



ANALYSIS OF SECURITY OF STRATEGIC NATIONAL VITAL OBJECTS IN THE ENERGY SECTOR FROM THE PERSPECTIVE OF MILITARY DEFENSE

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Abstract.

In the draft military defense, TNI is the element main in the system of national defense, supported by components spares and components supporters through prepared and developed mobilization since early for face threat military. Security national vital objects that are sector strategy energy is part of operation military besides war. In context, the needed military support for security from possibility exists potential disturbances and threats give impacts serious to the resilience of national energy. Moment this security national vital object energy strategic sector carried out internally, meanwhile, TNI only help through the signing of the memorandum of understanding cooperation. The research uses a survey approach with give questionnaires good formal or informal meetings with elements of the TNI and Polri in the regions, Managers national vital object sector energy, and government area to get certain data To use analysis as far as the paradigm in address essence threats that occur faced with urgency security national vital objects that are strategic need conducted from perspective defense military. Deep conclusion framework security national vital objects that are strategic, from perspective defense military no regardless from aspect geography and areas based energy resources, including security national vital objects that are strategic sector energy in the sea and border areas sea as well as those in interior and borderland areas. on the condition where spectrum threat still forms follow crime ordinary (criminal) handling fully is authority Police. If the threat is already characteristic asymmetric then the TNI can be used well in a manner conventional or non-conventional or occupy live or occupy in a manner not direct.

Keywords: National Vital Object, Energy Strategic Sector, Military Defense

I. Introduction.

As a sovereign nation, of course, Indonesia has vital interests, namely the maintenance of national security and national prosperity. This is contained in the fourth paragraph of the preamble to the 1945 Constitution, which ontologically implies that the function of the state is to protect the entire nation and all of Indonesia's homeland and promote the welfare and intelligence of the nation. Protection for all nations and all of

Indonesia's bloodshed means protection for all Indonesian citizens and territories and all the resources in them. Currently, the world is facing a wave of global megatrends, including global demographics, world urbanization, geoeconomic changes, especially in the Asian region, international trade integration, changes in international finance, rising middle-income class, increasing competition for natural

resources, and technological change. , climate change, and geopolitical change.

Related analysis with presented global megatrends Oxfam Great Britain is one of them will happen decline availability source power nature can implicate many kinds of including decline economy and welfare society. Conflict will happen well between or intra-state which leads to violence or war consequences inequality economy and access obtain source power natural (Guijt, 2020). Faced with development there is potency opportunity and at the same time increasing threat complex, so state presence for follow-up arrangement system national defense is increasingly required. According to (Steeves & Ouriques, 2016) realist paradigm suggests that competition between countries can generate namely: from the defense strategy of protective national source power energy, supplying and routing state energy, and access to and controlling source power .

According to (Cole, 2008) in security energy, there are three elements main namely: *energy availability*, *energy affordability*, and *military capability* to save a stock of the desired energy. Threats that arise from energy too are seen in a manner narrow nor wide as draft security alone. If seen from types The issue is threats security could be grouped broadly speaking into dimensions military, nonmilitary, and hybrid (combined between threat military and non-military). As for the security *referent object*, some are divided at the level of the state, non-state actors, and individuals (Hough, 2004). Based on data from the Ministry of Energy and Mineral Resources shows that 69.9 percent industry Indonesian oil and gas (oil and gas) is dominated by foreigners, with about 70 percent of their companies from America

such as Chevron, Conoco Philips, and Exxon Mobil. oil and gas company national only occupy a portion of 29.1 percent of the industry oil and gas (Iswandi & Dewata, 2020). this showing that Indonesia as if no own sovereignty in managing sources the energy.

In notes history, war because oil earth was once experienced by Indonesia in the battle of Tarakan between 1942-1944. Tarakan became “*Pearl Harbor*”, that door gate entry occupation Japan dominates the territory of the Indonesian archipelago which is event battle clan Western (Dutch-Australian-American) and Eastern (Japanese) colonialists in a battle for oil fields earth (Santoso, 2005). Conflict energy that Indonesia also faces occurs in the Ambalat Block. Right ownership Ambalat block (sea threshold) becomes _ an issue crucial after off Sipadan-Ligitan triggered conflict connection between Indonesia and Malaysia. Indonesia calls this area the Ambalat and Ambalat Timur Blocks, while Malaysia calls this area with the designation Block XYZ (Alexandra, 2005). this region is an area of operation nearby oil and gas with Sipadan-Ligitan , so the incident could be categorized as a threat sector security _ upstream oil and gas

The incident other happened in 2020 when one of the tank areas _ Saudi Aramco oil located in the Port of Ras Tanura in the Eastern Region of Saudi Arabia (the port oil largest in the world) was attacked by aircraft not manned. The Saudi defense ministry explained several drones that attacked the port area have demolished, the ballistics missile target Aramco facility in Dahrhan (Arbar, 2021). A review of data collected by *the National Memorial Institute for the Prevention of Terrorism*, or MIPT, shows that group terrorists do at least 330 attacks to facility oil and gas

around the world during the period 1990-2005 (Moran & Russell, 2009). The most incident occurred in eight countries: Iraq, Russia, Colombia, Ecuador, the Philippines, Turkey, Pakistan, and Algeria. As described destructive drone attacks in oil field facilities Khurais in Saudi Arabia in 2019 has been annoying half from capacity production of the country of 5.7 million BPD (*barrels per day*) from production reached 13.6 BPD. When the loss of supply from drone strikes do not could be closed, the impact could widespread in Asian markets, especially India, China, South Korea, and Japan as consumers of big oil from Saudi. Besides the aspect supply impact period short from attack the has resulted from spike increase price oil *brent* from 60.25 US\$/month to 68.64 US\$/month (Nugraha, 2019).

Look dynamics threat source security increasing oil and gas complex, required function from state institutions that have the capacity for keep and protect source national oil and gas in a manner comprehensive. Distractions and threats to source oil and gas national will influential to condition security national. Embodiment security national run in a manner integrated and directed through system defense and security people universe (Sishankamrata) with involve all component nations and exploit whole source power national, as stated in Article 30 paragraph 2 of the 1945 Constitution of the Republic of Indonesia. Functions of the TNI/ military needed for Duty security national vital object strategic sector especially oil and gas in protect activities and facilities upstream oil and gas which is valuable state assets strategic. In mandate Constitution Number 34 of 2004 concerning the TNI Article 7 Paragraph 2b number 5 and number 8, the task of the TNI / military besides securing national vital

object strategy is also trying empowerment of defense and strength areas supporters in a manner early corresponding with system defense universe.

The use of the TNI in MOOTW has the character of a main function and as a support. The terminology of term "use" is a term that is specifically used in the context of Military War Operations and Military Operations Other than War which is a process of utilizing the resources of the TNI, both human resources (HR) and the main weapons system tools. and its supporting facilities. The use of TNI forces in MOM and OMP focuses on efforts to handle both threats and disturbances to protect national interests and security. These two things are done by considering the strategic environmental conditions that encompass geopolitical and geoeconomic factors, this is considering Indonesia's strategic position and potential natural resources. As stated by (Nasution, 1963) that the issue of national security is not only a military issue, not only a political issue but a matter for all of us. Today, defense equals security. Every danger to security from within is always accompanied and piggybacked by dangers for defense from outside. Outward defense and internal security have now become one, with the notion of national security.

In securing strategic national vital objects in the energy sector, security is currently carried out by the energy sector national vital object managers and the National Police assist with security assistance, as stipulated in Presidential Decree No. 63 of 2004 concerning the Security of National Vital Objects. However, in practice in the field, the manager of national vital objects in the energy sector apart from the National Police also entered into a cooperation

agreement (MoU) with the TNI for security assistance. The TNI should not need to enter into a cooperation agreement because in the mandate of the law, the task is the main (main element) not supportive (supporting element), this becomes a gap in its application or implementation, the TNI's duties in MOOTW which are helpful include helping the task of regional government is to assist the National Police in carrying out security and public order duties and assisting the security of state guests.

In this regard, when faced with threats that are lurking now and in the future, it has developed greatly both in terms of the form of the threat, the motivation of actors (state and non-state), and technological developments used to threaten, requires the capability of the TNI to prevent it utilizing military operations or programmed non-military operations. In addition to meeting the needs of the community, energy, especially oil and gas, is the main logistics for meeting the main tools of the TNI's weapons system in the context of preparedness and operations. As the opinion (Domecq, 2016) in managing energy, it is necessary to understand the emergence of emerging risks including climate change, resource depletion, and considerations of supply security and other requirements that will assist in maintaining future capabilities, it also requires the effectiveness of military capabilities. For example upstream oil and gas activities need special attention because they carry a big risk associated with their products which are classified as flammable materials and the working areas of upstream oil and gas operations facilities are state assets.

Upstream oil and gas industry activities include onshore and offshore drilling activities. Offshore production

facilities and equipment are spread throughout Indonesia to national borders, such as the Anambas Islands, the Natuna Islands, the Makassar Strait, and the Arafura Sea. Security threats at local, national, or cross-border levels can result in delays in various core upstream oil and gas activities such as seismic surveys, drilling, and development of new sources and affect the transportation of products (Ditjen Migas Kemen ESDM, 2018). Therefore, the main focus of this research is the criteria for strategic national vital objects from the perspective of military defense and the task of securing strategic national vital objects carried out by the TNI because threats that occur against strategic national vital objects in the energy sector will disrupt national interests and will affect national defense.

II. Research Method

This research uses a survey by providing questionnaires both formally and informally meeting with elements of the TNI and Police in the regions, Managers of national vital objects in the energy sector, and local governments to obtain certain data to analyze the extent of the paradigm in responding to the nature of threats that occur in the face of the urgency of securing objects strategic national vital needs to be carried out from the perspective of military defense. Then explained descriptively by analyzing the data obtained. To gain and improve understanding a literature study was carried out, namely by gathering information from several works of literature, regulations, yearbooks, and other written sources both printed and electronic.

Data analysis in this study is used to answer the focus of existing problems, and

quantitatively determined the scale score index as follows:

SKALA PENDAPAT	SS (Sangat Setuju)	S (Setuju)	N (Netral)	TS (Tidak Setuju)	STS (Sangat Tidak Setuju)
INDEKS SKOR SKALA	5	4	3	2	1

Furthermore, the scale score is calculated from the multiplication of the number of respondents (N) with the scale score index. The maximum score is the multiplication of the total number of respondents with the maximum score index (5), while the minimum score is the multiplication of the total number of respondents with the minimum score index (1). The ideal score percentage is the sum of the scale scores divided by the maximum scale score. To find the percentage based on what Champion conveyed (1985:302), namely:

$$P = \frac{\text{Jumlah Skor Jawaban Hasil Penelitian}}{\text{Jumlah Skor Jawaban Ideal}} \times 100 \%$$

The total percentage of respondents' responses was then interpreted and assessed. The description of the research results in this study is then interpreted based on the opinion of Arikunto (1998: 244) as in the following table:

PROSENTASE	KRITERIA PENILAIAN
76% - 100%	Baik
56% - 75%	Cukup baik / Sedang
40% - 55%	Kurang baik
< 40%	Tidak baik

III. THEORY BASE.

Defense Science is a science that studies how to manage resources and national strength in times of peace, war, and after the war. The goal is to be able to face threats from outside and within the country, whether in the form of military or non-military threats, to territorial integrity, state sovereignty, and the safety of all Indonesian citizens (Supriyatno, 2014). In addition, defense science does not only discuss the science and art of war, but also discusses various matters relating to national resources during peacetime, early preparation of human resources (including the main components and supporting components), and the safety of the entire Indonesian nation. to realize national security.

Military defense is the defense that relies on the TNI as the main component of national defense, which is supported by reserve components and supporting components through mobilization that is prepared and developed early on to deal with military threats. In military defense, the TNI as the main layer carries out the task of military operations to deal with aggression. Military defense to carry out military operations other than war is carried out in two forms of activity, as a direction for the TNI to carry out combat and non-combat operations, as assistance is carried out to assist

government agencies. One of the combat characteristics is securing vital national strategic objects (Ministry of Defense of the Republic of Indonesia, 2015).

- a. Research results
 - 1) Criteria for strategic national vital objects from a military defense perspective.

IV. Results and Discussion.

Table 4.1 Criteria for Strategic National Vital Objects in the Energy Sector

No	Research Object _ question items)	Frequency Alternative Answer												%
		SS		S		R		TS		STS		Total		
		Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	
1	natural resource s manage d and owned role urgent in push develop ment national as well as could influenc e econom y, politics and governm ent as well as security national get said as national vital object strategic	259	1295	373	1492	60	180	8	16	0	0	700	2983	17,1

2	To make it happen system defense, Indonesia needed capable military – protect interest national that is national vital object sector energy	240	1200	366	1464	63	189	33	66	6	6	700	2925	16,4
3	National vital object strategic sector energy located in urban areas	78	390	405	1620	108	324	103	206	6	6	700	2546	14,6
4	National vital object strategic sector energy located on the border of the country	87	453	332	1328	78	234	148	296	29	29	700	2322	13,3
5	National vital object strategic sector	127	635	301	1204	137	411	121	242	14	14	700	2506	14,3

	energy located in the marine area of the EEZ													
6	National vital object strategic sector energy vulnerab le to threat military as bombing , sabotage and terroris m	96	480	24 4	976	61	183	19 8	396	10 1	101	70 0	213 6	12 ,2
7	National vital object strategic sector energy vulnerab le to non-military threats as attack cyber disaster nature, investm ent and politics	51	255	21 4	856	94	282	29 6	592	78	78	70 0	206 3	12
		43 9	219 5	14 96	598 4	47 8	143 4	86 6	173 2	22 8	228	35 00	174 81	10 0

Amount respondents : 700 total score answer max . per item : $700 \times 5 \times 7 = 24500$
Average response respondents : $17481 : 24500 = 0.7153$

Source: Processed by Researchers, 2022

Based on table 4.1 above, it is obtained that the average value of respondents' responses to indicators of strategic national vital object criteria in the perspective of military defense is 0.7135 (71.35%). If this value is consulted on the criticism table, it is at a fairly good or moderate interval. This means that respondents quite understand what is meant by strategic national vital objects, namely natural and artificial resources which have an important role in driving national development and can influence the national economic system, political system, and government as well as national security. What is sufficiently understood by respondents is that areas/areas both on the border and in the sea

area, or places that have business installations that are included in the category of strategic national vital objects are quite vulnerable to military threats such as bombings, sabotage, and terrorist attacks both from foreign parties and from within the country, so that the role of the military is needed to protect national interests from any threats, one of Indonesia's national interests is the functioning of vital national objects which are strategic sources of foreign exchange.

- 2) The task of securing strategic national vital objects in the energy sector is carried out by the TNI.

Table 4.2 Tasks for securing national vital objects in the Energy Sector Strategic

No	Researched Object _ question items)	Frequency Alternative Answer												%
		SS		S		R		TS		STS		Total		
		Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	Tot al	Sco re	
1	TNI and Police could operate Duty the main thing is in a manner adequate in protect national vital object strategic	118	590	214	856	81	243	73	146	10	10	700	1845	18

	sector energy													
2	The use of the TNI in security national vital object sector energy addressed in framework protect from effort bombing , sabotag e and terrorism in a manner proporti onal	18 8	940	35 8	143 2	88	264	44	88	22	22	70 0	274 6	26 ,4
3	In security national vital object strategic sector energy , ability TNI is a must owned is ability intelligence , anti-	18 3	915	44 0	176 0	49	147	20	40	8	8	70 0	287 0	27 ,6

	piracy and anti-bombing													
4	In framework prevent threat bombing, sabotage and terrorism, must develop technology system warning (early warning system)	214	1070	430	1720	44	132	4	8	0	0	700	2930	28
		703	3515	1422	5768	262	786	141	282	40	40	2800	10391	100
Amount respondents : 700 total score answer max . per item : $700 \times 5 \times 4 = 14000$														
Average response respondents : $10391 : 14000 = 0.7422$														

Source: Processed by Researchers, 2022

Based on the table, the average value of respondents' responses to indicators of how the task of securing national vital objects that are strategic is carried out by the TNI is 0.7422 (74.22%). If this value is consulted on the criticism table, it is at a fairly good or moderate interval. This means that respondents gave a fairly good assessment of the TNI and Polri in their main task of protecting the whole nation, one of which is securing strategic national vital objects. Furthermore, the current use of TNI forces in securing national vital objects which are

strategic. According to the assessment of respondents, it is still needed, as an effort to safeguard and protect national vital objects from bombing, sabotage, and terrorism. The task must be carried out proportionally and by the applicable laws and regulations. Likewise the respondents' assessment of TNI capabilities such as anti-piracy and bombing and the role of intelligence needs to be increased, one of which agrees with the development of early warning system technology

3) The concept of implementing security for national vital objects that are strategic in the energy sector.

Table 4.3 the concept of safeguarding strategic national vital objects in the energy sector by the TNI

No	Researched Object – question items)	Frequency Alternative Answer												%
		SS		S		R		TS		STS		Total		
		Total	Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	Score	
1	Security national vital object strategic sector energy need to be rearranged where to be realm police and which one to be military realm	172	860	359	1436	119	357	40	80	10	10	700	2743	21
2	TNI implements security national vital object sector existing	107	535	347	1388	136	408	94	188	16	16	700	2535	20

	energy _ at the border land													
3	TNI implem ents security national vital object sector energy in urban areas _	59	259	30 1	120 4	17 3	519	15 6	312	11	11	70 0	234 1	18
4	TNI implem ents security national vital object sector energy in the loose region beach / border sea	74	370	37 6	150 4	18 1	543	55	110	14	14	70 0	254 1	20
5	Budget for security national vital object strategi c sector energy from the state budget	17 2	860	30 2	120 8	13 6	408	82	164	8	8	70 0	264 8	21

		54	292	16	674	74	223	47	854	59	59	35	128	10
		8	0	85	0	5	5	2				00	08	0
Amount respondents : 700 total score answer max . per item : 700x5x5 = 17500														
Average response respondents : 12808: 17500 = 0.7318														

Source: Processed by Researchers, 2022

Based on the table, it is obtained that the average value of respondents' responses to indicators of how the concept of implementing strategic national vital object security is 0.7318 (73.18%). If this value is consulted on the criticism table, it is at a fairly good or moderate interval. This means that the concept of implementing the security of national vital objects that are strategic is currently being carried out both in terms of juridical and operational aspects in the field, the public's assessment needs to be re-arranged which is the domain of the TNI and which are the domain of the Police. Support for the TNI to carry out security duties on strategic national vital objects located in the sea, border areas, and in urban areas is quite good

b. Discussion.

1)Criteria for strategic national vital objects in the energy sector from a military defense perspective

Indonesia's geographical position has strategic value in the presence of natural resources, one of which is energy sources. According to (Amin, 2019) energy is very important for the civilization and prosperity of the nation. Its production, distribution, and utilization greatly affect the economic structure and relations between countries. Therefore energy has a strategic value for a country.

Oil and gas are energy sources that often become a global issue, as stated by the United Nations Economic Commission for Europe (UNECE), various factors have

raised concerns about energy availability and energy supply security, including economic growth, increasing dependence on external energy supplies, Middle East political tensions, sabotage and terrorist attacks, tough negotiations on oil revenue-sharing arrangements between the government and the private sector in several oil-producing countries, and conflicts in several crude oil and natural gas producing areas.

The risks to global energy security stem from a complex diversity of political, social, economic, financial, legal, geographical, and technical factors, ethnic conflicts, and increasing international tensions, including international terrorism as an important factor that threatens global energy security (UNECE, 2007).

According to Law number: 22 of 2001 concerning oil and natural gas, it is explained that oil and natural gas are strategic natural resources controlled by the state and are vital commodities. The same assertion is contained in Law number: 26 of 2007 concerning Spatial Planning, which states that strategic areas from the point of view of the utilization of natural resources and high technology include, among other things, oil and gas mining, including offshore oil and gas mining. Realization of management of natural and artificial resources that have strategic value, both on land, sea, and aerospace under the principles of sustainability, diversity, and environmental productivity to support defense logistics.

In the Decree of the Minister of EDSM number: 159.K/90/MEM/2020 concerning national vital objects in the field of energy and mineral resources, it has a strategic role in ensuring the supply of national oil and gas, both in the form of fuel oil and gas and processed oil and natural gas. Likewise, the impact of the threat that occurred resulted in a disaster for humanity and development, chaos in transportation and communication nationally and resulted in disruption of the administration of the country.

Mastery of geography as a whole following its nature, form, and dynamics will guarantee complete sovereignty. In other words, in realizing national defense, it must be based on an understanding of the reality of geographical conditions, so that the defense capability in dealing with threats gains a strong foothold. Juridically, Article 3 Paragraph (2) of Law Number 3 of 2002 stipulates that national defense is prepared by taking into account the geographical conditions of Indonesia as an archipelagic country. Land areas bordering other countries have strategic value in supporting the success of national development so a strong national defense is needed by building and developing all aspects of local

community life. The handling of land borders from a security aspect is carried out by the TNI because it involves state sovereignty and the territorial integrity of the Unitary State of the Republic of Indonesia.

The shape of Indonesia's sea area consists of islands, protruding areas that lead to neighboring areas such as in the seas around Natuna, in the areas of Aceh, Papua, northern East Kalimantan, Sangir Talaud, and so on, from a geostrategic point of view Indonesia is relatively quite vulnerable to threats. . Indonesia's sea lanes have 4 (four) straits (SLOC) sea lanes of communication that function as a link or approach road by sea because they involve the survival of various countries. With the existence of the SLOC, Indonesian seas become strategic. The results of the release from (ICC International Maritime Bureau, 2021) security in the Malacca Straits in 2021 show a decline, but in Indonesian waters in general there were 23 incidents of piracy and armed robbery in 2020, so the threat of piracy and armed robbery is still a real threat and needs to get attention, as stated in table 4.

Table 4. Piracy and Armed Robbery Data
(January – September , 2017 – 2021)

Locations	2017	2018	2019	2020	2021
Indonesia	20	21	29	20	6
Malacca Straits	3	1	0	3	1
Malaysia	6	9	10	4	1
Philippines	17	6	4	8	9

Singapore Straits	1	3	1	1 5	2 0
Thailand				1	

Source: *International Maritime Bureau*,2021

Conflicts over the territory of the state's sovereignty with neighboring countries can arise at any time, for example, the issue of territorial claims over the Ambalat Block and land borders in East Kalimantan and West Kalimantan have problems with Malaysia, issues of maritime territorial boundaries with Singapore, the territory of the Republic of Palau in the east of the North Maluku Sea related to the determination of Indonesia's EEZ, as well as the issue of the Timor gap with Timor Leste and Australia is a potential border conflict which is indicated to be related to the existence of strategic national vital objects in energy and economic interests.

Similar to what was stated by the respondents, the opinion is that oil and gas resource areas located on the border or in the sea area are vital national objects that are strategic, prone to military threats such as bombings, sabotage, and terrorist attacks both from foreign parties and from within. country, so a military role is needed to protect the area.

- 2) The task of the TNI is in securing national vital strategic objects in the energy sector

In the concept of military defense, the TNI is the main element in the national defense system, which is supported by reserve components and supporting components through mobilization which are prepared and developed early on to deal with military threats. Securing strategic national vital objects in the energy sector is part of military operations other than war, as mandated by TNI Law Number 34 of 2004 article 7. In the context of safeguarding strategic national vital objects in the energy sector, the focus on safeguarding includes areas and assets of upstream oil and gas and geothermal, oil refineries, fuel terminals to refueling stations which are used to distribute national fuel oil needs. In particular, assets in the upstream sector and oil refineries need TNI support to protect against possible disturbances and threats that have the potential to have a serious impact on national energy security.

According to (Moran & Russell, 2009), America in securing its vital interests in the energy sector (oil and gas) in the Persian Gulf, issues policies by protecting assets and infrastructure, or physical protection of refineries, oil pipelines, loading facilities, and offshore fields. and sea lines of communication, regime protection, government military support facilitating America's oil exports, reserves for foreign

markets, and guarantees of military access or mobility, intended to ensure uninterrupted access to oil-producing areas. Likewise, China sent 700 troops as UN peacekeepers to South Sudan to help guard China's state oil fields and protect Chinese workers and installations (Bariyo, 2014).

Currently, the security of strategic national vital objects in the energy sector is carried out internally, while the TNI's task is only to assist through the signing of a memorandum of understanding on cooperation since 2013. Security cooperation is carried out through a territorial development approach, namely community empowerment in remote and poor areas. This cooperation also includes training and utilization of the parties' facilities for the benefit of the state (PT.Pertamina, 2015). The security of strategic national vital objects in the energy sector is not only carried out with territorial development because the threats faced have complex dimensions which have implications for national defense.

In line with the opinion of respondents that the current use of TNI forces in securing strategic national vital objects is still needed, as an effort to protect and protect national vital objects from bombing, sabotage, and terrorism. The task must be carried out proportionally and following the applicable laws and regulations. TNI capabilities such as anti-piracy and bombing as well as the role of intelligence need to be increased, one of which is agreeing with the development of early warning system technology

According to (Dupuy et al., 2021) on energy security in the era of hybrid warfare, proper interoperability is needed to detect, prevent, and recover from hybrid attacks that have the potential to destroy energy

infrastructure. Hard power is needed to keep energy flows safe and support the security of infrastructure and shipping lanes. The role of the TNI (Navy) in securing national vital objects that are strategic in the energy sector is not just securing the SLOC line but also includes securing energy sources, especially oil fields from various threats.

Most of Indonesia's oil fields are offshore or on sea borders with other countries. This means that security in the area can only be carried out by the Navy. For example, safeguarding the oil and gas working areas around the Natuna Block and the Masela Block is the domain of the Navy. Offshore operating activities need to be guarded because security disturbances such as theft of operating equipment and violations of fishing limits by foreign and traditional fishermen can hinder operations (Sunaryadi, 2015). Security cooperation through training, supervision assistance, intelligence cooperation, and the use of effective military means to ensure physical security (Cornell, 2009).

Quoting expert opinion (Kirbiantoro & Rudyanto, 2010) that, currently oil and other metal mining are the target of foreign control, as well as Indonesia's natural resources are the target of big countries, therefore the concentration of Indonesian defense should be diverted to regional areas based on resources. According to (Bakrie, 2007) various claims over several strategic maritime areas in the South China Sea are the main cause of disputes between countries, especially Malaysia, Vietnam, China, and the Philippines. This fact shows the magnitude of the economic benefits involved in it, not to mention the wealth of natural resources it contains. Based on this view, several countries use the issue of state

sovereignty to claim the territory through a militaristic approach. The task of the TNI in securing national vital strategic objects in the energy sector in military defense is dependent on the escalation of threats and threatened areas. In conditions where the threat spectrum is still in the form of ordinary crimes (criminals), handling is entirely the authority of the National Police. If the threat is already asymmetric, the TNI can be used either conventionally or unconventionally or occupy it directly or indirectly.

From this discussion and review, the strategy for securing strategic national vital objects in the energy sector can involve TNI capabilities by looking at the geographical aspect as well as looking at resource-based areas, including securing national vital objects that are strategic in the energy sector in the sea area and sea borders as well as those in inland areas and land borders. The alternative strategy will be in line with the policies that have been prepared previously, as in Government Regulation number 68 of 2014 concerning the management of the national defense area, it is stated that strategic national vital objects are part of the defense area. Utilization of the area around strategic national vital objects must support and maintain the functions of strategic national vital objects. Likewise, the Minister of Defense Regulation number 4 of 2011 regarding the empowerment of defense areas, in the management and exploitation of natural resources aims to increase the development and growth of the national economy to support the welfare of the Indonesian people and build defense logistics support.

V. Conclusion.

- a. Energy, in this case, oil and gas and other mining goods as strategic natural resources contained in the earth, is a vital commodity, so the government places energy as a strategic national vital object. The concept developed in securing national vital objects that are strategic in the energy sector from a military defense perspective refers to the government's policy in developing a defense system because strategic national vital objects are part of the defense area. Utilization of the area around strategic national vital objects must support and maintain the functions of strategic national vital objects. Furthermore, the management and exploitation of natural resources aim to increase national economic development and growth to support the welfare of the Indonesian people and build defense logistics support..
- b. The use of TNI forces as a means of national defense in securing national vital objects that are strategic in the energy sector is always within the framework of the state political system for the national interest. The concept developed in the context of safeguarding national vital objects that are strategic, looking at the geographical aspect also looks at areas based on energy resources, including securing national vital objects that are strategic, the energy sector located in sea areas and sea borders and those located in interior areas and land borders. In conditions where the threat spectrum is still in the form of ordinary crimes (criminals), handling is entirely the authority of the National Police. If the threat is already asymmetric, the TNI can be used either conventionally or

unconventionally or occupy it directly or indirectly.

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