

TACTICS, TECHNOLOGY, AND DEFENSE POLICY IN JOINT EXERCISES OF THE INDONESIAN AND RUSSIAN NAVIES

TAKTIK, TEKNOLOGI, DAN KEBIJAKAN PERTAHANAN DALAM LATIHAN GABUNGAN ANGKATAN LAUT INDONESIA DAN RUSIA

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Abstract- *The joint exercises between the Indonesian Navy (TNI AL) and the Russian Navy play a crucial role in shaping defense capabilities and policies within the Indo-Pacific's evolving security landscape. As regional maritime security challenges grow, driven by threats such as piracy, illegal fishing, and geopolitical tensions, these exercises provide a strategic framework for enhancing operational interoperability and collective defense readiness. This research explores how the tactical and technological components of these exercises influence the defense strategies of both nations. Using a qualitative approach based on secondary data from government reports, defense journals, and academic publications, this study examines the impact of coordinated tactics, such as anti-submarine warfare and advanced communication systems, on operational efficiency and defense policy. Findings reveal that joint exercises improve real-time data sharing and surveillance capabilities, shaping Indonesia's active neutrality and Russia's strategic reach in Southeast Asia. These insights underscore the exercises' role in fostering regional stability through enhanced collaboration. The conclusion highlights the alignment of defense policy and operational readiness, positioning both nations as key contributors to Indo-Pacific security.*

Keywords: Indonesian Navy, Indo-Pacific security, Joint exercises, operational interoperability, Russian Navy

Abstrak- Latihan gabungan antara Angkatan Laut Indonesia (TNI AL) dan Angkatan Laut Rusia memainkan peran penting dalam membentuk kemampuan dan kebijakan pertahanan dalam lanskap keamanan Indo-Pasifik yang terus berkembang. Seiring dengan meningkatnya tantangan keamanan maritim regional, yang didorong oleh ancaman seperti pembajakan, penangkapan ikan ilegal, dan ketegangan geopolitik, latihan ini menyediakan kerangka strategis untuk meningkatkan interoperabilitas operasional dan kesiapan pertahanan kolektif. Penelitian ini mengeksplorasi bagaimana komponen taktis dan teknologi dari latihan ini mempengaruhi strategi pertahanan kedua negara. Dengan menggunakan pendekatan kualitatif berdasarkan data sekunder dari laporan pemerintah, jurnal pertahanan, dan publikasi akademis, studi ini mengkaji dampak taktik terkoordinasi, seperti perang antikapal selam dan sistem komunikasi canggih, terhadap efisiensi operasional dan kebijakan pertahanan. Temuan penelitian mengungkapkan bahwa latihan gabungan meningkatkan kemampuan berbagi data dan pengawasan secara real-time, serta membentuk netralitas aktif Indonesia dan jangkauan strategis Rusia di Asia Tenggara. Wawasan ini menggarisbawahi peran latihan dalam membina stabilitas regional melalui peningkatan kolaborasi. Kesimpulannya menyoroti keselarasan kebijakan pertahanan dan kesiapan operasional, yang memposisikan kedua negara sebagai kontributor utama bagi keamanan Indo-Pasifik.

Kata kunci: Angkatan Laut Indonesia, keamanan Indo-Pasifik, latihan gabungan, interoperabilitas operasional, Angkatan Laut Rusia

Introduction

In the face of rising geopolitical tensions and multifaceted maritime security challenges within the Indo-Pacific region, nations increasingly turn to collaborative military exercises as a strategic tool for bolstering defense capabilities and enhancing regional stability. Joint military exercises between the navies of different nations, such as those recently conducted between the Indonesian Navy (TNI AL) and the Russian Navy, illustrate this approach by enabling countries to build interoperability, share tactical expertise, and advance their defense technologies. These exercises enable countries to address common threats, including territorial disputes, piracy, and natural disasters, compromising maritime security in an ever-complex security landscape (Mazaris & Germond, 2018; Potamos et al., 2024).

Scholars have noted the strategic significance of these exercises in promoting bilateral and multilateral defense cooperation, as they foster mutual understanding and reduce the risk of conflict by improving transparency and predictability in joint military actions (Wills Jr, 1993). Further supporting this, Noferius et al. (2020) highlight that joint

exercises, especially in volatile regions like the Indo-Pacific, showcase regional influence and affirm a commitment to stability. These exercises allow participating nations to convey their defense postures and strategic intentions without confrontation. This concept of defense diplomacy is increasingly relevant in a multipolar world, where competition among global powers intensifies, and joint exercises act as a non-aggressive platform to build alliances and deter potential threats (Howe, 2024).

The participation of the TNI AL and the Russian Navy in these exercises underscores a shared commitment to regional security. It reflects the importance both countries place on fostering a practical, collaborative approach to operational preparedness. In this context, joint exercises allow for cross-training in tactical scenarios, such as anti-submarine warfare, maritime surveillance, and humanitarian missions. These are critical for developing the operational cooperation essential to modern naval defense (Dwi Riantoko & Eko Prasajo, 2023).

This section need not be divided into smaller subsections, allowing for a more comprehensive discussion. The exercises present opportunities to

incorporate advanced technologies, such as Kilo-class submarines and unmanned systems, which enhance situational awareness and improve command and control capabilities. Through these engagements, the Indonesian Navy gains valuable insights into the application of technology that strengthens its operational framework, reflecting broader defense and security priorities (Munir et al., 2022; Putro et al., 2024).

Moreover, the consequences of these drills go beyond tactical and technological improvements, impacting Russia's and Indonesia's military strategies to match their respective strategic national interests in the Indo-Pacific. By enhancing their defense collaboration amid escalating external threats, both governments are committed to a more extensive regional security strategy (Chacko, 2016; Denisov et al., 2021). Joint military exercises with foreign nations are increasingly regarded as an element of soft power, fostering confidence and showcasing preparedness while frequently influencing broader strategic plans and alliances (Oktaviano et al., 2020).

This research aims to understand how the tactics and technologies employed in joint military exercises

between Indonesia and Russia shape operational effectiveness and support broader defense policy objectives. By thoroughly analyzing the significant impact of these strategic collaborations on tactical interoperability in joint military operations, innovative technological integration in defense systems, and substantial policy outcomes regarding regional defense strategies, the study seeks to demonstrate how such partnerships not only significantly enhance naval operational capabilities but also directly contribute to regional security and positively influence the broader strategic dynamics of the Indo-Pacific region.

The research further explores the tactical strategies utilized in joint exercises between the Indonesian and Russian navies, focusing on improving operational interoperability and addressing regional maritime security challenges. It also investigates the technological advancements featured in these exercises, such as advanced vessels and unmanned systems, to assess their role in reinforcing collective defense capabilities. Additionally, the study examines the broader implications of these collaborations for the defense policies of both nations, emphasizing

how they align with strategic objectives in the Indo-Pacific in response to evolving regional threats and geopolitical dynamics.

This study investigates the multifaceted impacts of joint naval exercises between the Indonesian and Russian navies by addressing three central research questions. First, it examines how the tactics employed in these exercises influence operational interoperability, particularly regarding regional maritime security challenges. Second, it looks at the new technologies used in these partnerships, like advanced ships and unmanned systems, and rates how well they help improve collective defense. The study also looks at how these exercises changed the defense policies of both countries, focusing on how well they fit with how security is changing in the Indo-Pacific region.

The study aims to give a complete picture of joint naval exercises' tactical, technological, and policy aspects by answering these critical questions. This will help us understand how they support defense cooperation in the region and the advancement of strategic security goals.

Methods

This exploratory study employs a case study approach, consistent with Creswell's emphasis on profoundly understanding complex phenomena. The research design focuses on how tactical strategies, technological advances, and policy implications change over time during joint naval exercises. This makes it possible to look at these different aspects in depth.

The study draws on various credible secondary sources to provide depth and context. These sources include policy papers, government reports, military manuals, and agreements pertinent to naval operations. The study also looks at the academic literature on military cooperation, defense strategies, and regional security, as well as media coverage and expert analyses focusing on the exercises' technological and tactical aspects. Furthermore, statistical reports from defense organizations offer valuable insights into military capabilities, expenditures, and joint operations. Together, these sources form a robust foundation for understanding the significance of the joint exercises and their broader implications.

The study employs a combination of thematic, content, and comparative analyses to gain a comprehensive

understanding of the data. The thematic analysis identifies recurring patterns related to tactics, technological advancements, and policy outcomes. In contrast, content analysis focuses on how key concepts such as "interoperability" and "regional security" are presented across different sources. The comparative analysis integrates these approaches by cross-referencing findings to highlight consistencies and address discrepancies. This dynamic process ensures a thorough understanding while allowing new and unexpected themes to emerge.

Triangulation enhances the study's credibility by comparing insights from multiple data sources, thereby validating the findings. Detailed descriptions provide contextual depth, helping convey the subject matter's complexities. This methodological approach strengthens the study's reliability and relevance.

The findings are presented in a straightforward and engaging narrative, connecting tactics, technology, and policy themes to their impact on interoperability and regional security. Direct excerpts from the data support key points and emphasize the broader implications for defense collaboration and strategy.

By following this structured framework, the research offers valuable insights into how joint naval exercises influence defense cooperation and contribute to the evolving strategic dynamics of the Indo-Pacific.

Results and Discussion

The conceptual framework below illustrates how joint exercises between the Indonesian Navy and the Russian Navy enhance their collaborative defense capabilities and influence defense policies within the broader Indo-Pacific security landscape (Nicastro, 2023). These exercises incorporate tactical maneuvers and technological innovations to improve interoperability and collective defense preparedness (Karsa, 2022).

Tactical maneuvers such as anti-submarine warfare, air defense, and maritime surveillance form the core of these exercises, fostering operational interoperability between the two navies (Paget, 2021).

In addition to these tactical components, various technological advancements including UAVs, submarine detection systems, and advanced communication platforms bolster the navies' capacities to monitor and address regional threats effectively

(Tertia & Perwita, 2018). These elements enhance both navies' readiness and defensive capabilities, facilitating coordinated operations (Patil et al., 2024).

The framework also underscores the policy implications of these joint exercises. As the Indonesian and Russian navies enhance their operational

alignment and integrate cutting-edge technologies, they create a foundation for adapting defense policies to address regional security challenges (Bradford & Herrmann, 2021). This alignment contributes to a more stable security environment, enabling both nations to promote peace and stability within the Indo-Pacific region (Jackson, 2023).

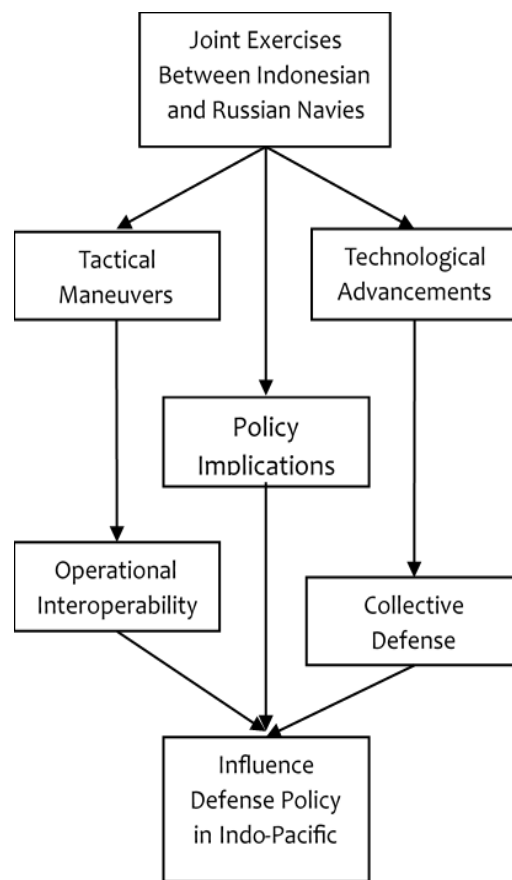


Figure 2. Collaborative Exercises Between the Indonesian and Russian Navies
 Source: proceed by author, 2024

The following conceptual framework shows how exercises between the Russian and Indonesian navies shape operational interoperability, improve collective defense, and affect

defense policy. This framework highlights how tactical maneuvers and technological advancements within these exercises contribute to operational effectiveness. Together with the policy

implications, these factors collectively shape broader defense strategies within the Indo-Pacific region.

Tactics in Indonesian-Russian Naval Exercises: Impact on Operational Interoperability and Maritime Security

The tactics employed in joint exercises between the Indonesian Navy and the Russian Navy are designed to enhance operational interoperability, a critical factor for effective collaboration in the complex security environment of the Indo-Pacific (Potamos et al., 2024). These exercises feature a range of tactical maneuvers, including coordinated anti-submarine warfare (ASW), naval air defense, and maritime surveillance, each aimed at addressing regional security threats such as piracy, illegal fishing, and territorial disputes (Joesoef, 2022).

A key component of these exercises is the coordinated anti-submarine warfare (ASW) tactic, where both navies work together to detect and neutralize underwater threats. This approach involves the synchronized deployment of sonar-equipped vessels, advanced submarine tracking technologies, and aerial support to create a comprehensive defense system (Kajiwara, 2020). ASW is crucial in contested waters like the South

China Sea, where rising submarine activity poses persistent security challenges. Through these coordinated exercises, the Indonesian and Russian navies enhance their ASW capabilities, improving the speed and effectiveness of their detection and response to regional threat (O'Rourke, 2022).

During the joint exercises, tactical communication systems are prioritized to ensure seamless, real-time intelligence sharing and coordination between the Indonesian Navy (TNI AL) and the Russian Navy. Russian tactical communication technologies are known for being strong in electronic warfare. Adding them to the Indonesian Navy significantly improves its communication abilities, which are crucial for keeping information channels safe. To enhance situational awareness, these systems allow both navies to respond quickly to new threats by letting them track the movements of ships in real-time and share surveillance data (Nugraha et al., 2024). Improved communication strategies are essential for preventing misunderstandings and promoting coordinated efforts in maritime policing and rescue operations.

Another crucial tactic in these drills is naval air defense. Both navies pretend that air threats are coming at them and

practice finding, tracking, and engaging them using anti-aircraft weapons and defensive maneuvers. These drills prepare the forces to counter potential aerial threats from state and non-state actors in the region (Chacko, 2016; Denisov et al., 2021). This training component is particularly relevant. Southeast Asian nations face increasing aerial threats in contested waters, making joint preparedness crucial for effective defense system operations by Indonesian and Russian forces.

The exercises also include maritime surveillance techniques that use uncrewed aerial vehicles (UAVs) and radar systems. These techniques assist both navies in monitoring vast expanses of the ocean and promptly responding to

any illegal activity they detect. UAVs, in particular, offer a cost-effective solution for expanding maritime surveillance, enabling both navies to conduct extended monitoring missions without exposing personnel to risk (Rahadi et al., 2024). For Indonesia, enhanced surveillance capabilities are crucial due to its extensive maritime borders, which are often vulnerable to illegal fishing and smuggling. By conducting these exercises with the Russian Navy, TNI AL strengthens its capacity to patrol and secure its waters more effectively.

The following figure visually represents this framework, highlighting the relationships between tactics, interoperability, and security outcomes.

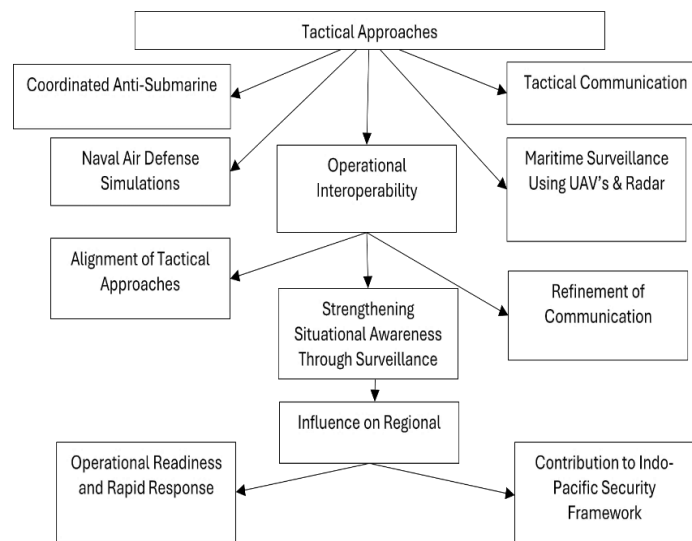


Figure 3. The Role of Tactics in Joint Exercises on Enhancing Operational Interoperability
 Source: proceed by author, 2024

The Indonesian and Russian navies can work together effectively to address

security challenges in the Indo-Pacific region. They can create a strong and

coordinated force by sharing tactics and technology.

Joint exercises between the two navies help them learn to work together better. They improve communication and use advanced methods to monitor the situation. This collaboration has significantly improved the Indonesian Navy's ability to respond to regional security threats (Cameron, 2023).

This strong partnership strengthens Indonesia's defense and contributes to overall security in the Indo-Pacific. It helps maintain stability in the face of growing maritime security challenges (Bailey, 2024).

Technological Advancements in Indonesian-Russian Naval Exercises: Impact on Defense Capabilities

The joint exercises between the Indonesian Navy (TNI AL) and the Russian Navy have introduced significant technological advancements, improving both forces' defense capabilities and teamwork. These advancements, such as advanced communication systems and unmanned surveillance technologies, are key to modern naval operations. They have strengthened both nations' ability to tackle common maritime security threats more effectively.

Implementing advanced communication and data sharing systems is a key technological advancement in these joint exercises. The Russian Navy has recently introduced encrypted communication platforms allowing real-time data exchange between vessels and command centers, even in electronically contested environments (Ardi, 2023). This technology ensures that both navies maintain secure communication channels and robust situational awareness. During joint maritime patrols, for example, these systems let them instantly share information about where ships are, what threats they have found, and tactical orders. This makes acting as a group much easier (Dalkiran et al., 2021).

Uncrewed Aerial Vehicles (UAVs) and drone systems play a crucial role in enhancing maritime surveillance and reconnaissance during joint exercises. By leveraging Russia's expertise in drone technology, TNI AL gains access to UAVs equipped with high-resolution imaging and real-time data transmission capabilities, allowing for monitoring vast ocean areas over extended periods. These UAVs provide both navies with a safer, more cost-effective solution for continuous surveillance, vital for tracking suspicious or hostile vessels in remote

areas (Chacko, 2016; Denisov et al., 2021). For instance, UAVs can monitor regions prone to illegal fishing or smuggling, capturing visual data that guides naval deployment decisions, thereby increasing the reach and effectiveness of patrol operations (Potamos et al., 2024).

Submarine technology is another key focus in the joint training between the Indonesian and Russian navies. Russia's advanced Kilo-class submarines, featured in these exercises, provide valuable insights into submarine warfare and anti-submarine tactics for the Indonesian Navy. These submarines, known for their stealth capabilities and endurance, are equipped with advanced sonar and radar systems, allowing for silent and prolonged surveillance in contested waters (Char, 2024). Through these joint exercises, TNI AL personnel gain firsthand experience in detecting and countering submarine threats, a skill that is increasingly vital in Southeast Asia's contested maritime zones.

Additionally, TNI AL has integrated radar and sonar systems to detect vessels and submarines at extended ranges and under various conditions. Russia has supplied high-performance sonar systems that significantly enhance the detection of underwater threats,

improving TNI AL's ability to monitor submarine activity. During joint exercises, these sonar systems simulate finding an enemy submarine. This helps both navies get ready to work together to defend themselves (Ismail et al., 2021). This technology strengthens TNI AL's offensive and defensive maritime capabilities, which are crucial for safeguarding Indonesia's extensive naval borders.

Anti-aircraft defense systems have been a focal point in the exercises, enabling the Indonesian Navy to integrate new defense mechanisms against aerial threats. The Russian Navy has provided valuable insights and training on anti-aircraft weapons and radar systems, enhancing the ability to intercept potential aerial threats in maritime zones (M. Singh, 2020). This capability is particularly relevant as aerial reconnaissance and unmanned aerial threats become increasingly prominent in modern naval security. The enhanced anti-aircraft defense training strengthens the Indonesian Navy's capacity to protect vessels and assets from state and non-state aerial threats.

The diagram below illustrates key technological advancements integrated into joint exercises between the

Indonesian and Russian navies, highlighting their impact on collective defense capabilities. These improvements, which include safe communication systems, advanced

sonar, and anti-aircraft defense technologies, make it easier for structures to work together and prepare to deal with regional security problems.

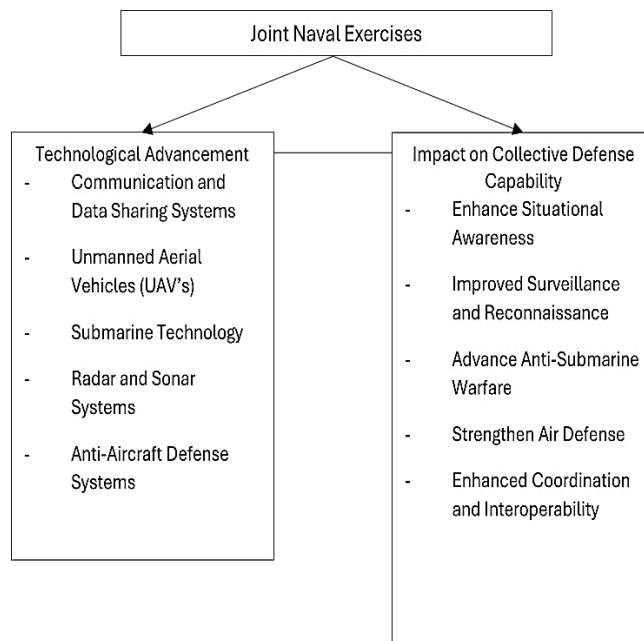


Figure 4. Impact of Technological Advancements in Joint Naval Exercises on Defense Capabilities
 Source: proceed by author, 2024

These technological advancements significantly enhance the operational readiness and defensive capabilities of the Indonesian Navy, allowing both navies to work together in a highly coordinated and synchronized manner (Sarjito, 2023). By integrating these technologies into joint exercises, the Indonesian and Russian navies strengthen their combined maritime defense, equipping them with the tools needed to address the complex security challenges in the Indo-Pacific region. The continued technological alignment

fostered by these exercises is crucial for promoting regional stability and boosting defense resilience, positioning both nations as key players in ensuring maritime security.

Indonesian-Russian Naval Exercises Shaping Defense Policies in the Indo-Pacific

The joint drills between the Indonesian Navy (TNI AL) and the Russian Navy are critical for aligning military strategy with the Indo-Pacific region's evolving security situation. These

exercises go beyond conventional military training, serving as a framework for establishing and coordinating defense strategies that prioritize regional stability, maritime security, and geopolitical balance. Joint operations demonstrate the fleets' commitment to boosting their defense capabilities and developing diplomatic relations. This collaboration substantially impacts military measures to address the region's escalating security concerns.

One of the most significant outcomes of the joint exercises between the Indonesian and Russian navies is their contribution to reinforcing Indonesia's defense policy of "active neutrality." Historically, Indonesia has maintained a non-aligned stance, balancing defense relations with various global powers (Le, 2020). Through these exercises, Indonesia aims to collaborate with non-Western nations, such as Russia, while preserving its neutral position in the global arena (Chacko, 2016; Denisov et al., 2021). By doing these drills, Indonesia can broaden its defense partnerships and avoid relying too much on a single country. This protects Indonesia's freedom in defense policy and supports its national interests in maintaining peace

and security in the region (Gindarsah & Priamarizki, 2015).

Additionally, these exercises have strengthened the focus on maritime security policies for both nations, addressing regional challenges such as illegal fishing, piracy, and territorial disputes. Protecting its naval borders and combating illicit activities within its extensive exclusive economic zones (EEZ's) remain top priorities for Indonesia. Collaborating to combat piracy and monitor the situation provides TNI AL with valuable experience and strategic insights that help shape its maritime security policies and safeguard its exclusive economic zone (Arif & Kurniawan, 2018; Manggala et al., 2024). For Russia, which has growing interests in Southeast Asia, these exercises allow it to showcase its commitment to supporting regional stability, reinforcing its broader policy of expanding influence in strategic regions such as the Indo-Pacific (Atanassova-Cornelis et al., 2023).

The joint exercises also significantly influence both countries' defense procurement and technology policies. For Indonesia, these exercises provide an opportunity to evaluate Russian military technology, such as submarines, radar systems, and communication platforms.

This exposure informs Indonesia's defense procurement policies, helping to identify potential future acquisitions and areas for technological enhancement within its naval forces (Savitri, 2016).

The exercises offer Russia a platform to showcase its military hardware and capabilities, reinforcing its position as a reliable defense partner. Additionally, they promote Russia's defense exports in Southeast Asia, aligning with its broader strategic goal of diversifying military alliances beyond traditional partners (Gorenburg & Schwartz, 2019).

These joint exercises significantly influence adjustments in policies related to collective security and joint maritime response frameworks. The growing collaboration between the Indonesian Navy and the Russian Navy establishes a foundation for cooperative frameworks that could evolve into multilateral security arrangements in the Indo-Pacific (U.S., 2019). Both countries acknowledge the need for coordinated responses to regional threats, and the exercises provide a platform to assess how their defense policies can be adapted for future joint operations. This collaboration helps enhance regional stability by fostering partnerships based on shared

security interests, offering an alternative to alliances primarily centered on Western powers.

Additionally, these exercises have a subtle but significant impact on geopolitical alignment and deterrence policies. As tensions rise in the Indo-Pacific due to the strategic competition between the United States and China, Indonesia and Russia leverage their joint exercises to strengthen their regional positions. Cooperation with Russia signals its policy independence for Indonesia and highlights its capacity to engage with diverse global partners. Meanwhile, Russia strengthens its influence in Southeast Asia and advocates for a multipolar security framework in the Indo-Pacific rather than one dominated by a single power bloc (S. Singh & Marwah, 2022). These policy shifts help enhance regional deterrence by presenting a united front in maritime operations and discouraging potential aggression from external powers.

The following framework illustrates how joint exercises between the Indonesian Navy and the Russian Navy shape defense policies in the Indo-Pacific region. These exercises extend beyond tactical collaboration, providing a foundation for formulating policies that

address evolving regional security challenges. Through joint operations, both navies strengthen policies that

promote regional stability, enhance defense partnerships, and adapt to the complex geopolitical landscape.

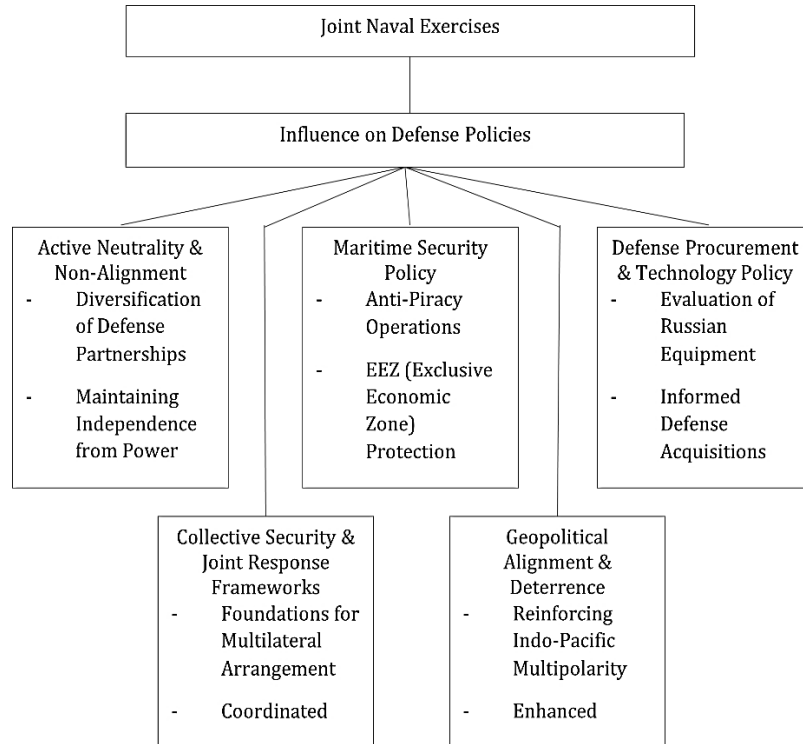


Figure 5. Influence of Joint Naval Exercises on Defense Policy Development in the Indo-Pacific
Source: proceed by author, 2024

Through these joint exercises, Indonesia and Russia develop policies that enhance regional security and resilience. This collaboration demonstrates both nations' commitment to an adaptive and balanced defense approach, contributing to maintaining stability in the increasingly dynamic Indo-Pacific region.

The joint exercises between the Indonesian and Russian navies are critical in shaping defense policies by promoting regional security stability, optimizing

procurement efficiency strategies, and strengthening geopolitical alignment. These drills help both countries improve their defense strategies so they can better deal with the challenges that come with the growing security complexity of the Indo-Pacific. This makes the region's power structure more stable and balanced.

Conclusions, Recommendations, and Limitations

The joint exercises between the Indonesian and Russian navies are critical in shaping defense policies by promoting regional security stability, optimizing procurement efficiency strategies, and strengthening geopolitical alignment. These drills help both countries improve their defense strategies so they can better deal with the challenges that come with the growing security complexity of the Indo-Pacific. This makes the region's power structure more stable and balanced.

These collaborations have broader implications for defense policies as well. Indonesia aligns with its active neutrality policy, enabling diversified partnerships while maintaining a non-aligned stance. For Russia, the exercises extend its influence in Southeast Asia and reinforce a multipolar security environment. Together, these efforts contribute to regional stability by balancing power dynamics and supporting the evolving strategic landscape of the Indo-Pacific.

Several steps are recommended to build on these successes. A long-term strategic plan for future exercises could ensure sustained interoperability and progress in technology sharing. Expanding training to include cyber-defense and disaster response scenarios

would address emerging security challenges and boost adaptability. Transparent communication with regional partners could alleviate geopolitical concerns and foster trust. Additionally, continued investment in advanced technologies like AI and autonomous systems would enhance operational efficiency and decision-making in joint missions.

Despite progress, some challenges persist. Geopolitical concerns may limit the depth of collaboration, as some countries view Russia's increasing influence in Southeast Asia with caution. Budget constraints could also reduce the frequency and scale of joint exercises or technological investments. Additionally, differences in operational practices, language, and technological capabilities could complicate efforts to achieve smooth interoperability. Importantly, Indonesia must avoid becoming overly dependent on Russia to maintain its active neutrality and retain the flexibility to build partnerships with other nations. By addressing these challenges and adopting the suggested strategies, Indonesia and Russia can strengthen their cooperation, bolster regional security, and support a more balanced and stable Indo-Pacific.

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