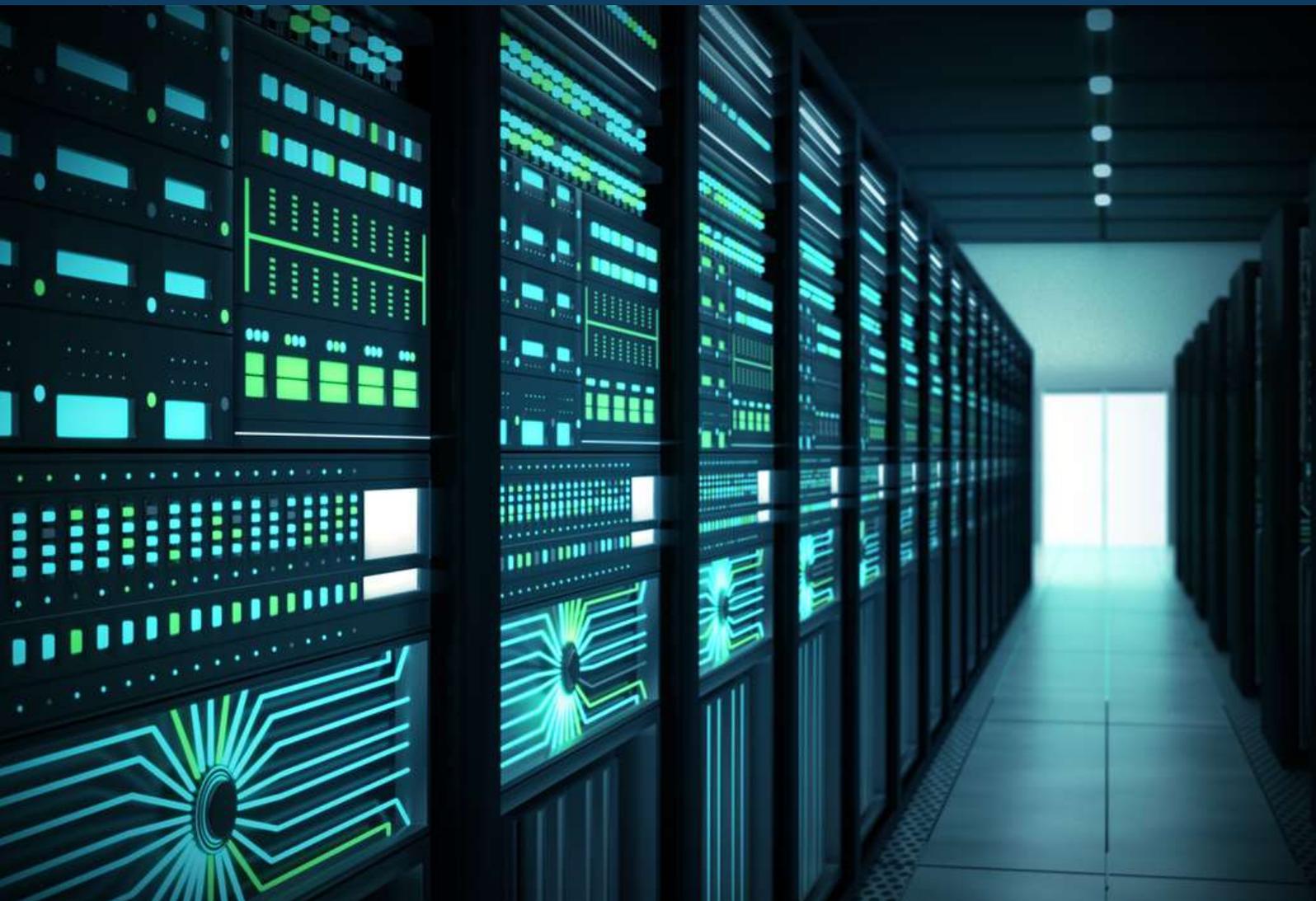




# Impact of Artificial Intelligence on Defence Planning: Case of Japan

MARCH 2026

RYO HINATA-YAMAGUCHI



© 2026 Ryo Hinata-Yamaguchi

This volume is published under a 4.0 International Creative Commons License.

The views represented herein are the author's own and do not necessarily reflect the position of the Asia-Pacific Leadership Network or any of its members, board, or funders.

This paper was supported through a general core grant from the Nuclear Threat Initiative.

Please direct inquiries to: Asia-Pacific Leadership Network (APLN)  
Secretariat 4th floor, 116, Pirundae-ro,  
Jongno-gu, Seoul, ROK, 03035  
Tel. +82-2-2135-2170  
Fax. +82-70-4015-0708  
Email. [apln@apln.network](mailto:apln@apln.network)

This publication can be downloaded at no cost at [www.apln.network](http://www.apln.network).

Cover Photo: Yuichiro Chino, Getty Images.

# IMPACT OF ARTIFICIAL INTELLIGENCE ON DEFENCE PLANNING: CASE OF JAPAN

Ryo Hinata-Yamaguchi<sup>1</sup>

## INTRODUCTION

There is an ongoing debate over the impact of Artificial Intelligence (AI) in military operations and warfare. While there are divisions over whether the integration of AI into modern warfare is evolutionary (representing an evolution in military capabilities) or revolutionary (representing a fundamental shift in nature of combat), there is little disagreement that AI technologies are an essential enabler of greater effectiveness and efficiency of defence operations and readiness. The technological features of AI make them critical in modern warfare that involves various systems dependent on high-volume data, algorithms, and complex communication infrastructures, leading to significant enhancements in command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), and in automating administrative tasks. Implementation and operationalisation of the above will not only boost the effectiveness and efficiency of weapons systems, but more importantly pertain to cross-domain and multi-domain operations that span across the ground, maritime, air, cyber, outer space, and cognitive spaces.

Like many states, Japan acknowledges the benefits and the need to utilize AI-enabled systems in defence. Japan's Ministry of Defense (MOD) has embarked on implementing and operationalising AI in the Japan Self-Defense Force (JSDF). The efforts started in the mid-2010s, but the momentum grew after the adoption of the Artificial Intelligence Technology Strategy in July 2024 and the Guideline for Responsible AI Application in Research and Development of AI-Equipped Defense Systems (Responsible AI Application Guideline) in June 2025 that set the vision and roadmap for AI-enabled defence systems.<sup>2</sup> While Japan holds much potential in taking advantage of AI to enhance the operational readiness and capabilities of the JSDF, it is still in the early phases of the learning curve. To date, most of the developments have been on the institutional and procedural frameworks, while progress on the operational and technological aspects have focused on conceptualising and experimenting with what works and what does not. Thus, Japan's actual AI-related progress has been modest and incremental, which in turn raises a number of questions about defence planning.

This paper aims to examine how AI shapes Japan's defence planning and operational risk management. The paper begins by looking at the nature of Japan's AI governance

---

<sup>1</sup> Research for this paper was supported by JSPS KAKENHI Grant Number 23K22086.

<sup>2</sup> See: Japan Ministry of Defense, "Artificial Intelligence Strategy," (Tokyo, Japan: July 2024), [https://www.mod.go.jp/j/press/news/2024/07/02a\\_03.pdf](https://www.mod.go.jp/j/press/news/2024/07/02a_03.pdf); Japan Ministry of Defense, "Guideline for Responsible AI Application in Research and Development of AI-Equipped Defense Systems," (Tokyo, Japan: June 2025), [https://www.mod.go.jp/atla/soubiseisaku/ai\\_guideline/ai\\_guideline\\_ver.01\\_eng\\_202506.pdf](https://www.mod.go.jp/atla/soubiseisaku/ai_guideline/ai_guideline_ver.01_eng_202506.pdf)

in the defence realm, followed by an outline of the plans for the operationalisation of the technology in the JSDF. The paper will then look at the impact on regional security, discussing how the fluid and tense nature of the region raises dilemmas and questions concerning stability. Finally, the paper will conclude by looking at the road ahead for Japan's AI initiatives from the defence planning perspective.

## **JAPAN'S INTEREST AND IMPLEMENTATION OF AI IN DEFENCE**

Aside from the technological benefits of AI shared by most states, several unique and specific factors drive Japan's pursuit of AI-enabled defence systems. First, for Japan, AI-enabled defence systems are a direct response to a rapidly deteriorating security environment. Japan is driven by the need to counter regional threats from China, North Korea, and Russia – all nuclear-armed neighbours.<sup>3</sup> The threats posed by these states emanate not only from their military capabilities, but also from the increasing military cooperation between these states. Japan's proximity to the regional conflict hotspots like the Korean Peninsula, South China Sea, and the Taiwan Strait, also complicates Japan's security environment.

The second driver, related to the first, is the combination of threats faced by Japan and vulnerabilities in its own defence readiness. For instance, in recent years there has been a notable increase in number of incursions and transits, military exercises, weapons tests, and provocations near Japan by China, North Korea, and Russia in the maritime, air, and cyber domains. Such cases have led to burdens beyond the JSDF's current capacity to detect, analyse, track, and respond to potential and actual hostile activities, requiring more advanced C4ISR and weapons systems.

Advanced C4ISR systems, however, are comprised of sophisticated computer and network systems that process massive amounts of data. Therefore, AI-enabled systems are considered vital to increase efficiency and effectiveness in modern defence operations. Moreover, Japan is working to enhance its joint operations readiness with efforts boosted by the establishment of the Joint Operations Command in March 2025. Although there are still many more developments to come, joint operations will be one of the key criteria for Japan's defence planning, and AI will prove to be one of the key components in the creation of a "joint kill-web."<sup>4</sup>

The third driver pertains to personnel shortages in the JSDF. The problems stem not only from Japan's demographic challenge but also from the lack of interest among the youth to join the forces. The recruitment and retention shortages in the JSDF have become serious since the 2010s. Given this reality, the Japanese Ministry of Defence (MOD) sees automation through AI as a pivotal solution to meet the increasing readiness demands amid the limited capacity in human resources.

---

<sup>3</sup> Japan Ministry of Defense, "Defense of Japan 2025," (Tokyo, Japan: July 2025).

<sup>4</sup> See: Ryo Hinata-Yamaguchi, "Optimizing Joint Operational Readiness: Lessons for Japan," *Japan Maritime Self-Defense Force Command and Staff College Review* 13, no. 2 (March 2024).

Despite a strong rationale for AI-enabled systems in Japan's defence, actual progress in development and operationalisation has been modest and incremental. In March 2017, Japan compiled the first "Artificial Intelligence Technology Strategy," serving as the political, bureaucratic, and organisational roadmap for the government and related industries in the research and development, as well as utilisation of AI.<sup>5</sup> In national defence, the National Security Strategy of 2013, and the revised National Defense Program Guidelines and Mid-Term Defense Program issued in December 2018 made references to AI as one of the key emerging technologies in modern military operations and platforms.<sup>6</sup> The developments, however, remained incremental till the 2020s, as the budgets allocated modest funds for conceptualising the application of AI in the areas of C4ISR, uncrewed systems, and cyber security.<sup>7</sup> Moreover, there were institutional efforts for enhancing research and development through establishing dedicated units within the MOD, and by collaborating with various industrial partners and academic institutions.

Significant steps followed with the issuance of the National Security Strategy (NSS), National Defense Strategy (NDS), and Defense Buildup Program (DBP) in December 2022.<sup>8</sup> The three documents introduced major changes to Japan's defense strategy and planning, with more nuanced emphasis on new and emerging technologies, including AI. Then in July 2024, the MOD introduced the Artificial Intelligence Strategy, stating that the MOD and JSDF "stands at the crossroads of either becoming an efficient organization that innovatively shapes its own future through AI utilization, or become an inefficient, outdated organization."<sup>9</sup> While broad, the document nonetheless outlined the visions for the development, application, and operationalisation of AI-enabled defence systems, as well as the procedural, structural, and technological challenges. In accordance with the AI Strategy and standards set by the Ministry of Economy, Trade and Industry, the MOD released the Responsible AI Application Guideline in June 2025, outlining how the research and development, and implementation of AI-enabled systems will adhere to strict standards of accountability, bias mitigation, oversight, reliability, safety and security, and transparency.<sup>10</sup>

---

<sup>5</sup> Strategic Council for AI Technology, "Artificial Intelligence Technology Strategy," (Tokyo, Japan: Strategic Council for AI Technology, March 2017).

<sup>6</sup> Japan Ministry of Defense, "National Defense Program Guidelines for FY 2014 and Beyond," (Tokyo: Japan17 December 2013).; Japan Ministry of Defense, "National Defense Program Guidelines for FY 2019 and Beyond," (Tokyo: Japan18 December 2018).; Japan Ministry of Defense, "Medium Term Defense Program (FY2019 - FY2023)," (Tokyo: Japan18 December 2018).

<sup>7</sup> See: Ryo Hinata-Yamaguchi, "Comparing Military AI Strategic Perspectives: Japan and South Korea," in *The AI Wave in Defence Innovation: Assessing Military Artificial Intelligence Strategies, Capabilities, and Trajectories*, ed. Michael Raska and Richard A. Bitzinger (London, UK: Routledge, 2023).

<sup>8</sup> Government of Japan, "National Security Strategy of Japan," (Tokyo: Japan16 December 2022).; Japan Ministry of Defense, "National Defense Strategy," (Tokyo: Japan16 December 2022).; Japan Ministry of Defense, "Defense Buildup Program," (Tokyo: Japan16 December 2022).

<sup>9</sup> Japan Ministry of Defense, "Artificial Intelligence Strategy." p.iv.

<sup>10</sup> See: Strategic Council for AI Technology, "Artificial Intelligence Technology Strategy."

Broadly, the Responsible AI Application Guideline boils down to addressing three areas. First, it stresses the MOD's compliance with international and domestic discussions on ethical use of AI in defence. In particular, there is considerable emphasis on "human-in/on the loop" to ensure adequate control and oversight by humans, and on the narrative that Tokyo does not have intentions to pursue the development and deployment of Lethal Autonomous Weapon Systems (LAWS). Naturally, much of this is about promising the responsible use of AI and upholding Japan's compliance with international humanitarian laws.

Second, the Responsible AI Application Guideline is also intended to assure and attract academic and industrial partners for collaboration in the research and development of AI-enabled defence systems. Such measures are important in Japan, given the long-standing controversies and hesitancy among the academic and civilian sectors for collaboration with the defence institutions. Problems not only stem from views on the pacifist constitution and fear of militarism, but also views among some that working with the defence sector involves stringent regulations.

Third, the Responsible AI Application Guideline is also part of Japan's effort to improve its credibility in information security. In recent years, Japan has deepened its defence relations not only with the United States, but also with other US allies in the Indo-Pacific region and beyond – including in the areas of AI.<sup>11</sup> At the same time, however, there have been concerns over Japan's information security regimes, particularly with the hacking of Japan's defence network by China in 2020 and 2021, as well as laws and protocols that are considered weak compared to those of "Five Eyes" states.<sup>12</sup> While the Guidelines are no silver bullet, Tokyo considers it to be nonetheless important in assuring allies and other partners that Japan will adequately manage its AI systems from the vantage point of information security.

## **PLANS FOR AI-ENABLED SYSTEMS IN THE JSDF**

Although still in its early stages, Japan is slowly but steadily moving forward in operationalising AI-enabled systems within the JSDF. The MOD Artificial Intelligence Strategy laid out the following areas where AI-enabled systems will be introduced:<sup>13</sup>

---

<sup>11</sup> See: Tate Nurkin and Ryo Hinata-Yamaguchi, "Emerging Defense Technologies in the Indo-Pacific and the Future of US-Japan Cooperation," ed. Atlantic Council (Washington, DC April 2020).

<sup>12</sup> Jeffrey W. Hornung et al., "Preparing Japan's Multi-Domain Defense Force for the Future Battlespace Using Emerging Technologies," (Santa Monica, CA: RAND Corporation, 2021).

<sup>13</sup> Japan Ministry of Defense, "Artificial Intelligence Strategy." pp:8-9.

CATEGORY	APPLICATIONS/ROLES
C4ISR	<ul style="list-style-type: none"> <li>• Target detection and distinction</li> <li>• Information collection and analysis</li> <li>• Assisting threat assessment and decision-making</li> <li>• Operation of air, naval, ground, and uncrewed systems</li> </ul>
Rear support	<ul style="list-style-type: none"> <li>• Analyse and forecast logistical needs and supplies</li> <li>• Calculate efficient supply-chain routes</li> </ul>
Cyber security	<ul style="list-style-type: none"> <li>• Detect and block/neutralise cyber-attacks and espionage</li> </ul>
Administrative tasks	<ul style="list-style-type: none"> <li>• Analyse and forecast logistical needs and supplies</li> </ul>

In all, the above areas of AI-application dovetail with the “Key Capabilities for Fundamental Reinforcement of Defense Capabilities” outlined in Japan’s 2022 NDS:

1. “stand-off defense capabilities”,
2. “integrated air and missile defense capabilities”,
3. “unmanned defense capabilities”,
4. “cross-domain operation capabilities”,
5. “command and control and intelligence-related functions”,
6. “mobile deployment capabilities and civil protection”, and
7. “sustainability and resiliency.”<sup>14</sup>

In sum, AI is seen as the essential piece for various capabilities and operations, including, but not limited to: joint operations, C4ISR, deterrence by detection, uncrewed systems, counterstrikes, administrative efficiency, and so forth.<sup>15</sup> Japan’s pursuit of AI-enabled defence systems, therefore, is both threat-based and operations-based, aiming to use the technology to improve the effectiveness and efficiency of the JSDF’s operations and readiness to address the aforementioned external threats and internal vulnerabilities.

<sup>14</sup> Japan Ministry of Defense, “National Defense Strategy.”

<sup>15</sup> For general concepts on these operations, see: Bryan Clark, “Winning the Fight for Sensing and Sensemaking: Fielding Cyber and Electronic Warfare Capabilities at Scale,” (Washington, D.C.: The Hudson Institute, December 2024); John R. Hoeh, “Joint All-Domain Command and Control: Background and Issues for Congress,” (Washington, DC: Congressional Research Service, 2022).; Travis Sharp, Thomas G. Mahnken, and Tim Sadov, “Extending Deterrence by Detection: The Case for Integrating Unmanned Aircraft Systems Into the Indo-Pacific Partnership for Maritime Domain Awareness,” (Washington, D.C.: Center for Strategic and Budgetary Assessments, July 2023).

## CHALLENGES IN IMPLEMENTING AI-ENABLED SYSTEMS IN THE JSDF

That said, the MOD faces several issues in implementing and operationalising the AI-enabled systems in the JSDF. First, there are major infrastructural and logistical issues in implementing and operationalising the MOD's plans. Even if the AI-enabled systems are introduced, effectively and sustainably operating them will pivot on whether Japan possesses or has access to quantitatively and qualitatively sufficient data centers. While Japan already operates over 275 publicly-listed data centres, the drive for AI-enabled systems will inevitably increase demands for more centres. Moreover, given that such systems will require enormous amounts of electricity, there will be questions about the stability and security of energy supplies – an issue that Japan already struggles to address given the lack of indigenous energy resources.

Second, and related to the first, there will be questions over how Japan can adequately protect its data centres, networks, and energy systems. The dilemma here is that the more MOD utilises (and depends on) AI-enabled systems, the more it is forced to protect the data and networks from attacks, theft, and manipulation. Although the JSDF has taken some steps forward in its cyber defence readiness through the Cyber Defense Command, actual readiness is still nascent, and will still depend much coordination with the police institution and the private sector for dealing with the diverse threats in the cyber domain.

The third problem relates to human resources, where Japan's plans to implement AI-enabled systems in defence will require the recruitment and training of personnel specialising in information and communications technology (ICT). The MOD has already started recruitment schemes for personnel specialising in ICT, and there are also training centres within the JSDF that purport to nurture AI-specialized personnel. While such efforts are set in the right direction, the JSDF nevertheless faces the additional challenge of securing sufficient numbers of ICT-specialized personnel, given the JSDF's aforementioned difficulties with recruitment and retention. Moreover, Japan overall faces concerns about a shortage of software engineers, often relying on foreign citizens to take on those roles.

The fourth challenge concerns institutional and structural problems in both MOD and JSDF. The guidelines and strategies formulated in recent years have led to the establishment of offices and units within defence institutions dedicated to research and development, operational and tactical concepts and doctrines, and operationalisation of AI-enabled systems. Yet, these institutions remain small and many of their projects are still in nascent stages. Problems persist not only because the MOD's initiatives for AI-enabled defence systems are still in their infancy, but more because of the inherent cautious and conservative nature of Japan's bureaucracy that makes them hesitant and even resistant to institutional and procedural changes. Consequently, such problems

hinder the necessary reforms essential to accommodating and operating new and emerging technologies like AI.

How Japan addresses the abovementioned issues will impact not only the effectiveness of AI-enabled systems, but also the JSDF's force structural and operational readiness. Given the challenges and also the fact that the MOD's plans are still broad and nascent, the actual progress to implement and operationalise AI-enabled systems is likely to be incremental. Consequently, although Japan will continue to make progress, it will still take time before it can implement and operationalise, or even make itself compatible with more complex systems such as the US' Joint All-Domain Command and Control (JADC2), distributed operations, and others that heavily depend on AI architectures.<sup>16</sup>



*Source: Drill by ASDF space operation squadron The Japan Air Self-Defense Force's space operation squadron conducts a drill at its base in Fuchu, western Tokyo, on Nov. 30, 2021. Inaugurated in May 2020, the 20-member squadron is tasked with establishing a system to monitor space debris, a threat to satellites. (Photo by Kyodo News via Getty Images)*

---

<sup>16</sup> See: Sam J. Tangredi and George Galdorisi, *AI at War: How Big Data, Artificial Intelligence, and Machine Learning Are Changing Naval Warfare*, (Annapolis, MD: Naval Institute Press, 2021).

## IMPACT ON REGIONAL STABILITY AND ESCALATORY RISKS

Given the growing momentum across East Asia toward integrating AI into defence planning and readiness, there are pressing questions about the impact on regional stability and potential escalatory risks. While the actual effects are difficult to precisely forecast, the grey-zone tensions in the Indo-Pacific driven-up by the nature of the conflicts and military postures by regional stakeholders, warrant greater attention.

First, all states in East Asia are integrating AI into their defence planning and operations, arguably for similar purposes of improving effectiveness and efficiency, albeit with differences in the degrees of implementation and operationalisation. Such circumstances are ripe for competition based on AI-enabled weapons systems that would take place over the course of the coming decades. It must be borne in mind, however, that the competition would be less about physical aspects such as accuracy, destruction, manoeuvre, range, and velocity that are not directly dependent on AI systems. Rather, AI-enabled systems are anticipated to increase the speed and bandwidth in the ‘observe, orient, decide, and act’ loop (OODA) that would significantly enhance the forces’ ability to act more quickly and decisively, consequently lowering the threshold for armed engagements.

Second, there are growing debates about how AI-enabled C4ISR systems will impact escalation, particularly nuclear.<sup>17</sup> Naturally, today’s systems are technologically far more advanced, but whether they are smarter and can perfectly handle circumstances is not guaranteed and remains unknown. While there is a general consensus about how AI will improve real-time data analysis, threat detection, and decision-making, there are divided views about whether or not the technology will increase or decrease the risks of escalation and conflict.<sup>18</sup> Indeed, automated systems are not new, and there have been cases in the past where there have been false alarms that risked nuclear exchange, such as the case in September 1983 when the Soviet Union’s early warning system ‘Okol’ falsely detected an intercontinental missile strike launched from the United States.<sup>19</sup>

Third, the conflicts in East Asia – most notably the Korean Peninsula, Taiwan Strait, and East China Sea – have evolved to include hybrid warfare using both military and

---

<sup>17</sup> For examples, see: Toni Erskine and Steven E. Miller, “AI and the Decision to Go to War: Future Risks and Opportunities,” *Australian Journal of International Affairs* 78, no. 2 (2024).; Vladislav Chernavskikh and Jules Palayer, “Impact of Military Artificial Intelligence on Nuclear Escalation Risk, What Happens if AI Goes Nuclear?,” (Stockholm, Sweden: Stockholm International Peace Research Institute, June 2025).; Priyesh Mishra et al., “Code, Command, and Conflict: Charting the Future of Military AI,” (Cambridge, MA: Belfer Center for Science and International Affairs, 2025).

<sup>18</sup> For examples, see: Iskander Rehman, “An Algorithmic Loosening of the Atomic Screw? Artificial Intelligence and Nuclear Deterrence,” (West Point, NY: Modern War Institute, November 2025).; Edward Geist and Andrew J. Lohn, “How Might Artificial Intelligence Affect the Risk of Nuclear War?,” in *Next Gen Community Analysis* (Santa Monica, CA: RAND Corporation, 2018).

<sup>19</sup> See: David E. Hoffman, *The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy*, 1st Anchor Books ed. (New York, NY: Anchor, 2010).

non-military means, and expanding and ensuring grey-zone situations short of armed conflicts. Moreover, these conflicts are unfolding not only on land, at sea, and in the sky, but also in the cyber, outer space, and cognitive domains. raising the risks of escalation – both planned and unintended – in the East Asia region.<sup>20</sup>

Under such circumstances, the greater utilisation of AI-enabled systems – particularly in C4ISR and uncrewed vehicles – could accelerate and increase the risks of armed conflict, either by increasing the sensitivity of C4ISR systems to contentious situations or, in extreme cases, by misinterpreting threats and the opponent’s actions. For instance, AI-enabled C4ISR may not be able to distinguish between provocations with the intention of intimidating the opponent and an actual armed attack. Given that intimidating actions are not uncommon in the region, there are concerns that AI-enabled systems could spark hot conflicts – especially if any of the states opts to develop and deploy LAWS.

Indeed, the various discussions concerning the technological features of AI suggest that states are aware of the risks and questionable reliability of the technology, making them more plausible tools to assist humans than working autonomously. In fact, much of the discussion among defence professionals on the use of AI-enabled systems has focused on assisting commanders and operators with ISR and target acquisition. The reasons are not simply from the ethical standpoint, but about questions over the credibility and reliability of AI-enabled systems, and to avoid operational and tactical failures. Still, even if AI systems are used to assist commanders and operators, it would nevertheless accelerate their OODA loop processes, which would consequently facilitate quicker and more decisive operations. Moreover, the cautious use of AI means that the risks from human-oriented misinterpretation and misjudgement will still exist, suggesting that the crux of the problem is not so much the technology, but the volatile circumstances in the region.

Against this backdrop, regional stability and escalating risks are shaped less by isolated developments in Japan than by the overall regional landscape. While much depends on how AI-enabled systems are implemented and operationalised, current and emerging trends suggest that these systems will be key factors shaping the nature of military modernisation and may directly or indirectly influence how conflict and escalation scenarios unfold.

---

<sup>20</sup> See: Yu Koizumi and Ryo Hinata-Yamaguchi, *2030no sensou [War in 2030]* (Tokyo, Japan: Nikkei BP, 2025).

## CONCLUSION

Like many states, Japan has strong rationales for implementing and operationalising AI-enabled defence systems, and the drivers for AI-integration are expected to grow in the coming years. Going forward, Japan is likely to take incremental yet steady steps in utilising AI as a key component of boosting the JSDF's readiness. This paper suggests, however, that Japan faces both internal and external challenges that boil down to two pressing questions: first, how to adequately implement and operationalise AI-enabled systems within the JSDF, and second, how to deal with the security environment and escalatory risks associated with AI-enabled systems. As discussed in this paper, several interrelated questions concerning AI will fundamentally shape Japan's defence planning in the coming years.

First, how Japan implements and operationalises AI will depend largely on how the JSDF determines and shapes its concept of operations and required capabilities. The 2022 NSS and NDS were a significant step in sharpening and strengthening the JSDF's strategies, operations, and readiness. Although details of the next version are yet to be determined, they could further clarify the AI-enabled systems needed in the JSDF.

Second, how to construct the AI-enabled systems and architectures that fit with the JSDF will pivot on the joint operations system that will be built in the coming years. The important point is that the JSDF develops its jointness readiness for cross- and multi-domain operations, as well as coordinated and combined operations with allies and like-minded states. Although the JSDF is still in the early stages of this endeavour, there is much potential in building a system that can take advantage of AI to enable effective and efficient joint operations readiness.

Third, as is the case for all states, AI alone will not be a silver bullet for Japan. While AI is undoubtedly an essential enabler in C4ISR by processing vast amounts of data and the OODA loop, real effectiveness and efficiency can be gained not only with the necessary hardware and software, but also if the institutional, cultural, and procedural frameworks are in order, and with a sufficient level of fluency among personnel. Achieving this, however, would require significant reforms within the MOD and JSDF, which could prove to be the biggest hurdles to overcome.

Japan's visions and efforts to implement and operationalise AI-enabled systems serve as an important case in the defence planning context. Despite the critical role that AI can play in defence, it must be the enabler, not the driver of defence readiness. Taking the technology-centric approach without due consideration of operations and capabilities, as well as setting the right structural, procedural, and infrastructural factors will lead to major disconnects in readiness. Although AI and its applications in defence is still evolving, it will undoubtedly remain a critical element in strategic planning and global security.

As for the regional implications, AI-enabled systems could worsen the already tense security environment in the Indo-Pacific. All states in East Asia, and some in South and Southeast Asia are now pursuing the adoption of AI-enabled systems in defence, raising the risks discussed in this paper. Facing such circumstances, measures to mitigate (in)advertent escalation risks are critical. Indeed, it would be implausible for states to reverse their plans to implement and operationalise AI-enabled systems and to be fully transparent given that the technology would be embedded deep into the most sensitive areas of their institutions, processes, and systems. Nevertheless, regional stakeholders should work together in setting agreed norms and standards for the responsible and safe use of the technology, focusing on areas such as accountability, best practices, oversight, safety, and transparency. While the above may be difficult enough under the current geopolitical climate, regional efforts in this direction could pave the way for stability and crisis prevention in the Indo-Pacific.

## ABOUT THE AUTHOR

**Ryo HINATA-YAMAGUCHI** is an Associate Professor at the Institute for International Strategy, Tokyo International University; Senior Non-Resident Fellow at the Atlantic Council Scowcroft Center for Strategy and Security Indo-Pacific Security Initiative; and Adjunct Senior Fellow at the Pacific Forum. Ryo has presented, published, and consulted on a variety of topics relating to defence and security, and transport governance in the Indo-Pacific. Ryo previously served as a non-commissioned officer in the Japan Ground Self-Defense Force (reserve) and also held positions at the University of Tokyo, Pusan National University, and Universitas Muhammadiyah Malang. Ryo received his PhD from the University of New South Wales, MA in Strategic and Defence Studies and BA in Security Analysis from the Australian National University and was also a Korea Foundation Language Training Fellow.

## ABOUT APLN

The **Asia-Pacific Leadership Network (APLN)** is a Seoul-based organization and network of political, military, diplomatic leaders, and experts from across the Asia-Pacific region, working to address global security challenges, with a particular focus on reducing and eliminating nuclear weapons risks. The mission of APLN is to inform and stimulate debate, influence action, and propose policy recommendations designed to address regional security threats, with an emphasis on nuclear and other WMD (weapon of mass destruction) threats, and to do everything possible to achieve a world in which nuclear weapons and other WMDs are contained, diminished, and eventually eliminated.



@APLNofficial



@APLNofficial



aplن.network



aplنofficial