



STRATEGI PEMERINTAH DALAM PEMENUHAN KEBUTUHAN ALAT UTAMA SISTEM SENJATA TENTARA NASIONAL INDONESIA (ALUTSISTA) DI ERA REVOLUSI INDUSTRI 4.0

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Abstrak

This study argues that the condition of Indonesia's defense equipment in the Industrial Revolution 4.0 era needs to be realized. Therefore, the Government must implement a strategy to fulfill defense equipment that is in accordance with developments in the environmental strategy in the era of the industrial revolution 4.0. This research was conducted using a qualitative method with a literature approach that focused on strategy theory, the concept of defense equipment and the concept of the industrial revolution 4.0. This research found the results that: the condition of Indonesia's defense equipment needs renewal and new procurement. The strategy carried out by the Government places more emphasis on the independence of defense equipment in the country. However, the fulfillment of defense equipment independently still encounters several difficulties, such as budgetary weaknesses, human resource weaknesses and infrastructure. So it can be concluded that in an effort to meet the defense system, which is currently not optimal, the Government has begun to manage the strategy of self-sufficiency in the production of defense equipment by utilizing state-owned enterprises, so that the Indonesian state does not depend on defense equipment from other countries.

Kata Kunci: Strategy, Fulfillment, Defense Equipment, Eevolution, Industry.

INTRODUCTION

The era of the Industrial Revolution 4.0 has significantly changed the paradigm of war. Armed conflicts are increasingly complex with the use of high

technology such as drones, robotics, artificial intelligence and autonomous weapon systems.

However, Indonesia is still heavily dependent on imports to fulfil the

needs of the Indonesian National Armed Forces (TNI). This dependence causes challenges in terms of security of supply, technology transfer, and the development of a domestic defence industry. In the era of the Industrial Revolution 4.0, countries with technological advantages and advanced defence industries can take advantage of this situation for their own political or economic interests.

For example, the World Bank and SIPRI Report noted that the value of Indonesia's arms imports rose 24.42% in 2020 on a year-on-year (yoy) basis. The value is US\$ 270 million or around Rp 3.9 trillion (exchange rate US\$ 1 = Rp 14,468). In the last five years, the trend in the value of Indonesian weapons imports tends to fluctuate. In 2016 the value reached US\$ 377 million or around Rp 5.45 trillion. Then the value rose dramatically in 2017 to US\$ 1,171 million or around Rp 16.94 trillion. This value is the highest during the last five years. In 2018 the import value of Indonesian weapons plunged to US\$ 329 million or around Rp 4.75 trillion. Then in 2019 it reached the lowest import value of US\$ 217 million or around IDR 3.13 trillion. (Annur, 2021)

Of course, seeing the data above, it is a concern about how the development of Indonesia's weapons and defence industry will be in the future. The government must take alternative steps to fulfil the TNI's defence equipment without having to continue to increase the number of imported weapons. One of the steps that can be taken is with a strategy to create domestic defence equipment independence.

This is in line with the explanation of the Minister of Industry Agus Gumiwang Kartasasmita, who said that the Ministry of Industry seeks to make Indonesia independent in the production of the main weaponry system (alutsista). This needs to be supported by

spurring the ability of industries in the country to utilise high technology while optimising the use of local raw materials (Ministry of Industry, 2021).

In addition, the Executive Director of the Indonesian Public Institute (IPI), Karyono Wibowo, also explained that State-Owned Enterprises (SOEs) in charge of the industry of making the Main Equipment of the Indonesian National Army Weapon System (Alutsista) are urged not to import weapons. This is to reduce Indonesia's dependence on weapons exporting countries. Furthermore, Karyono said, the budget and supervisory functions of SOEs that produce weapons must be increased. If these SOEs can work optimally, it will reduce dependence on imports and especially save the budget (Mahendra, 2023).

Based on the description above, it is interesting to examine how the government's strategy in fulfilling the needs of defense equipment independently, therefore the researcher decided to take the research title "Government Strategy in Meeting the Needs of the Indonesian National Army's Main Weapon System (Alutsista) in the Era of the Industrial Revolution 4.0".

The formulation of the problem in this study is how the current condition of Indonesia's defence equipment, and how the Indonesian government's strategy in meeting the needs of the defence equipment. While the purpose of this study is to find out what the current condition of Indonesia's defence equipment is, and to find out what strategies are used by the Indonesian Government to meet these needs. To answer the formulation of the problem, researchers use theories and concepts related to the theory of strategy, defence equipment and the industrial revolution 4.0.

Strategy comes from the Greek "strategos" which in a narrow sense is

understood as the art of skill of generals in the context of organising their troops in war. According to Liddell Hart, strategy is the art of distributing and applying military power (means) to achieve goals (ends) using policies or ways that can be pursued (ways) (Sipahutar, 2022). So it is concluded that strategy is the art and science of being able to achieve goals (ends) by formulating policies (ways) through existing facilities and infrastructure (means).

Furthermore, regarding the concept of defence equipment, researchers will quote the definition, function and purpose of defence equipment based on the Minister of Defence Regulation. Based on the Regulation of the Minister of Defence of the Republic of Indonesia number 17 of 2014 concerning the Implementation of Procurement of Major Weapon System Equipment within the Ministry of Defence and the Indonesian National Army. Alutsista can be explained as the main equipment and its supporters which constitute a weapon system that has the ability to carry out the main tasks of the TNI. Procurement of TNI's defence equipment is an activity to obtain TNI's defence equipment, the stages of which are preceded by the planning of needs until the receipt of TNI's defence equipment that functions in accordance with its designation.

Next, the concept of the fourth industrial revolution builds on the third industrial revolution, also known as the digital revolution, which was characterised by the proliferation of computers and automation of record-keeping in all fields. Automation in all fields and connectivity are the obvious signs of the fourth Industrial revolution. One of the unique and special signs of the fourth industrial revolution is the application of artificial intelligence (AI). The 4th industrial revolution perfected the 3rd revolution with the occurrence of

various automation of records in all fields (Tjandrawinata, 2016).

In line with that, according to Savitri, the industrial revolution 4.0 is the fourth industrial era since the first industrial revolution in the 18th century. The era of the industrial revolution 4.0 is characterised by a combination of technologies that blur the boundaries between the physical, digital and biological fields, or collectively referred to as cyber-physical systems (CPS) (Savitri, 2019).

So based on the description above, it can be concluded that the Industrial Revolution 4.0 is a fundamental change that occurs in the world of industry and production as a result of the use of digital technology and increasingly strong connectivity. It is an advanced stage of the previous industrial revolution, which includes the use of steam power in the Industrial Revolution 1.0, mass production in the Industrial Revolution 2.0, and the use of computers and automation in the Industrial Revolution 3.0. The Industrial Revolution 4.0 is characterised by the adoption of advanced technologies such as artificial intelligence (AI).

RESEARCH METHODS

In writing this scientific paper, the author uses a qualitative research method with a literature review approach. According to Creswell (2016), literature review is a research approach based on non-numerical data in the form of text and images, where the material is filtered to provide an interpretation of the literature review. The research was conducted using literature sources such as journals, books, articles, research reports and scientific articles that contain valid and authoritative sources.

RESULTS AND DISCUSSION

The condition of Indonesia's defence equipment in the era of the Industrial Revolution 4.0

Secretary General of the Ministry of Defence (Kemhan), Air Marshal Donny Ermawan Taufanto stated that the condition of Indonesia's defence equipment is very concerning. Both those owned by the Army (AD), Air Force (AU), and Navy (AL). Many of Indonesia's defence equipment are old and have passed their effective operational period. Some warplanes, warships and other weapons systems date back to the 1960s and 1980s. This advanced age results in a significant decline in performance and reliability (Kumparan, 2022).

Furthermore, the Governor of the National Defence Institute (Lemhanas), Andi Widjajanto, explained that in the Military Balance 2022 report published by the International Institute for Strategic Studies, it was stated that only around 40 per cent of Indonesia's defence equipment was ready for combat. The Ministry of Defence itself targets this figure to be in an optimal condition of 100 per cent, with a realistic target of 70 per cent (VOA, 2022).

On the other hand, Lab 45 Security Analyst Febry Triantomo explained that the Indonesian Government is considered not to have developed military weapons or the main weapon system (alutsista) which leads to joint operations across TNI dimensions. In fact, the aspect of integration or joint operations across TNI dimensions is the government's wish. Based on data compiled by Lab 45, Febry said, currently the number of Indonesian troop landing warships or tanks operated reaches 10 per cent of ships worldwide. In addition, Indonesia also deploys 4 per cent of surface warships worldwide. Based on data compiled by Lab 45, of the 11 categories of defence equipment, the government tends to emphasise the development of two types of defence equipment, namely sea combat capability, which is manifested through the addition of a surface war fleet, and a missile system (CNN, 2021).

In fulfilling this defence equipment, the Indonesian government still imports from several countries. This is done because the domestic industry is still unable to fulfil these needs. In 2021 itself, the Ministry of Defence details the output requirements that will be achieved by the Ministry of Defence in Fiscal Year 2021, including:

1. Support for the procurement of Alutsista (Alat Utama Sistem Persenjataan) amounting to IDR 9,305.1 billion (IDR 9.31 trillion).
2. Modernisation and harwat (maintenance and care) of Alutsista as follows:
 - TNI AD amounting to Rp 2.65 trillion for the procurement of materials and strategic Alutsista, and for the maintenance of Arhanud Alutsista, aircraft overhauls and transport helis amounting to Rp 1.24 trillion, a total of Rp 3.89 trillion.
 - The Indonesian Navy (TNI AL) amounting to Rp 3.75 trillion, including the procurement of fast patrol boats, and the upgrade of naval aircraft, as well as Rp 4.28 trillion for the maintenance and care of Alutsista and supporting components of Alutsista, a total of Rp 8.03 trillion.
 - The Air Force amounting to Rp 1.19 trillion, including the procurement of Air Attack Deterrent (PSU) and supporting materials, as well as maintenance and maintenance of combat aircraft amounting to Rp 7 trillion, a total of Rp 8.19 trillion.

Currently, the domestic industry cannot fulfil these needs. Therefore, the need must be met through imports. Citing data from the Central Statistics Agency, imports of tanks and other combat vehicles and spare parts (HS 87100000) during January-May 2020 were US\$ 220.14 million. It jumped 48.54% compared to the same period the previous year. Then, Indonesia also imported artillery weapons (HS 93011000) from other countries. In January-May 2020, the value was US\$ 1.05 million. There were also imports of other military weapons other than revolvers and pistols (HS 93019000) with a value of US\$ 65.35 million. It skyrocketed 630.17% compared to January-May 2019 (Setiaji, 2020).

So based on the results of the research above, it is known that currently, Indonesia's defence equipment is still not 100% ready to be used to face attacks or war conditions. Moreover, many defence equipment that are more than 25 years old require maintenance and rejuvenation so that they can be used optimally again. In terms of procurement, in order to meet the needs of the TNI, the domestic weapons and defence equipment industry is still unable to meet all existing defence equipment needs. So that the strategy of importing defence equipment is still widely carried out by the Government. It should be noted that the dependence on imported defence equipment will make the country vulnerable to changes in foreign policy and termination of supply by supplier countries. In addition, the high cost of imports is also an obstacle in improving defence equipment capabilities.

Strategy for Fulfilment of Defence Equipment by the Indonesian Government in the era of Industrial Revolution 4.0

For now, the fulfilment of TNI defence equipment is carried out in two

ways. In fulfilling the TNI's defence equipment, it is carried out in two ways, namely by procuring from abroad for defence equipment that cannot be built in the country, and secondly through domestic procurement of national strategic Defence Industry products. In the process of fulfilling the defence equipment, it has not been able to be implemented properly because in the implementation process there are still several problems, including policy issues, budget problems, problems with the quality of human resources who take care of the procurement process and the weak ability of the national strategic industry in building and fulfilling the needs of TNI defence equipment (Lemhannas, 2023).

On the other hand, according to the Regulation of the Minister of Defence of the Republic of Indonesia Number 17 of 2014 Article 5 concerning the Implementation of Procurement of Major Weapon System Equipment within the Ministry of Defence and the Indonesian National Army. It is explained that the procurement of TNI defence equipment must use domestic production. In the event that the TNI Alutsista as referred to in paragraph (1) cannot be fulfilled by the Domestic Defence Industry, procurement of foreign products can be carried out through a direct process between governments or to manufacturers.

Furthermore, in order to meet the needs of defence equipment, the Government, in this case President Jokowi Widodo, prohibits the Ministry of Defence (Kemenhan) and the National Police from importing weapons. Jokowi asserted that the domestic industry can already produce weapons. He only allows the import of weapons with high technology, such as fighter aircraft. Jokowi also highlighted the import of food for soldiers. He will check information about the TNI always

working with one party to procure soldiers' food (CNN, 2023).

Jokowi said, "Soldiers' food, I got a story, whispered by General Luhut Binsar Pandjaitan, 'Mr President, since I was a soldier until I retired and am now a minister, how come the goods provider is still the same? The more suppliers there are, the better because the price will be competitive. I'll check if it's true" (CNN, 2023).

However, in an effort to be independent in the procurement of defence equipment, there are still several obstacles faced by the Government. Based on the results of previous research, it is known that there are limitations or shortcomings possessed by the Indonesian defence industry to reach the quality of international Alutsista due to technological developments that are still running until now. Indonesia's well-known defence industries that produce domestic Alutsista include PT Dirgantara Indonesia (Aircraft Industry), PT Pindad (Weapons Industry), PT PAL (Ship Industry), PT LEN (Electronics Industry for Defence), and so on. Therefore, domestic production and defence cooperation for the procurement of Alutsista must go hand in hand to achieve the same goal of improving a stronger Indonesian defence system (Andalus, 2022).

Based on the results of the research above, it can be concluded that currently the Government has a strategy for fulfilling defense equipment by maximizing domestic resources, with a policy of prohibiting imports of defense equipment that can already be made by the domestic defense industry. However, there are still several obstacles such as budget constraints, resources and the readiness of facilities and infrastructure for making this defence equipment.

Based on strategy theory, it is known that the ultimate goal or ends of fulfilling this defence equipment is the

independence of defence equipment procurement. Where Indonesia is able to meet its defence equipment needs through the domestic defence industry, without any imports. As for (means) by using qualified supporting facilities and infrastructure, and (ways) by making policies and improving the facilities and infrastructure of the domestic defence industry.

This needs to be done because if we are too dependent on foreign defence equipment imports, then the movement of Indonesian defence equipment will be easily known by other countries. In addition, other countries will easily regulate the movement of Indonesian defence equipment with their foreign import policies, which causes Indonesia's defence forces to be threatened.

CONCLUSIONS

Based on the results and discussion above, it can be concluded that some of Indonesia's defence equipment is already in poor condition, where some of the defence equipment was produced 25 years ago, so it needs to be rejuvenated and upgraded to newer defence equipment. Indonesia's defence equipment procurement strategy in the era of the industrial revolution 4.0 is focused on the procurement of domestic defence equipment produced by state-owned enterprises. To fulfil this, the Government has made a policy that prohibits the TNI and Polri from importing weapons and equipment that can be fulfilled by the domestic defence industry. However, in its fulfilment there are still several obstacles that hinder it, ranging from limited budgets, insufficient resources and insufficient facilities and infrastructure. Seeing this, the researcher suggests that the Government can prepare adequate facilities and infrastructure for the domestic defence industry to be able to produce the necessary defence equipment. In addition, in terms of

budget, the Government also needs to increase the existing defence budget, so that all of the country's defence equipment needs can be met.

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