

**NOTES  
DE L'IFRI**

ASIE.VISIONS, No. 124



OCTOBER  
2021



# **Developments in Japan's Defense Strategies and Readiness** Is the Glass Half Full or Half Empty?

Center for Asian  
Studies

---

Ryo HINATA-YAMAGUCHI

The French Institute of International Relations (Ifri) is a research center and a forum for debate on major international political and economic issues. Headed by Thierry de Montbrial since its founding in 1979, Ifri is a non-governmental, non-profit organization.

As an independent think tank, Ifri sets its own research agenda, publishing its findings regularly for a global audience. Taking an interdisciplinary approach, Ifri brings together political and economic decision-makers, researchers and internationally renowned experts to animate its debate and research activities.

The opinions expressed in this text are the responsibility of the author alone.

ISBN: 979-10-373-0426-1

© All rights reserved, Ifri, 2021

Cover: © Ministry of Defense, Japan

#### **How to quote this publication:**

Ryo Hinata-Yamaguchi, “Developments in Japan’s Defense Strategies and Readiness: Is the Glass Half Full or Half Empty?”, *Asie.Visions*, No. 124, Ifri, October 2021.

#### **Ifri**

27 rue de la Procession 75740 Paris Cedex 15 – FRANCE

Tel. : +33 (0)1 40 61 60 00 – Fax : +33 (0)1 40 61 60 60

Email: [accueil@ifri.org](mailto:accueil@ifri.org)

**Website:** [ifri.org](http://ifri.org)

# Author

**Ryo HINATA-YAMAGUCHI** is a Project Assistant Professor at the Research Center for Advanced Science and Technology of the University of Tokyo and also an Adjunct Fellow at the Pacific Forum. Ryo has presented and published on a variety of topics relating to defense and security, and transport governance in the Indo-Pacific. He previously served as a reserve Non-Commissioned Officer in the Japan Ground Self-Defense Force and held positions at Pusan National University, Universitas Muhammadiyah Malang, FM Bird Entertainment Agency, International Crisis Group Seoul Office, Sasakawa Peace Foundation, Embassy of Japan in Australia, and the Japan Foundation Sydney Language Centre. Ryo received his PhD from the University of New South Wales Canberra, an MA in Strategic and Defense Studies and a BA in Security Analysis from the Australian National University and was also a Korea Foundation Language Training Fellow. Ryo can be followed on Twitter at: @tigerrhy.

Ryo's recent publications include:

- *Defense Planning and Readiness of North Korea: Armed to Rule*. Oxfordshire, UK and New York, NY: Routledge, 2021.
- “Flying Blind at Sea: Growing Japan’s Naval Aviation Capability”, in *Policy Roundtable: The Future of Japanese Security and Defense*, edited by Jonathan D. Caverley and Peter Dombrowski, *Texas National Security Review*, October 1, 2020, available at: [tnsr.org](https://tnsr.org).
- *Emerging Defense Technologies in the Indo-Pacific and the Future of US-Japan Cooperation*, Atlantic Council, April 2020 (co-authored with Tate Nurkin).

# Abstract

On December 18, 2018, the Japanese government issued its latest National Defense Program Guidelines (NDPG), marking another step in Japan's defense planning and the readiness of the Japan Self-Defense Force (JSDF).

Broadly, there are four key takeaways from the 2018 NDPG: (1) Nascent but notable push for readiness based on Japan's expanded strategic frontiers under the auspices of the "Free and Open Indo-Pacific", (2) the emerging concept of "offense is the best means of defense" to defend and deter against threats, (3) pursuit of readiness for multi-domain operations in the ground, maritime, air, cyber, outer space, and electromagnetic spectrums, and promoting jointness that coordinates operations in those domains, and (4) greater coordination and interoperability with the United States and to some extent with other likeminded states at the strategic, operational and tactical levels. The revised NDPG is certainly a new step in Japan's accelerated efforts to sharpen and strengthen the JSDF's readiness.

Yet, despite the notable developments over the past two decades, there are still some issues that constrain Japan from formulating the strategies and readiness to effectively deal with the fluid and uncertain security environment in the Indo-Pacific region, particularly with China's increasingly assertive strategies and actions in the East and South China Seas and Taiwan Straits, North Korea's continued bellicose behavior and military modernization, and also uncertainties over Russia's strategies. Moreover, given the growing demands despite the political and economic constraints, there are still questions about how Japan's defense planning and readiness will continue to advance in the years to come.

# Table of contents

<b>INTRODUCTION .....</b>	<b>5</b>
<b>THREE FACTORS BEHIND THE ADVANCEMENTS IN JAPAN'S DEFENSE READINESS .....</b>	<b>6</b>
<b>An evolutionary path of military normalization.....</b>	<b>6</b>
<b>Responding to a threatening security environment.....</b>	<b>8</b>
<b>Upholding Tokyo's Free and Open Indo-Pacific Vision .....</b>	<b>9</b>
<b>THE 2018 NDPG: FLESHING OUT THE MULTI-DOMAIN DEFENSE FORCE.....</b>	<b>12</b>
<b>Modernization of aerial and maritime assets.....</b>	<b>12</b>
<b>Enhancing ballistic and space capabilities .....</b>	<b>14</b>
<b>Investing in new warfare domains: cyber and AI .....</b>	<b>15</b>
<b>CHALLENGES AND LIMITATIONS: INTERNAL AND EXTERNAL FACTORS .....</b>	<b>18</b>
<b>Challenges over offensive capabilities, jointness and security cooperation.....</b>	<b>18</b>
<b>Limitations to greater readiness: political and budgetary constraints in defense planning, manpower shortage and the security dilemma .....</b>	<b>21</b>
<b>CONCLUSION .....</b>	<b>25</b>

# Introduction

On December 18, 2018, the Japanese government issued its new National Defense Program Guidelines (NDPG). The document advocated a “Multi-Domain Defense Force” that “organically fuses capabilities in all domains including space, cyberspace and electromagnetic spectrum; and is capable of sustained conduct of flexible and strategic activities during all phases from peacetime to armed contingencies”.<sup>1</sup> Moreover, the 2018 NDPG and the Medium-term Defense Program (MTDP) for the fiscal year (FY) 2018–2023 has taken some important steps in building sharper capabilities that operate in a wider operational radius in what could be interpreted as the pursuit of offensive capabilities. The revised NDPG was yet another step forward for Japan’s defense planning, enhancing the effectiveness and efficiency of the Japan Self-Defense Force’s (JSDF) readiness to operate in a wider strategic scope, as well as reconfiguring its role in the alliance with the United States (US).

In essence, the 2018 NDPG is an evolutionary culmination of the developments that have taken place to strengthen and sharpen the JSDF. Compared to the Basic Defense Capability concept in the first NDPG issued in 1976, which took a minimalist approach by focusing on bare essential capabilities to deal with attacks and invasions, the NDPGs since the 2010s have worked to make the JSDF a more proactive force. The 2018 NDPG reflects the Japanese government’s efforts to fill the gaps but also build the foundations for future developments. That said, there are still a number of questions around readiness, in terms of the capacity and ability to effectively and efficiently carry out missions, and also *how* Japan’s defense planning will continue to advance in the years to come. While the demand for further enhancements are high, a number of political, economic, legal and operational constraints give rise to major defense planning dilemmas, consequently creating issues regarding the future of the JSDF.

This paper assesses the developments in Japan’s defense planning and impact on the JSDF’s readiness. The assessment is based on three questions: What factors motivated the 2018 NDPG? What are the key developments in Japan’s defense planning and the JSDF’s readiness? What are the future challenges, limitations and dilemmas faced by Japan?

---

1. Japan Ministry of Defense, “National Defense Program Guidelines for FY 2019 and Beyond”, December 18, 2018, p. 11.

# Three Factors behind the Advancements in Japan's Defense Readiness

## An Evolutionary Path of Military Normalization

Analysis of the rationales behind the recent advancements in Japan's defense planning must begin with an overview of the developments since the inauguration of the JSDF in 1954. Despite the significant developments in the JSDF's organizational structure and readiness between the 1950s and 1970s, it was not until 1976, when Japan published its first NDPG, that the nation's defense posture was clarified under the Basic Defense Capability concept that capped the JSDF's assets to those most essential to deter attacks and invasions. In large part, the incremental steps were due to the fact that defense-related matters were not immediate agendas under Tokyo's post-World War II Yoshida Doctrine, which focused on economic development while keeping a low profile in security. Although the 1995 NDPG broadly inherited the preceding NDPG, the increasingly challenging post-Cold War realities, which directly threatened Japan – most notably with North Korea's pursuit of strategic weapons, China's military modernization, and transnational terrorism – called for major changes. The new NDPG issued in December 2004 stated a more proactive and self-reliant posture toward national defense and international security, with a notable shift away from the original Basic Defense Force Concept toward “multifunctional, flexible, and effective defense forces”.<sup>2</sup> Structural developments also took place. On January 9, 2007, the Japan Defense Agency was promoted to full ministerial status, becoming the Ministry of Defense. The other significant development was the reorganization of the Joint Staff Council into the Joint Staff Office in March 2006 to improve joint operations and streamlining the JSDF's command structure and order-of-battle through a force-user/force-provider system.

The momentum for developments in defense strategies and readiness continued even when the Liberal Democratic Party (LDP) was replaced by the liberal-progressive Democratic Party (DPJ) as the ruling party in September 2009. The pressing circumstances and

---

2. “Defense of Japan 2005”, Japan Defense Agency, 2005, pp. 22-23.

need to sharpen the JSDF's readiness led to the introduction of the 2010 NDPG, which promised to enhance the JSDF's "readiness, mobility, flexibility, sustainability, and versatility" to create a "dynamic defense force".<sup>3</sup> The 2010 NDPG not only focused more on the mobilization of capabilities but also focused strongly on the defense of the southwest island chain, including readiness improvements for amphibious operations. Further developments came after the return of the LDP to power under Abe Shinzo in December 2012. In December 2013, Japan established the National Security Council to take charge of all national security matters, and also to formulate and issue the nation's National Security Strategy (NSS). The Abe administration also unveiled the 2013 NDPG and the MTDP based on the NSS, which was more proactive than reactive in nature. While there was much continuity between the 2010 and 2013 NDPG, the latter placed particular emphasis on the JSDF's joint readiness under the concept of the "Dynamic Joint Defense Force".

The more proactive defense posture led to changes in the legal conditions for the use of force. The first change came with the introduction of the "newly determined three conditions for the 'use of force'": (1) "[w]hen an armed attack against Japan has occurred, or when an armed attack against a foreign country that is in a close relationship with Japan occurs and as a result threatens Japan's survival and poses a clear danger to fundamentally overturn people's right to life, liberty and pursuit of happiness"; (2) "when there is no appropriate means available to repel the attack and ensure Japan's survival and protect its people", and (3) with the "use of force to the minimum extent necessary".<sup>4</sup> Legal reconfigurations were needed to make the JSDF capable of adequately functioning in accordance with the new conditions, leading to the passing of the Legislation for Peace and Security in September 2015; it included bills on Japan's right to exercise collective self-defense as well as legal justifications for the JSDF to respond to "gray-zone" situations that affect the nation's security.<sup>5</sup>

Despite the clear developments in Japan's strategies and defense planning, the increasingly uncertain security environment called for further measures to enhance the effectiveness and efficiency of JSDF operations for both national defense and international security cooperation.

3. Japan Ministry of Defense, "National Defense Program Guidelines for FY 2011 and Beyond", December 17, 2010, p. 40.

4. "Defense of Japan 2020", Japan Defense Agency, 2020, p. 200.

5. For details on the legislation, see: "Defense of Japan 2017", Japan Defense Agency, 2017, pp. 237-60.



## Responding to a Threatening Security Environment

A significant part of the developments in Japan's defense planning are threat-based. For Japan, China is and will continue to be the primary security threat. The critical issue is not only the rapid modernization of Chinese forces, but also the fact that Japan is positioned within China's continuously growing anti-access/area denial (A2AD) coverage, which makes the JSDF more vulnerable against the numerically superior People's Liberation Army (PLA). The major risk is that conflicts in the context of A2AD and counterstrategies could evolve into what some have termed "trench warfare in the sea".<sup>6</sup> There are also problems created by the acceleration in tempo, forcing the JSDF to face challenges in the rules of engagement to calculate whether the aggressor's actions are hostile or not, and executing the appropriate response measures within a much shorter timeframe.<sup>7</sup> Moreover, the potential intensity of conflicts would also lead to logistical issues in the state of hardware and also fatigue as a result of continuous deployments – particularly in the Japan Air Self-Defense Force (JASDF) and the Japan Maritime Self-Defense Force (JMSDF).

North Korea also poses serious threats due to the developments in the Korean People's Army (KPA).<sup>8</sup> Although there are only minor challenges in gaining both air and sea supremacy against North Korea given the state of the KPA air and naval assets, Pyongyang's continued development of strategic weapons systems, cyber and electronic warfare systems will continue to pose existential threats to high-value Japanese and US assets in the Japanese archipelago. In particular, the developments in North Korea's mobile ballistic missile capabilities, including submarine-launched ballistic missiles and vessels capable of launching them, indicate that Japan (and the US) will face challenges in detecting, tracking and dealing with the launches. Moreover, North Korea's development of anti-ship ballistic missiles has raised concerns about the threats to the US carrier strike group as well as Japanese naval vessels that are vital for deterrence, ballistic missile defense, and anti-submarine warfare.

There are also concerns about Russia in the north, not only due to the disputes over the Northern Territories and continuing

---

6. See: S. Stashwick, "A New War in the Pacific Could be 'Trench Warfare' at Sea", *The Diplomat*, August 18, 2016, available at: [thediplomat.com](http://thediplomat.com).

7. See: A. Yamashita, "grezonjitaieno taiouhouhoutoshiteno kikikanri-sono yuukouseito genkai [Crisis Management as a Means to Respond to 'Gray-zone Situations']", *Ea Pawa Kenkyuu* [Air Power Studies], 2016. See also discussions on crisis management and A2AD: V. Alcazer, "Crisis Management and the Anti-Access/Area Denial Problem" *Strategic Studies Quarterly*, Vol. 6, No. 4, 2012.

8. See: R. Hinata-Yamaguchi, *Defense Planning and Readiness of North Korea: Armed to Rule*, Oxfordshire, UK and New York, NY: Routledge, 2021.

modernization of the Russian armed forces, but also actions in the areas in Japan's neighborhood. Air and naval incursions by Russian forces are not uncommon, and there are concerning developments, including the deployment of fighter aircraft and anti-ship missiles to the military bases on the disputed islands of Etorofu and Kunashiri. While the scale of Japan's conflict with Russia is portrayed in far milder ways compared to those with China and North Korea, the circumstances nevertheless raise concerns, in the context of both Japan's national security and the Japan–US alliance.

Indeed, some may argue that the circumstances are controllable and have not gone beyond “gray-zone” situations. That said, “gray-zone” situations nonetheless raise concerns given that such scenarios are already evidence of how deterrence has failed.<sup>9</sup> Compounding the problem is the developments in modern warfare, with the growing importance of the cyber, outer-space and electromagnetic domains. Such issues have emboldened the demands to strengthen and sharpen the JSDF's readiness, including greater Intelligence, surveillance and reconnaissance (ISR) capabilities and multi-domain readiness, while a growing number of voices argue that the principle of using “minimum necessary” force is insufficient, and call for enhancements in power projection and even offensive capabilities for defense and deterrence.

## Upholding Tokyo's Free and Open Indo-Pacific Vision

The developments in Japan's defense strategies and readiness are not only directly instigated by the threats in the region, but also because of Tokyo's expanding strategic frontiers to ensure regional security, most notably under the concept of the Free and Open Indo-Pacific (FOIP). The concept first emerged during Abe Shinzo's first term as prime minister in 2006 and 2007, but were embodied during his second stint from 2012. In essence, FOIP is a strategy that comprehensively and proactively deals with the security challenges in the areas vital to Japan's security. Indeed, the emergence of the concept was not a surprise given that Japan had been long concerned about the security of the sea lanes of communication that are vital for the nation's trade. Rather, the more important point was that FOIP reflected the Japanese government's view that the JSDF needed to play a more proactive role in both national defense and international security. Against this backdrop, Japan has embarked on enhancing its power

9. A. Yamashita, “grezonjitaieno taiouhouhoutoshiteno kikikanri-sono yuukouseito genkai”, *op. cit.*, p. 45.

projection capabilities while working closely with the US, Australia and India, which led to the formation of the Quadrilateral Security Dialogue.

The enhancements in Japan's defense strategies and readiness were also based on, and further required, deepening and rebalancing the alliance with the US. In April 2015, the revised Guidelines for Japan–US Defense Cooperation were announced, marking some significant changes from the previous version, issued in 1997. The new guidelines stated not only Japan's greater role in the partnership but also expanded the partnership's focus to include the cyber-space and outer space domains.<sup>10</sup> The new guidelines reflected not only the new demands for the partnership, but also the fast rate of developments in Japan's defense policies. Indeed, many constraints remained, particularly in the way that the guidelines did not specify how Japan and the US would cooperate in broader international security issues beyond Japan's immediate periphery, indicating how Tokyo's right of exercising collective self-defense would only be granted in specific circumstances.<sup>11</sup> Thus the key question was about how Japan can play a more constructive alliance role despite the constraints by focusing on greater coordination and interoperability, but also boosting the JSDF's readiness for multi-domain operations within a more expanded radius.

Based on the abovementioned factors and the recognition that the current framework is insufficient, Japan not only faced the need to update the NDPG according to the developments since the 2013 NDPG, and also by addressing sensitive questions concerning new capabilities, including those with offensive features. In March 2017, the ruling LDP even recommended the consideration of capabilities for counterattacks against enemy bases with cruise missiles.<sup>12</sup> Moreover, after the Japanese government formally announced its plans to revise the NDPG, the LDP recommended enhanced jointness; greater attention to the cyber, outer-space and electromagnetic-spectrum domains; operation of a “multi-role” aircraft carrier; and stand-off strike capabilities.<sup>13</sup> While it was

10. Japan Ministry of Defense, “The Guidelines for Japan-US Defense Cooperation”, Tokyo: Japan: Japan Defense Agency, April 27, 2015.

11. See: Y. Tatsumi, “4 Takeaways from the New US-Japan Defense Guidelines”, *The Diplomat*, April 29, 2015, available at: [www.thediplomat.com](http://www.thediplomat.com).

12. “dandoumisairuboueino jinsokukatsu bappontekina kyokani kansuru teigen [Recommendation on the Rapid and Fundamental Strengthening of Ballistic Missile Defense]”, Liberal Democratic Party, March 30, 2017.

13. “aratana boueikeikakuno taikou oyobi chuukiboueiryokuseibikeikakuno sakuteini muketa teigen: ‘tajigenoudan ‘cross-domain’ boueikousou”no jitsugenni mukete’ [Recommendations for the Formulation of the New National Defense Program Guidelines and the Medium Term Defense Program: Toward the Realization of “Cross-Domain Defense Concept”]”, May 29, 2018.

clear that the proposals would be moderated on political and economic grounds, it was also certain that there would be some significant developments in the new NDPG.

# The 2018 NDPG: Fleshing out the Multi-Domain Defense Force

On December 18, 2018, the revised NDPG was unveiled. It introduced the concept of the “Multi-Domain Defense Force”, which emphasized: multi-domain readiness in the ground, maritime, air, cyber, outer-space and electromagnetic-spectrum domains; seamless mobilization; and cooperation with the US and likeminded states.<sup>14</sup> While there were few surprises in the contents of the 2018 NDPG, as it reflected many of the discussions that had taken place in the preceding years, the developments in Japan’s defense policies and strategies have naturally led to significant advancements in the JSDF’s readiness. Generally, the developments have been qualitative rather than quantitative, focusing on the acquisition and operationalization of capabilities rather than boosting the number of personnel and the inventory. Moreover, the JSDF’s force structural readiness improvements have not only taken place through new platforms, but also through extending the lifecycle of existing platforms, as well as reconfiguring and streamlining the order-of-battle. Thus the readiness developments have been about cost-effectiveness, by refining and sharpening the JSDF’s readiness to execute missions.

## Modernization of Aerial and Maritime Assets

The emphasis on air and maritime supremacy has naturally led to continued efforts to modernize the assets of the JASDF and the JMSDF. In naval capabilities, the NDPG aims to build a force consisting of 54 destroyers, 22 submarines and 12 patrol vessels. In addition, the JMSDF is working to develop more modular systems, particularly with the new Mogami-class frigates with multi-role capabilities for anti-air/ship/submarine and also mine warfare. In submarines, major generational changes have taken place over the past 13 years, with the commissioning of both the Soryu and Taigei-class submarines, which boast greater speed, maneuverability and stealth. Developments are also seen in the naval aviation fleet, which

---

14. Japan Ministry of Defense, “National Defense Program Guidelines for FY 2019 and Beyond”, December 18, 2018; Japan Ministry of Defense, “Medium Term Defense Program (FY2019–FY2023)”, December 18, 2018.

plays key roles in maritime patrol, anti-submarine warfare and mine countermeasures. All of the JMSDF's destroyers and frigates and some of the other vessels are capable of launching the SH-60J/K, with some even having the capacity to launch the MCH-101. The introduction of the larger Hyuga and Izumo-class helicopter destroyers has boosted the JMSDF's shipborne aviation capabilities, particularly in the case of the latter due to modifications to allow launching of Short Take Off Vertical Landing (STOVL) jet aircraft. As for land-based aircraft, the JMSDF operates the P-3C as well as the newer P-1 for maritime patrol. Combined, the abovementioned assets give the JMSDF greater capabilities in defense and surveillance of Japanese waters, as well as vital sea lanes.

In the air, the current NDPG aims to boost the JASDF's capabilities both in mass and range. The JASDF's combat fleet consists of the F-15J and F-2, and is expected to field a total of approximately 147 F-35s (105 F-35A and 42 STOVL F-35B). Developments are also seen in airborne early-warning capabilities, with the E-2D and the RQ-4 Global Hawk working alongside the E-767 and the E-2C. In addition, the JASDF is scheduled to operate six of the KC-46A aerial-refueling aircraft to increase the tactical aircraft's range and increase the efficiency of sorties. There have also been notable realignments in its order-of-battle in response to the growing tensions in the southwestern areas, particularly with the establishment of the 9<sup>th</sup> Air Wing based in Naha, Okinawa in January 2016, establishment of the larger Airborne Warning and Control Wing in March 2020 to expand the JASDF's surveillance capacity, and the planned basing of the F-35Bs at Nyutabaru Airbase in Miyazaki. While there is much work in progress, the sum of the developments improves, both qualitatively and quantitatively, the JASDF's surveillance and defense readiness in a wider periphery.

Japan's maritime and air defense is also enabled by the Type-03 and Type-11 surface-to-air and Type-88 and Type-12 surface-to-ship missiles. Due to the pressing threats to the southwest island chain, the JSDF has deployed a significant portion of the above-mentioned area-denial assets to areas near the East China Sea. Both the surface-to-air and surface-to-ship missiles are vital not only to defend the offshore islands, but also to support and supplement the JASDF and JMSDF's air and naval operations.

Regarding joint operations for defense of remote islands, the 2018 NDPG vows to further advance the developments to date. Much has taken place since the establishment of the Japan Ground Self-Defense Force (JGSDF) Western Army Infantry Regiment in 2002, which was developed with marine corps-like attributes. In April 2018, the JGSDF restructured the Western Army Infantry Regiment

and activated the 2,100-strong Amphibious Rapid Deployment Brigade (ARDB). The JGSDF also acquired platforms suitable for amphibious operations, including the AAV7 assault amphibious vehicles, Type-16 mobile combat vehicles, and light armored vehicles, while the Type-96 armored personnel carrier was upgraded. The JSDF's amphibious capabilities are also enabled by the air and sea-lift platforms, particularly with the Osumi-class landing ships that accommodate two air-cushion landing craft, as well as the Hyuga- and Izumo-class helicopter destroyers capable of launching CH-47J transport helicopters and tilt-rotor V-22 aircraft. In fixed-wing airborne operations, the new C-2 transport aircraft boasts greater size, speed and range for units of the 1<sup>st</sup> Airborne Brigade and the Special Forces Group.

## Enhancing Ballistic and Space Capabilities

The JSDF's ballistic missile defense capabilities have also been enhanced remarkably over recent decades, and further developments are expected under the current NDPG. Japan's ballistic missile defense system accelerated after North Korea's launch of the Taepodong technological demonstrator that flew over the Japanese archipelago in August 1998. Currently, the JMSDF operates SM-3 systems for the mid-course phase while the JASDF operates the PAC-3 systems for the terminal phase. Developments have also taken place in early-warning systems, particularly with the development of the J/FPS-5 radar systems and the introduction of the Japan Aerospace Defense Ground Environment network. The combination of developments in both interceptor and early-warning and tracking systems has allowed the JSDF to boast extremely modern and well-established ballistic missile defense systems that are continuously being enhanced.

The greater attention given to defense against ballistic missiles and threats to remote islands has led to incremental developments in offensive capabilities. Although the acquisition of more offensive capabilities has been discussed in the past, the actual acquisitions were more recent. In December 2017, Japan announced its decision to acquire the Joint Air-to-Surface Standoff Missile (JASSM-ER) and Long Range Anti-Ship Missile (LRASM) for the F-15J, and Joint Strike Missile (JSM) for F-35s.<sup>15</sup> More recently, Japan has been working to extend the range of the Type-12 surface-to-ship missiles from 200 km to 1,500 km, and also on developing new anti-ship

---

15. Japan Ministry of Defense, "Defense Programs and Budget of Japan – Overview of FY2018 Budget", August 2017, p. 5.



missiles with a range of approximately 2,000 km.<sup>16</sup> Significant developments are expected in the coming years, particularly with the plans for hypersonic weapons. Already, the ATLA has drawn up plans for developing two types – the Hypersonic Cruise Missile (HCM) and the Hyper Velocity Gliding Projectile (HVGP) – which are expected to enter service around 2030.<sup>17</sup>

Regarding the outer-space domain, developments have accelerated under the NDPG 2018. On 18 May 2020, the JASDF Space Operation Squadron was established. For now, the new squadron is to focus on Space Situational Awareness to detect, track and identify objects in space, handling defense-related data provided by the Japan Aerospace Exploration Agency and the US Space Force, as well as satellite communication and navigation for other JSDF units. Currently, the squadron is still in its preliminary stage; full-scale operations are expected to begin from 2023.

## Investing in New Warfare Domains: Cyber and AI

As for the cyber domain, greater effort has been put into developing the JSDF's cyber defense capabilities since the 2013 NDPG, with further accelerated momentum since the 2018 NDPG. The JSDF established the joint Command Control Communication Computers Systems Command (CCCCSC) in March 2008; it commandeers the 300-strong Cyber Defense Group inaugurated in March 2014. Under the current MTDP, Japan aims to boost the Cyber Defense Group to 1,000 personnel by 2023, and is also working closely with key information and communications companies and experts from the civilian sector. Moreover, the CCCCSC is planned to be replaced by a larger Cyber Defense Command (tentative name) in 2022.

In electronic warfare, the JSDF already has fairly advanced capabilities that have been built and operationalized since the 1950s. The 2018 NDPG's emphasis on the electromagnetic spectrum is in response to the growing capabilities of adversaries and competitors, but also the need to protect the advanced systems of the JSDF. The current and planned developments are seen in various parts of the JSDF, including upgrades to electronic equipment on the various platforms and networks, as well as R&D of standoff electronic warfare capabilities.

16. S. Shinbun, "kokusan tomahoku'kaihatsue syatei 2,000kirono shingataikandan 12shikiha 1,500kironi enshin [Developments for an 'indigenous Tomahawk' New Anti-Ship Missile with Range of 2,000 km Type-12 to Extend its Range to 1,500 km]", December 29, 2020, available at: [www.sankei.com](http://www.sankei.com).

17. Japan Ministry of Defense, "R&D Vision: Toward Realization of Multi-domain Defense Force and Beyond", 2019.



Japan has also placed greater emphasis on other new and emerging technologies to implement and operationalize the visions outlined in the 2018 NDPG.<sup>18</sup> In unmanned systems, further enhancements are also expected with plans for field unmanned underwater vehicles (UUVs) and unmanned aerial systems (UAS).<sup>19</sup> Regarding artificial intelligence (AI), both the NDPG and the MTDP describe it as one of the game-changing technologies to enhance automated capabilities and management of operations. One key area of AI application is C4ISTAR. Developments are already taking place, with reports that the JMSDF will equip the P-1 maritime patrol aircraft with AI systems.<sup>20</sup> In addition, Japan is expected to use AI for cyber security, including systems to detect and deal with cyber-attacks including malicious e-mails.<sup>21</sup> The greater applications of AI and other information-based technologies for automation and computerization are vital given the JSDF's human resource shortages, while also providing capabilities that are beyond the calculation capacity of humans.

While built on the agendas and visions laid out in the 2010 and 2013 NDPGs, the 2018 NDPG has taken Japan's defense planning to new heights. In particular, the most important aspect of the 2018 NDPG is not so much the capabilities acquired as the focus on multi-domain readiness to effectively and efficiently coordinate and integrate the various complementary assets of the JSDF. In particular, the 2018 NDPG clarified the organization, management and use of the JSDF's capabilities, enabling improved ways of setting and carrying out missions. Moreover, the 2018 NDPG is comparatively more future-oriented in that it looks at the foundational capacity for future developments such as the defense industry network, research and development, and human resource base.

The developments in Japan's defense readiness have certainly benefitted the Japan-US alliance and other partnerships, with changes in US perceptions of the alliance and of Japan's role.<sup>22</sup> There is also much potential in Japan's role in multilateral security cooperation. Key developments are seen in the potential for Japan to join the Five Eyes intelligence pact comprising the US, Australia,

---

18. *Ibid.*

19. Japan Ministry of Defense, "Defense Programs and Budget of Japan - Overview of FY2019 Budget", 2019, pp. 9-26.

20. K. Takahashi, "Japan to Outfit Kawasaki P-1 MPA with Artificial Intelligence", *Jane's Defense Weekly*, November 13, 2019, available at: [www.janes.com](http://www.janes.com).

21. Japan Ministry of Defense, "Defense Programs and Budget of Japan - Overview of FY2020 Budget", 2020, p. 5.

22. For examples, see: R. L. Armitage and J. S. Nye, "The U.S.-Japan Alliance: Anchoring Stability in Asia", Washington, DC: CSIS, 2012; R. L. Armitage, J. S. Nye Jr., V. Cha, M. P. Goodman and M. J. Green, "The U.S.-Japan Alliance: An Equal Alliance with a Global Agenda", Washington, DC: CSIS, 2020.

Canada, New Zealand and the UK. Encouraging developments are also taking place with the restarting of the Quadrilateral Security Dialogue (along with the US, Australia and India). While the Quadrilateral Security Dialogue is still a nascent and loose framework based on dialogue as opposed to a formal alliance network, it does show potential to become a vital platform for security and stability in the Indo-Pacific. Furthermore, the “AUKUS” alliance (the US, Australia and the UK) presents new opportunities for Japan to not only expand and deepen its strategic partnerships, but also technological cooperation for new assets, including nuclear-powered submarines.

# Challenges and Limitations: Internal and External Factors

## Challenges over Offensive Capabilities, Jointness and Security Cooperation

Despite the notable developments in Japan's defense planning and the JSDF's readiness, a number of challenges remain. Above all, there are questions regarding the sufficiency of readiness for deterrence and defense.

### ***Power Projection and Offensive Capabilities***

One key topic of debate concerns power projection and offensive capabilities. Indeed, the debates on offensive capabilities for counterattack are certainly not new, as the legal debates were in fact settled in February 1956 when the then Hatoyama Ichiro administration asserted the constitutionality of striking enemy bases should other means be unavailable.<sup>23</sup> Although the actual steps toward strike capabilities were not actualized in the following years, the recent security challenges have led to renewed discussions on the topic.<sup>24</sup> The question, of course, is how the JSDF's readiness for counterstrike operations will be shaped as the actual number of options are limited to very few given the political and economic considerations. The most plausible option would be cruise or even ballistic missiles to strike the enemy's military assets, and the potentials are evident in the investments in hypersonic weapons systems, albeit with some questions regarding the range of these platforms. The other option would be STOVL aircraft launched from the Izumo-class helicopter destroyers or future purpose-built carriers. Yet, in the case of shipborne aircraft, they are much more suited for

---

23. Statement made by Director General of JDA Funada Naka on behalf of Prime Minister Hatoyama Ichiro, p. 241.

24. See: M. Murano, "The Modality of Japan's Long-Range Strike Options", *Texas National Security Review*, October 1, 2020; J. D. Caverley and P. Dombrowski (eds.), "Policy Roundtable: The Future of Japanese Security and Defense", *Texas National Security Review*, October 1, 2020, available at: [tnsr.org](https://tnsr.org).

fleet defense and sea control rather than striking enemy bases.<sup>25</sup> Regardless of the type of capabilities, controversy could arise given that many view them as excessive. For example, counterstrike capabilities, even if designed to strike enemy assets in response to attacks, may still be interpreted as potential avenues toward preemptive or even preventative strikes that contradict Japan's "exclusively defense-oriented" policies. Thus regardless of the need for more offensive strategies and capabilities, materializing them would take time and would continue to rely on the US for high-end strategic strikes.

Although offensive capabilities have their value, they are not the only means to neutralize or weaken the adversary. For example, given the numerical deficit against the PLA Navy (PLAN), the JMSDF will also need to enhance its readiness to gain an asymmetric edge. Much hinges on how the JMSDF can penetrate the vulnerabilities of the PLAN. The most obvious would be to further enhance submarine and anti-submarine warfare capabilities, but equally vital would be mine warfare, where the JMSDF qualitatively and quantitatively enhances its readiness to lay mines in areas of probable PLAN operations. For instance, minelaying UUVs would be of significant interest, allowing the JMSDF greater ability to lay sea mines with lighter logistical burdens. Hence, given Japan's particular circumstances and conditions, the JSDF will need to develop its own blend of offensive and asymmetric capabilities to effectively deal with the threats.

Japan's engagement in infrastructure investment in the IOR has been spurred by China's growing infrastructure presence associated with naval interests. Japan should manage three challenges in pursuing its strategic objectives. The challenges are related to enhancing the attractiveness and value of its own infrastructure investment and to skillful management of strategic connections with India and of subtle bilateral relations with China.

### ***Inter-branch Coordination and Jointness***

Sharper readiness for multi-domain operations requires enhancements in inter-branch coordination and jointness. Indeed, there have been credible developments over the past 15 years, particularly since the establishment of the Joint Staff Office in March 2006, and the establishment of a number of joint units such as the Command Control Communication Computers Systems Command and the Intelligence Security Command. In addition, the three JSDF branches also station liaison officers in each other's headquarters as

---

25. See: R. Hinata-Yamaguchi, "Flying Blind at Sea: Growing Japan's Naval Aviation Capability," *ibid.*

part of efforts to enhance jointness and integration, as laid out in the 2013 NDPG.<sup>26</sup> There have also been technological developments, with improvements in C4ISTAR systems including improved tactical data link systems and cloud technologies. The operationalization of joint operations was seen in March 2011, when the joint task force was set up to commandeer the three branches' response to the Great East Japan Earthquake. Yet, despite the important (and overdue) improvements, particularly under the 2013 and 2018 NDPGs, insufficiencies remain. Structurally, the JSDF still lacks a permanent joint command, leaving the Joint Staff Office over-burdened with handling both management and operational matters. The lack of joint command structures leaves outstanding issues, including inter-branch rivalries and stove-piping that affect both JSDF readiness and defense planning. As for readiness, joint training and exercises also remain quantitatively and qualitatively insufficient, and joint operational doctrines are still underdeveloped. Moreover, there are also major readiness deficits, with the JASDF and JMSDF having much more experience in actual operations (e.g. in “gray-zone” situations) than the JGSDF.

Finally, there are also issues concerning the disruptions to the developments laid out in the 2018 NDPG and the MTDP for the FY 2019-2023. The biggest issue has been the cancellation of the two Aegis Ashore missile interception systems that were stated in the 2018 MTDP. Immediately, the government mulled revisions to its national security strategy, opening up opportunities to pursue bolder measures, including stronger offensive capabilities. In the end, however, Japan's “Aegis Ashore alternatives-related projects” settled on the construction of two Aegis-equipped vessels, as well as enhancing its stand-off strike capabilities by extending the range of the Type-12 surface-to-ship missiles.<sup>27</sup>

## ***Security Cooperation***

There are also issues concerning security cooperation. Above all, Japan and the US will need to take new steps in formulating more robust and detailed strategic, operational and tactical doctrines, as well as enhancing the levels of combined readiness. Even in multilateral cooperation, much turns on how Japan and the US can expand and operate the partnership network. In the regional security context, it is critical for Japan to deepen its security relations with key other players including Canada, select Southeast Asian states, select

---

26. Japan Ministry of Defense, “National Defense Program Guidelines for FY 2014 and Beyond”, December 17, 2013, p. 19.

27. See: Japan Ministry of Defense, “Procurement of a New Missile Defense System, etc. and Strengthening Stand-off Defense Capability”, December 18, 2020.

European states, South Korea and Taiwan. Aside from issues in forming the defense pacts, the problem is that, despite the greater flexibility to undertake missions for collective self-defense, strict self-imposed restrictions remain in place.<sup>28</sup>

The biggest question is how Japan can fill the gaps between readiness in development and those needed to effectively carry out the strategies. The trajectory of developments in the Indo-Pacific security environment will bring greater demands for Japan to further sharpen and strengthen the JSDF's readiness that would overwhelm Tokyo's defense planning. But the problem is not so much *what* the shortfalls are as *how* they can be addressed, given the myriad political, economic and bureaucratic issues that lead to major defense planning dilemmas.

## **Limitations to Greater Readiness: Political and Budgetary Constraints in Defense Planning, Manpower Shortage and the Security Dilemma**

### ***Internal Factors***

First, domestic political issues continue to be a major impediment in Japan's defense planning. Indeed, there has been growing bipartisan awareness among the Japanese public and political parties in recent years about the national security threats and vulnerabilities, consequently rationalizing and lubricating the reconfigurations in Japan's defense posture and readiness. Still, there are limits, and Japan's defense planning has been hamstrung by political opposition, as seen in the case of the Legislation for Peace and Security in 2015.<sup>29</sup> Even though the bills were essentially a watered-down alternative to constitutional reform, they met with significant pushback, demonstrating how defense-related issues are still controversial among the Japanese public, and also the high barriers to amending the constitution. The issues are not simply about partisan politics or constitutional debates, but also the underdeveloped nature of debates about defense, which remains unfamiliar to many in Japan.

Second, the budgetary issues remain acute, presenting major constraints in financing both force structural and operational improvements. In March 2021, the Japanese Diet enacted the budget for FY2021, with the defense budget marking yet another record high

28. See: J. W. Hornung and M. M. Mochizuki, "Japan: Still an Exceptional U.S. Ally", *The Washington Quarterly*, Vol. 39, No. 1, 2016.

29. See: J. W. Hornung, "Abe on His Heels", *Foreign Affairs*, September 18, 2015.

for the seventh straight year, at JPY 5.34 trillion (USD 50.1 billion). While Japan's defense outlays have steadily increased over the years, much of it has been an effort to recover from the defense budget cuts imposed between FY2003 and FY2012.<sup>30</sup> Moreover, the increases have been incremental and have not resulted in immediate boosts in the JSDF's readiness. To understand this, one must look at the specific breakdown of Japan's defense budget; much of it is devoted to operations and maintenance costs, including personnel; education and training; maintenance and repair, and so forth. Thus, although the expenses for R&D and acquisitions have increased with some of the new investments, they remain the smaller portion of the overall defense outlays, revealing the constraints in beefing up the JSDF's force structural readiness.

The budgetary issues would pivot on how Japan addresses the self-imposed one-percent of gross domestic product (GDP) limit for defense expenditures. Given the overall size of the economy, Japan indeed has the capacity to feed further developments in defense. However, if the cap is maintained, there are limits. As Tatsumi correctly argues, Japan would need to either: 1) further increase defense expenditures to meet the already set demands, or 2) revise the plans to meet the budgetary conditions.<sup>31</sup> Indeed, the previous Abe government stated how the one-percent-of-GDP cap could be lifted in the future. Still, increases beyond the cap are likely to be incremental and based on specific demands, as opposed to dramatic unconditional increases. Furthermore, the political-economic constraints will become stronger even if the cap is lifted. For instance, even if Covid-19 had little effect on the current defense budget, the economic effects of the pandemic would be exposed should Japan seek to lift the one-percent-of-GDP cap. Thus, going forward, future developments would need to strictly focus on cost-effectiveness and on the capabilities that are most essential.

Third, there are also major issues in human resources. The problem is not so much in the total number of personnel in the JSDF overall, but rather the uneven distribution of personnel to the three branches, which means a lack of alignment with Japan's defense priorities. On an annual average, the JGSDF has 140,646 personnel, while the JMSDF and JASDF have 43,033 and 44,152 respectively, meaning that approximately 61% of the JSDF personnel are in the JGSDF.<sup>32</sup> Despite the chronic imbalance, recruitment remains heavily tilted toward the JGSDF, meaning that the disproportion among the

---

30. Y. Tatsumi, "Japanese Defence Spending at the Fiscal Crossroads", *East Asia Forum*, February 17, 2021, available at: [www.eastasiaforum.org](http://www.eastasiaforum.org).

31. *Ibid.*

32. Japan Ministry of Defense, "Defense Programs and Budget of Japan – Overview of FY2021 Budget", 2021, p. 47.



three services will remain for the time being. The personnel imbalance among the three branches has significant implications for the JSDF's multi-domain readiness. Specifically, readiness improvements for air and naval supremacy would require a large number of personnel to operate and maintain the capabilities. Indeed, many of the new technologies are designed to overcome the human resource challenges. For instance, the new 3,900-ton Mogami-class frigates require only 90 personnel thanks to the automated systems on board. Nevertheless, there are limits to how far technologies can circumvent the personnel shortages in the JASDF and JMSDF.

The defense planning dilemmas created by the above-mentioned factors will continue to affect not only Japan's defense strategies and policies, but also the JSDF's readiness. Although there is some momentum to address the issues that affect Japan's defense planning, the changes are likely to be more incremental than immediate, particularly considering the collection of agendas for strengthening JSDF readiness. Much, therefore, comes down to how Japan strikes the right balance and makes the necessary trade-offs to ensure optimal readiness despite the limited resources as well as the political and legal constraints.

### ***External Factors***

On top of the internal issues, there are external factors that raise questions for Japan's defense planning. In particular, the security dilemma concerning responses from adversaries and competitors is obvious. Most notably, China, North Korea and Russia would view any improvements in the JSDF's readiness as a threat, leading to various counter-measures, including further modernization of their readiness, sharper strategies and more bellicose behaviors. Still, while the response by China, North Korea and Russia amounts to a classic example of a security dilemma, the consequences of not taking any measures to enhance JSDF readiness would lead to greater vulnerabilities.

The delicate geopolitical circumstances also create caveats in framing multilateral security cooperation in the Indo-Pacific, where the focus should – at least for now – focus on regional security and stability as opposed to being overtly threat-based. While a growing number of states are threatened (or at least concerned) about China, many have to tread carefully so as not to jeopardize their economic interests and/or risk facing stern responses from Beijing. For instance, many Southeast Asian states would prefer norms-building and formulation of code-of-conduct as opposed to joining a network that is specifically designed to counter China. Moreover, concerning the positive security relations



between Japan and select Southeast Asian states, much is owed to the successes in capacity-building and also cooperation in non-traditional security issues.<sup>33</sup>

To mitigate the possible geopolitical repercussions, Japan's developments in defense readiness must be combined with constructive diplomacy with regional stakeholders. As Soeya correctly argues, the "Asia component" has been a weakness in much of Japan's post-1945 diplomatic history.<sup>34</sup> One important step would be for Japan to tone down the politicized and nationalistic attitudes that not only disturb its relations with China and the two Koreas, but also create discomfort in Southeast Asia and Taiwan. Furthermore, Japan should also continue to promote its role in advancing regional dialogues and preventative diplomacy that includes competitors. While such initiatives depend to a great extent on commitments by regional states, it is nonetheless critical for Japan to demonstrate its leadership in building a mechanism for sustainable regional cooperation and conflict prevention.

---

33. T. Shimodaira, "The Japan Maritime Self-Defense Force in the Age of Multilateral Cooperation: Nontraditional Security", *Naval War College Review*, Vol. 67, No. 2, 2014, p. 53.

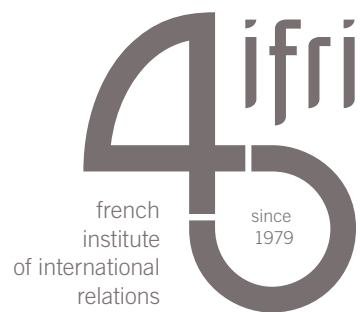
34. See: Y. Soeya, *nihonno midoru pawa gaikou* [Japan's Middle Power Diplomacy], Tokyo: Chikuma Shinsho, 2005.

# Conclusion

For the past seventeen years, Japan has undergone major developments in its defense planning, epitomized by the four NDPGs that have been issued since 2004. The developments are notable in three areas. First, Japan is incrementally shifting toward readiness based on its expanded strategic frontiers and the concept of “offense is the best means of defense” to defend and deter against threats in advance while standing by its exclusively defense-oriented posture. Second, Japan is pursuing readiness for multi-domain operations in the ground, maritime, air, cyber, outer-space and electromagnetic spectrums, and promoting jointness that coordinates operations in those domains. Third, it is seeking advanced coordination and interoperability with the US and to some extent with other like-minded states at the strategic, operational and tactical levels. The developments essentially focus on greater effectiveness and efficiency in defense planning and readiness, but also configurations in strategies that meet current-day demands to deal with the fluid regional and global security challenges.

In assessing the developments under the 2018 NDPG, the question of whether the glass is half full or half empty depends on perspectives. On the one hand, if one looks at the developments in Japan’s defense policies and readiness since the JSDF’s inauguration in 1954, it is fair to say that the glass is half full. On the other hand, if one looks at the developments needed to field credible readiness for multi-domain operations against the current and future threats, then the glass is half empty. But the more important question is how Japan fills the rest of the glass. Answers to the above question are obscured by the fact that Japan’s defense planning is currently at a crossroads. The demands for sharper and more robust readiness given the expanded strategic scope and challenging circumstances are crystal-clear, but there are still major political and economic factors that create acute defense planning dilemmas. The future of Japan’s defense planning does not pivot on the debates concerning the constitution *per se*, but rather how the nation envisions national defense, and how it proceeds to shape the JSDF’s readiness to deal with the threats and uncertainties.





27 rue de la Procession 75740 Paris Cedex 15 – France

---

[Ifri.org](http://Ifri.org)