www.bircu-journal.com/index.php/birci
Budapest International Research and Critics Institute-Journal (BIRCI-Journal)
Humanities and Social Sciences
ISSN 2615-3076 Online)
ISSN 2615-1715 (Print)
Budapest Institute

Civil and Military Integration in the Indonesian Defense Industry

Cecep Sukrisna[1], Mitro Prihantoro[2]
[1,2]*Universitas Pertahanan Indonesia*
cokrisna@gmail.com, mitrop91@gmail.com

Abstract

A country with an established defense industry is considered to have a strategic advantage in the global or world order. The defense industry in Indonesia has a long history and has always been eager to empower and improve the national defense industry. At the same time, the defense industry has to face very tough rivals facing global competition that is not easy. With a qualitative approach, it is necessary to tactical and operational efforts of civilian-military integration following the development of a dynamic global military situation.

Keywords
integration; civil-military; defense industry

I. Introduction

The hegemony of significant countries in the global arms market, competing hard as if justifying all means to beat each other's competitors. One form with the CAATSA Act (Countering America's adversaries through sanctions act)by America that makes it difficult for consumer countries. In history, Indonesia has been subject to embargoes that make Indonesia lack spare parts, so it must cannibalize its fleet—departing from that experience that raises awareness of the importance of the self-defense industry in supporting domestic weapons needs. Since the colonial era, Indonesia's defense industry (Indhan) has existed, starting from a weapons factory called Contructie Winkel (CW) in Surabaya. Today many indhan in Indonesia can produce weapons and other equipment supplying weapons and military equipment. Indian's existence is inseparable from integrating civilian and military roles in building an independent defense industry.

The model of civilian-military integration (civil-military integration) is expanding more widely as the dynamic global military situation develops. Many countries use military-civilian integration (ISM) in the industry due to increased pressure on the defense economy, national financial deficits, lack of independence of domestic sub-contractors, inefficient production costs, declining market share, and lack of product alternatives. In this regard, the ISM is assumed to be able to empower the country's economy and defense simultaneously, as is the case with the defense industry in countries such as the United States (US), Russia, China, The United Kingdom, and Japan that have participated in the ISM program for decades (Malik, 2022).

As a country with a strong military, America became one of the countries that very aggressively conducted a study on ISM under the authority of the Secretary of Defense as the Office of Technology Assessment (OTA). OTA has conducted various assessments of the technology's viability and the capabilities of the US industry in providing military and civilian products. Meanwhile, China started its ISM activities in the 1980s when it converted the military sector to the commercial sector and dual-use production in the 1990s (Bitzinger, 2004). In Europe, there is no doubt that until the end of the 1980s, companies still benefited from the tremendous demand for weapons. Still, the decline in orders for military equipment due to declining war tensions in the early 1990s and increasingly competitive competition

between industries led to the use of dual-technology technology. Use is becoming more and more inevitable. According to Cheung et al. (2019), China is carrying out an intensive campaign to secure the transfer of dual-use civil-military defense technology using various means, from spending money to import large amounts of technology and engaging in collaborations using more extreme means in cyber espionage.

The idea of implementing the ISM began in the 1990s when defense budgets plummeted, and countries scrambled to rationalize the defense industry with unsatisfactory results. For example, the Pentagon twice changed its policy towards restructuring the defense industry. This results from the decline in the world's military budget and the shifting of development priorities in general. The most significant expenditure is on weapons procurement, but arms trade is one of the sectors affected by the world financial crisis (Markusen & Reppy, 2000). As Gansler (1988) delivered, the way to simultaneously strengthen the military and economic spheres is through greater integration of military and civilian technology at the engineering and production levels. Historically, the country's security and economy have been treated as conflicting issues (funds on defense hurt the economy). According to Bitzinger (2004), the Definition of ISM is merging the defense industrial base and commercial industrial base so that technology, processes, equipment, personnel, and facilities can meet defense and commercial needs. In America, the IMS is operationalized to preserve America's defense capability in the face of budget cuts and is intended to meet defense and commercial markets (Herdman, 1995).

So far, the Indonesian defense industry has not applied the term ISM optimally in the industrial sector, as developed countries have. However, the concept of ISM in local discourse has existed since Indonesia started its defense industrialization in the 1980s. The idea of initiating the integration of the defense and commercial industries in one agency occurred for the first time within the Indonesian defense industry after the issuance of Presidential Decree number 59 of 1983 concerning the Establishment of the Board of Trustees and Management of Strategic Industries and Defense and Security Industries in which the Strategic Industries in Indonesia consist of four industry, namely: PT. Krakatau Steel, PT. Indonesian Telecommunications Industry (INTI), PT. Nurtanio, and PT. Indonesian PAL.

Defense policies and strategies are not yet fully comprehensive. Policies to empower the domestic defense industry are still challenging to implement because they have not been supported by integrated implementation policies from various related parties. The current military equipment is not optimal to support the implementation of military campaigns in Indonesia's vast territory, both land, sea, and air. The quantity, quality, and operational readiness of an extensive defense system are needed to maintain the integrity and integrity of the jurisdictional area optimally.

II. Review of Literatures

According to Lawrence (1997), the integration model refers to the need for coordination between departments of an organization. This integration model assumes that the higher the dependence of one department on other departments, the greater the need for coordination to achieve organizational goals. Meanwhile, according to Pfiffner and Presthus (1960), the integration model is a corporate perspective that assumes that integrated administration refers to an organizational structure with centralized authority and responsibility, including tighter leadership selection. According to James Fassler (Pfiffiner and Presthus, 1960), “the ideal structure can be implemented if there is a responsibility and good communication on each staff and has a section that oversees and evaluates both the

department's scope to the state." This model may be easier to understand and apply, but it has the "weak executive model" (weak executive model). Every local government previously used this model. In the implementation of government politics in the regions, it is not possible to only prioritize one aspect (economics) but it is important to pay attention to other aspects, namely environmental sustainability so that the implementation of green government is very important in supporting environmental sustainability in the political process of government in the regions (Dama, 2021). The Government of the Republic of Indonesia was formed to protect the whole of the Indonesian people and all of Indonesia's blood, to promote public welfare, to educate the life of the nation and to carry out world order based on eternal peace and social justice for all Indonesian people (Angelia, 2020). This integration model is present as a critique of the feudal power system in political-administrative relations in the United States. This model offers an excellent idea in managing the government power system, especially related to the power structure between the executive and the legislature as state organizations. There are three variants of this integration model that discusses the design of executive power as a government administration organization, namely:

1. The Weak Executive Model

This model can perhaps be seen as the first step towards integration, which is influenced by three aspects; (1) historical power lies with the administrative leadership, (2) the reaction of colonial power, and; (3) impetus for the selection of administrative officers. This model was born as a reaction to the dissatisfaction of the federal administration when the election of a leader will be elected every two to four years. However, this study always tries to follow the following patterns and rules: 1) decisions are made after consultation with local leaders. 2) so many vacancies that nominate each individual to become an administrative officer; 3) Local leaders can exercise their influence but mainly through personal influence and political negotiations in an administrative sense and, 4) technically that a professional and budgetary administration will decline (Pfiffner and Presthus, 1960).

2. The Strong Executive Model

This model is a centralized authority and is elected by the department's chief executive without the legislature's approval. This authority has a bottom-up and inward pattern of "bottom upward and inward" centered on government. Government officials are responsible for the administrative arrangements of the elected leaders and are responsible for all political activities. This model aims to bring a more decisive leader by combining these responsibilities. The supervisory system in this model is focused on one hand to avoid overlapping in administration. Progress in re-organization has been going on for 50 years. Still, it requires improvements and understanding both in terms of rules and administrative models of each form implemented by the leadership. The implementation of this model includes the formation of a CAO (Chief Administration Officer) who has the task of selecting Executive Administration and Professional Assistants who will later be placed in each department and under the supervision of the CAO (Pfiffner and Presthus, 1960).

3. The Council-Manager Model

This model is a term for an elected city council that appoints an administrative head responsible for running the city government. The Council-Manager model is widely applied by companies, local governments, and local schools. In the view of Orthodox Theory, the mayor will be elected by the council of the members themselves, although there are some cities where the electorate elects the mayor (Bitzinger, 2004). The mayor will head the city for ceremonial purposes, not the usual administrative duties. The problem with this arrangement is the most critical failure to provide a structural role for political leadership. However, according to the Council-Manager Model, the division of roles between mayors and managers is a source of conflict. In the spirit of the mayor, who tends to become impatient with the limitation of his power, he will intervene in the administrative area held by

the manager. If the manager is aggressive, he will resist the mayor's intervention (Supriyanto et al., 2021).

The company's internal and external growth can be done through the merger of several businesses. With the union, it is hoped that these companies can increase market share, diversify their business, or increase the vertical integration of existing operational activities to gain control over assets and operations. According to Scott (2015), industrial integration links previously independent firms, enterprises, or production processes to achieve economies of scale or finance. The simultaneous combination of activities of the strength of the elements of the company that combine in such a way that the joint activities produce a more significant effect than the sum of the company's actions if they work alone.

Based on the Law of the Republic of Indonesia Number 16 of 2012 concerning the Defense Industry, that the implementation of the Defense Industry aims to: a. realizing a professional, effective, efficient, integrated, and innovative Defense Industry; b. realize the independence of the fulfillment of Defense and Security Equipment Tools; and c. increase the ability to produce Defense and Security Equipment Tools, maintenance services that will be used to build a reliable defense and security forces. In addition, the administration of the Defense Industry functions to a. Strengthen the Defense Industry; b. develop Defense Industry technology that is beneficial for defense, security, and public interest; c. increase economic growth and employment; d. to establish the state defense and security system, and e. build and improve substantial human resources to support the development and utilization of the Defense Industry.

III. Research Methods

The design of this paper uses a qualitative descriptive approach to find out how the integration of civil and military in technology and industry supports the Indonesian defense industry. This is done by collecting information from both informants and literature studies and available library materials, mass media, electronic media, electronic books, and other open sources (de Klerk & Harmse, 2020).

IV. Results and Discussion

The mutualistic approach, interdependence, and consultation of individuals and institutions have become a preventive force built within civil and military cooperation. Civil and military interaction recognizes three elements: first, exchanging capacity information; second, building work teams and joint training across civil and military sectors; third, compiling a common program.

4.1 Civil and Military Integration in Technology and Industry in the Defense Industry in Indonesia

The concept of integration that has been implemented by the government only occurs at the policy level in the form of the formation of integrating organizations such as DPIS, BPIS, PT. BPIS and KKIP ignore integration in deeper relationships to the basic level within the system or between systems, such as production, facilities, technology, research, or products. The government has not had a perfect planning program in ISM until now. This can be assumed because the ISM strategy explored by developed countries is still not widely known domestically. When PT. Dirgantara Indonesia had to carry out an ISM project at a low technology level with private industry to produce satellite dish TV antennas and pan molds, which became the subject of criticism at the national level. Whereas in developed countries,

this strategy is reasonable to implement to maintain the economic and defense sectors' stability in a balanced way (defense economics).

Based on Presidential Decree Number: 59 of 1989, a Non-Ministerial Government Agency National Industrial Management Agency (LPND BPIS) was carried out. This is a continuation of the issuance of Presidential Decree Number 56 of 1989 concerning the Establishment of the Strategic Industry Supervisory Board (DPIS), which is the supervisory agency of BPIS. The establishment of the BPIS LPND Institute is to foster, manage and develop ten Strategic Industries, namely: PT Dirgantara Indonesia (Aircraft Industry/ Aerospace), PT PAL Indonesia (Ship Industry), PT. Pindad (Arms/Defense Industry), PT. Dahana (Explosives Industry), PT. Krakatau Steel (Steel Industry), PT. Barata Indonesia (Heavy Equipment Industry), PT. Boma Bisma Indra (Engineering/Diesel Industry), PT. Railway Industry (Railway Industry), PT. Indonesian Telecommunications Industry (Telecommunication Industry), and PT. LEN Industry (Electronics and Components Industry). Based on Government Regulation No. 35 of 1998, BPIS was dissolved. In 1999, the Decree of the President of the Republic of Indonesia No. 40/1999 concerning the Strategic Industry Development Council (DPIS) was issued, followed by the establishment of PT Bahana Prakarya Industri Strategies (BPIS) as the first holding company within the Ministry of State-Owned Enterprises to specifically handle Strategic Industries. PT BPIS was then disbanded based on Government Regulation Number 52 of 2002. Since 2002, the defense industry has been under the Ministry of SOEs and named strategic industry BUMN (Harry, 2011). The last model, based on Presidential Decree No. 42 of 2010, was formed by the Defense Industrial Policy Commission (KKIP), followed by Law No. 16 of 2012 concerning the defense industry.

The ISM model has been attempted between the defense and commercial industries, but it is still small in scale and requires minimal investment and low technology. For example, the first ISM on utilizing essential steel products from PT. Krakatau Steel by PT. PINDAD and PT. PAL. This resulted in the spin-on technology, wherein the critical steel product of PT. Initially used for commercial goods, Krakatau Steel was later used to fulfill defense goods such as supporting Indonesian Army armored vehicles and building Indonesian Navy ships. Second is the ISM between the government's defense industry, namely PT. Dirgantara Indonesia and PT. PAL and non-government aviation and shipping service companies in maintenance services.

4.2 PT. Dirgantara Indonesia

PT. Dirgantara Indonesia (PT. DI) is an aviation industry capable of producing the first and only aircraft in Southeast Asia. On April 26, 1976, under PT. Nurtanio Aircraft Industry (IPTN) and BJ Mr. Habibie as President Director. The Nurtanio Aircraft Industry then changed its name to Nusantara Aircraft Industry (also abbreviated as IPTN) on October 11, 1985. After being restructured into PT BPIS, IPTN later changed its name to PT Dirgantara Indonesia (PT.DI) on August 24, 2000.

PT.DI's production has been designed for dual use since the beginning. Only all of them are in the assembly industry. PT.DI is also a sub-contractor for significant aircraft industries like Boeing, Airbus, General Dynamic, Fokker, etc. PT.DI once had up to 16 thousand employees, and now there are 4000 people. PT.DI tries to use its production facilities for civilian products such as dish antennas, and pan molds, which they don't realize are common in the defense industries of developed countries when military product sales fall. Under KKIP, PT.DI received a debt relief award from the government. In early 2012, PT.DI managed to deliver 4 CN-235 aircraft ordered by South Korea. In addition, it is trying to complete 3 CN-235 planes ordered by the Indonesian Navy and 24 Super Puma Eurocopter

helicopters. PT.DI is also building C-295 aircraft (CN235 jumbo version) for the Indonesian Air Force and N-219 and cooperating with South Korea in building the KFX stealth fighter.

Currently, dual-use manufactured goods and services continue (spin-off), for example, the CN-235 aircraft product and its maintenance services and the manufacture of commercial interests.

4.3 PT. PAL Indonesia

PT. PAL Indonesia was initially a shipyard called the Marine Establishment (ME) and was inaugurated by the Dutch government in 1939. During the Japanese occupation, the company changed its name to Kaigun SE 2124. After independence, the Indonesian government nationalized this company and changed its name. Become a Naval Training (PAL). On April 15, 1980, the government changed the company's status from a Public Company to a Limited Liability Company.

Product development is carried out for dual-use, both for military and commercial products. Commercial ships are aimed at international, national, and pioneer shipping markets for passengers and goods (cargo). The production capacity per year currently reaches three units of ships. PT. PAL Indonesia is also developing products that will be marketed domestically, especially to meet the needs of central government agencies such as the Ministry of Defence, the Indonesian Police, the Ministry of Maritime Affairs, the Ministry of Finance/Directorate General of Customs & Excise, as well as the Regional Government and the private sector.

4.4 PT. Pindad

PT. Pindad is an industrial and manufacturing company engaged in manufacturing military and commercial products in Indonesia and employs around 3000 employees. PT Pindad is involved in dual-use, military products, and commercial products. PT. Pindad's activities include design and development, engineering, assembly, manufacturing, and maintenance. PT. Pindad was initially established under the Dutch East Indies government to strengthen military defenses on the island of Java. In 1908 in Surabaya, a workshop known as Constructie Winkel (CW) was established, which provides supplies and maintenance of weapons.

In 1850 in Surabaya, the Pyrotecnische Werkplaats (PW) was also established, which carried out explosives work. In 1816, the CW and PW were merged. In 1918-1920 Artillerie Constructie Winkel (ACW) was established in Bandung to realize the transfer of ACW in Surabaya by producing tools or parts of weapons, especially light weapons, and repairing arranging components into ready-to-use complete weapons. During the Japanese occupation, the company was broken up again with names adapted to the Japanese language, such as Dai Ichi Kozo.

In 1945, Japan lost, and the proclamation of Indonesian independence was proclaimed on August 17, 1945. Since then, the youths and fighters formed a Van Actie committee organization that fought to take over these weapons institutions from the hands of the Japanese with the help of their colleagues.

In 1947, Dai Ichi Kozo was renamed Legger Productie Bedrijven (LPB) under NICA. On April 29, 1950, the name was changed to the Arms and Munitions Factory (PSM), which is then commemorated as the company's anniversary. In 1958 the name was changed to Army Equipment Factory (Pabal AD). In 1962 changed its name again to Army Industry Industry (PINDAD). The name was changed to Komando Industri TNI-AD (KOPINDAD) in line with government policy. On January 31, 1972, based on the Decree of the Minister of Defense and Military Commander No. Kep 58/X/1979, the name KOPINDAD was changed to PINDAD, and then on October 12, 1979, this resulted in PINDAD status from the Main Guidance

Command to the Main Implementing Body within the TNI-AD. Then on April 29, 1983, PINDAD became a State-Owned Enterprise (BUMN) under the name PT. Pindad (Persero), where PINDAD is a name and not an abbreviation. In 1989 the government formed the Strategic Industry Management Agency (BPIS) and PT. Pindad, under its guidance or became a Strategic Industry BUMN. In 1998 BPIS was dissolved by the government. In the same year, the government established a state-owned enterprise under PT. Prakarya Industri, of which PT PINDAD was a subsidiary.

In 1999, PT. Prakarya Industri changed its name to PT Bahana Prakarya Industri Strategis (Persero). Then in 2002, PT BPIS (Persero) was dissolved by the government. And since then, PT. Pindad has changed its status to PT. Pindad (Persero) is directly under the Ministry of BUMN.

4.5 PT. Dahana

The early history of PT. Dahana was marked by the construction of a dynamite factory (NG based) in 1966 at the Tasikmalaya TNI-AU base. Along with technological developments and market demand, in 1991, the water-based emulsion technology was transferred, which has a higher degree of safety with its products from the cartridges emulsion type. The DANFO explosives factory was established with Dahana's engineering capabilities.

The desire to continually develop and be the best has driven Dahana to improve its operations continuously. The opportunity to operate together to serve PT. Kaltim Prima Coal (KPC) since 1994, partnering with a global player, is Dahana's first step in entering the world of explosives application services. The success of this project is a milestone for the continuation of subsequent collaborations in other mines in Central Kalimantan and Sumbawa. The achievements made so far are significant in strengthening Dahana's identity to continue focusing on the explosives service business and its applications as its core competence.

The oil and gas market is a growing sector and is always challenging. The oil and gas exploration sector, including seismic surveys, has successfully served its explosive needs with Dahana's product, namely Dayagel Seismic. In oil and gas exploitation, namely for "Oilwell Perforating," Dahana has succeeded in meeting the needs of shaped charges by producing its products in collaboration with Chartered Oiltech Singapore (COS), whose factory has been operating since 1995. The granite quarry market on Karimun Island is overgrowing, and Dahana seized this opportunity by establishing a factory "on site bulk emulsion" in 1998, resulting from Dahana's engineering work.

Currently PT. Dahana carries out its duties to serve the needs of commercial explosives and their utilization services for the world of mining and construction; encourage the ability to expand the market for mastery of technology and independence through the development of the quality of human resources; become a domestic market leader through strategic partnerships with customers and suppliers, and implement government programs and missions that are in line with the company's line of business and objectives.

4.6 Factors Supporting Civil-Military Integration

It is universally recognized that two military and civilian missions work together. The humanitarian mission is called humanitarian action, while the state political mission is called military action. Meanwhile, the deployment of military power is under the authority of the political decision of the sovereign civilian authority, whose scope of the military assignment is in the area of crisis stabilization and reconstruction. Civil expertise capabilities are very dominant in civil and military interactions. The civil profession area is snowballing, as can be

seen from various aspects, such as mastery of hardware and software technology, medical, legal, environmental management, business economics, and information technology. The military's role is "ultimate ratio," not the final determinant. Still, it becomes the central element of the state to save and maintain the survival of the nation and state in crisis conditions. Therefore, the assignment needs clarity on the time limit and the scale of the work. Professional militaries carry out missions adhering to the principles of neutrality and impartiality.

Political will is needed to formulate an integrated strategy for operationalizing civil and military cooperation in crisis management. Professional civilian technocrats work closely with military personnel on a joint crisis response mission. The dominant factor of parliamentary control and strategic direction in regulations is needed to legitimize civil and military cooperation. In the era of civil society, present and future, civil and military partnerships occupy an ample space. Indonesia has developed a roadmap for mutualistic cooperation and revitalized the military's role. Of course, we can't stop. We hope that the state will continue to optimize and systematically optimize it. Psychological and traumatic factors should not constrain us but rather view the need for national integration to face future challenges.

With the enactment of Law Number 16 of 2012 concerning the Defense Industry, this is a new life for the rise of the domestic defense industry. The law is the legal umbrella that will make Indhan more independent, superior, and more competitive in producing the central weapon system (Alutsista) and regulates several financing articles.

In its embodiment, the Defense Industry Policy Committee (KKIP) was formed as a forum for collaboration and coordination from government stakeholders. KKIP makes a common standard because many products do have a performance reference, but it is also important to note that not all defense products have the same standard. In general, what is referred to as Alutsista is Combat Equipment, while what is meant by Non-Combat is supporting defense equipment. It breaks down which ones can be mastered because there are quite a lot of them. To determine the extent to which the product uses a composition of raw materials originating from within the country, the Domestic Content Level (TKDN) is measured because the range of products is extensive, so it is necessary to calculate that the product must be able to be sold. In this Law on Defense, there is an obligation to use domestic production so that there will be a kind of technology transfer or funding in the form of offsets and counter trades. In other words, if the product cannot be made in Indonesia, the purchase must be accompanied by compensation, technology transfer, or a countertrade scheme.

A country with an established defense industry is considered to have a strategic advantage in the global or world order. In general, although Indonesia has a defense industry with a long history, it should be acknowledged that its existence is not optimal. The desire to empower the national defense industry will face the reality of limited federal resources. Meanwhile, the national defense industry must also face global competition that is not easy, thus making it more challenging to achieve adequate economies of scale. By approaching the potential of domestic enterprises for the benefit of national defense and taking into account Indonesia's geographical and geostrategic conditions (Guiora, 2017), the defense industry can be grouped as follows:

a. Industries that support firepower can produce defense equipment and increase explosive power, including weapons, rockets, bombs, torpedoes, guided missiles, explosives, and ammunition.
b. The industry that supports locomotion can produce defense equipment to increase mobility on land, sea, and air, including spare parts components.

c. Command and control system support industry. Here, the domestic sector can produce various defense electronic equipment, including telephone, radio (UHF, VHF), telex, radar, navigation, sonar, avionics, computers, and data provider (information network system operator), as well as communication system operation. The satellite includes software support.
d. Provisions industry, which can produce the needs of individuals and groups/units for defense, including field rations, medicines, personal field equipment, field unit equipment, fuel, lubricants, and other services needed for defense purposes. Defense interests (this supporting industry is commonly called the non-defense equipment industry).

4.7 Factors Inhibiting Civil-Military Integration

The level of trust between the civilian elite and the military elite was considered very important, especially at the beginning of the reform. The definition of civilian supremacy is deviated, which implies no balance between the civilian elite and the military elite. The balance of power between military and non-military instruments needs to be underlined so that there is no dominant force in the strategic or national decision-making process. There are two types of civil control, and namely subjective civil control focused on maximizing the power of civilian control or groups. At the same time, objective civilian control focuses on optimizing the professionalism of Military Officers. The objective of civilian control is to ensure that the military elite will be more effective by reducing its influence in national decision-making.

Civil-military integration with different "instincts" and perceptions about threats, how to overcome them, and their sensitivity to actors/non-actors that may have the opportunity to be a challenge to a threat. If based on Huntington's thinking, it is difficult for the military to create a harmonious relationship as a partner and at the same time as subordinate to the civilian elite. This follows the principle of democracy, namely establishing civilian supremacy of civilian control over the military. Control or sovereignty is not interpreted as equivalent to a command, but control is analyzed closer to policy. This means that the policy products of the civilian elite (government), especially those with interest in national security strategies that have been regulated in the civilian elite "policy," as the military, will carry out a consequence. Civilian control implies a desire to guarantee the national defense strategy; therefore all agencies related to national defense are subordination of national traditions, values, customs, government policies, and social and economic institutions".

The balance that occurred at the beginning of the revolution for independence and the military "only" had a small portion to influence in peacetime. The dynamics of civil-military relations can be captured in a broader sense as the relationship between the community and military institutions, where the public sees more hope and opportunity for the military to act to protect public/community interests against attacks from outside. This general expectation is a form of embodiment of civilian control and thus indirectly implies and confirms that HSM is a critical aspect of the national security strategy.

V. Conclusion

The independence of the defense industry is one of the strategic indicators of the progress of a country in the global or world order. The development of the defense industry cannot be separated from the integration of various stakeholders, in this case, the civil and military integration (ISM). The implementation of ISM needs to get more focused attention to the operational level, which will mature the national industry in innovating independently.

The performance of the Indonesian defense industry is constrained because all of them are manufacturing industries without the support of primary industries and supporting industries as local sub-contractors. At the time, the government argued that the ambition to develop the defense manufacturing sector would start with the help of foreign sub-contractors as a temporary measure, hoping that the growing competitive defense industry would lead to the emergence of domestic sub-contractors. However, the Indonesian defense industry is still not competitive to generate profits, so it has not provided opportunities for local enterprises to grow and develop. PT. DI and PT. PAL (for example) is still dependent on foreign suppliers. As reported, the import ratio is still high, reaching 80% of the total defense needs, and the government needs a strategy to reduce imports.

Offset, technology transfer, or countertrade schemes are alternatives in obtaining returns from the purchase or procurement of a cooperation contract. As a step to reduce Indonesia's dependence on defense equipment originating from abroad. In addition, the Indonesian defense industry will contribute more to encouraging the national economic sector.

References

Angelia, N. (2020). Analysis of Community Institution Empowerment as a Village Government Partner in the Participative Development Process. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol 3 (2): 1352-1359.

Bitzinger, A. R. (2004). Civil-Military Integration and Chinese Military modernization. Asia-Pacific Center for Security Studies, 3(9).

Cheung, T. M., Lucyshyn, W., & Rigilano, J. (2019). The role of technology transfers in China’s defense technological and industrial development and the implications for the United States.

Dama, M., et.al. (2021). Implementation of Green Government by the Regional Government of East Kalimantan Province as a Form of Ecological Principles (Case Study of the Impact of the Implementation of Coal Mining Policy in Samarinda City). Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol 4 (3): 4445-4457.

de Klerk, W., & Harmse, E. (2020). Review: Transforming research methods in the social sciences: Case studies from South Africa. In African Journal of Psychological Assessment (Vol. 2). https://doi.org/10.4102/ajopa.v2i0.27

Guiora, A. N. (2017). Cybersecurity : geopolitics, law, and policy. Routledge.

Herdman, C. R. (1995). Other approaches to civil-military integration: The Chinese and Japanese arms industries (OTA-BP-ISS-143).

Lawrence, D. P. (1997). The need for EIA theory-building. Environmental Impact Assessment Review, 17(2), 79–107. https://doi.org/10.1016/S0195-9255(97)00030-9

Malik, T. H. (2022). Military-civilian partner selection for mental health management: An analysis of organisational and technological legitimacy. Ethics, Medicine and Public Health, 20, 100733. https://doi.org/10.1016/j.jemep.2021.100733

Markusen, A., & Reppy, Y. (2000). The Place of the Defense Industry in National Systems of Innovation: Should We Welcome a Transnational Defense Industry? (No. 1075–4857).

Scott, J. (2015). A Dictionary of Sociology (4 ed.). Oxford University Press. https://doi.org/0.1093/acref/9780199683581.001.0001

Supriyanto, E. E., Rachmawati, M., & Nugroho, F. J. (2021). Transformative Policies and Infrastructure Strengthening Towards the Police Era 4.0. Jurnal Bina Praja, 13, 231–243.