1 Background of Review of the 2013 NDPG

Japan’s security environment is becoming more testing and uncertain at a remarkably faster speed than expected when the 2013 NDPG was formulated. In light of such circumstances, Prime Minister Shinzo Abe announced at his policy speech to the 196th session of the Diet in January 2018 that the 2013 NDPG would be reviewed, while maintaining an exclusively defense-oriented policy as given.

Based on this policy, related ministries and agencies, such as the National Security Secretariat, the Ministry of Defense (MOD), and the Ministry of Foreign Affairs, held repeated discussions in close coordination. In addition, Prime Minister Abe set up the Advisory Panel on Security and Defense Capabilities in which experts from various specialized fields conducted intense discussions. The Advisory Panel held seven meetings from August to December of 2018.

In August of the same year, the MOD established the Study Committee on Future Defense Capabilities, chaired by the Minister of Defense, with an aim to set up a cross-ministerial study framework and conduct in-depth study. The Committee met six times and held intensive study on matters including the approach to strengthening defense capabilities and the structure of the SDF.

2 Basic Approach—Building a Multi-Domain Defense Force

So far, Japan has built a “Dynamic Joint Defense Force” which enables the SDF to conduct dynamic and sustainable activities through joint operations based on the 2013 NDPG. Meanwhile, Japan’s security environment is becoming more testing and uncertain at a remarkably faster speed than expected when the 2013 NDPG were formulated. On such basis, the 2018 NDPG indicate that Japan will build a truly effective defense capability that has honed the attributes of a “Dynamic Joint Defense Force.”

Specifically, Japan will build a “Multi-Domain Defense Force” with a truly effective defense capability that: (i) can execute cross-domain operations, which organically fuse capabilities in all domains, including not only traditional domains—land, sea and air—but also new domains—space, cyberspace and electromagnetic spectrum—, to generate synergy and amplify the overall strength; (ii) is capable of sustained conduct of flexible and strategic activities during all phases from peacetime to armed contingencies; and (iii) is capable of bolstering the ability of the Japan-U.S. Alliance to deter and counter threats and promoting multi-faceted and multi-layered security cooperation.

In particular, as capabilities in new domains, which are space, cyberspace, and electromagnetic spectrum, substantially enhance the military’s overall capabilities to conduct operations, states are exerting efforts to improve capabilities in these fields. Japan will also focus on enhancing such capabilities as well as capabilities to effectively counter attacks by aircraft, ships, and missiles in combination therewith, and enhancing the sustainability and resiliency of defense capability, including logistics support.
Japan’s national defense cannot be carried out by the MOD/SDF alone, and it is essential to gain the understanding and cooperation of each individual Japanese national concerning defense policy. From such viewpoint, the 2018 NDPG succinctly indicates its goals and awareness of issues in the part “NDPG’s Objective” in a simple manner which is easy to understand for nationals.

Specifically, the 2018 NDPG first sets forth that Japan will vigorously march forward as a peace-loving nation even while the security environment surrounding Japan becomes more testing and uncertain, with changes in the balance of power in the international arena accelerating and becoming more complex, and uncertainty over the existing order increasing, and the existing paradigm of national security being fundamentally changed through rapid expansion in the use of the new domains of space, cyberspace and electromagnetic spectrum. Then, it goes on to state that, to do so, Japan needs to fundamentally strengthen its national defense architecture with which to protect, by exerting efforts on its own accord and initiative, the life, person and property of its nationals, territorial land, waters and airspace, and its sovereignty and independence, thereby expanding the roles Japan can fulfill. In addition, it sets forth that, while no country can preserve its security by itself alone, strengthening the Japan-U.S. Alliance as well as security cooperation with other countries, which is critical to Japan’s national security, cannot be achieved without Japan’s own efforts, clearly expressing Japan’s attitude to make efforts on its own accord and initiative. In this regard, the past NDPGs have also been formulated based on the recognition that Japan’s own efforts serve as the basis of the security policy, but the 2018 NDPG has included this statement with an aim to put it down expressly.

On such basis, the 2018 NDPG states as follows. In strengthening its defense capability, Japan must squarely face the realities of national security and ensure necessary and sufficient quality and quantity so as to build a truly effective defense capability that does not lie on a linear extension of the past. In particular, it has become essential that Japan achieve superiority in the new domains, of space, cyberspace and electromagnetic spectrum. To build a new defense capability that combines strengths across all domains, Japan needs to engage in a transformation at a pace that is fundamentally different from the past, completely shedding the thinking that relies on traditional divisions among land, sea, and air. On the other hand, given the rapidly aging population with a declining birthrate and severe fiscal situation, Japan cannot strengthen its defense capability without thorough rationalization that does not dwell on the past. In this manner, the 2018 NDPG emphasizes that Japan needs to build defense capability at a pace that is fundamentally different from the past and to allocate resources without adhering to traditional ways of thinking.

Moreover, the 2018 NDPG states that the Japan-U.S. Alliance, together with Japan’s own defense architecture, continues to be the cornerstone of Japan’s national security, and that Japan’s fulfillment of its foremost responsibility as a sovereign nation is the very way to fulfill its roles under the Japan-U.S. Alliance and further enhance the Alliance’s ability to deter and counter threats, and is a foundation upon which to strategically promote security cooperation in line with the vision of a free and open Indo-Pacific.

In order to formulate a new NDPG, it is necessary to make in-depth analysis of the realities of the security environment surrounding Japan, which lies in the background.

The 2018 NDPG analyzes the characteristics of the current security environment as follows.

In the international community, thanks to further growth of national power of such countries as China, changes in the balance of power are accelerating and becoming more complex, thereby increasing uncertainty over the existing order. Against such a backdrop, prominently emerging is inter-state competition across the political, economic, and military realms, in which states seek to shape global and regional order to their advantage.

This inter-state competition occurs on a continuous basis: In conducting inter-state competition, states leverage various means, such as undermining other country’s sovereignty using military and law-enforcement entities, and manipulating foreign country’s public opinion by exploiting social media.

Also, the so-called gray-zone situations may possibly increase and expand, and they harbor the risk of rapidly
developing into graver situations without showing clear indications. In addition, methods employed to alter the status quo, such as “hybrid warfare,” that intentionally blur the boundaries between the military and non-military realms are forcing affected actors to take complex measures not limited to military ones.

Driven by rapid technological innovation in information & communications and other fields, military technologies are showing remarkable advances. Against the backdrop of such technological advances, contemporary warfare increasingly features capabilities combined across all domains: not only land, sea, and air but also the new domains of space, cyberspace, and electromagnetic spectrum. States are seeking to gain superiority in technologies that undergird capabilities in the new domains.

Due to advances in military technologies, a variety of threats can now easily penetrate national borders. States endeavor to develop weapons that leverage cutting-edge, potentially game-changing technologies. They also engage in research of autonomous unmanned weapon systems equipped with artificial intelligence (AI). Further technological innovations hereafter are expected to make it difficult still to foresee future warfare.

In the international community, there is a broadening and diversifying array of security challenges that cannot be dealt with by a single country alone. With respect to space and cyber domains, establishing international rules and norms has been a security agenda. In the maritime domain, there have been cases where a country unilaterally claims its entitlements or takes actions based on its own assertions that are incompatible with the existing international order. These have generated undue infringement upon freedom in high seas. In addition, the proliferation of weapons of mass destruction, including nuclear, biological and chemical weapons, and ballistic missiles, as well as worsening international terrorism remain grave challenges for the international community.

Against such background, qualitatively and quantitatively superior military powers concentrate in Japan’s surroundings where clear trends are observed in further military build-up and increase in military activities.

The 2018 NDPG analyzes the military trends of the international community, particularly core countries that form the security environment surrounding Japan, as follows.

The United States, with inter-state competition in a range of areas prominently emerging, has acknowledged that a particularly important challenge is strategic competition with China and Russia, who attempt to alter global and regional order. To rebuild its military power, the United States is engaged in such efforts as maintaining military advantage in all domains through technological innovations, enhancing nuclear deterrence, and advancing missile defense capabilities.

With an aim to build “world-class forces” by the mid-21st century, China has sustained high-level growth of defense expenditures with continued lack of transparency. China has engaged in broad, rapid improvement of its military power in qualitative and quantitative terms with a focus on nuclear, missile, naval and air forces. In so doing, China is ensuring superiority particularly in new domains including space, cyberspace and electromagnetic spectrum, and also

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**"Gray-Zone Situations" and "Hybrid Warfare"**

The so-called gray-zone situations simply represents a wide range of situations that are neither peacetime nor wartime.

In a gray-zone situation, for example, a country that confronts another over territory, sovereignty or maritime and other economic interests uses some forceful organization to demonstrate its presence in the relevant disputed region in a bid to alter the status quo or force other countries to accept its assertions or demands.

The so-called hybrid warfare represents methods to alter the status quo while intentionally blurring the boundaries between the military and non-military realms, forcing affected actors to take complex measures that are not limited to military actions.

The means of hybrid warfare include operations using military units of unidentified nationality, cyberattacks to affect communications and other critical infrastructure, the spread of false information through the internet and the media, and other influential operations. The combination of these measures is considered as amounting to hybrid warfare.

Amid emerging inter-state competition, hybrid warfare and other various measures tend to cause gray-zone situations to last for a long period of time.
improving missile defense penetration capabilities and others. China also engages in unilateral, coercive attempts to alter the status quo based on its own assertions that are incompatible with existing international order. In the East China Sea and other waters, China is expanding and intensifying its military activities at sea and in the air. Such Chinese military and other developments, coupled with the lack of transparency surrounding its defense policy and military power, represent a serious security concern for the region including Japan and for the international community. Japan needs to continue to pay utmost attention to these developments.

Although North Korea expressed its intention for complete denuclearization of the Korean Peninsula, it has not carried out the dismantlement of all weapons of mass destruction and ballistic missiles of all ranges in a complete, verifiable and irreversible manner: There has been no essential change in North Korea’s nuclear and missile capabilities. North Korea is assessed as possessing large-scale cyber units, developing capabilities to attack critical infrastructure. North Korea also retains large-scale special operation forces. Such military developments of North Korea pose grave and imminent threats to Japan’s security and significantly undermine the peace and security of the region and the international community.

Russia is enhancing its military posture by continuing force modernization efforts with a focus on nuclear forces. Russia’s military activities are trending upward in the Arctic Circle, Europe, areas around the United States and the Middle East, as well as in the Far East, including Japan’s Northern Territories. Close attention therefore needs to be paid to its developments.

The 2018 NDPG describes the characteristics of Japan as follows.

For Japan, a maritime nation, fundamental to its peace and prosperity is to ensure the safety of maritime and air traffic by strengthening the order of “Open and Stable Oceans.”

Japan is prone to natural disasters that exact heavy damage. Industry, population and information infrastructure concentrate in Japan’s urban areas, and a large number of critical facilities such as nuclear power plants are located in coastal areas.

In addition, Japan is undergoing population decline and ageing with a dwindling birthrate at an unprecedented pace.

In light of the foregoing, the 2018 NDPG states that while the probability of a large-scale military conflict between major countries remains low, Japan’s security environment is becoming more testing and uncertain at a remarkably faster speed than expected when the 2013 NDPG was formulated.

On that basis, the 2018 NDPG specifies that, to prevent threats to Japan from materializing to menace life and peaceful livelihood of its nationals, it behooves Japan to take measures that are in line with these realities.

In so doing, Japan under the Constitution has adhered to the basic precept of maintaining the exclusively defense-oriented policy and not becoming a military power that poses a threat to other countries, ensured civilian control of the military, and observed the Three Non-Nuclear Principles. Based on this premise, Japan, even amid the realities of a security environment it has hitherto never faced, must strive to preserve national interests identified in the National Security Strategy—defend to the end Japanese nationals’ lives, persons and property, territorial land, waters and airspace, and its sovereignty and independence.

Based on the NDPG’s objective and the security environment as mentioned above, the 2018 NDPG clarifies Japan’s basic defense policy as follows.

First, in line with the National Security Strategy and from the perspective of “Proactive Contribution to Peace,” Japan has enhanced its diplomatic strength and defense capability. Japan has also promoted cooperative relationships with other countries, with the Japan-U.S. Alliance being a cornerstone.
Under such circumstances, the 2018 NDPG sets forth (i) the creation of a security environment desirable for Japan, (ii) deterrence, and (iii) countermeasures as national defense objectives. Specifically, they are as follows: first, to create, on a steady-state basis, a security environment desirable for Japan by integrating and drawing on the strengths at the nation’s disposal; second, to deter threats from reaching Japan by making opponents realize that doing harm to Japan would be difficult and consequential; and finally, should a threat reach Japan, to squarely counter the threat and minimize damage.

Japan will strengthen each of the means by which to successfully achieve these national defense objectives: Japan’s own architecture for national defense; the Japan-U.S. Alliance; and international security cooperation. These efforts, including achieving superiority in new domains, which are space, cyberspace, and electromagnetic spectrum, must be carried out swiftly and flexibly in order to deal with increasingly complex security environment that is changing at an accelerating speed.

In dealing with the threat of nuclear weapons, U.S. extended deterrence, with nuclear deterrence at its core, is essential: Japan will closely cooperate with the United States to maintain and enhance its credibility. To deal with the threat, Japan will also increase its own efforts, including comprehensive air and missile defense as well as civil protection. At the same time, towards the long-term goal of bringing about a world free of nuclear weapons, Japan will play an active and positive role in nuclear disarmament and non-proliferation.

The three approaches indicated as basic policy in the 2018 NDPG—Japan’s own architecture for national defense, the Japan-U.S. Alliance, and international security cooperation—are explained below.

2 Strengthening Japan’s Own Architecture for National Defense

(1) Building Comprehensive Architecture for National Defense

What kind of national defense architecture should Japan build in order to squarely address the realities of a security environment that it has hitherto never faced and to securely achieve national defense objectives? The NDPG first indicates that Japan will, in all phases, integrate the strengths at the nation’s disposal, enabling not only the MOD/SDF efforts but also coherent, whole-of-government efforts, as well as cooperation with local governments and private entities. In particular, the NDPG clearly states that Japan will accelerate its efforts and cooperation in such fields as space, cyberspace, electromagnetic spectrum, ocean, and science & technology, and also states that Japan will promote measures concerning the formulation of international norms in fields such as space and cyberspace.

Japan will further advance steady-state efforts such as strategic communications\(^1\) by systematically combining all available policy tools.

In order to address a range of situations including armed contingencies and “gray-zone” situations, Japan has been strengthening its posture under the principle of civilian control of the military. Japan further needs to seamlessly deal with various situations in a coherent, whole-of-government manner by way of swift and pertinent decision-making under even stronger political leadership, which will be assisted by an enhanced support mechanism.

In addition, Japan will also strengthen organization for disaster response and civil protection, build a posture prepared to evacuate Japanese nationals overseas during emergencies and to ensure their safety, and promote measures to protect infrastructure critical to people’s daily lives, such as electricity and communication, as well as to protect cyberspace.

(2) Strengthening Japan’s Defense Capability

a. Significance and Necessity of Defense Capability

The NDPG defines defense capability as Japan’s will and ability to defend to the end Japanese nationals’ lives, persons and property as well as territorial land, waters and airspace as a sovereign nation, by exerting efforts on its own accord and initiative, which at the same time, is essential for Japan to play, on its initiative, its roles in the Japan-U.S. Alliance. Defense capability is essential also for advancing Japan’s efforts in security cooperation with other countries.

On such basis, it emphasizes that defense capability is the most important strength for Japan in retaining self-sustained

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\(^1\) Communications made with the international community, not only through words, but also by combining activities of SDF units, etc., such as joint training or port visits by SDF ships, if appropriate, in order to create a desirable security environment for Japan.
existence as a sovereign nation amid a security environment that it has never faced before, and that Japan must strengthen this capability on its own accord and initiative.


As for the specific ideal form of defense capability, the NDPG sets forth that Japan will newly aim to build a “Multi-domain Defense Force,” given that Japan’s security environment is becoming more testing and uncertain at a remarkably fast speed. The Multi-domain Defense Force is specifically as follows.

To deter and counter qualitatively and quantitatively superior military threats, it has become vitally important to adapt to warfare that combines capabilities in new domains—space, cyberspace, and electromagnetic spectrum—and traditional domains—land, sea, and air.

Japan needs to develop, while qualitatively and quantitatively enhancing capabilities in individual domains, a defense capability that can execute cross-domain operations, which organically fuse capabilities in all domains to generate synergy and amplify the overall strength, so that even when inferiority exists in individual domains such inferiority will be overcome and national defense accomplished.

At the same time, it is also important for Japan to be able to seamlessly conduct activities at all stages from peacetime to armed contingencies. In recent years, however, SDF’s activities, such as maintaining its presence in peacetime, and intelligence, surveillance and reconnaissance (ISR) activities, which are increasing in scope and frequency, are causing a chronic burden on its personnel and equipment, generating a concern that the SDF may not be able to maintain the proficiency and the volume of its activities.

Japan needs to: improve the quality and quantity of capabilities that support the sustainability and resiliency of various activities; and develop a defense capability that enables sustained conduct of flexible and strategic activities commensurate with the character of given situations.

Further, Japan’s defense capability needs to be capable of strengthening the ability of the Japan-U.S. Alliance to deter and counter threats as well as promoting multi-faceted and multi-layered security cooperation.

In light of the foregoing, the NDPG states that Japan will henceforth build a truly effective defense capability, “Multi-Domain Defense Force,” which: organically fuses capabilities in all domains including space, cyberspace

Contemporary warfare combines the traditional domains of land, sea, and air with new domains such as space, cyberspace, and electromagnetic spectrum against the backdrop of technological advances.

For example, modern military activities depend on the use of outer space to the extent in which satellite-based communications between units and satellite-using positioning are indispensable for smooth functioning of forces on land, sea and air. These operations also heavily depend on information and communication networks using cyberspace.

In such situation, it is essential to use such new domains as space, cyberspace, and electromagnetic spectrum to prevent and eliminate attacks so as to effectively deter and counter threats. Cross-domain operations that organically fuse capabilities in the new domains and the traditional domains of land, sea, and air have thus become vitally important.

Cross-domain operations generate synergy to amplify the overall strength to overcome any inferiority in individual domains, obtain overall superiority, and accomplish national defense.
and electromagnetic spectrum; and is capable of sustained conduct of flexible and strategic activities during all phases from peacetime to armed contingencies.

Based on this, in order to promote the building of Multi-Domain Defense Force, the MOD established the Committee for Building Multi-Domain Defense Force in March 2019. Chaired by State Minister of Defense, the committee carries out studies under a cross-ministerial structure.

(3) Roles that Defense Capability Should Play

Defense capability plays various roles to protect the life and peaceful livelihood of Japanese nationals. The NDPG specifically indicates the roles of defense capability as follows.

a. From Peacetime to “Gray-Zone” Situations

Defense capability is not only utilized in armed attack situations, that is, armed contingencies, but is also utilized for deterrence in peacetime and for preventing the situation from deteriorating in gray-zone situations. The NDPG states that the SDF will, in close integration with diplomacy, promote strategic communications such as active joint training and exercises and overseas port visits, and prevent occurrence or escalation of emergencies by leveraging its capabilities to conduct wide-area, persistent ISR activities around Japan, and by employing deterrence activities (“flexible deterrent options”) and other measures according to situation. Moreover, leveraging its posture in place for these activities, the SDF will, in coordination with the police and other agencies, immediately take appropriate measures in response to actions that violate Japan’s sovereignty, including incursions into its territorial airspace and waters.

The SDF will provide persistent protection against incoming ballistic missiles and other threats, and minimize damage should it occur.

b. Attack against Japan including Its Remote Islands

Japan possesses numerous islands, and it is an important role of defense capability to respond to attacks on Japan’s national territory, including these remote islands. The NDPG specifically indicates as follows regarding this point.

In response to an attack on Japan, including its remote islands, the SDF will quickly maneuver and deploy requisite units to block the access and landing of invading forces while ensuring maritime and air superiority. Even when maintaining maritime and air superiority becomes untenable, the SDF will block invading forces’ access and landing from outside their threat envelopes. Should any part of the territory be occupied, the SDF will retake it by employing all necessary measures.

Against airborne attack by missiles and aircraft, the SDF will respond in a swift and sustained manner by applying optimal means and minimize damage to maintain the SDF’s capabilities as well as the infrastructure upon which such capabilities are employed.

In response to attack by guerrillas or special operations forces, the SDF will protect critical facilities including nuclear power plants, and will search for and destroy infiltrating forces.

c. Space, Cyberspace, and Electromagnetic Domains during All Phases

In the new domains such as space, cyberspace, and electromagnetic spectrum, which countries are pursuing to take technical advantage to increase their military capability to prevent any actions that impede their activities, the NDPG states that the SDF will conduct on a steady-state basis persistent monitoring as well as collection and analysis of relevant information. In case of such event, the SDF will take such measures as damage limitation and recovery.

In case of an armed attack against Japan, the SDF will, on top of taking these actions, block and eliminate the attack by leveraging capabilities in space, cyberspace, and...
electromagnetic domains.

In addition, in light of the society’s growing dependence on space and cyberspace, it also pointed out that the SDF will contribute to comprehensive, whole-of-government efforts concerning these domains under appropriate partnership and shared responsibility with relevant organizations.

d. Large-Scale Disasters
Defense capability also plays a significant role when incidents that have an enormous impact on people’s daily lives, such as large-scale disasters, occur. The NDPG states that, in case of disasters, the SDF will swiftly transport and deploy requisite units to take all necessary measures for initial response, and, as required, maintain its posture for disaster response for a longer term. At the same time, the SDF will carefully address the needs of affected citizens and local governments, and engage in life saving, temporary repair and livelihood support in appropriate partnerships and cooperation with relevant organizations, local governments, and the private sector.

e. Collaboration with the United States Based on the Japan-U.S. Alliance
The NDPG indicates that it is an important role of defense capability to effectively conduct bilateral activities with the United States by playing on its initiative its own roles in the Japan-U.S. Alliance in all stages from peacetime to armed contingencies, in line with the “Guidelines for Japan-U.S. Defense Cooperation.”

f. Promotion of Security Cooperation
The NDPG clearly states that it is one of the roles of defense capability to actively engage in efforts for enhanced security cooperation by, for example, strategically promoting defense cooperation and exchanges, such as joint training and exercises, cooperation in defense equipment and technologies, capacity building assistance, and service-to-service exchanges, in accordance with policies that are tailored to individual regions and countries.

3 Strengthening the Japan-U.S. Alliance

The NDPG states that the Japan-U.S. Security Arrangements based on the Japan-U.S. Security Treaty, constitute a cornerstone for Japan’s national security. While based on the conventional recognition that the Japan-U.S. Alliance plays a significant role for the peace, stability and prosperity of not only Japan, but also the region and the international community, it also specifically indicates that Japan's fulfillment of its foremost responsibility as a sovereign nation, through Japan's efforts to strengthen its own defense capability on its own accord and initiative, is the very way to fulfill its roles under the Japan-U.S. Alliance and further enhance the Alliance’s ability to deter and counter threats. On such basis, it clearly states as follows.

First, it has become all the more important for Japan’s national security to further strengthen the relationship with the United States, with whom Japan shares universal values and strategic interests, and the United States also views that cooperation with its allies has become more important. In other words, the importance of the alliance has increased for both the countries.

Next, while the Japan-U.S. Alliance has been reinforced through activities including those that were made possible by the Legislation for Peace and Security, Japan needs to further enhance the Alliance through efforts under the “Guidelines for Japan-US Defense Cooperation” as the security environment
surrounding Japan becomes more testing and uncertain at a remarkably fast speed.

Furthermore, Japan needs to press ahead with such efforts as bolstering the ability of the Alliance to deter and counter threats, enhancing and expanding cooperation in a wide range of areas, and steadily implementing measures concerning the stationing of U.S. Forces in Japan.

4 Strengthening Security Cooperation

The NDPG places more importance than before on security cooperation with other countries utilizing defense capability. Specifically, it clearly states as follows. In line with the vision of a free and open Indo-Pacific, Japan will strategically promote multifaceted and multilayered security cooperation, taking into account the characteristics and situation specific to each region and country. As part of such efforts, Japan will actively leverage its defense capability to work on defense cooperation and exchanges which include joint training and exercises, defense equipment and technology cooperation, capacity building assistance, and service-to-service exchanges. Furthermore, Japan will also contribute to address global security challenges.

The NDPG states that, in implementing these initiatives, Japan should position the Japan-U.S. Alliance as its cornerstone and will work closely with the countries that share universal values and security interests, through full coordination with its diplomatic policy.

6 Priorities in Strengthening Defense Capability

1 Guiding Thoughts

In formulating the NDPG, it was provided that Japan will build a truly effective defense capability that does not lie on a linear extension of the past, in order to adapt to increasingly rapid changes in the security environment.

While clearly indicating priority capability areas in strengthening defense capability, the NDPG sets forth that Japan will develop those areas as early as possible, allocating resources flexibly and intensively without adhering to existing budget and human resource allocation, and undertake necessary fundamental reforms.

The priority capability areas specified in the NDPG are as indicated below.

2 Priorities in Strengthening Capabilities Necessary for Cross-Domain Operations

(1) Acquiring and Strengthening Capabilities in Space, Cyberspace and Electromagnetic Domains

In cross-domain operations, capabilities in the new domains of space, cyberspace and electromagnetic spectrum are essential through focused resource allocation and utilization of Japan’s superb science and technology. The NDPG clearly states that the SDF will strengthen and protect command, control, communications and information capabilities that effectively connect capabilities in all domains and will implement initiatives as follows.

a. Capabilities in Space Domain

The SDF will further improve capabilities that leverage the space domain, including information-gathering, communication and positioning capabilities. The SDF will also build a structure to conduct persistent space situation monitoring. To ensure superiority in use of space at all stages from peacetime to armed contingencies, the SDF will also work to strengthen capabilities, including mission assurance capability and capability to disrupt opponent’s command, control, communications and information. In doing so, it will make efforts to enhance cooperation with relevant agencies and with the United States and other relevant countries, set up a unit that specializes in space domain missions, and develop human resources.

b. Capabilities in Cyber Domain

In order to prevent attacks against the SDF’s information and communications networks, the SDF will continue to strengthen capabilities for persistent monitoring as well as for damage limitation and recovery in case of attack. In addition, the SDF will fundamentally strengthen its cyber defense capability, including capability to disrupt, during attack against Japan, opponent’s use of cyberspace for the attack. In doing so, the SDF will significantly expand its human resources with specialized expertise and skills and contribute to whole-of-government efforts.

c. Capabilities in Electromagnetic Domain

The SDF will work to enhance information and communications capabilities as well as information collection and analysis capabilities related to electromagnetics, and develop an information sharing posture. The SDF will improve capabilities to minimize the effect of opponent’s electronic jamming. In addition, the SDF will strengthen capabilities to neutralize the radar and communications of an opponent who intends to invade Japan. In order to smoothly perform these activities, the SDF will enhance its
Foreign countries have remarkably modernized their respective air forces in recent years and fighters and bombers have increasingly flown beyond Japan’s southwestern island chain into the Pacific Ocean. Military aircraft activities have rapidly expanded and intensified their flights in the Pacific. This situation had not been seen until after the formulation of the 2013 NDPG, and such activities are expected to further expand and intensify in the future.

In expending all possible means to defend Japan in such situation, it is very important to ensure the flexibility of fighter operations by making more air bases available for high-performance fighters to be used for seamlessly securing air superiority. Given that available runways are limited in our small country, fighters capable of Short Take-off and Vertical Landing (STOVL) on destroyers would further contribute to improving the flexibility of fighter operations and to facilitating air defense in the Pacific, where Japan has only one air base (Iwo To) and where the SDF has limited operational infrastructure.

From this viewpoint, it is essential to refurbish Izumo-class destroyers to make take-off and landing of STOVL fighters possible out on the sea so that, dealing with the new security environment, Japan secures its sea and air defense, including the vast Pacific side, while ensuring the safety of SDF personnel. This is the minimum necessary measure for Japan’s self-defense.

The Izumo-class destroyers are multi-function destroyers capable of helicopter, antisubmarine, command central, personnel and vehicle transportation, medical and other operations. Even after the STOVL aircraft operation function is added, they will continue to be utilized as multi-function destroyers, and will operate STOVL aircraft when necessary such as in response to air attacks in time of emergency, and for ISR, training, and disaster response.
b. Stand-Off Defense Capability
The SDF will acquire stand-off firepower and other requisite capabilities to deal with ships and landing forces attempting to invade Japan, including remote islands, from the outside of their threat envelopes. In addition, in order to appropriately leverage advances in military technologies, Japan will swiftly and flexibly strengthen stand-off defense capability through measures such as comprehensive research and development of related technologies.

c. Comprehensive Air and Missile Defense Capability
In order to counter diverse airborne threats of ballistic and cruise missiles and aircraft, the SDF will establish a structure with which to conduct integrated operation of various equipment pieces, thereby providing persistent nation-wide protection and also enhancing capability to simultaneously deal with multiple, complex airborne threats. The SDF will also study ways to counter future airborne threats.

d. Maneuver and Deployment Capability
In order for requisite SDF units to conduct sustained, persistent activities in appropriate areas on a steady-state basis and to maneuver and deploy according to the situation, the SDF will strengthen amphibious operation and other capabilities. In addition, to enable swift and large-scale transport, the SDF will strengthen joint transport capability, including inter- and intra-theater transport capabilities, tailored to the characteristics of remote island areas. The SDF will also work to collaborate with commercial transport on a steady-state basis.

(3) Strengthening Sustainability and Resiliency
It is important to be able to secure and supply sufficient ammunition and fuel and to achieve prompt recovery from any damage caused to facilities when various situations occur. The NDPG places importance on this point, and states as follows. The SDF will take necessary measures for securing ammunition and fuel, ensuring maritime shipping lanes, and protecting important infrastructure. In particular, while cooperating with relevant ministries and agencies, the SDF will improve sustainability of activities through safe and steady acquisition and stockpiling of ammunition and fuel. The SDF will also improve resiliency in a multi-layered way through efforts including dispersion, recovery from damage, and substitution of infrastructure and other foundations for the SDF operations, including defense-related facilities. Further, the SDF will ensure high operational availability by reviewing equipment maintenance methods.

The NDPG sets forth that the SDF will develop thorough structure for Japan’s national defense, and enhance personnel, industries, technologies, and information that serve as the basis, in order to conduct sufficient activities.

(1) Reinforcing Human Resource Base
In light of the rapid progress of shrinking and aging population with declining birth rates, the SDF needs to work even further to reinforce human resource base that sustains SDF personnel.
The MOD/SDF will promote efforts in order to secure diverse, high-quality talents from a wider range of people. These efforts include: various recruitment measures such as cooperation with local governments and other entities; diversifying the applicant pool; and expanding women’s participation. The MOD/SDF will also promote manpower saving and automation by leveraging technological innovations such as artificial intelligence.
To enable all SDF personnel to fully exercise their ability under high morale, the MOD/SDF will improve living and work environments and promote work style reforms at the MOD/SDF to ensure proper work-life balance.
Furthermore, through such efforts as enhancing joint education and research, the MOD/SDF will enrich education and research. The MOD/SDF will also enhance education for organization management skills.

(2) Reviewing Equipment Structure
The MOD/SDF will examine the existing equipment structure from a joint operation perspective and build an optimized equipment structure. In so doing, while giving due considerations to the capabilities each SDF service requires for its operations, the MOD/SDF will: develop equipment with multiple functional variants; optimize and standardize specifications; jointly procure equipment commonly used across SDF services; reduce types of aircraft; suspend the use of equipment whose importance has decreased; and review or discontinue projects of low cost-effectiveness.

(3) Reinforcing Technology Base
The MOD/SDF will make focused investments through selection and concentration in important technologies, including artificial intelligence and other potentially game-changing technologies. The MOD/SDF will also dramatically shorten research and development timelines by streamlining research and development (R&D) processes and procedures. In addition, the MOD/SDF will reinforce its structure aimed at fostering of innovative, emerging technologies by actively
leveraging commercial technologies through such efforts as technology exchange with relevant domestic and overseas entities, and utilizing think tanks.

(4) Optimizing Equipment Procurement
In order to implement thorough cost management and reduction, the MOD/SDF will promote active use of systematic acquisition methods which facilitate efficient procurement, streamlining of equipment maintenance, and competition among domestic and foreign companies. Moreover, in order to efficiently procure U.S.-made high-performance equipment, the MOD/SDF will promote rationalization of Foreign Military Sales (FMS) procurement and further strengthen efforts on project management throughout the entire life cycle of defense equipment.

(5) Strengthening Defense Industrial Base
Through measures including reform of the existing contract system to create a competitive environment for companies, the MOD/SDF will work to reduce equipment costs and improve industrial competitiveness, thereby striving to build a resilient defense industrial base.

(6) Enhancing Intelligence Capabilities
The MOD/SDF will strengthen capabilities for each stage of information collection, processing, analysis, sharing, and protection so that the SDF can promptly detect and swiftly respond to indications of various situations and also take requisite measures based on medium- to long-term military trends. In so doing, the MOD/SDF will strengthen capability and posture for the collection of SIGINT, IMINT, HUMINT, OSINT and others. The MOD/SDF will also enhance collaboration with relevant domestic agencies, including the Cabinet Satellite Intelligence Center which operates Information Gathering Satellites, and with allies as well as with other parties.

7 Organization of the SDF
The NDPG states that, in order to realize cross-domain operations, including in the new domains of space, cyberspace, and electromagnetic spectrum, the SDF will strengthen joint operations as described in 1 and develop the organization of each SDF service as described in sections from 2 to 4.

The GSDF will maintain surface-to-air guided missile units and ballistic missile defense units, the MSDF will maintain Aegis-equipped destroyers, the ASDF will maintain surface-to-air guided missile unit, and the SDF will build comprehensive air and missile defense capability comprising these assets.

The SDF will maintain a maritime transport unit as an integrated unit that allows SDF units to swiftly maneuver and be deployed in joint operations.
To be able to counter an invasion of remote islands, the GSDF will maintain surface-to-ship guided missile units and hyper-velocity gliding projectile units for remote island defense.

With respect to basic operational units (divisions and brigades) other than the rapidly deployable ones, the GSDF will review their organization and equipment with a focus on tanks, howitzers and rockets. With respect to units under the direct command of regional armies, the GSDF will also review their organization and equipment related to aerial firepower. The GSDF will thoroughly implement rationalization and streamlining of these units and appropriately position them to meet the conditions and characteristics of each region.

The number of GSDF personnel will be maintained at 159,000.

3 Organization of the MSDF

The MSDF will maintain reinforced destroyer units including destroyers with improved multi-mission capabilities (FFM), minesweeper units, and embarked patrol helicopter units. The MSDF will organize surface units composed of these destroyer units and minesweeper units. In addition, the MSDF will maintain patrol ship units to enable enhanced steady-state ISR in the waters around Japan.

In order to effectively conduct steady-state, wide-area underwater ISR, and to effectively engage in patrols and defense in the waters around Japan, the MSDF will maintain reinforced submarine units. By introducing a test-bed submarine, the MSDF will work to achieve greater efficiency in submarine operations and accelerate capability improvement, thereby enhancing persistent ISR posture.

In order to effectively conduct steady-state, wide-area airborne ISR, and to effectively engage in patrols and defense in the waters around Japan, the MSDF will maintain fixed-wing patrol aircraft units.

4 Organization of the ASDF

The ASDF will maintain air warning and control units consisting of ground-based warning and control units and reinforced airborne warning units: ground-based warning and control units are capable of conducting persistent surveillance in airspace around Japan including vast airspace on the Pacific side; and airborne warning units are capable of conducting effective, sustained airborne warning, surveillance and control during “gray zone” and other situations with heightened tensions.

The ASDF will maintain fighter aircraft units reinforced by high-performance fighter aircraft. In addition, the ASDF will maintain reinforced aerial refueling and transport units.

The ASDF will maintain air transport units which enable it to effectively carry out activities such as maneuver and deployment of ground forces.

The ASDF will maintain unmanned aerial vehicle units which enable it to conduct information collection in areas relatively remote from Japan and persistent airborne monitoring during situations with heightened tensions.

8 Elements Supporting Defense Capability

The NDPG sets forth that the following initiatives will be emphasized as elements supporting defense capability, in order for Japan’s defense capability to demonstrate its true value.

1 Training and Exercises

The NDPG states that the SDF will conduct more practical, effective and systematic training and exercises while work in partnership with relevant organizations, local governments and the private sector. In so doing, the SDF will develop and utilize domestic training areas, such as those in Hokkaido as well as fine training environments overseas; facilitate joint/shared use of U.S. Forces facilities and areas; facilitate use of places other than SDF facilities or U.S. Forces facilities and areas; and more actively introduce training simulators and others. The SDF will also actively utilize training and exercises to constantly examine and review various plans for emergencies.

2 Medical Care

The NDPG states that, in order to protect the lives of SDF personnel to the maxim extent possible, the MOD/SDF will strengthen its posture for medical care and onward transfer of patients, seamlessly covering the entire stretch between the frontline and final medical evacuation destinations. Taking into account the conditions and characteristics of each region, the SDF will focus on strengthening medical functions of the SDF in Japan’s southwestern region. The SDF will establish an efficient and high-quality medical care regime through endeavors including upgrading of SDF hospitals into medical hubs with enhanced functions. In order to secure medical personnel in operation units, the SDF will: improve the management of the National Defense Medical College; and enrich and enhance education and
research, such as that for improving medical care capabilities for combat injury.

3 Collaboration with Local Communities

The NDPG states that the MOD/SDF will constantly and actively engage in public relations activities regarding defense policies and activities. Upon fielding units and equipment of the SDF or U.S. Forces in Japan and conducting training and exercises, the MOD/SDF will make careful, detailed coordination to meet desires and conditions of local communities. At the same time, the MOD/SDF will continue to promote various impact alleviation measures, include noise mitigation. The MOD/SDF will further strengthen collaboration with relevant organizations, including local governments, police and fire departments, in order to enable the SDF to swiftly and securely conduct its activities in response to various situations.

The MOD/SDF will give due considerations to local conditions and characteristics upon reorganization of...
### Fig.II-3-2-2 Transition of NDPG Annex Tables

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<td>6 fire groups</td>
<td>4 fire groups (24 fire squadrons)</td>
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<td><strong>Unmanned Aerial Vehicle Units</strong></td>
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<tr>
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<td>approx. 340</td>
<td>approx. 360</td>
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<tr>
<td><strong>Surface-to-Air Guided Missile Units</strong></td>
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</table>
operation units as well as placement of SDF garrisons and bases. At the same time, in administering garrisons and bases, the MOD/SDF will give due considerations to their contributions to local economies.

4 Intellectual Base

The NDPG states that, in order to facilitate understanding of security and crisis management among the populace, the MOD/SDF will work to promote security-related education at educational institutions. In order to achieve at high levels both academic research and policy-support by the National Institute for Defense Studies (NIDS), the MOD/SDF will facilitate the NIDS’ collaboration with the policy-making sector. The MOD/SDF will further enhance its defense research regime with the NIDS playing central roles. In so doing, the MOD/SDF will promote systematic collaboration with other research and educational institutions within the Government, as well as with universities and think-tanks of excellence both at home and abroad.

9 Points of Attention

Japan’s defense capability which the NDPG set forth envisions approximately 10 years. The National Security Council will conduct periodic, systematic evaluations throughout the course of implementation of various measures and programs. At the same time, the MOD/SDF will conduct verifications regarding capabilities required for Japan’s defense in the future.

When major changes in situation are anticipated during evaluation and verification processes, the NDPG will be amended as necessary after examining the current security environment and others.

In addition, considering increasingly severe fiscal conditions and the importance of other budgets related to people’s daily life, the MOD/SDF will work to achieve greater efficiency and streamlining in defense force development to curb costs. The MOD/SDF will work to ensure that defense capability can smoothly and fully perform its functions while harmonizing with other policies and measures of the Government.