Legal Aspect on Indonesia Military-Industrial Complex to Strengthening Defence Industry Research and Clasterization in Building Independent Defence Industry in Indonesia

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Abstract: Indonesia's bitter experience of the embargo became a hard slap and a reminder of the importance of the National Defense Industry in meeting the needs of the TNI's defense equipment and encouraging the quality of the TNI's performance in carrying out the territorial defense of the Republic of Indonesia. Over time the development of the National Defense Industry continues to grow and is supported by regulations at the level of the Law, namely Law no. 16 of 2012 concerning the Defense Industry in realizing the Independence of the National Defense Industry. However, over time the implementation of Law no. 16 of 2012 does not work properly, challenges and problems arise, there are two problems in the National Defense Industry, namely Research and Development (R&D) and Defense Clustering. In this paper, a deeper review of the complex defense industry uses the research method, namely normative juridical research with two approaches including the statute approach and the conceptual approach. The results of the research in this paper carry the Core Indonesia Military-Industrial Complex which supports the strengthening of Research by initiating the Concept of Feedback and Clustering of the Defense Industry by forming 7 Defense Industry Clusters which include Raw Material Industry, Production Industry, Assembly Industry, Production, Support Industry (Components, Spare Parts), Electronic Industry, Maintenance.

Keywords: Military Industrial Complex, Defense Industry, Legal Aspects, Defense and Security

A. Introduction

The national defense power is not only supported by manpower or active military forces that are large in quantity, but also the availability of advanced technology as a means of defense. For Indonesia, throughout the course of Indonesia’s history, the strengthening of the national defense system has been dominated by the supply of defense and security equipment from abroad. In recent years, Indonesia has continued to try to modernize defense and security equipment from various countries such as the United States, Russia, South Korea, Britain, and Germany. Although the defense equipment system can provide a deterrence effect, the continuous purchase of defense equipment from abroad brings Indonesia to be dependent. One of Indonesia’s bitter experiences of dependence on foreign defense equipment occurred in the 90s (1995-2005), Indonesia was embargoed for 10 years due to reactions to a number of incidents of human rights violations by the Indonesian military.¹

The effect of the military embargo by the United States has an impact on imports of Indonesian military equipment originating from abroad, resulting in a decrease in the quality of the TNI’s performance to operate optimally to maintenance and repair of defense equipment which causes a crisis of the life of the main weapon system in the implementation of defense and territorial security in the territory of the Republic of Indonesia. This provides awareness of the importance of having the independence of the domestic Defense Industry for the sake of defense. The independence of the domestic defense industry is an effort to escape from dependence on foreign defense equipment.²

In responding to the above challenges, the Government of Indonesia launched the MEF program in 2007, which was later ratified in Government Regulation No. 5 of 2010 concerning the National Medium Term Development Plan for 2010 – 2014 and the derivative regulation of the Minister of Defense No. 19 of 2012 concerning the Minimum Essential Force Alignment Policy. The MEF Program itself is the result of the formulation of the Strategic Defense Review (SDR) in 2009 which stipulates the minimum points and

strategic steps in fulfilling the ideal defense poster. the user is TNI. In encouraging the Defense Industry to be more optimal, it is supported by regulations at the level of the Law, namely Law No. 16 of 2012 concerning the Defense Industry in which there is an obligation to use domestically produced defense equipment, the clustering of the Defense Industry (the existence of ties to the upstream industry, downstream industry, component industry, and supporting industries, as well as the raw material industry), the utilization of defense research and technology, as well as the implementation of compensation, trade and funding in the form of offsets, as well as Transfer of Technology in the purchase of foreign defense equipment. With the Defense Law, it should be able to answer the challenges in the independence of the national defense industry.

However, over time the implementation of Law no. 16 of 2012 raises new challenges and complex problems that bind it. There are doubts about users or users of domestic defense industry products, namely the TNI in the continuity of orders for domestic defense equipment which continues to decrease, strengthening Research and Development (R&D) and R&D findings (Prototype) which are followed up to the production stage due to lack of research budget even though in UU no. 16 of 2012 stipulates that defense industry managers provide at least 5% of net profit for Research and Development purposes, as well as the non-running of the defense industry clustering which is bound and supports each other from upstream to downstream industries and their supporters.

Industrial clustering and the military industrial complex have broad dimensions in the aspects of defense, procurement of goods, industrial development, and others, so this research will look at the legal aspects of the military industrial complex and the development of the defense industry in Indonesia.

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3 RD Wibowo, “Permasalahan dalam Mewujudkan Kemandirian Industri Pertahanan”, Defendonisia, 1(2), 43-48

http://journal.unpacti.ac.id/index.php/JGLP/article/view/50/83
B. Method

This research uses normative juridical research. The problem approach used in this study includes a statute approach and a conceptual approach. The data from this study uses primary and secondary data from law books, journals, and Policy Briefs on the Defense Industry and more specifically in this study focuses on data from the White Paper of the Ministry of Defense of the Republic of Indonesia, Law no. 16 of 2012 concerning the Defense Industry, as well as Scientific Journals related to the National Defense Industry.

Normative legal research does not always connote a juridical norm research. In general, juridical norm research is understood to be only legal research which limits it to the norms contained in the legislation. Meanwhile, normative legal research is broader. According to Johnny Ibrahim, normative legal research is a scientific research procedure to find the truth based on scientific logic from the normative side. The normative side here is not limited to laws and regulations. As stated by Peter Mahmud, legal research is normative research, but not only positivist law research. Norms are not only interpreted as positive laws, but namely rules also made by politicians who have a higher position as stated by John Austin or rules made by rulers as stated by Hans Kelsen. Based on this opinion, legal research seeks to find the truth of coherence, namely whether the rule of law is in accordance with legal norms and whether the legal norms containing obligations and sanctions are in accordance with legal principles, whether one's actions are in accordance with legal norms or legal principles.

C. Result and Discussion

1. The development of the National Defense Industry in fulfilling the Ideal Indonesian Defense Poster


The development of the National Defense Industry cannot be separated from the history of the Indonesian nation, the beginning of the National Defense Industry since the nationalization of Dutch-owned companies by the Government of Indonesia. Of the companies nationalized by the Government of Indonesia, there are 3 companies in the defense sector and these three companies represent 3 dimensions of defense, namely land, sea, and air. The land-based defense company, which was originally named Leger Productie Bedrijven, was transferred from the Netherlands to Indonesia and changed
its name to the Arms and Munitions Factory, which in 1962 was changed back to the Army Industry Industry or what we know today is PT PINDAD. Then, the defense company from the marine dimension, namely the Marine Establishment, was transferred to the Indonesian Government and changed its name to Penatara Naval (PAL). And, lastly, the air force defense company which was transferred from the Netherlands to Indonesia, which was a flight test workshop in Surabaya, which was then managed by Indonesia and its journey from the Aviation Institute to become the National Aviation Company which we know as PT Dirgantara Indonesia.

Along with the history of Indonesia. Companies engaged in the defense sector experience ups and downs in their business activities. However, in the 1980s the Indonesian Defense Industry experienced a golden age when all these industries were consolidated under the Strategic Industry Management Agency (BPIS) according to Presidential Decree No. 59 of 1989 to be more efficient and competitive in the global market. The golden age had to stop when the monetary crisis that hit Indonesia in 1987 caused the National Defense Industry to collapse. To save the state’s finances, the President of the Republic of Indonesia signed a Letter of Intent (LoI) with the International Monetary Fund (IMF) which requires the termination of state funding for national strategic industries and an increase in the value of shares released to the public. The absence of government control due to the loss of majority shares owned by the Government has made these strategic industries to diversify their businesses more towards the production of civil equipment as a survival effort due to uncertain internal financial conditions.

b. Efforts to restore the National Defense Industry

In an effort to restore the capability of the National Defense Industry and reduce Indonesia’s dependence on foreign-made Defense and Security Equipment (Alpalhankam), the United Indonesia Cabinet I under President Susilo Bambang Yudhoyono began to make the defense industry a development priority. The government accommodates and provides great opportunities for the involvement of the private sector in the activities of the Defense Industry. This effort was continued by the United Indonesia Cabinet II which produced Presidential Decree No. 42 of 2010 concerning the Defense Industry Policy Committee, which was followed by the enactment of Law no. 16 of 2012 concerning the Defense Industry, and other products of legislation.

Law No. 16 of 2012 provides a great opportunity and becomes an accelerator for the empowerment and growth of capital-intensive, labor-intensive and technology-intensive industries to engage in the Defense
Industry sector. Although the National Defense Industry has not yet been able to optimally support the needs of the Defense and Security Agency, it is hoped that through the consistent application of Law Number 16 of 2012 and other related laws and regulations, the aspiration to have a Defense Industry that is advanced, strong, independent and competitiveness will be realized, which in the end will lead to the realization of independence in fulfilling the needs of Alpalhankam in accordance with those required by the TNI, Polri and other Ministries/Institutions.

In 2022, the Government launched the Defense Industry BUMN Holding under the name DEFEND ID through PP No. 5 of 2022. The purpose of the Defense Industry BUMN Holding is to build an independent defense industry ecosystem, capable of organizing transformations for member companies of the defense industry BUMN holding in order to realize good corporate governance and aligning domestic defense needs. DEFEND ID itself is a group of 5 state-owned defense companies consisting of PT Pindad (Land Platforms, Heavy Equipment, Weapons and Ammunition), PT DI (Land Platforms and Avionics Components), PT PAL (Marine Platforms, Shipyards, and Ship Docks), and PT LEN (Electronic System), and PT DAHANA (Explosives and High Energy Materials).

c. Problems of the development of the National Defense Industry

In building the independence of the National Defense Industry, various challenges and problems are complex and protracted. This paper focuses on two main problems that make the shackles in the development of the National Defense Industry, namely Research and Development (R&D) and Classification of the Defense Industry.

These two problems are very complex in accelerating, modernizing, and linking upstream to downstream industries as well as supporters in the Defense Industry. First, the unpreparedness of the National Defense Industry can be seen from Research and Development (R&D). Although, in the regulation of Law no. 16 of 2012 which stipulates that defense industry managers provide at least 5% of net profit for the interests of R&D in the defense sector is not going well. The limited budget for strengthening research and development (R&D) has narrowed Indonesia's choice to take the offset and technology transfer (ToT) method. This option could be a realistic thing because of the limited budget for Research and Development in the field of defense involving elements of the military, universities, research institutions and the private sector is relatively limited. However, there are...
still obstacles because there is no clear concept of Research and Development (R&D) between the Government, Defense Industry Managers, Elements of Research and Development study institutions, as well as the role of the University in linking roles and implementing elements.

Second, the concept of clustering the Defense Industry is not clear and the Defense Industry is not able to produce its own components, either finished products, maintenance, spare parts, etc. Support (Raw Material).

2. Core Indonesia Military-Industrial Complex
   a. Strengthening Research in Building the Independence of the National Defense Industry

   In responding to challenges and problems in strengthening research, the author encourages an idea in terms of obstacles in the form of a roadmap for the development of the production of defense and security equipment (alutsista) based on Research and Development. The ideas are poured into the Turning Point Concept, this concept focuses on the needs of users, namely the TNI and with the assistance of the Ministry of Defense of the Republic of Indonesia whose needs are implemented into a research and development project by involving various supporting elements including BRIN, Universities, TNI-AD/AL/AU Research Service, and the Defense Industry belonging to BUMN and Private.

   **FIGURE 1.** Turning Point Concept
   Sources: Authors, 2021 (edited)
The Flow and Role of Related Institutions from the Feedback Concept/Turning Point Concept. The flow that is executed is as follows:

a. The TNI Headquarters submits a draft plan for the Implementation of the Procurement of the TNI's Main Weapon System Equipment to the Ministry of Defense. (following the rules Based on the Minister of Defense Regulation No. 17 of 2014)

b. The Ministry of Defense is following up and reviewing the plan for the Implementation of the Procurement of Main Weapon System Equipment. If it is accepted, it will continue as a Research and Development Working Group Program. (Ministry of Defense Regulation No. 11 of 2011)

c. Then the Ministry of Defense immediately submits the Research and Development Working Group Program together with BRIN and the appointed University.

d. Balitbang Ministry of Defense, BRIN, and the University carry out assessments and development research on the prototype being carried, the prototype must go through 3 stages, namely Manufacture, Assessment, Finalization. The finalization of the prototype was immediately tested with the Ministry of Defense and assisted by the Army/Air Force/Navy Research and Development Service as needed.

e. With regard to Funding for the Research and Development Working Group Program based on existing laws and regulations, it is provided through various schemes from the Ministry of Defense DIPA through the Ministry of Finance with the Minister of Finance Regulation, the Public-Private Partnership (PPP) scheme, financing is divided on the basis of ability each other.

f. Finalization of the prototype if it is approved by the Ministry of Defense through the Defense Feasibility Center of the Ministry of Defense which is then given a certificate of eligibility.

g. Final Prototype can be produced according to Defense Procurement needs both with DEFEND ID and Private Company, Private Company may have joint ventures and plans for defense acquisitions.

b. Clustering of the National Defense Industry

The essence of implementing the defense industry cluster concept is the creation of interrelationships and mutual support between the upstream and
downstream industries. The upstream industry is closely related to the processing of raw materials into semi-finished goods. While the downstream industry is an industry that processes semi-finished goods into finished goods.

In realizing the independence of the defense industry, upstream and downstream industries in the country must be able to support the need for the supply of defense and security equipment for the TNI. The close linkage between upstream and downstream industries in the country will encourage greater local content in the resulting defense and security equipment. The more components that can be made domestically, the greater the local content.

**FIGURE 2.** Clasterization of Defence Industry

Sources: Authors, 2021 (edited)

The ideas proposed by the author in supporting the Clustering of the Defense Industry to support Independence were formed 7 Defense Industries, as follows:

1) Raw Materials Industry
2) Production Industry
3) Assembling Industry
4) Production
5) Supporting Industries (Components, Spare Parts)
6) Electronic Industry
7) Maintenance
D. Conclusion

From the discussion above, the National Defense Industry for a country including Indonesia is very important in reducing dependence on imports of military equipment from abroad and the efforts of the independence of the National Defense Industry in encouraging the fulfillment of the ideal posture of national defense. Efforts to realize the independence of the National Defense Industry, namely the establishment of Law no. 16 of 2012 concerning the Defense Industry in which there is an obligation to use domestically produced defense equipment, the clustering of the Defense Industry (the existence of ties to the upstream industry, downstream industry, component industry, and supporting industries, as well as the raw material industry), utilization of defense research and technology, and implementation of compensation. trade and funding in the form of offsets, as well as Transfer of Technology in the purchase of foreign defense equipment. However, these two problems are very complex in accelerating, modernizing, and linking upstream to downstream industries as well as supporters in the Defense Industry. First, the unpreparedness of the National Defense Industry can be seen from Research and Development (R&D). Although, in the regulation of Law no. 16 of 2012 which stipulates that the management of the defense industry to provide at least 5% of net profit for the interests of R&D in the defense sector is not going well. The limited budget for strengthening research and development (R&D) has narrowed Indonesia's choice to take the offset and technology transfer (ToT) method.

The Core Indonesia Military-Industrial Complex is a solution to problems in the effort to realize the Independence of the National Defense Industry by Strengthening Research and Clustering of the Defense Industry. In the field of Research, encouraging the idea of the Feedback Concept / Turning Point Concept focusing on the needs of the user / user, namely the TNI and assisted by the Ministry of Defense of the Republic of Indonesia. In the field of Clustering, encouraging 7 Defense Industry Clusters, namely: Raw Material Industry, Production Industry, Assembly Industry, Production, Supporting Industry (Components, Spare Parts), Electronic Industry, Maintenance.

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Who dares, wins.
Who sweats, wins.
Who plans, wins

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