MEANS OF INDONESIAN MARITIME DEFENSE STRATEGY IN SEA CONTROL ON THE INDONESIAN STRATEGIC STRAITS TO SUPPORT TOTAL DEFENSE AND SECURITY SYSTEM

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Abstract

Indonesia is a country with a water area of 6.4 million km² or about 2/3 of its territory is the sea. Geographically, Indonesia's position is very strategic because of an international shipping route on it as well as a crossing point between the continents of Asia and Australia and the Pacific and Indian oceans. This configuration of the Indonesian sea area requires strict control to meet all types of demand at all Archipelagic Sea Lanes' choke points. Therefore, this study was conducted to answer what kind of strategy that needed in controlling the sea at Indonesia's four strategic choke points to support the Total Defense System. This study used a qualitative method with an exploratory approach because the researchers explored deeper and analyzed the objectives, resources, and methods of controlling the sea at four strategic points in Indonesia. The theory of strategy researchers used to discuss problem formulation was assisted by NVivo 12 tools in processing data and Soft System Methodology (SSM) to analyze research data. The results of the research prove that the resources used to achieve Indonesia's maritime defense in controlling the sea at Indonesia's four strategic choke points are the empowerment of power, inter-agency cooperation, and regulation-making in determining maritime defense strategies.
INTRODUCTION
As an archipelagic country from Sabang to Merauke with a vast area of water requires Indonesia to have a defense system capable of safeguarding sovereignty from military and nonmilitary threats. In maintaining maritime defense, the necessary defense system has a more complicated level because it requires a capable defense force and requires a small cost in conducting every operation to maintain maritime sovereignty in the territory of the Unitary State of the Republic of Indonesia. Therefore, a targeted defense system is needed to be a reference in implementing policies capable of strengthening maritime defense systems.

Indonesia's unique marine configuration requires strict controls to be able to monitor all types of shipping both above the surface and below the surface and in the air at all choke points of the Indonesian Archipelago Sea Channel (Alur Laut Kepulauan Indonesia or ALKI). The military threat is very likely to come through the strategic funnel, in this case, the strategic straits of Indonesian waters and the air space above it, so that sea power and air power are the first to face such military threats, so maritime defense is an absolute thing to support Indonesia's overall defense in the form of total defense (Hidayat, 2019).

By utilizing the geographical condition of Indonesian waters, the sea defense strategy held has the target of preventing the intentions of parties that will interfere with the sovereignty of the country and the territorial integrity of the Republic of Indonesia through naval diplomacy, presence at sea as well as building the capabilities and strength of the Navy. Sea control strategies, directed to ensure the use of the sea for its strength and prevent the use of the sea by opponents, break the line of sea relations and prevent and eliminate various forms of threats aspects of the sea from within the country. The current sea control strategy still has some issues. In the discussion of elements of resources, the need for strength, and inter-agency cooperation as part of the total defense system still needs to be optimized. Therefore, this study was conducted to answer what kind of strategy that needed in controlling the sea at Indonesia's four strategic choke points to support the Total Defense System.

METHODS
The research was conducted by the qualitative method that emphasizes the process analysis of inductive thinking processes related to the dynamics of relationships between observed phenomena and always using scientific logic (Gunawan & Suryani, 2013).
The qualitative approach method used in this research is explorative qualitative to set priorities, develop operational definitions, and improve the final research design. Data collection for this article is done by using literature studies and documents as a source of research data, while data processing using NVivo software and data analysis using Soft System Methodology (SSM).

The research was carried out in several places, including the Ministry of Defense (MoD) of the Republic of Indonesia, Indonesian Armed Forces or TNI Headquarters (Mabes TNI), Indonesian Navy Headquarters (Mabesal), the Fleet Command I (Koarmada I), and the Fleet Command II (Koarmada II). The primary data of this study was obtained through live interviews and written interviews with several informants according to the research subject. While secondary data obtained from literature, articles, journals, and sites on the portal related to research conducted.

In this qualitative data processing, researchers used NVivo 12 software. NVivo 12 can separate data sources. The process of coding in NVivo 12 can be displayed in the research appendix to demonstrate a consistent and accurate analysis process. Similarly, the display of various NVivo outputs can show the credibility and validity of qualitative research data that is ultimately effective in data triangulation and triangulation of researchers (Bandur, 2019).

The process of triangulation data processing is as follows, checking the interview results from various sources which are then processed into report data in proving the validity of interview answers from the sources. Furthermore, checking the results of observations in the field. Lastly, researchers carried out checking the results of documentation obtained during the conduct of research in the field to strengthen the results of interviews and direct field observations.

RESULT AND DISCUSSION

According to Liddle Hart’s strategy is the art or skill of distributing and using (ways) military means to realize the ultimate goal of policy (ends) (Hart, 1967). Based on interviews with resource persons, resources in implementing Indonesia’s maritime defense to support the total defense system have been implemented but have not been able to achieve absolute control. Based on Milan Vego’s theory of sea control in the book Operational Warfare at Sea, the resources needed to support sea control strategies at choke points include goals, resources, and ways or methods (Vego, 2008). From the element of resources, in the form of the need for strength and inter-agency cooperation. The high degree of control at the absolute control level makes us have complete freedom to use the sea without interference and makes the opposing side have no chance at all to be able to use the sea.

Result finding of regulators, operators, and observers

The findings of the regulator’s instruments in this case informant X2 that Indonesia has the resources of both natural resources and human resources that have the potential to realize the concept of The Indonesian Maritime Defense Strategy (Strategi Pertahanan Maritim Indonesia or SPMI) but has not been processed to the maximum. Based on the results of interviews with informant Y1 as the operator, the resources owned have been adequate to realize absolute control, but in its realization requires a solid synergy between stakeholders. Furthermore, the fulfillment of maritime defense resources has been implemented but is still not optimal. It is the authority of the Ministry of Defense to synergize and make regulations in utilizing and optimizing existing resources to support the defense of the universe at sea. This requires cooperation and synergy with
government agencies and other private institutions.

The findings of the observer instruments, in support of SPMI are with the national surveillance system air, surface, and underwater, radar systems connected at a chokepoint, adequate strike units in the form of the title of a fast patrol ship carrying missiles and coastal cannons along the chokepoint.

**Research Data Processing**

In this qualitative data processing, researchers used NVivo 12 software. The research data obtained is processed in NVivo 12 by establishing a coding category to assist in the preparation of the theme and explore how the relationship between attributes or thematic things from the findings in the field. The coding is based on derivatives of research questions, findings in the field of research subjects, as well as secondary data. Classification of themes created in the process of NVivo 12 code refers to research questions as well as the theories and concepts used in this study, while the classification of nodes in NVivo 12 refers to the interview guidelines.

Furthermore, the coding is carried out by combing through the transcripts of the interview results. The results can be seen in the sources column and reference how often nodes are alluded to by informants. After the data is processed using NVivo 12, it appears that not all informants have a focus on each category submitted during the interview process. This is shown from the results of the code formed into a tree chart that shows which informants are focused on what categories and at the same time perform data triangulation.

**Figure 1. NVivo processing results**

*Source: Processed by Authors, 2020*

**Data Analysis Using SSM**

Data obtained in the study, analyzed using SSM which process consists of seven stages. The seven stages are to understand the situation that is considered problematic; describe the situation of the problem; compile the root definition of the appropriate system of a prepared behavior; building conceptual models; make model comparisons; determine the most desirable and possible changes, and take action to
Table 1. CATWOE Analysis

<table>
<thead>
<tr>
<th>C</th>
<th>Indonesian maritime stakeholders users of Indonesian waters</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The Fleet Command (Koarmada); Indonesian Naval Main Based (Pangkalan Utama TNI AL or Lantamal)</td>
</tr>
<tr>
<td>T</td>
<td>Implementing the fulfillment of Indonesia's maritime defense resources by empowering maritime components as well as the integration of maritime roles, surveillance, and punch elements in implementing maritime control</td>
</tr>
<tr>
<td>W</td>
<td>Indonesia's resources can support sea control, but to be more optimal, a more solid synergy is needed between the stakeholders/stakeholders where each must foster understanding to foster mutual trust (confidence-building measure/CBM) with other sea control elements.</td>
</tr>
<tr>
<td>O</td>
<td>TNI and Navy Headquarters</td>
</tr>
<tr>
<td>E</td>
<td>Budget constraints, national development policy direction, TNI and TNI AL policy direction, strategic environmental development, domestic political direction, human resources capability, and social condition of the community</td>
</tr>
</tbody>
</table>

Source: Processed by Authors, 2020

Table 2. 3E Analysis

| Efficacy | Indonesia's maritime defense resources must be met by empowering maritime components to realize the total defense system |
| Efficiency | Engage and empower all maritime components in Indonesia |
| Effectiveness | Implementing the fulfillment of Indonesia's maritime defense resources by empowering maritime components to support total defense systems |

Source: Processed by Authors, 2020

Figure 2. Conceptual model and root activity definition
Source: Processed by Authors, 2020

develop the existing situation.

System thinking of SPMI in controlling the sea at strategic chokepoints
Root definition in this study is formulated in three questions that represent the research question. Root definition discussion uses the PQR formula to answer what question, why, and how (what, why, and how). PQR formula in question is: "Do P, with (by) Q, to achieve (to achieve) R” (Hardjoesoekarto, 2012).
Implementing the fulfillment of Indonesia's maritime defense resources (P) by empowering the maritime component (Q) to support the total defense system (R).

**Conceptual model of Indonesia's Maritime Defense Strategy in maritime control at a strategic chokepoint**
The next stage of SSM is to form a conceptual model by connecting all activities that will be carried out to perform the T process (on the CATWOE analysis table) so that it becomes a whole system. This step is carried out by combining all the steps that have been done in the third stage or root definition in determining the relevant system to be used in solving research problems.

**The fulfillment of Indonesia's maritime defense resources used in sea control at Indonesia's four strategic chokepoints**
All components of the Indonesian nation have the same importance to the sea, namely the realization of security stability at sea to ensure territorial integrity as well as national interests in and or by sea. To be able to realize the security conditions at sea, efforts are needed to enforce sovereignty and law enforcement. The issue of law enforcement at sea is one of the most important national issues, given the enormous losses suffered by the state, due to various violations of the law; including illegal fishing, illegal migrant, illegal logging, and illegal mining.

Security enforcement at sea has two dimensions, namely sovereignty enforcement, and law enforcement so that the two dimensions are intertwined with each other. The State Defense System, namely the Total Defense System (Sishanta) is placed in the modern state format through state political policy, thus giving awareness and responsibility to the public that the problem of state defense is not only the affairs of the TNI but the problem of the whole nation. Similarly, concerning the development of the country's defense capability, not only the responsibility of the TNI or the Ministry of Defense but also the responsibility of all components of the nation that includes the government and all components of society.

Sea control in open waters and narrow waters can be achieved quickly and convincingly by conducting a series of naval base operations as well as joint operations with other forces. Achieving sea control requires a series of simultaneous actions from several operations. In the implementation of marine control strategies inseparable from the needs of strength, and inter-agency cooperation as part of the total defense system as a resource (means), the effectiveness of operations as (ways), as well as the guarantee of security at four choke points as a goal (ends).

Based on the results of comparative analysis of conceptual models found the range between real-world and system thinking where the activity has not been done (research gap) by related instruments. The gap in research analyzed using theories, past research, and research interview results can be seen in Table 3.

<table>
<thead>
<tr>
<th>No</th>
<th>Gap Analysis</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify any resources in implementing Indonesia’s maritime defenses to support the total defense system</td>
<td>Milan Vego sea control theory</td>
</tr>
<tr>
<td>2</td>
<td>Follow up on the fulfillment of maritime defense resources</td>
<td>Interview results</td>
</tr>
<tr>
<td>3</td>
<td>Evaluating the fulfillment of established resources</td>
<td>Previous research</td>
</tr>
</tbody>
</table>

**Table 3. Gap analysis of gap questions**

From Table 3, it appears that the first gap is the implementation of resource support in implementing Indonesia’s maritime defense to support the total defense system but has not been able to reach the absolute control level. Based on Milan Vego’s theory of sea control in the book Operational Warfare at
Sea, the resources needed to support sea control strategies at choke points include goals, resources, and ways or methods. From the elements of resources, in the form of the need for strength and inter-agency cooperation. The high degree of control at the absolute control level makes us have complete freedom to use the sea without interference and makes the opposing side have no chance at all to be able to use the sea. Based on the results of interviews with informant Y1, the resources we have are adequate to realize absolute control, but its realization requires a solid synergy between stakeholders.

Indonesia’s resources can support sea control, but to be more optimal, a more solid synergy is needed between stakeholders where each must foster a confidence-building measure (CBM) with other elements of marine control. (Informant Y1)

The second gap obtained from the table above is the follow-up fulfillment of maritime defense resources that have been implemented but are still not optimal. Based on the theory of efficiency according to Slichter, Engineering/Physical Efficiency is a comparison between the number of units of objects used with the resulting objects. In this case, it is not optimal fulfillment of maritime resources to support defense at sea. It is the authority of the Ministry of Defense to synergize and make regulations in utilizing and optimizing existing resources to support the defense of the universe at sea. This requires cooperation and synergy with government agencies and other private institutions.

Referring to the total state defense system, the TNI is the main component, with the people trained as a spare component, as well as infrastructure as a supporting component. Given the scale of the conflict that can occur from peaceful conditions to war, the construction of spare components and supporting components from peaceful conditions to war. In this case, there needs to be cooperation and synergy with government agencies and other private institutions. (Informant Y1)

The third gap obtained is the implementation of the evaluation of the fulfillment of the necessary resources. This is related to the unfined idea of SPMI that has been made. Evaluation activities that have been carried out especially by the navy are only limited to reports on the implementation of the Military Operations for War (MOW) and the Military Operations Other Than War (MOOTW) titles that have been implemented.

SPMI form that has been implemented Koarmada I is through the title of operations in the working area of Koarmada I namely MOW and MOOTW Operations degree in the implementation of each operation has been made implementation report as an effort to supervise and evaluate Koarmada I. (Informant Y1)

Based on the three gaps above, it can be determined maritime defense resources used in maritime control at four strategic choke points of Indonesia is cooperation and synergy between stakeholders supported by the role of the Ministry of Defense in supporting and making regulations in utilizing and optimizing existing resources to support total defense at sea.

CONCLUSIONS AND RECOMMENDATION
To support the maritime defense system, cooperation and synergy between stakeholders are required supported by the role of the Ministry of Defense in supporting and making regulations in utilizing and optimizing existing resources to support total defense at sea. Maritime defense resources used in carrying out sea control include the national surveillance system of air, surface, and underwater at choke points, the title of elements of navy ships and air force aircraft in strategic
straits, and the title of the role at strategic points.

Surveillance systems of air, surface, and underwater chokepoints used in carrying out sea control are carried out through radar deployment and STIS. The air radar deployment carried out by Indonesian National Air Defense Command (Kohanudnwas) has now been deployed throughout the choke point supported by the deployment of civilian air radar at several airports around the strait that are access to ALKI and choke points in Indonesia. The integration of THE IMSS command and control system which has radar facilities and long-range maritime observation cameras has now been launched in the Malacca Strait and Sulawesi Sea, as well as monitoring with sound sensing systems in strategic straits to detect elements of submarines and ships on military waters of other countries.

Patrols carried out in carrying out sea control involve elements of the Navy and Air Force who are involved in the operation TNI Headquarters controlled by the Main Command of Operations (Komando Utama Operasi or Kotamaops) of each force. The routine operations are carried out through Sea Combat Standby Operations, Border Security Operations, Sea Security Operations, and ALKI Security Operations carried out by the Indonesian warships (KRI) and Navy aircraft.

The deployment of mines in strategic narrow straits using mines owned by the Navy today, namely kb M-26 touch mines that are effective at a depth of 12 m - 260 m, AMD 500/1000 magnetic mines that are effective at depths of 3-50 m, and acoustic mines KMD 1000 (M25) that can be held at a depth of 3-50 m. The mines are on alert at Navy bases located around choke points and ALKI in Indonesian waters.

Based on the results of the research, the recommendation to the Ministry of Defense in the ratification of SPMI into a state document following the doctrine of the Total Defense System so that it can be used as a defense strategy of the country at sea.

REFERENCES