Sword and Shield: How Japan and the United States responded to North Korea’s Ballistic Missile Threat

Maria M. Widhia Putri and Anak Agung Banyu Perwita

Abstract
The security environment surrounding Japan has become more severe as North Korea continued to develop its nuclear arsenal. Additionally, China’s military development within Japan’s surroundings has also increased the security dilemma in East Asia, galvanizing Japan to respond to the contingencies accordingly. As North Korea and China were known to cooperate closely in developing North’s nuclear arsenal, Japan which is geographically close to North Korea and has been one of its missile targets, responded militarily to protect its mainland from future nuclear aggressions. To that end, Japan has endeavored to increase its ballistic missile defense capability through strengthening its alliance with the United States, Japan’s strategic ally since the end of World War II. This research elucidates Japan’s national strategy and defense policy in response to North Korea’s ballistic missile threat, and how Japan cooperates with the United States in building its ballistic missile defense capability under the Japan-U.S. Alliance.

Keywords: Defence policy, nuclear, ballistic missile defense, national strategy, alliance, national security

INTRODUCTION
North Korea’s nuclear development has engendered a severe security environment in Asia-Pacific region. As its nuclear program develops (BBC News, 2017), there is growing concern among countries neighboring North Korea, especially Japan, which has been one of its nuclear strike targets (Duchatel & Godement, 2017). The latest missile test, in November 2017, landed in Japan’s exclusive economic zone, was apparently seen as an aggressive act (White, 2017). This aggression has urged Japan to conduct a military modernization, mainly in developing its ballistic missile defense (BMD) system. In line with Japan’s National Security Strategy (NSS) and the National Defense Program Guideline (NDPG), Japan has intended to increase its defense budget to develop its BMD capability. In an effort to
increase its BMD capability, Japan has envisaged a revision in the Guidelines for Japan-U.S. Defense Cooperation to also strengthen ties in military for its national security and regional peace (Japan Ministry of Defense, 2017). Regarding this matter, this article emphasizes more on Japan’s efforts in accelerating its BMD capability.

In light of Japan’s growing significant concerns over its surroundings, Tokyo’s main interest here is to increase its BMD capability to respond to North Korea’s nuclear threat – primarily for its national security. According to the Whitepaper, Defense of Japan 2017, Japan has envisaged to also maintain Asia-Pacific regional security through its bilateral relations with the United States and protect the region from any aggression, even from North Korea. This article aims to analyze how the Japan-U.S. defense cooperation has been conducted in responding to North Korea’s missile threat and preventing future nuclear aggressions, under the Japan-U.S. Alliance.

JAPAN’S SECURITY ENVIRONMENT

**CHINA’S MILITARY GROWTH IN JAPAN’S EXTERNAL ENVIRONMENT: CHINESE PERSPECTIVE**

The rise of China’s military power has captivated the world, especially in East Asia, pertaining to its increase in defense budget and military modernization. China has been focusing on the development of its military to create an image of a “powerful state” (Shambaugh, 2011). In China’s perspective, the image of a powerful state encompasses a great military power and capability to spread its influence around its neighborhood. However, challenges or obstacles might appear. China perceives Japan as its rival in the region, not to mention its alliance with the United States, that has potential to become a regional hegemon (Glaser & Farrar, 2015). Furthermore, China sees Japan’s military modernization as a challenge to its military expansion, especially in East Asia. That is why it keeps increasing its military activities in Japan’s surroundings. This has created a security dilemma, namely among countries in East Asia. In addition, the increase of the military capability of both China and Japan urged South Korea to respond militarily, also knowing the fact that North Korea can threaten the country’s security through its nuclear development (Oh, 2012).

This interaction has created a dangerous cycle of arms race in East Asia and to some extent, put the world into a critical situation since East Asia is also one of the pivotal regions for economy and security (Christiansen, 1999). In particular, the security dilemma has affected Japan as one of the closest countries to the Korean Peninsula and China geographically.
The unsettled territorial disputes with China have made Japan worry that China will harm its vicinity while acquiring new military equipment. Moreover, the Korean Peninsula issue also has exacerbated the situation. North Korea has been developing its nuclear arsenal and launched a number of missile tests, especially on Japan (Japan Ministry of Defense, 2006). To that end, Japan endeavored to conduct military modernization, especially in developing its BMD system. In line with the NDGP, Japan has tried to build a “comprehensive defense architecture and strengthen its posture for preventing and responding various situations” (Japan Ministry of Defense, 2013). This means that Japan also focuses on building non-conventional armament, such as BMD system, besides conventional armament.

On the other hand, China perceives that Japan has the potential to become a hegemon in the Asia-Pacific (Sasaki, 2010). China has an objective to continue spreading influence in the Asia-Pacific, especially in military,
notwithstanding China sees Japan’s military modernization as a challenge to its objective. In line with Tomonori Sasaki’s view on China’s perception to Japan, China will do anything to make sure Japan is in the position it expects, even if it should involve military might (2010, p. 568). In regard to this, China has increased its military expenditure for developing military capability.

Chinese government has been increasing its military expenditures for acquiring new military equipment.

![China's Defense Spending](image)

According to CSIS, the number of China’s military expenditures has increased significantly until it reached the optimum number in 2008. In 2008, China announced to allocate $57.22 million for its defense budget. Until 2015, China’s military budget kept increasing up to $238.2 million – a more drastic number than that of 2011 which was $119.8 million. This increase of military budget, in fact, has surpassed the amount of military budget that the United States and Russia have spent – even the G-20 countries. Figure 3 shows China’s military budget that surpasses the global military spending.
Furthermore, Theater Missile Defense (TMD) in East Asia has challenged China in pursuing its interest in the region; becoming a regional hegemon (Urayama, 2000). In facing American dominance in the region, especially in military, China sees that it must rely on its own capability – referred as “asymmetrical warfare capabilities” (Wortzel, 2017) – especially in developing ballistic missile capability. In addition, China is concerned about the development of TMD upper tier system in East Asian countries. As a counter measure to the U.S. arms transfer to some East Asian countries – mainly for developing missile defense system in Taiwan, Japan, and South Korea – China keeps conducting military modernization programs, including developing its ballistic missile capability (The State Council Information Office of the People's Republic of China, 2015).

**NORTH KOREA’S NUCLEAR DEVELOPMENT**

The purpose of North Korea’s ambition in building a nuclear arsenal is subjected to various interpretations, albeit not quite clear (Kuhn, 2010). In 2012, a RAND Corporation report stated that North Korea’s nuclear capability is much lower than how it looks like, notwithstanding, it is augmented by the higher ranks of the regime (Schiller, 2012). Although North
Korea’s nuclear capability is seen as a “bluff”, it has both internal and external purposes (Mariani, 2017). On the internal aspect, North Korea would like to convince its elites – in military aspect – that the regime is developing a powerful state. North Korea believes that nuclear force is the source of pride and power (Klinger, 2018). It has been developing several means in ensuring “greater survivability of its missile forces, enhancing both a pre-emptive first-strike and retaliatory second-strike capability”. On the external aspect, North Korea aims to create deterrence and gain “bargaining leverage vis-à-vis the United States, its main security threat, and American allies in Northeast Asia” (Keating, 2018).

In general, North Korea’s objective in possessing nuclear power is for strategic leverage and political reasons. It pertains to maintaining the pride of Kim’s dynasty and protecting its belief in depending on nuclear power for regime survival (Wit & Ahn, 2015). The regime has a goal to ensure the existence of the Kim family’s perpetual rule in North Korea. In other words, Kim’s family must stay in power eternally to achieve its goal – becoming a nuclear state. In addition, North Korea wants to obtain an international recognition as a nuclear state (Schiller, 2012). This, for Kim’s dynasty, is essential for regime survival since North Korea believes that having nuclear weapons will ensure its security. To that end, North Korea will endeavor everything to fulfill its ambition by any means, even if it should create starvation and put the people into poverty (Wilson, 2017). Furthermore, North Korea also has sought for cooperation with China to achieve its nuclear ambition since China has been able to produce various types of ballistic missiles (Snyder, 2009).

North Korea’s relentless development of missile capability is the manifestation of its policy. In the decision-making process, be it for producing domestic or foreign policy, North Korea always adopts the juche ideology into it (Sagan, 1996). The juche ideology has given a doctrine that has been the ‘backbone’ of North Korea’s policy, especially in developing its technology for nuclear program. It consists of the idea to build a powerful country with military capability (as in missile capability) as its priority. In addition, Charles Armstrong asserted that juche is “a general world view that sets the parameters, the outer boundaries, of engagement with the outside world” (Kang, 2004).

North Korea has endeavored to develop its military capability since 1960s when Kim Il Sung was still in power. Since his administration, and the influence of juche ideology, North Korea’s military structure has been developed rather for offensive means (Ahn, 1990). In 1960s, North Korea
endeavored to produce or acquire missiles and develop its human resources to support its nuclear armament. Additionally, the Korean War gave an opportunity for North Korea to continue the realization of *juche* ideology through militarization (1990, p. 163). Military has been the backbone of Kim Il Sung’s regime. The militarization during Kim Il Sung’s era encompassed the development of military industrial complex which had reached 300,000 troops (Solingen, 2007).

During Kim Jong Il’s administrations, North Korea kept developing its nuclear program, under the ideology, which was succeeded by his father, Kim Il Sung, in the hope to continue what his father had left and make North Korea become a nuclear state (Kuhn, 2010). Kim Jong Il introduced the *songun* policy for the first time in his administration, also known as the military-first policy (Voronstov, 2006). According to Kim Jong Il, North Korea needed this kind of military-centric idea for the survivability of the regime and defending the country from threats in North Korea’s surroundings. Under this policy, Kim Jong Il would like to make North Korea become a “strong and prosperous great power”. Voronstov said that the idea of ‘military first’ lifted the national pride of North Korea under Kim Jong Il’s revolutionary leadership, and, in fact, increased North Korea’s bargaining power in the international community.

Despite the regime instability during Kim Jong Il’s era, (Weissmann, 2011), pretty much caused by the fall of Soviet Union, and several warnings and sanctions from the United Nations Security Council (UNSC) under the request of the United States (Davenport, 2018), North Korea still produced long-ranged ballistic missiles. This continued after North Korea announced its withdrawal from the Non-Proliferation Treaty (NPT) – which was acceded by North Korea in 1985 – although later on, it agreed upon a framework to resolve the concern about Pyongyang’s plutonium reactors. The NPT was established in 1968 and agreed by 190 countries, recognized by the five States (the United States, Russia United Kingdom, France, and China), to inhibit the spread of nuclear proliferation (Kimball, 2018). The parties of NPT are classified in two categories; “nuclear weapons” states consisting of the five States, and “non-nuclear weapons” states.

North Korea’s nuclear crisis, however, continued to create restlessness after it announced to withdraw from NPT permanently in 2003 (Davenport, 2018). Since then, North Korea refused to attend several international meetings, including Six Party Talks (first held in 2003). The Six Party Talks was held to end North Korea’s nuclear program through negotiations involving China, Japan, Russia, South Korea, the United States, and North Korea. However,
the negotiations did not work as expected during 2005 when the fifth round of discussion led to a tension between Washington and Pyongyang after Macao froze Pyongyang’s bank accounts (Bajoria & Xu, 2013). North Korea refused to attend the Six Party Talks since then knowing that all parties would discuss its nuclear disarmament, involving China, although China was hesitant toward several points of the discussion (pertaining to nuclear disarmament). After its withdrawal from the NPT, North Korea began to conduct the first missile test in 2006. It created a greater concern when Pyongyang succeeded in developing and launching Rodong-1 missile test with the capability of reaching 1,000 km.

The missile development was then succeeded to Kim Jong Un, the current supreme leader of North Korea, and has been going on since 2011. During Kim Jong Un’s administration, Musudan was produced and tested in 2016, reaching 4,000 km. According to a report from Business Insider, North Korea is still developing Taepodong-2, which is estimated to reach 10,000 km – a missile with the longest range. These figures below will show the details of North Korea’s missile tests and ranges.

Figure 4: North Korea’s missile launches (CSIS Missile Defense Project, 2018)
Figure 5: Types of North Korea’s ballistic missiles and their ranges (CSIS Missile Defense Project, 2018)

Given the fact that North Korea, supported by China, has been developing its nuclear weapons and launching missile tests (Japan Ministry of Defense, 2017), Japan is in the position to make sure that the country is prepared for the possibility of a nuclear warhead. In other words, the external threats to Japan have made it become more defensive, although it would engender China, North Korea, and South Korea to further increase their respective military capability (Oh, 2012).

JAPAN’S DEFENSE POLICY AND STRATEGY

In light of North Korea’s nuclear development, not to mention its missile tests and bellicose rhetoric towards the United States and its allies (Kim & Nichols, 2017), including Japan, developing missile defense capability became important for Japan to prevent more nuclear aggressions (Osaki, 2017). In line with its Fundamental Concepts of National Defense, Japan has an objective “to prevent direct or indirect aggression, but once invaded, to repel such aggression, and thereby, to safeguard the independence and peace of Japan based on democracy” (Japan Ministry of Japan, 1957).
Amidst the security dilemma in East Asia, particularly Japan’s external environment, the procurement of BMD system, which is provided by the United States, has been very necessary (Swaine, Swanger, & Kawakami, 2001). The fact that North Korea has launched a number of missile tests to Japan – causing an “imminent threat” to the state (Agence France Presse, 2017) – it has urged a military response from Japan and the United States, as an alliance, by developing Japan’s missile defense capability (Japan Ministry of Japan, 1957).

According to Japan’s Ministry of Defense, Japan has developed BMD system to respond to ballistic missile attacks (Japan Ministry of Defense). In 2003, Japanese government introduced a multilayered defense system and it has been used to destroy ballistic missile attacks (Japan Ministry of Finance, 2004). In addition, the Ministry of Defense has formed the Joint Task Force-BMD to respond to ballistic missile attacks, especially from North Korea, with “the Commander of the Air Defense Command serving as its Commander, and various postures for effective defense are to be taken under a unified command through JADGE” (Japan Ministry of Defense, 2017, p. 328).

In order to support Japan’s BMD system, the SDF continues to gather intelligence information, conduct warning and surveillance activities, and other necessary activities, while maintaining defense cooperation with the United States and South Korea (2017, p. 329). The MSDF will receive a Maya-class Aegis destroyer, furnished with major weapons system, in March 2020 (2017, p. 330). Japanese Defense officials hope that this destroyer will become one of Japan’s most powerful naval ships linked to the U.S. naval combat network. According to a report from The Japan Times, this ship will carry the latest version of Japan’s BMD system that can fire SM-3 Block IIA missiles (Yoshida, 2018).

SM-3 Block IIA missile has been developed as a new interceptor missile. This missile has been developed under the cooperation between Japan and the United States on BMD (Japan Ministry of Defense, 2017). In February 2017, this missile has been tested and successfully intercepted a ballistic missile. It has entered the final phase of completion of the development. In order to realize the completion, both Japan and the United States have endeavored ongoing efforts.

THE DEVELOPMENT OF JAPAN’S BMD UNDER THE JAPAN-U.S. ALLIANCE
One of the factors galvanizing Japan’s military modernization is North Korea’s nuclear threat, and at the same time, China’s military rise – not to mention China’s assistance and support to North Korea’s nuclear development and missile tests (Lim & Cha, 2017). Moreover, The New York Times reported that North Korea confirmed about Beijing nurturing it for six years (Perlez, 2018). Furthermore, North Korea’s nuclear development has become one of Japan’s concerns over a bigger threat as their relations could threaten its existence and survival.

“I described the [North Korea’s missile programs] as a serious threat that would undermine the peace and security of the international community and that it was absolutely unacceptable… In particular, North Korea has launched as many as 40 ballistic missiles in the last two years, with many of them impacting Japan’s Exclusive Economic Zone. Furthermore, two ballistic missiles flew over Japan and fell into the Pacific Ocean over the past year.” (Onodera, 2018)

That is why Japan has sought for strengthening its alliance with the United States in developing its BMD capability to create deterrence (Tatsumi, 2018). In line with the Defense of Japan 2014, it was asserted that issues engendered by changes in the balance of power in Japan’s surroundings, so-called “gray zones”, has urged both Japan and the United States to extend deterrence (Ministry of Foreign Affairs of Japan, 2016). The current issues regarding proliferation of weapons and mass destruction (WMD) and ballistic missiles, especially North Korea’s nuclear proliferation, has become one of the issues urging the deterrence extension under the Japan-U.S. Alliance (Japan Ministry of Defense, 2014, p. 224).

Japan sees that its alliance with the United States, in bolstering its BMD capability, has become more important. The United States provides Japan deterrence against contingencies and external threats that can harm Japan’s security environment, whilst Japan allows the U.S. military forces to build their bases in Japanese soil, to ensure her security effectively (Yamaguchi, 2018). The U.S’ military presence in Japan’s soil helps to strengthen the defense posture of Japan in responding to security issues and contingencies, especially North Korea in this case (Cropsey & Isomura, 2018). According to Defense of Japan 2014, “the U.S. Forces in Japan serves as deterrence against aggression towards Japan” (Japan Ministry of Defense, 2014, pp. 225-226).

The U.S. military role in defending Japan from any armed attack is stipulated in Article 5 of the Japan-U.S. Security Treaty (Ministry of Foreign Affairs of Japan, 1960). In order to carry out this role, it is necessary to maintain the
U.S. Forces in Japan. In response to the armed aggression against Japan, the U.S. Forces hold a primarily offensive power (the “spear”) in cooperation with the SDF (Japan Ministry of Defense, 2014, p. 226). In addition to the U.S. obligation to defend Japan, Article 6 of the Security Treaty “allows for the use by the United States of facilities and areas in Japan for maintaining the security of Japan” and regional peace and security in East Asia.

The making of three nuclear weapons and more than seventy missile tests by North Korea, not to mention its aggressive missile launches to Japan, has changed Japan’s strategic calculus in maintaining its security (Miller, 2017). Against this backdrop, Japan endeavored to engage more with the United States and utilize its military role serving as deterrence against armed attack on Japan accordingly. In other words, Japan and the United States work together like “shield” and “sword”. Japan’s actions towards its external threats are for defensive means whilst the United States provides offensive capabilities, assuming Japan needs to respond to the contingencies surrounding it (Armitage & Nye, 2012).

The role of the United States, under the Japan-U.S. Alliance, has been very significant for Japan to respond to external threats from North Korea and China. Not only the U.S. Forces will defend Japan’s vicinity alone, but the SDF will also maintain and strengthen deterrence (in coordination with the U.S. Forces) and their defense postures against ballistic missile attacks (Japan Ministry of Defense, 2016, p. 232). Japan and the United States will continue to discuss the strengthening of their alliances in response to contingencies or external threats towards Japan, especially from North Korea and China. In line with the Guidelines of Japan-U.S. Defense Cooperation, Japan and the United States will enhance operational coordination functions in which the SDF and the U.S. Armed Forces will exchange personnel for information sharing and conduct more consultations (Ministry of Foreign Affairs of Japan, 2015).

Moreover, Japan has tried to respond and deter the emergence of contingencies by ensuring “information superiority through continuous surveillance over a wide region around Japan”, and its maritime and air superiority” (Japan Ministry of Defense, 2017, p. 318). Consisting of 6,800 islands and surrounded by wide sea space, including the sixth largest Exclusive Economic Zone (EEZ) in the world (Okamoto, 2018), Japan has endeavored to ensure the security of the sea and airspace surrounding through the SDF (Japan Ministry of Defense, 2017).
According to the Defense of Japan 2017, the Ministry of Defense (MoD) responded by conducting sea patrols around Hokkaido, the Sea of Japan, and the East China Sea from peacetime, primarily using P-3C patrol aircraft. Furthermore, Japan’s air forces (ASDF) support the patrols using “radar sites at 28 locations nationwide, and early warning and control aircraft among others,” to carry out surveillance activities around Japan’s airspace in 24 hours. In addition, warning and the 24-hour surveillance activities are not only conducted by ASDF, but also MSDF (maritime forces) and GSDF (ground forces), and other assets. The MSDF patrols Japan’s territorial waters to carry out 24-hour warning and surveillance activities with ASDF, as well as GSDF coastal surveillance units, at their respective guard posts. Their radars detect any vessel carrying weapons, or any missile deployed by another country within the area of Japan’s sea and airspace.

Against the backdrop of Japan’s severe security environment, caused by North Korea and China, Prime Minister Shinzo Abe would like to push Japan’s military further and take initiative in maintaining regional security and stability (The Japan Times, 2015). This includes increasing defense expenditures for the acquisitions of necessary capabilities (Steinhauer & Fackler, 2013). Since 2012, Japan’s military expenditures have increased. Japan initiated a meeting with the United States in 2012 to discuss the revision of the 1997 Guidelines for Japan-U.S. Defense Cooperation, pertaining to expand the scope of the SDF’s joint operation with the U.S. military “on a global scale in ways that essentially transcend the original architecture of the postwar security treaty between the two countries” (The Japan Times, 2015).

According to the Joint Statement of the Secretary Consultative Committee (SCC), in April 2012, the U.S. military would continue to provide the deterrence and necessary capabilities for Japan to ensure its security, under the Japan-U.S. Alliance (Ministry of Foreign Affairs of Japan, 2012). This was due to responding to the security dynamics in Asia-Pacific region accordingly and embrace the security challenges emerging in the region. China, whose military activities and growth have been increasing significantly, has led the region to an endless cycle of arms race due to uncertainty and became the main concern of most countries in the Asia-Pacific region, not to mention Japan and the United States (Revere, 2013).

As results from intensive consultations in revising the Guidelines, both Japan and the United States agreed to re-establish the new Guidelines on April 27, 2015. The new Guidelines emphasize on strengthening the bilateral relations between Japan and the United States in line with the Japan-U.S. Security Treaty (Ministry of Foreign Affairs of Japan, 2015). Nonetheless, unlike the
1997 Guidelines, which was formulated based on the situation post-Cold War, the new Guidelines highlight more on the military modernization in response to the complex security challenges in the twenty first century, including developing BMD capability. In addition, the implementation of the new Guidelines included the discussion on increasing interoperability between Japan and the U.S. military (Japan Ministry of Defense, 2016). The new Guidelines have produced Alliance Coordination Mechanism (ACM), which was meant to fix the coordination of the alliance between Japan and the United States. In particular, the ACM was formed as a response toward North Korea’s missile threat in 2017.

Prior to the amendment, the Guidelines emphasized on the U.S. military role in ensuring regional security of the Asia-Pacific (including Japan’s security) but it could only be one way (Christiansen, 1999). In other words, Japan could only focus on its domestic affairs, whilst the United States focused in responding to emerging threats surrounding Japan. After the revision of the Guidelines, both the Japanese and the U.S. governments can involve in responding to contingencies in Japan’s surroundings under the Japan-U.S. Security Arrangements (Japan Ministry of Defense, 2016).

In line with the Defense of Japan 2016, the mechanism of the Japan-U.S. Alliance involves both governments to coordinate bilaterally in responding to contingencies. Both Japan and the United States will use the ACM appropriately to assess situations, share information, as well as deterrent actions aimed at de-escalation, through appropriate channels. In a particular measure related to air and missile defense, Japan and the United States have cooperated to “strengthen deterrence and their defense postures against ballistic missile launches and aerial incursions” (Japan Ministry of Defense, 2016).

Furthermore, as a response to North Korea’s missile threat, Japan and the United States have agreed to deploy the U.S. missile defense assets in Japan gradually for the security of Japan and its surroundings. In addition, the BMD assets in Japan have actually been developed since 2006, due to the continuous development of North Korea’s nuclear weapons despite the sanctions (Ellison & Williams, 2015). Furthermore, every ship that guards the sea areas is facilitated with destroyers. This equipment is meant to detect weapons, including missiles launched by another country, or vessels that carry out weapons in Japan’s territorial waters. According to the Missile Defense Advocacy Alliance (2015), the SDF carries out warning and surveillance activities in the sea areas and airspace with “the flexible use of destroyers and aircraft as required”.
The SDF has indicated quick responses (Japan Ministry of Defense, 2017, pp. 319-320), for example, toward China’s assertiveness when its vessels, carrying out weapons, passed through the disputed Senkaku Islands in December 2015 (Tiezzi, 2015). During the surveillance activities, the ASDF has detected and scrambled a number of Chinese aircrafts passing through Japan’s airspace with fighter jets (Mie, 2016). Moreover, in response to submarines submerged in Japan’s territorial waters, the MSDF has been increasing its capabilities for “expressing its intention not to permit any navigation that violates international law” (referring to International Law of the Sea or UNCLOS) and “responding in shallow water areas by detecting, identifying, and tracking foreign submarines navigating under the territorial waters of Japan” (Japan Ministry of Defense, 2017, p. 323). Regarding this, the MSDF has detected a submerged Chinese nuclear-powered submarine navigating under the sea of Japan around Sakishima Islands (Japan Ministry of Defense, 2012). The MSDF issued an order for maritime security operations and continued tracking the submarine until it entered the high seas (using P-3C). In this way, Japan has been trying to maintain its defense posture to respond to such activities appropriately.

As for identifying more underwater vessels navigating within Japan’s territorial waters, especially armed special operation vessels, the SDF has strengthened cooperation with other relevant governments by establishing joint exercises with the Japan Coast Guard on regular basis (Japan Ministry of Defense, 2017, p. 323). Particularly, the MSDF has conducted the deployment of guided-missile patrol boats. The MSDF received six guided-missile patrol boats built by Mitsubishi Heavy Industries (MHI) between 2002 and 2004 (Naval Technology, n.d.). Hayabusa class guided-missile boats have been made for the MSDF to replace PG 1-go missile boats that have already become obsolete.

After conducting the deployment of guided-missile patrol boats, the MSDF established a special boarding unit to deter expected resistance and disarm suspicious vessels during meriting security operations (Japan Ministry of Defense, 2017). In addition to the military ships or patrol boats the MSDF has been using, the MSDF has equipped their destroyers with machine guns. The MSDF, furthermore, has improved the ratio of military vessel personnel and enhanced equipment for the Vessel Boarding Inspection Team.

In line with the Defense of Japan 2017, the MoD began developing the BMD system in 2004. After the amendment of SDF law in 2005, Japan began to conduct Japan-U.S. cooperative development of an advanced ballistic missile interceptor. In light of North Korea’s nuclear development that showed an
increase in 2017, the MoD continued to respond by conducting intelligence collection, warning and surveillance activities, and other necessary activities. To strengthen Japan’s forces in maintaining its national security, Japan has sought to closely cooperate with the United States and South Korea under a joint military operation (Japan Ministry of Defense, 2017). More importantly, Japan also has strengthened its alliance with the United States and prolonging their cooperation, especially in building Japan’s BMD capability for its national security.

According to Japan’s Ministry of Foreign Affairs, Japan has formed a strategy to ensure its national security as well as responding to contingencies or external threats surrounding its mainland, especially North Korea’s missile threat. There are six strategic approaches in obtaining and maintaining Japan’s national security objectives, including strengthening Japan’s capabilities and alliance with the United States (Ministry of Foreign Affairs of Japan, 2013). In line with the NSS, Japan’s main objective is to strengthen deterrence to prevent any incursion from another state. In order to strengthen the deterrence, Japan needs the United States to provide necessary capabilities. In fact, the U.S. forces have been playing an important role in enhancing Japan’s defense posture to extend deterrence, especially in building BMD system.

In line with the Defense of Japan 2017, Japan has begun developing BMD system since 2004 “to be fully prepared for the response against ballistic missile attacks”. Since 2006, Japan and the United States have been steadily implementing the joint development of Standard Missile 3 (SM-3) Block IIA (Japan Ministry of Defense, 2006). Until this time, Japan had built up its multilayered defense system against missile attacks and installed an advanced ballistic missile interceptor, under the Japan-U.S. Alliance (Japan Ministry of Defense, 2012). The procurement of Japan’s BMD system from the United States continues in order to prevent further nuclear aggressions from North Korea (Japan Ministry of Defense, 2013).

Japan’s BMD system comprises Aegis-equipped destroyers to intercept missiles at the mid-course phase, Patriot Advanced Capability-3 (PAC-3) at the terminal phase, sensor system to detect missiles, and communication systems coordinated systematically with the weapon systems and the sensor systems to counter ballistic missiles. In light of North Korea’s imminent missile threat, Japan decided to continue accelerating its efforts in enhancing its BMD capability by engaging closely with the United States (Japan Ministry of Defense, 2017, p. 327). This means that the proximity between Japan and the United States as security alliances is very pivotal to ensure Japan’s security.
and maintain the regional security in Japan’s surroundings further. In other words, the United States remains as the key partner to Japan in developing its BMD system (Watai, 2018).

Additionally, the implementation of Japan-U.S. defense cooperation under the Alliance in developing Japan’s BMD capability has resulted in types of Japan’s ballistic missiles.

<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
<th>Time (minutes)</th>
<th>Re-entry Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-range Ballistic Missile</td>
<td>1,000 km and less</td>
<td>5-10</td>
<td>1~3 km/second</td>
</tr>
<tr>
<td>Medium-range Ballistic Missile</td>
<td>1,000-5,500 km</td>
<td>10-20</td>
<td>3~7 km/second</td>
</tr>
<tr>
<td>Intercontinental Ballistic Missile</td>
<td>5,500 km and more</td>
<td>20-30</td>
<td>7~8 km/second</td>
</tr>
</tbody>
</table>

*Table 4: Japan’s types of ballistic missiles (Ministry of Defense of Japan, 2012)*

These assets are meant to respond to North Korea’s excessive and bellicose military activity using nuclear weapons, with China remaining as its partner (Kelly & Kubo, 2018). Moreover, in line with the Defense of Japan 2017, Japan and the United States responded to the nuclear threat by establishing Shared Early Warning (SEW). This early warning system analyzes and conveys objects related to ballistic missiles launched on Japan, and informs the objects to the SDF by the U.S. forces in a short time after the launch. Furthermore, Japan and the United States also responded by “sharing intelligence gathered by assets including transportable BMD radar (TPY-2 radar) and Aegis-equipped destroyers” (Japan Ministry of Defense, 2017, p. 329). In addition, the MSDF and the U.S. Navy have held BMD exercise since 2010 by “connecting their ships and other equipment via a network and conducting a simulation of response to ballistic missiles”. The simulation was meant to enhance their tactical capabilities and strengthen bilateral coordination.

The development of Japan’s BMD system in response to North Korea continues to serve as the backbone of the Japan-U.S Alliance since the U.S. military is responsible to provide deterrence for Japan (Harold, et al., 2016). The United States and Japan have endeavored to implement the “Sword and Shield” system in developing necessary capabilities of Japan, especially BMD.
capability (Armitage & Nye, 2012). In addition, both the U.S. and Japanese governments have tried to strengthen their alliances in response to various contingencies bilaterally to promote and maintain regional security in the Asia-Pacific, including responses towards North Korea and China as their major threats in the region. Japan and the United States will continue to exchange views on how to increase alliance deterrence in the future, in line with the Extended Deterrence Dialogue. This dialogue has been held since 2010 to discuss the bilateral relations between Japan and the United States, especially in defense and security, and the expanse of their defense cooperation in areas including BMD (Ministry of Foreign Affairs of Japan, 2018).

CONCLUSION

Japan’s primary objective is to maintain its national security, especially from incursion of another state, with capabilities that are relevant to respond to the contingencies. North Korea’s ballistic missile and nuclear programs have engendered a more severe security environment surrounding Japan. On the other hand, China’s military has also been rising rapidly. It is rational for Japan to respond to such situations by conducting military modernization, mainly developing its BMD system to prevent future nuclear aggressions from North Korea. It is necessary for Japan to strengthen its alliance with the United States to develop its BMD capability. With this in mind, the Japan-U.S. Alliance has an important meaning to establish a more sophisticated defense posture for Japan through joint military training, enhancing the capabilities of the SDF in conducting military operations around Japan, and most importantly, developing BMD system to respond to ballistic missiles or nuclear aggressions.
BIBLIOGRAPHY


