.

Different systems in an organization communicating with each other is critical, as smooth communication is a critical aspect of interoperability. This means that the devices are capable of exchanging and interpreting data shared with one another. Thus, using existing information systems to collaborate between organizations, the exchange of information data is very possible.

This condition has numerous advantages and benefits. For example, the greater the effectiveness of existing services, the higher user satisfaction, as well as other potentials that can be explored in the future.

It is desired that by centralizing digital data storage, information can be accessed across institutions or institutions without significant barriers. This benefit makes interoperability more popular, and it is encouraged to be used in many organizations and governments, as well as between government agencies with a common goal.

Interoperability between institutions, which has been implemented in several developed countries, has resulted in significant changes in the delivery of community services. As community satisfaction rises, so does public trust in the government.

3.3 Interoperability in Indonesia Maritime Security

Although Indonesia's government has made various efforts to secure the Malacca Strait, both internally and externally, in order to reduce the number of occurrences of various events that have the potential to harm the country, in reality on the ground, it is still very far from expectations and has not shown optimal results. This is shown by the rampant violations that occur in the Malacca Strait, such as piracy, illegal border crossing, treasure theft, fish theft, drug smuggling, and territorial boundary violations that have not shown a significant decrease. Some of the efforts made by the violators were thwarted, but not a few managed to escape and enter the territory of the Republic of Indonesia through roads or rat lanes that could not be detected by officers. For example, in 2020, the National Police managed to thwart the smuggling of 821 kilograms of methamphetamine. When compared to the amount circulating in Indonesia, according to the data obtained, the amount is still very small. This can be used as an indicator of the lack of or weak security in border areas. Based on data and facts from existing literacy and documents, the description above is a portrait of the current condition of the security coordination system for the border areas of the Republic of Indonesia, both land, sea, and air. Especially at the sea border, there are still many weaknesses and problems that require immediate handling in order to minimize illegal goods entering the territory of the Republic of Indonesia unofficially.

The main issues are as follows:

- 1) The border area security coordination mechanism has not yet been integrated. The coordination mechanism for border area security has not been integrated, so it will have implications for border security that are not synergistic and ultimately unable to uphold the sovereignty of the Republic of Indonesia. All agencies that carry out border area security are rarely brought together in a forum to improve coordination and unity of command, so it has implications for each border area security agency to focus on the rules used by each. Due to the lack of joint forum activities, inter-agency activities have not been able to plan periodic joint operations exercises. This coordination mechanism can be caused by the absence of an institution designated by the government as the leading sector in securing border areas as a whole. The coordination mechanism also does not use technology that integrates coordination between the headquarters of the border area security agencies.
- 2) The communication system between border area security agencies is not yet integrated. In communicating, each agency operates using devices with their own frequencies and bands, although some have used maritime frequencies, but there is no integration. Because cross-agency communication has not been integrated using a single frequency agreed upon at the time of operation, in the event of a regional security violation, coordination is difficult and follow-up is slow. In addition, communication data in the form of voice during operation cannot be documented and utilized for decision making.
- 3) Maritime surveillance defense equipment when patrols are very limited. The equipment of air patrol in question is a drone for sea patrol (Sea Surveillance Drone) and an equipment such as drone/robot for underwater patrol (Underwater Surveillance Drone). For maritime patrols from the air, we currently use twin otter aircraft belonging to the Air Transportation Service for patrols and they are not routine because they are adjusted to the existing slots. The technology to collect all sensor work that provides image, video,

or sound information does not yet exist, so the data cannot be processed to become official information material that can be conveyed openly to the border area security team properly in an integrated information system.

4) Information governance for border law enforcement is still not incorporated. The unavailability of information technology is related to the socialization of legal aspects of the technical handling of violations in border areas as a reference for all agencies that carry out border area security so as to integrate coordination between the headquarters of border area security agencies. This is supported by the role of institutions that prioritize internal rules when dealing with violations of border area security using the rules they use.

5) Software used in joint operational activities continues to overlap. The absence of a blueprint will be an obstacle for stakeholders, especially in the regions, because there is no legal certainty for an agency in the operationalization of development in border areas. The fact is that the roles and functions of regional agencies such as the National Border Management Agency in the province and Regency/City are highly expected so that border management can be more effective. This also means that if there is a boundary violation, the regional government and the TNI cannot immediately take action. As emphasized by the Chief Marshal of the TNI, Yuyu Sutisna, S.E., M.M., laws and state legal provisions related to border areas must be in harmony and not overlap. With this system, only then can we feel confident in facing various future challenges that are unpredictable and unprecedented.

6) There is no information technology that integrates the border area's security coordination system. The technology intended to collect all voice communications into text, so that communication data can be well documented in an integrated information system, all software used during border area security operations does not yet exist. Technology is also expected to be able to optimize the use of marine security information taken from the Indonesian Navy's radars to support an integrated main information system.

4 Conclusion

This research concludes that the implementation of interoperability in Indonesia is still very limited and not comprehensive, for example, interoperability between military or civilian agencies only. This is a challenge in itself to combine military and civilian interoperability in order to secure national borders in the Malacca Strait in order to form E-Pamtas as one of the solutions to the problems that have occurred to date. E-Pamtas combines all interested agencies and institutions in the Malacca Strait to coordinate with each other in dealing with any problems that arise. Data sharing and command and control are very crucial elements to carry out. The use of data together will make it easier for each agency/institution to complete tasks according to their respective functions and jobs. In addition, government intervention is needed to appoint a leading sector that has the authority to coordinate by making laws and regulations as a legitimate basis for legitimacy so that all relevant agencies and institutions obey it.

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