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# Optimizing the Development of Maritime Defense In The Natuna Sea in Realizing Indonesia As The World Maritime Axis

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*Abstract — the development of the South China Sea situation which is increasingly requiring special attention, where China as the largest economic and military power in the region shows a significant change in strategy. Over the past few years China has also increased its assertive stance to support territorial boundary claims, established an Air Defense Identification Zone (ADIZ) unilaterally, and maintained an attitude not to accept decisions by international courts or multilateral forums regarding SCS issues, as well as increased Chinese Navy training activities that operating all the way to the Indian Ocean, the Government of Indonesia is currently prioritizing the development of facilities and infrastructure for the placement of military forces which are considered strong enough to demonstrate Indonesia's seriousness in maintaining the territorial integrity of the Unitary State of the Republic of Indonesia. In this study, there are main problems, namely defense industry policies in supporting maritime defense in Indonesia. The method used in this research is qualitative in the form of descriptive and juridical analysis needed to analyze the problems of implementing Indonesia's seven pillars of maritime policy in order to realize Indonesia as the world's maritime axis. The results of the analysis and study of the problem show that Indonesia's defense forces are being tidied up to monitor and uphold sovereignty and will apply strict rules of engagement on the use of weapons from armaments in the Natuna region.*

Keywords — *Maritime Defense, the World Maritime Axis.*

## I. INTRODUCTION

As the largest archipelagic country in the world, which has 17,499 islands and a water area of 5.8 million km², Indonesia has a strategic geographical location between 2 (two) continents and 2 (two) oceans, namely the continent of Asia and the continent of Australia and the Pacific and Ocean.[1][2] Indian Ocean. Indonesia's strategic position is certainly inseparable from the influence of the dynamic interaction of strategic environmental developments both globally and regionally which are directly in contact with the borders of Indonesia's national jurisdiction waters, such as the conflicts and tensions that occurred between China and Taiwan, Vietnam, the Philippines, Brunei Darussalam and Malaysia in the South China Sea region due to disputes over the ZEE boundaries of each claimant state.[3][4] The dynamics of conditions in the South China Sea area which is directly adjacent to the national jurisdiction area, especially the Natuna sea area, has the potential to cause military, non-military and hybrid threats that can impact the security stability and sovereignty of the Unitary State of the Republic of Indonesia.[5][6] In anticipating these real and potential forms of threats, Indonesia should optimize the development of its maritime defense to face all forms of threats, disturbances, obstacles and challenges both from within and from abroad. The World Maritime Axis Policy which has been published by the government in the international world, supported by the 7 pillars of the Indonesian Maritime Policy is a strong signal to prioritize the implementation of the development and development of Indonesia's maritime defense.[7][8]

The Indonesian Navy as a defense tool for the maritime dimension of the country which has the task of upholding state sovereignty, maintaining territorial integrity and enforcing the law at sea is an integral part of the maritime defense component.[9] However, it is not easy to implement this maritime defense instantly and comprehensively, because the current development of maritime defense forces still has limitations in various ways. For this reason, it is necessary to optimize the development of maritime defense by the Indonesian Navy in the Natuna sea area so that it is able to overcome existing problems in order to increase defense capabilities in warding off all forms of threats that can disrupt the upholding of state sovereignty, territorial security and safety at sea in accordance with the Maritime Policy.[10] Indonesia in order to realize the government's vision of making

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Indonesia a World Maritime Axis. Natuna waters are strategic waters in international relations, this area is a passageway for international ships (ALKI I). Apart from that, Natuna waters are also rich in natural resources which, if managed properly, can add benefits to Indonesia. But apart from these favorable factors, the Natuna waters also have vulnerabilities, both from a military and non-military perspective. From a military perspective, the existence of unilateral claims by China and Vietnam over Indonesia's continental shelf in Natuna waters can lead to hands-off between countries. From a non-military perspective, the presence of foreign fishing boats escorted by coast guard ships from China and Vietnam when stealing fish must receive special attention from the Indonesian government.

The problems that can be identified in carrying out the development of this maritime defense are the capability of the defense equipment which is still not optimal so that it is unable to carry out a full and continuous coverage area in the Natuna sea area, infrastructure development in the form of Indonesian Navy bases around the Natuna Sea. Is still not optimal to be able to provide support in carrying out maritime defense, and the existing C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) capabilities are still not optimal to support the implementation of maritime defense.Therefore, the Indonesian Navy as one of the main components of national defense in the maritime sector needs to carry out strategies and efforts in carrying out the development and development of the capabilities of its defense equipment.[11] Through the procurement and modernization of defense equipment so that it can increase the coverage capability of national jurisdictional waters. especially in the Natuna Sea region, as well as simultaneously carrying out the construction and development of maritime defense infrastructure which is equipped with various base facilities and high-tech surveillance installations as part of C4ISR, to support the endurance presence of KRI elements and increase maritime defense capabilities in the Natuna Sea region optimally, so as to be able to support the formation and strengthening of the 7 Pillars of Indonesian Maritime Policy in order to realize Indonesia as a World Maritime Axis.[12][13]

## II. METHOD

In light of Indonesia's position as the maritime axis of the world, researchers employ qualitative methods to investigate how to maximize the development of maritime defenses in the Natuna Sea.[14] The development of Natuna's military strength is not limited to maritime strength; it encompasses all dimensions. Problems involving descriptive analysis of prescriptive jurisprudence on the policies of the seven pillars of Indonesia's maritime affairs, including the development of maritime forces, including the components of the maritime defense force, and How to analyze using a narrative approach and a collection of participant accounts, this study can directly identify and investigate the involvement of objects in activities. In order to support the primary data, secondary data were gathered from various documents and existing literature reviews, in addition to observations, interviews, and documentation.[15] In order to provide an analysis of the collected data that is the result of an analysis that is commonly used, we used a descriptive analysis approach in this study. Organized research graphic examination gathers ebb and flow data or information in a structure that depicts the central issue exhaustively, investigates various circumstances, recognizes issues, and helps other people with a similar issue and critiques.

## III. RESULT AND DISCUSSION

The Natuna Sea politically provides high political bargaining power because the entire Natuna Sea area will provide strategic advantages. This is because the Natuna Sea is the link between the Malacca Strait and the East Asia region. Indonesia also has an interest in handling the conflict in the Natuna Sea, because if it is not handled properly it will have an impact on the security stability of Indonesia and the region.[16] Indonesia also has an interest in asserting its claim to Indonesia's ZEE in these waters which are located north of the Natuna Islands. The geographical location of the South China Sea which is adjacent to the Natuna waters and China's outward looking military posture inspire the Indonesian Navy to build a maritime defense to prevent the impact of conflicts in the Sea.[17] South China to the territorial waters of Indonesia's national jurisdiction. Increasing Human Resources (HR) and developing infrastructure to support the development of maritime defense forces in the Natuna Sea must fully support the national defense policy that has been established by the Indonesian government in accordance with applicable laws and regulations, especially towards Indonesia as a World Maritime Axis. The policy regarding the World Maritime Axis is expected to be able to improve and develop Indonesia's economy and defense to become a respected maritime power among countries in the world. Indonesia's maritime defense

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will seek to advance the Indonesian nation in the maritime sector through the tasks that have been assigned to the Indonesian Navy, Police and Bakamla

### *A. Alutsista Capabilities*

The existence of the power of the Indonesian Sea as a means to secure national interests related to the maritime domain is a non-negotiable requirement. Therefore, efforts to build and develop the strength of the Indonesian Navy as a vital factor are needed to build a maritime nation in an operational aspect. Combat power (fighting instrument) to protect assets and interests must be sufficiently developed. If you look at the current condition of Indonesia's sea power elements, the priority that must be realized is the effort to build the capability of the Defense System in developing maritime defense forces. It is hoped that Sista's defense equipment capability will be able to carry out the task of maritime security operations in the Natuna Sea at this time and in the next few years. For this reason, the optimal capability of the Indonesian Navy's system of defense equipment is important to optimize in the maritime security system. The development of maritime defense forces and capabilities will become a fighting instrument that has a strong deterrent effect on various actors who will threaten national security in the Natuna Sea. The interest in developing a comprehensive maritime defense force can be a reference for the development of other maritime sectors. By developing maritime defense forces by increasing the capability of the system's missile system, it will lead to an ideal posture. This should be a priority to realize two goals at once, namely, apart from being able to improve the maritime security system, it is also able to strengthen the national defense system. Therefore, the modernization and procurement of the Indonesian Navy's main weaponry systems, especially in accordance with the MEF (Minimum Essential Force) program, should be realized more quickly, while at the same time supporting the realization of the Indonesian Navy as a world class navy.

The current posture of Indonesia's maritime power shows that the character of the TNI AL's weapon system capabilities must lead to the type of brown water navy which is aimed at maintaining the territorial integrity of the territorial sea in the Natuna Sea. The capability of the Sista's defense equipment for Indonesia's maritime forces must be able to reach all the vulnerable and strategic waters of the Natuna Sea. It is hoped that the TNI AL's old defense equipment can be added through procurement so that it can increase the ability of the TNI AL to become a brown water navy in securing the waters of the Natuna Sea. In addition to increasing the capability of the Defense Equipment System, the strength of the Indonesian Navy will be able to improve security in the Natuna Sea area by increasing the number of troops and also the combat fleet. The strengthening of the Indonesian Navy's main weaponry system in the Natuna Sea can be an alarm for Indonesia against threats coming from the impact of the South China Sea tensions. Placement and deployment of troops with the support of adequate facilities will optimize maritime defense in the Natuna Sea.

### *B. Defense Support Infrastructure*

The defense support infrastructure at the TNI AL base, namely Lanal Ranai and Lanal Tarempa, is expected to be able to support sea patrol operations carried out by the KRI to secure the Natuna Sea waters. The existing wharves are not yet able to accommodate ships from the Indonesian Navy's strike unit, so they have to take advantage of public ports around the area. The port is one of the main components of maritime power, because all maritime activities will depend heavily on the existence of a representative port. The expected dock or port facilities must be able to serve the needs of the 4R bases, namely Repair, Replacement, Rest and recreation as well as fresh water support, HSD and MT. In addition, it is also able to serve the latest generation of ships that go directly to various international trading centers (direct call) and is able to anticipate the acceleration of loading and unloading of goods with complete service facilities. The next defense supporting infrastructure is the defense industry which plays a very important role in increasing a country's capability in terms of defense technology independence. Therefore the defense industry and maritime services must continue to be developed in order to be able to support Indonesia to become a maritime country. Defense infrastructure around the Natuna Sea is an important factor in supporting maritime defense forces in the Natuna Sea. The maritime defense force in the Natuna Sea will be more capable if it is supported by the country's ability to produce various kinds of defense supporting facilities and infrastructure through its defense industry.

Strong defense infrastructure has two main effects, namely a direct effect on the development of defense capabilities, and an effect on national economic and technological development. In the field of defense capability development, a strong defense industry guarantees a sustainable supply of defense equipment and defense facilities. The availability of the supply of defense equipment on an ongoing basis is an absolute prerequisite for the freedom and certainty to draw up plans for the development of long-term defense capabilities. Building an independent defense industry infrastructure is not easy. Required various kinds of efforts and resources that are

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not small. Besides requiring large funds, it also requires mastery of high technology. This cannot be implemented in a short time, and requires the cooperation of various parties. The Indonesian Ministry of Defense as the main person in charge of the Indonesian defense system requires cooperation with other parties to realize the development of an independent defense industry. The empowerment of the national industry for defense development requires cooperation between the three pillars of the defense industry, namely the Research and Development Agency as well as Universities, Industry, and the Department of Defense/TNI, fortified by a clear national policy to use products produced by the sons and daughters of the defense industry. Nation's best. Infrastructure development for the defense industry must be specialized or grouped according to functions and areas of defense technology, namely:

1) Industries that produce infrastructure/alutsista that focus on "power of motion" (rantis, ranpur, ships, and aircraft).
2) Industries that can produce weapons, ammunition and explosives or that focus on "combat power".
3) Industry that produces electronic equipment for K4I products (command, control, communication, computer and information)
4) Industries engaged in the field of integrated weapons systems (Fire Control System).
5) Industries engaged in the supply sector, both specializing in food supplies and individual supplies.
6) The defense industry whose research and development is capable of carrying out efforts to diversify its industrial products for both military and non-military purposes. This is to anticipate if the country is in a state of peace, of course, the demand for small-scale military products. If its non-military products are recognized and accepted by the market, this will strengthen its research and development for military products.

### *C. Command, Control, Communication, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) Capability*

C4ISR is an ability to obtain accurate and reliable information about the actual condition of the enemy obtained through a system of sensors (radar) and satellite imaging systems, collect enemy data and geographical conditions and send it to the Command Center, then other Sub-Systems process it into an information needed for the decision-making Commander, which is forwarded as an order given to combat executors on the battlefield (air, land and sea) to carry out order execution activities so that they can deter or make attacks on the enemy. The ability of C4ISR in a Command and Control is more directed at making directions for decisions made by a Commander to regulate the movement of his troops in completing complex missions. This role is supported by several layers of the Sub-System, one of which is information technology where computer communication provides the main capability to create a command readiness situation, namely combat information regarding the position and strength of enemy troops and their own troops as well as other warfare parameters needed by a Commander or Commander so that the system it plays a practical, fast and precise role to achieve a combat advantage when decisions are made. In carrying out the development of maritime defense in the Natuna Sea, currently it still requires an integrated surveillance system in guarding and supervising the Natuna Sea area to prevent border violations, espionage, navigational threats, as well as from other factors that cause security instability, such as trafficking and illegal immigrants. In implementing marine surveillance, maritime stakeholders are expected to have a fast and accurate detection, monitoring and reporting system through the development of a Surveillance System based on adequate information technology and satellite imagery, which can be operated in an integrated manner. If you look at the condition of the existing system of defense equipment capabilities, the development of a surveillance system in the Natuna Sea can be carried out through the integration of Surveillance System technology facilities and an information network system, as well as the establishment of an integrated surveillance center.

Integrity between surveillance system technology facilities, with all existing facilities, both those owned by the Indonesian Navy, Bakamla, KKP, Indonesian Air Force, Ministry of Transportation and other agencies that have surveillance capabilities, so that they can work in an integrated manner in carrying out monitoring/observation, communication, surveillance (supervision) and reconnaissance (introduction). In addition, each agency will find it easier to search, find and analyze the data and information needed to support their duties. Meanwhile, in an effort to integrate the information network system, this can be done by utilizing the maritime observation network in each stakeholder which is integrated into an integrated network system. This integration is not only formed in hardware and software aspects, but also in the context of data processing as a whole which includes detection, identification, and classification to faster data processing. Speed and accuracy of information is needed so that monitoring and enforcement can be carried out quickly and precisely and to streamline the system for exchanging data information, licensing information, and other information among the stakeholders involved.

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The use of the C4ISR system is used by leaders as a global command and control system, a contingency planning system for the Natuna Sea area, a joint maritime command system in the Natuna Sea and a maneuvering system. Command and control are more directed at making decisions in the form of directions carried out by commanders in order to regulate the movement of their troops in completing missions. This role is supported by information technology where computers and communications are part of C4ISR. The C4ISR system provides the main capability to create a command readiness situation, namely information about the position and strength of enemy troops and own troops. Therefore, C4ISR becomes a practical and necessary component to achieve excellence when decisions are made. The most important thing about the C4ISR system is to provide situational information to the leadership regarding the location and status of enemy forces and our forces that need attention. The expected capabilities of C4ISR are:

1) Have the ability to Situational Awareness where all the information on the elements of the maritime defense force in the Natuna Sea and data on the status of the enemy's position are located.
2) Having the ability to Information Superiority, namely the ability to provide potential information is a very determining factor of a country's defense power. In military doctrine, information is an integral part of command and control which is the key to the success of any operation. Thus, every step taken is aimed at achieving information excellence.
3) The C4ISR concept in its implementation needs to be supported by the Network Centric Business Operation (NCBO) concept in supporting operational activities to synergize Command, Control, Communication, Computers, Intelligence, Surveillance, and Reconnaissance).

### *D. Contribution*

The conditions for the development of a maritime defense force in the Natuna Sea as a whole towards existing components will contribute directly to supporting the 7 pillars of maritime policy in realizing Indonesia as the world's maritime axis as well. The contribution can be explained as follows:

1) The optimal development of maritime defense forces in the Natuna Sea, especially those related to the ability of the system's defense equipment to support the 7 pillars of the state's maritime policy, has had a significant influence on increasing the security situation in the waters of the national jurisdiction and regional scope. With the development of maritime defense forces in accordance with the target, it can contribute to various things which include: If the maritime defense development strategy policy is achieved optimally, it will facilitate the achievement of the Minimum Essential Force (MEF) for the Indonesian Navy. This can also improve Indonesia's bargaining position as a maritime defense force in the Natuna Sea which can support Indonesia's maritime policy as a consequence of implementing Indonesia's policy as the world's maritime axis; Increasing the ability of the Sista Defense System as one of the Indonesian Maritime Defense Forces will automatically cause high deterrent and deterrent effects on the national, regional and global strategic environment so that the protection and utilization of Marine wealth and supervision of Maritime Domain Awareness (MDA) in the Natuna Sea can be carried out properly and sustainably
2) The support of the seven pillars of Indonesia's maritime policy will greatly contribute to Indonesia's development towards the World Maritime Axis. If the development of maritime defense forces in the Natuna Sea can be carried out optimally and sustainably. Then, with the synergy between government institutions and agencies in carrying out the process of building maritime defense forces in the Natuna Sea, the ability to control the territorial space can be carried out and realized, then Indonesia as the World Maritime Axis can be realized and by itself the enforcement of the sovereignty of the Unitary State of the Republic of Indonesia can be carried out without any significant obstacles and distractions.

### *E. Indicator of Success*

1) With the existence of a government policy regarding the development of maritime defense forces in the Natuna Sea through increasing the capability of the system's defense equipment within the framework of the Indonesian Maritime Strategy, there will be an increase in the confidence of countries using sea lanes in Indonesian waters, especially with regard to the level of water security. By increasing the trust of countries in the regional and international areas, this will have an impact on increasing the Bargaining Position and Confidence Building Measure (CBM) of the Indonesian nation in maritime strength among countries in the world, especially for SLOT and SLOC users.
2) By increasing the infrastructure of the maritime defense industry, it will support the ability to produce an independent system of defense equipment and be able to modernize maritime defense forces, especially in

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the Natuna Sea. If the defense industry is supported by the maritime service industry, it can synergize well, then maritime power will be realized so that the development of the world's maritime axis will be realized. The indicator is the achievement of the number of defense equipment produced by the domestic defense industry in accordance with what has been determined in the MEF

3) The realization of the C4ISR concept in providing superior information about situational awareness and information superiority is able to support the maritime defense system in the Natuna Sea. Then the synergy of cooperation and coordination between government and non-government institutions, both structural and non-structural, will increase the quality and quantity of infrastructure for Indonesia's maritime defense forces.

### *F. Solution to problem*

With the policy of the Government of Indonesia to continue to prioritize free and active politics guided by the principle of peace-loving but more in love with independence, and of the view that neighboring countries are friends who have a shared commitment to maintaining security and stability in the region, Indonesia is trying to build a common perspective in order to minimize the problems it faces. in international relations, both bilateral and multilateral. Development of defense forces specifically aimed at maritime defense is not intended as a form of arms race, but as an effort to achieve standards of professionalism of the armed forces, based on the vision and mission of the Seven Pillars of the World Maritime Axis policy. In order to build maritime defense in the Natuna Sea, policies, strategies and efforts are needed, so that the implementation is as expected, namely supporting Indonesia's seven maritime pillars policy in order to realize Indonesia as the world's maritime axis. After the policy regarding the development of maritime defense in the Natuna Sea has been formulated, then strategies are implemented in which there are steps in realizing the maritime defense supported by efforts that must be carried out so that the results obtained are as expected.

1) Policy. Policy Based on current conditions, a policy is needed that can be used in the process of developing maritime defense in the Natuna Sea to support Indonesia's seven pillars of maritime policy in order to realize Indonesia as a world maritime axis, the policy formulated is as follows: "Optimizing the development of facilities and the infrastructure of the strength of the main components, supports, reserves, empowering the role of supporting components and maritime reserve components is supported by increased C4ISR technological capabilities to support Indonesia's seven pillars of maritime policy in order to realize Indonesia as the world's maritime axis. efforts to solve the problems encountered so that the expected conditions can be realized
2) Strategy
   a) Strategy 1 : Optimizing the development of strength, facilities and infrastructure for the main components, supports and maritime reserves

      Currently, the form of Indonesia's maritime power is in the form of a national force which is an integration or a combination of the main components, reserve components, and supporting components that are used as infrastructure to uphold sovereignty and law at sea. This sovereignty and law enforcement is intended to protect and guarantee national interests in and or by sea. Some of the maritime power components owned by Indonesia include: The strength and capabilities of the Indonesian Navy; Fleet of government agency ships including maritime patrol aircraft and research and mapping vessels; National trading fleet; National fishery fleet; Supporting bases, including the Air Base; Ports and their facilities; Maritime industry and services; and Reserve and support components used in the task of enforcing sovereignty and law at sea.

      The preparation of national defense policies and strategies in the framework of building maritime defense facilities and infrastructure is formulated in accordance with the understanding and views of the Indonesian nation in a proportional, balanced and coordinated manner. The national defense strategy in building maritime defense facilities and infrastructure formulates goals, strategic objectives, defense resources, and the methods used to create strong, effective and high-deterrence national defense forces and capabilities. The national defense policy in building maritime defense facilities and infrastructure is implemented through all maritime defense implementation activities to optimize the ability to deal with various threats. The national defense policy in developing maritime defense facilities and infrastructure includes development, deployment, and empowerment of national defense supported by budgeting and supervision policies. The development of maritime defense forces needs to be increased in order to create self-sufficiency in terms of facilities and infrastructure as well as

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defense equipment. In the development of this maritime defense force, the things that need to be considered include ports, the capability of the national maritime industry and the defense industry.

b) Strategy 2 : Optimalisasi pemberdayaan peranan komponen pendukung dan komponen cadangan maritime

The implementation of guidance on the maritime function of the reserve components and maritime supporting components has not been carried out properly. For example, the Indonesian Navy, which has a deterrent effect on perpetrators of illegal fishing by sinking ships used to commit maritime violations, has had a positive effect by reducing the level of illegal fishing violations in Indonesian sea waters. However, this has not been followed by increased utilization of marine resources by local fishermen. This is because the equipment used by traditional fishermen is still not modern. So that Indonesian fishermen cannot compete with fishermen from neighboring countries. The government through the Ministry of Maritime Affairs and the Ministry of Maritime Affairs and Fisheries can provide real support to local fishermen in the form of modern facilities and infrastructure so that optimization of fishing as a fulfillment of the production needs of the fishing industry can be achieved.

Facing the impact of Indonesia's geographical contellation and the influence of the globalization of world trade routes that use the sea as a medium, Indonesian merchant ships must immediately anticipate this by building an Indonesian Commercial Fleet to reduce existing limitations by developing a Commercial Fleet to become a modern Commercial Ship Fleet. For this reason, the Government must implement a policy of building commercial ships in Indonesia with consideration towards strengthening the maritime industry, which must be carried out based on the principles of the corporate economy. The National Commercial Fleet also plays a role as a component of the National Defense which can be used as a support for the National Defense at Sea, when the country is in a state of emergency according to Law No. 27 of 1997 concerning Mobilization and Demobilization. So that the National Commercial Fleet which is a National facility and infrastructure that has been fostered and prepared can be used in an appropriate, integrated and directed manner for it must be controlled by domestically owned commercial vessels which can be strategically implemented in its deployment to maintain and supply National Logistics needs. Of course this can be realized through the application of these laws in an appropriate, directed and comprehensive manner to all Government Agencies related to the maritime sector.

c) Strategy 3: Increasing Command, Control, Computer, Communication, Intelligence, Surveillance and Reconnaissance (C4ISR) technological capabilities.

The modernization of the military forces of several countries in the Asia Pacific region shows that the modernization of the defense forces carried out by several countries in the region, which is supported by good economic growth has the aim not only of equality and achieving standardization with the alliance system, but also to anticipate possible contingencies due to uncertainty. Strategic situation. Modernization of weapons systems and placement in an area that is considered provocative can lead to miscalculations and misperceptions, but in reality this has happened around regional areas. Misjudgment or perception of an event can create a complex and very dangerous situation, especially in relation to the ongoing conflicts in the East China Sea and South China Sea regions.

The modernization of military forces is also influenced by advances in defense technology. Several countries in the region have used this technology to modernize their strategic weapons systems and modern sensing systems that are integrated in Command, Control, Computer, Communication, Intelligence, Surveillance and Reconnaissance (C4ISR). In the National Defense Strategy book issued by the Ministry of Defense in the State Capability Development section it is stated that the support capability in the fifth point states that maximizing the capabilities of Command, Control, Computer, Communication, Intelligence, Surveillance and Reconnaissance (C4ISR) is aimed at realizing the striking force and high mobility military power. It is hoped that this will also build mindsets, attitudes, and action patterns in the development of Maritime Domain Awareness (MDA) policies in general.

d) Strategy 4: Optimizing the power structure to overcome the impact of budgetary restrictions due to slowing growth in the economic sector.

Growth in the economic sector for the development of the defense sector, which has not yet met its target, which was originally at 0.8% - 0.9% to 1.5% - 2.5% of GDP according to the TNI's posture, is closely related to budget politics. In this case the defense system formulators and planners with their expertise must detect and analyze developments in the strategic environment by creating a concept of

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threat perception. From there, the need for a defense budget can be formulated, which will lead to an ideal defense posture. However, budget constraints will always arise when faced with meeting the needs of defense equipment. Therefore, the defense policy formulators are looking for a middle way to build and maintain their defense capabilities. With all these considerations, this will create MEF (Minimum Essential Force). MEF is a defense RPJP which is then translated into a Strategic Plan (a five year program) and then translated into a Renja/RKA. In this process the force development process uses capability based planning, meaning that our defense development program is faced with the capability to be achieved which has been agreed upon at the MEF.

3) Effort. Efforts made to realize the expected conditions still refer to existing policies even though they are not yet comprehensive. The strategy chosen is through applicable efforts to build maritime defense in the Natuna Sea to support Indonesia's seven maritime pillars policy in order to realize Indonesia as the world's maritime axis. These efforts must involve all relevant parties, both government agencies and non-government institutions as well as at the top and bottom levels in accordance with their authority.

a) Efforts to support strategy 1 are as follows:

Development of port facilities and infrastructure in the area around the Natuan Sea to support the Alutsista anchoring facility to support operations in the area; Optimizing the purchase and use of strategic national maritime and national defense industry products in the development of main, reserve and supporting component forces; and Revitalization of the national defense strategic industry by developing production cooperation programs or joint ventures for both domestic and foreign companies including the application of strict rules regarding the process of transfer of technology or Transfer of Technology (ToT).

b) Efforts to support strategy 2 are as follows:

Carry out state defense programs for civil society so that they can have a soul and fighting spirit based on Pancasila and the 1945 Constitution; Capacity building and modernization of fishing equipment and development of people's shipping in order to increase the maritime industry's capabilities to the community; and Providing knowledge about basic intelligence capabilities to coastal communities. This can be in the form of sufficient initial data collection so that any disturbing incidents at sea can be immediately reported to the state apparatus in the region.

c) Efforts to support strategy 3 are as follows:

Improving the sensing system in the Natuna region by prioritizing a modern sensing system that is integrated in Command, Control, Computer, Communication, Intelligence, Surveillance and Reconnaissance (C4ISR) in order to increase the ability of the striking force and create a high mobility force; Increased mastery of defense technology by Indonesian defense human resources in the context of dealing with various types of threats; and Carry out the process of acquiring and procuring goods and services for goods and equipment related to Management Information Systems (MIS) or Information Technology (IT), including tools such as satellites and drones.

d) Efforts to support strategy 4 are as follows:

The strength development process uses capability based planning, meaning that the defense development program is faced with the capability to be achieved which has been agreed upon at the MEF; Restructuring maritime defense forces through the A New Force Design and Structure or New Defense Posture program; and Early detection and analysis of developments in the strategic environment continuously and continuously in order to optimize budget constraints.

## VI. CONCLUSIONS

The program to increase the development of the National defense force to realize Indonesia as a world maritime axis can be implemented by increasing military capabilities, utilizing supporting components and maritime reserve components, utilizing other maritime-related components, accelerating economic growth to support the ideal TNI posture, and also vigilance against all forms of threats that arise from within and outside the country. Especially threats from abroad, Indonesia will always put forward the principle that Indonesia is a country that loves peace but loves independence more and always maintains a commitment to participate in efforts for world peace with a free foreign policy Active.

The development of Information Technology (IT) or Management Information Systems (MIS) that supports Command, Control, Computer, Communication, Intelligence, Surveillance and Reconnaissance (C4ISR)

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capabilities becomes a way in the context of the Maritime Domain Awareness strategy so that can facilitate the exchange of information and data traffic in terms of maritime area surveillance, so as to be able to support the program to accelerate the development of the world's maritime axis.

In order to overcome the limitations of the defense budget, it is necessary to increase the national defense strategic industry by increasing the production capacity and capabilities of human resources and companies in design technology to fulfill the strength of the main components. Then other industries follow the same pattern aimed at developing spare and supporting components, so that they are able to produce domestic defense equipment products which are the work of the nation's children that can make the Indonesian people proud.

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