

Optimization of Alutsista Procurement Management as a Means of State Defense to Support the Role of The Indonesian's Army in Implementing Duties

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Abstract

The rapid development of technology is also one of the gaps that can be used as a source of threat to the integrity of a country. Efforts made to maintain the country's integrity need to be supported by defense tools capable of supporting the achievement of these national goals. Developing an independent defense industry is very important in maintaining defense and defense in Indonesia. It is done to meet the needs of both the quality and quantity of defense equipment following the territory of Indonesia and eliminate dependence on other countries in the political field. This study aims to identify and clarify the management process for procuring defense equipment to support TNI personnel in carrying out their duties and increase Indonesia's competitiveness in the global market. In this study, field research was carried out using qualitative methods by reviewing the literature. The research findings show that logistics management in the defense field can support the TNI's role in maintaining the nation's integrity. By modifying the management of defense equipment procurement, the TNI can strengthen its capabilities in carrying out its duties more effectively and efficiently. The findings of this study are expected to guide related parties in making decisions regarding the procurement of defense equipment.

Keywords: Logistic Management, Quality, Weapon System Primary Tool

INTRODUCTION

In the current global context and technological developments, threats to the security and integrity of the country can come from various sources, both internal and external, military and non-military. Rapid technological developments have become an increasing threat to the integrity of the country (Novyanto & Faisol, 2022). Therefore, this condition is of concern to the government to maintain national sovereignty. Every country needs to make significant efforts to protect all its citizens and the country from various threats. In the 1945 Constitution, Indonesia aims to provide protection and prosperity to all Indonesian citizens, educate the nation's life, and participate in maintaining world order. Efforts are made to maintain the integrity of the nation, which defends the life and safety of the nation from existing threats, to achieve these national goals (Rachmat, 2014). These efforts must be supported by defence tools capable of achieving these national goals.

Developing an independent defence industry is critical in maintaining sovereignty and defence in Indonesia. This is done to meet the needs for both quality and quantity of defence equipment following Indonesian territory and to eliminate dependence on other countries in the political realm. Indonesia follows the example of countries such as China and India, which have solid military powers in Asia. Therefore, Indonesia is accelerating programs to meet military power needs by issuing a legal basis through Law Number 16 of 2012 concerning the Defense Industry (Novyanto & Faisol, 2022).

Law Number 16 of 2012 explains that developing the defence industry is part of the national strategic plan to maintain national security and defence. Article 1 defines the defence industry as state-owned or private companies the government selects to produce *Alutsista* (Defence and Security Equipment). All defence industry activities must comply with the law and be managed by the KKIP (Defence Industrial Policy Committee) by Presidential Regulation of

the Republic of Indonesia Number 59 of 2013 concerning the organization, work procedures and secretariat of the Defense Industrial Policy Committee (Putra et al., 2020).

The primary tool for an adequate defence system can improve the TNI's performance, especially in certain emergency conditions. However, the national system's primary equipment industry, which is still developing, tends to produce less than optimal quality products at relatively high costs compared to imported products. However, the central government and TNI do not support national defence industry products. In that case, the national defence industry will be unable to produce competitive products, and the Indonesian military will depend on imported products (Sya'ifudin & Yusworo, 2022).

Implementing a supply chain in procurement activities for the leading system equipment can reduce costs and labour incurred by management. This effectiveness and efficiency of time and energy encourages governments and companies to work optimally. Optimal performance and minimal operational costs can improve the quality of company competition. Therefore, the government or company must optimize management activities to increase competitiveness. Supply chain management can create quality competitiveness (Nyoman & Mahendrawathi, 2017). Therefore, management and the government can support TNI personnel in carrying out their duties through optimal management of the procurement of the leading system equipment. Research by Kasim et al. (2022) shows that managing the procurement of the leading equipment for this system can be done. The system's main tools can be managed through SWOT analysis to support the supply chain in managing the system's primary tools. SWOT analysis helps TNI management map the strengths, weaknesses, opportunities and threats of management activities. In this way, management can avoid problems that may arise later in management activities. Based on this research, it is assumed that the primary system tools' management, procurement and supply chain processes are not only centred on monitoring and recording, but strategy and in-depth analysis are also vital to achieving optimal supply chain management of the main system tools.

A study by Dana and Kostini (2023) found that using the system can help the management of the system's main tools to become more effective and efficient. The system also supports transparency of goods management information. Therefore, utilizing the system in the supply chain process for the system's main tools can improve management performance to be more effective and efficient and build positive relationships between managers and vendors who provide the system's primary tools.

In the research of Putro et al. (2021), management strategies that comply with legal standards are also required. SWOT analysis can help minimize threats and maximize opportunities. The system can also help management work effectively, efficiently and transparently. The research findings can support management performance, especially regarding human resources. However, if management is not integrated, there is a risk of legal violations. Therefore, the strategies and efforts made by management also need to be supported by increasing the integrity and ethics of organizers, strengthening and accelerating state bureaucratic reform, strengthening anti-corruption culture in society, and firm, consistent and integrated law enforcement (Putro et al., 2021).

In the defence sector, TNI management and effective outsourcing practices in carrying out management activities can improve the quality of the organization's competitiveness. TNI administrators with optimal performance can support their duties in safeguarding and defending state sovereignty. Based on this, the researcher aims to dissect the management process for procuring the main system tools to support TNI personnel in carrying out their duties. Through this research, governance of the procurement of crucial system equipment can be improved, strengthening Indonesia's position in global competition and increasing readiness to face complex security challenges.

RESEARCH METHODS

Researchers chose to use a qualitative approach in this study. The research design used was to review the literature. Reviewing or critically examining is one of the research designs known as library research. The procedure carried out by researchers in conducting research is to collect literature relevant to the research topic in advance. Then, researchers read and understand it in depth to facilitate researchers in analyzing and concluding research results. The literature used in this study comes from national and international literature published from 2010 to 2023 regarding the management of defense equipment procurement. Researchers coded the contents of the literature used to facilitate conclusions.

RESULT AND DISCUSSION

NO	AUTHORS	RESEARCH TITLE	METHOD	RESULTS
1	Kimilah, Jupriyanto, and Anwar (2020)	<i>Analisis Risiko Rantai Pasok Pada Pengadaan Komponen Kapal Di Pt Pal Surabaya</i>	This research used quantitative methods. The data and information obtained were mapped using the Supply Chain Operation Reference (SCOR) model and analyzed using the House of Risk (HOR) model.	Using the HOR method, the causes of risk that most often or most influence the occurrence of risk in the Supply Chain division are obtained. Furthermore, based on the priority of related risk mitigation alternatives, there needs to be a comprehensive understanding of project management, subcontractor management for service procurement, and vendor management for material procurement.
2	Dumitrascu, O., Dumitrascu, M., and Dobrotă (2020)	Performance Evaluation for a Sustainable Supply Chain Management System in the Automotive Industry Using Artificial Intelligence	Qualitative data collection through interviews and data analysis using univariate and bivariate as well as data mining techniques to highlight	The research results show that using mathematical models with artificial intelligence technology can help identify problems in supply chain management and link them to key performance indicators. The system can help predict problems and risks and improve work efficiency. In conclusion, the performance evaluation of this development model significantly contributes to solving problems in supply

			specific relationships and extract certain information	chain management. By understanding the relationship between emerging issues and relevant KPIs, companies can take appropriate steps to improve their performance.
3	Putra, Siahaan, and Bagdja (2020)	<i>Optimalisasi Manajemen Pengadaan Pada Pt. Pindad Dengan Supply Chain Operations Reference Model</i>	Using quantitative with Supply Chain Operations Reference model	Overall, the supply chain structure in procurement at PT. Pindad consists of four main parts: planning, implementation, control, and material receipt. Risk assessments are carried out based on employee experience and are divided into five main groups. The final score for the supply chain performance assessment was 78.89, with a pretty good predicate. Strengths lie in the speed of internal document processing and cost efficiency, while weaknesses lie in a minimal e-procurement system, unsatisfactory employee training programs, and unstructured procurement planning.
4	Putro et al. (2021)	Strategy to Prevent Corruption in the Procurement of Defence Equipment in Indonesia	Using qualitative method with design of library research	This research showed that efforts to prevent corruption in procuring defence equipment within the Ministry of Defense and the TNI involve several strategies, including strengthening the legal framework, evaluating bids, granting appropriate authority, and carrying out independent audits. Apart from that, this strategy also requires strong support in improving the integrity and ethics of organizers, strengthening state bureaucratic reform, creating an anti-corruption culture in society, and ensuring consistent and integrated law enforcement.
5	Puspita, Bura, and Apriyanto (2021)	<i>Analisis Tata Kelola Pengadaan Alat Peralatan Pertahanan Dan</i>	Using qualitative method with	Research showed that the procurement process experiences obstacles such as difficulties in preparing Technical

		<i>Keamanan Pada Peralatan Huru-Hara Korp Pasukan Khas Tentara Nasional Indonesia Angkatan Udara</i>	design of case study	Specifications (Spektek) and delays due to delays in material delivery which require contract amendments. The strategy used is based on the theory of ends, means and ways and CADMID theory. In preparing Spektek, focus was given to quality, industry standards, technical understanding, and delivery aspects. Strategies to overcome delays include better production planning, delivery scheduling, showcase meetings, and contract amendments.
6	Kasim, Wicaksonoputro, Alrasyid (2022)	<i>Struktur Pengadaan Alutsista Dalam Metode Berpikir Sistem</i>	Using qualitative method with design of library research and analysis with SWOT analysis	This research highlights the importance of effectively managing the procurement of key equipment for the system. Utilizing SWOT analysis aids in identifying strengths, weaknesses, opportunities, and threats in managing these tools, enabling proactive problem-solving. It emphasizes the need for strategic planning and thorough analysis to optimize supply chain management for the main system tools, going beyond mere monitoring and recording activities.
7	Wibowo, Deni, and Simatupang (2022)	<i>Penguatan Alutsista Sebagai Pilar Kekuatan Militer Indonesia</i>	Using qualitative method with design of library research	It was essential to increase quantity and quality to strengthen air, land and defence equipment. Indonesia has domestic defense equipment manufacturers capable of producing sophisticated products that are internationally recognized, showing the progress of the domestic defense industry. This gives great hope for developing defence equipment as Indonesia's defence power pillar.
8	Yusuf and Soediantono (2022)	Supply Chain Management and Recommendations for Implementation in the Defense	Using qualitative method with design of	Supply chain management (SCM) significantly impacts the defence industry, including minimizing inventory levels, reducing costs, shortening lead

		Industry: A Literature Review	library research	times, increasing revenue, ensuring on-time delivery of goods, and ensuring smooth flow. Therefore, based on the results of the literature analysis, it is recommended that SCM be implemented in the defense industry to improve operational efficiency and effectiveness and ensure the smooth flow of goods and services.
9	Sya'ifudin and Yusworo (2022)	<i>Strategi Pengadaan Alutsista Pesawat Udara Cn235 Pesawat Patroli Maritim Sarana Pertahanan Industri Pertahanan Indonesia</i>		Procurement of crucial defence equipment is essential but expensive. The national defence industry must be firm with the support of the MOD procurement program to compete globally. Cooperation is needed between the Ministry of Defense, TNI and local industry.
10	Dana and Kostini (2023)	<i>Optimalisasi VMS pada Pengadaan Kendaraan Khusus di PT Pindad Optimization of VMS on Special Vehicle Procurement in PT Pindad</i>	Qualitative method using descriptive analysis	Utilizing the system enhances the effectiveness and efficiency of managing the main tools, fostering transparency in goods management information. This improves management performance and cultivates positive relationships between managers and vendors.

The Indonesian National Armed Forces, or TNI, as the spearhead of the defense system in Indonesia, has to protect the integrity of the Republic of Indonesia. TNI has the task as written in Law Number 34 of 2004 concerning the Indonesian National Armed Forces Article 1 paragraph (21) is

"Citizens are prepared and armed as soldiers for the duties of national defense to face military and armed threats."

Soldiers also, in carrying out their positions, have a role that can be found in Law Number 34 of 2004 concerning the TNI Article 7 paragraph (1) is

"The main duties of the TNI are to uphold state sovereignty, defend the territorial integrity of the Unitary State of the Republic of Indonesia based on Pancasila and the 1945 Constitution of the Republic of Indonesia, and protect the entire nation and all of Indonesia's bloodshed from threats and disturbances to the integrity of the nation and state."

From this, we can see the critical position of the TNI in protecting the nation and state. For this reason, Indonesia must have sufficient strength in the form of TNI defense equipment as the main instrument in maintaining territorial sovereignty and securing national interests from threats, challenges, obstacles, and disturbances both within and abroad. Therefore, the TNI's defense equipment plays an essential role in carrying out the duties of army personnel to achieve one of the nation's goals, namely protecting the entire nation and state (Siregar & Achraf, 2021).

Eight forming elements of 47 interrelated components measure a country's military strength. In these eight elements, there are 20 components: defense equipment for air, land, and sea forces. Therefore, defense equipment becomes one of the critical pillars of a country's military power. Without a strong defense system pillar, a country will experience difficulties during a war. Therefore, in a peaceful situation, military forces must be prepared, and disaster management must be carried out before a disaster occurs to minimize losses (Wibowo et al., 2022).

If we compare Indonesia's military strength with neighboring countries, Indonesia needs to increase its substantial quantity and quality by optimizing its workforce and other supporting tools. Seeing the development of science and technology that continues to develop, this certainly needs to be given special attention by the government to focus more on the combat readiness of the soldiers. The condition and quality of the tools need to be considered to help guide the personnel's mandate. Therefore, procuring defense equipment to support the implementation of the TNI's duties is very important, where increasingly massive technological developments can threaten state sovereignty (Rachmat, 2014).

Based on this, the procurement of defense equipment also aims to keep up with the times to maintain state sovereignty. In addition, sufficient defense equipment capabilities and strength can also support the implementation of the duties of army personnel. The readiness of the technical defense equipment that is always ready to carry out operational tasks is essential in modernizing the TNI's primary weaponry system. Ready technical conditions can only be realized with optimal logistical support. Effective and efficient logistical support from the TNI dramatically influences the success of this main task because task implementation depends on the readiness of the defense equipment to carry out operations. Therefore, the TNI must prepare and provide materials, facilities, and services effectively and efficiently through the Development of Logistics Support. In order to realize the readiness of defense equipment, optimal procurement of defense equipment can impact the country's military strength in an emergency (Hartanto, 2016).

Procurement governance is part of the supply chain management, which manages the procurement of goods systematically and strategically, from the origin of the goods to the place of destination by taking into account the quality, quantity, price, time, origin, and appropriate place to meet user needs (Siahaya, 2013). The aim is to ensure the procurement process runs smoothly. It obtains suitable goods at the right time, quantity, quality, and price, overcoming obstacles in managing procurement, using the Ends, Means, Ways strategy, and a military strategy for classifying the goals to be achieved, the resources to be used, and the means to achieve these goals. Therefore, this strategy can be applied to procure defense equipment to ensure procurement runs smoothly and efficiently (Puspita et al., 2021).

A series of procurement obstacles often impede the process's smooth running, including delays, especially in manufacturing processes that experience problems that cause delays in delivering goods to users. This delay can cause losses because the goods cannot be used at the right time, so the use of output is late. Ideally, the assets ordered should be used immediately, but the output use is delayed due to delays in the completion process. To overcome this, the industry as a provider of goods must carefully plan to ensure that the goods ordered can be delivered on time, with good quality, and according to user needs (Puspita et al., 2021). Abdirad et al. (2021) argued that to meet market demands. The company proposed the concept of Supply Chain Management. Supply Chain Management refers to a series of production processes and activities, from raw materials obtained from suppliers, value-adding processes that convert raw materials into finished products, product inventory storage, and product delivery to retailers and consumers.

Dumitrascu et al. (2020) explained that effective supply chain management could produce affordable, high-quality, timely products that meet market demand and benefit the company. There are three types of flow in a supply chain network that must be appropriately managed. First is the flow of goods from upstream to downstream, such as raw materials from suppliers to factories and finished products sent to distributors to be sold to end consumers. Second, the flow of money and the like from downstream to upstream. Third, the flow of information can move from upstream to downstream or vice versa. For example, information about supermarket product inventory should be submitted to distributors or manufacturers for more accurate planning. The company must ensure this information is available to all related parties can better monitor and estimate inventory needs.

Supply chain management has become a strategy commonly used by companies. It is because the integrated relationship between suppliers and companies can reduce the total costs consisting of raw material costs, transportation costs, facility costs, production costs, inventory costs, and so on. For companies, supply chain management can be a competitive advantage. A supply chain is a series of physical flows, information, and processes to deliver products or services from a source location (supplier) to a destination location (customer or buyer). In other words, a supply chain is a set of approaches to integrating suppliers, manufacturers, warehouses, and stores to produce and distribute products in the correct quantity and at the right time to minimize costs (Dhamija et al., 2020; Dumitrascu et al., 2020).

Each company continually evaluates the viability of the company every certain period to know the company's health and maintain its existence. This process is known as company performance appraisal. *Company performance* is defined as the result of management efforts within the company. The results of the management efforts are then used as a parameter or measure to evaluate the success of the company's management in achieving the goals set in a certain period. Company performance refers to the results produced by the company in a certain period by considering the standards that have been set. Business performance refers to how much the company focuses on the market and achieves profit goals (Abdirad & Krishnan, 2021; Ardito et al., 2019; Attia & Salama, 2018; Dhamija et al., 2020; Dumitrascu et al., 2020).

Based on the analysis results, researchers know that the implementation of logistics management in the field of defense can help management activities become more effective and efficient. This cost reduction certainly has a significant effect on the defense equipment procurement process. In addition, timely delivery Integrated and soft goods flow systems can result in timely delivery. Ensure the smooth flow of goods Integration of all elements of logistics management through information systems can expedite the flow of goods. Based on the literature review, it is recommended that supply chain management be applied to the defense industry, especially in the procurement of defense equipment. Because this logistics management makes it easier for management and third parties in the defense equipment procurement process (Yusuf & Soediantono, 2022). Therefore, logistics management in the process of procuring defense equipment in the defense sector can support TNI personnel in carrying out their duties in realizing protection and security for society and the state. The logistics management role does not directly impact the TNI. However, logistics management in procurement, delivery, control, and inventory activities can make it easier for them to carry out their duties effectively and efficiently. Optimal and systemized management can adequately support the tracking and maintenance of defense equipment. Optimal maintenance will affect the physical condition of the tools used. It will undoubtedly affect the quality of the TNI in maintaining the integrity, sovereignty, and unity of the nation. Thus, optimal logistics management can support TNI personnel in maintaining and providing protection to society.

CONCLUSION

Based on the analysis results, it can be concluded that defense equipment is an essential pillar in a country's military strength because, without a strong defense system pillar, a country will experience difficulties when a war occurs. Therefore, procuring defense equipment to support the implementation of the TNI's duties is very important, especially in keeping up with the times to safeguard and defend national sovereignty. However, a series of obstacles in the procurement process often impede the smooth running of the process, including the delays that occur, so careful planning is necessary to ensure that the goods ordered can be delivered on time, with good quality, and following user needs. In overcoming obstacles in procurement governance, the Ends, Means, and Ways strategy can be applied as a military strategy for classifying the goals to be achieved, the resources to be used, and the means to achieve these goals.

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