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2020 DEFENSE WHITE PAPER



Ministry of National Defense
Republic of Korea

2020

DEFENSE
WHITE PAPER

Minister's Message

Our recent security situation is extremely complex and grave, both internally and externally. Neighboring countries of the Korean Peninsula continue to reinforce their cutting-edge military capabilities, pushing their own priorities while expanding their military domains not only in the sea and air but also to space and cyber. In addition, transnational and non-military threats such as COVID-19, disasters and terrorism are emerging as challenges to national security. In particular, with the spread of COVID-19 and the strategic competition between the United States and China, the fluidity and uncertainty of the regional security structure are increasing.

Meanwhile, despite showing its willingness to improve inter-Korean relations following the conclusion of the Comprehensive Military Agreement in 2018, North Korea has not responded proactively to the efforts of our government and the international community towards peace establishment.

Amid such challenges within the security landscape, the ROK Armed Forces maintains a robust military readiness posture based on "formidable force" and unwavering ROK-US Alliance while fulfilling the role and responsibility as "Armed Forces for the people", exerting their utmost efforts to construct "Strong Security, Proud Armed Forces and United National Defense".

The ROK Armed Forces maintains a combined defense posture and a military readiness posture that can respond to local provocations and all-out



war, while also strengthening realistic and practical education and training focused on combat missions. In addition, by preemptively and proactively responding to COVID-19, our Armed Forces has executed the sworn duties of protecting the lives and safety of the people.

As the linchpin of peace and prosperity on the Korean Peninsula and in the region, the ROK–US Alliance continues to develop into a comprehensive strategic alliance, sharing common values. The Armed Forces of both countries will continue preparing for a further leap forward for the Alliance while pursuing the transition of wartime operational control (OPCON) and establishment of a new combined defense structure. Furthermore, through strategic defense exchange and cooperation with our surrounding countries and diversification of defense diplomacy partners, the ROK Armed Forces is driving forward the substantialization and expansion of outer edges of defense exchange and cooperation. The ROK Armed Forces will continue contributing to world peace via active defense diplomacy activities in the future.

The ROK Armed Forces is building defense capabilities suitable for the future battlefield environment. We are strengthening both the ROK Armed Forces' and ROK–US combined capabilities against threats of various weapons of mass destruction, including nuclear weapons; we are also reinforcing core forces, centered around critical military capabilities. Furthermore, we are endeavoring to transform into a cutting-edge science

and technology force by promoting Defense Reform 2.0 and smart defense innovation. We are reorganizing the structure of our Armed Forces into an advanced science and technology-based elite unit structure suitable for the future battlefield and an operations and combat-focused personnel structure while actively implementing advanced technology of the Fourth Industrial Revolution, including drones, artificial intelligence and robots into the field of defense. Going forward, we will construct formidable military power, which will lead the future by building defense capabilities based on technological development.

In addition, in order to create a content national defense environment and transform into a force trusted by the people, we are firmly establishing a fair, transparent and efficient national defense management structure and embedding an inclusive culture within our Armed Forces. We are establishing a transparent, efficient national defense management structure through the expansion of public participation, transparency in defense projects, and enhancement of the defense industry's competitiveness. Furthermore, we are actively promoting policies to enhance the convenience for the people, such as relocation of military airbases and creation of military facilities that coexist with local communities. In addition, we are building a "force that stands alongside and is trusted by the people" by dramatically improving the service conditions for servicemembers and the military medical system, and by preparing support measures capable of embracing discharged servicemembers and veterans.

Peace on the ground, at sea, and in the air on the Korean Peninsula is the path for both the Republic of Korea and North Korea. Korea. Therefore, our Armed Forces will actively implement the Comprehensive Military Agreement and establish a strong defense posture to backstop with "formidable force" the complete denuclearization of and establishment of lasting peace on the Korean Peninsula.

The 2020 Defense White Paper contains the key achievements in the field of defense over the past two years and the future policy direction to thoroughly inform the public of such efforts of our Armed Forces. I hope that the 2020 Defense White Paper will assist its readers in expanding their understanding and appreciation of our Armed Forces, and I request your unwavering support and encouragement towards our Armed Forces, which are endeavoring tirelessly to realize "Strong Security, Proud Armed Forces and United National Defense".

December 31, 2020

A handwritten signature in black ink, consisting of stylized, overlapping strokes that form the name 'Suh Wook'.

Suh Wook

Minister of National Defense, Republic of Korea

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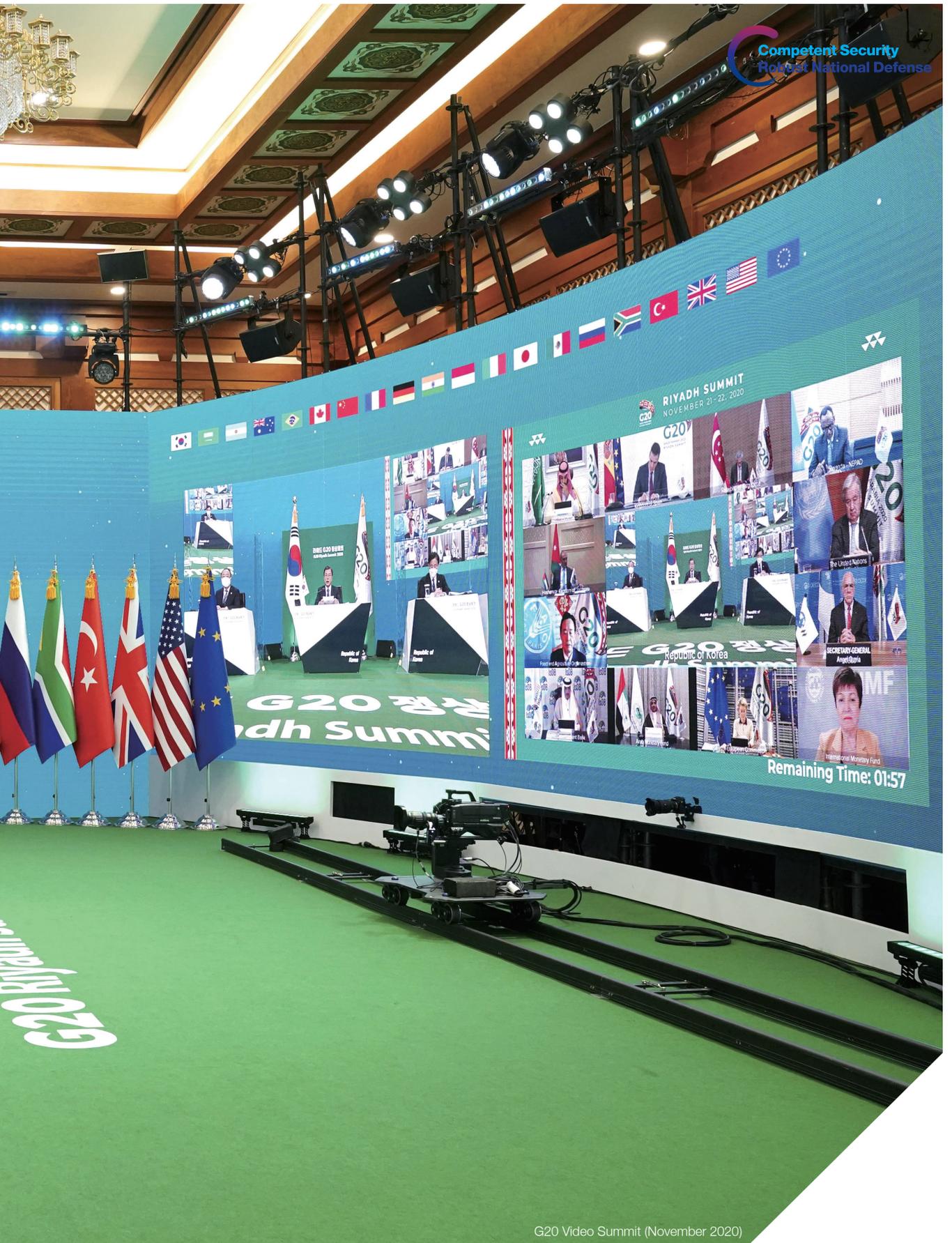
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Chapter 1

Changes and Challenges in the Security Environment

- Section 1 Global Security Environment
- Section 2 Security Environment of Northeast Asia
- Section 3 North Korean Situation and Military Threats





G20 Video Summit (November 2020)

Global Security Environment

While the global spread of COVID-19 has emerged as a new threat to international security as it causes political, economic, and social instability in many countries across the world, security threats continue to arise locally due to traditional causes of conflict such as territorial and religious disputes. Against this backdrop, extreme nationalism is intensifying in the international community but at the same time efforts to cooperate on jointly responding to various security threats are being strengthened.

1. COVID-19 and Increased Variability in the Security Environment

The COVID-19 outbreak, which began at the end of 2019 and has since spread rapidly across the world, has caused an unprecedented complex security crisis situation in the international community. In just nine months after the World Health Organization (WHO) declared the outbreak as a pandemic¹⁾ in March 2020, more than 61 million cases have been confirmed and over 1.4 million people have died worldwide, causing the worst level of casualties since World War II. COVID-19 has paralyzed social systems including health care systems, and has brought about an international economic crisis that includes a breakdown in the global supply chain, contraction in economic activities, and mass unemployment. The pandemic has also sparked social conflicts around the world, including racial hate crimes and protests by the economically vulnerable against government quarantine measures. As the crisis that started in the health care sector escalates into political, economic, and social crises, it poses a grave security threat to the international community.

The intensifying strategic competition between the US and China, amid global spread of COVID-19, adds instability and uncertainty to the international security environment. The US is seeking new partnerships and a variety of cooperation opportunities by further strengthening cooperation with its existing allies and friendly nations while holding China's expansion of influence in check through its Indo-Pacific Strategy. China, on the other hand, is striving to protect its core interests and expand its influence by pushing forward with its Belt and Road Initiative.

Also, in the initial response stages for COVID-19, members of the international community showed a tendency to prioritize their own country, choosing to close

¹⁾ State of great epidemic outbreaks around the world.

their borders rather than deal with the disease in close cooperation with regional partners and international organizations. This tendency is becoming a factor that weakens international solidarity and multilateral security cooperation against a variety of security threats.

Meanwhile, transnational and non-military security threats such as cyber threats, terrorism, and natural and man-made disasters continue to pose threats to international security. In a situation where telework, telemedicine, and remote education are becoming more common in various sectors of society and the dependency on digital technologies is intensifying in an effort to prevent the spread of COVID-19, cyber-attacks are on the rise in proportion to the development of information and communication technologies (ICT). Despite the COVID-19 situation, international terrorism continues to cause unrest as seen by the reorganization of ISIS²⁾ and al-Qaeda and instigation of terrorism targeting the western world. Meanwhile, hijacking sailors and other acts of piracy are drastically increasing due to the prolonged COVID-19 pandemic and deepening economic difficulties. As shown by the catastrophic Australian bushfires and the South African super cyclone in 2019, along with the volcanic eruption in the Philippines and the earthquake in Turkey in 2020, natural disasters and catastrophes continue to wreak havoc around the world. Forecasting natural disasters is difficult and damages caused by natural disasters are becoming greater and greater. Accordingly, with limitations in relief and recovery efforts by the disaster-stricken country alone, more emphasis is being placed on the need for international cooperation and support.

2. Ever-present Traditional Threats

Conflicts persist due to arms races and geopolitical factors among the powerful nations, and so do security threats due to traditional causes of conflict such as territory and religion in various regions around the world as well.

In the Asia-Pacific region, the US and China continue to carry out military activities that have perceived intentions to keep the other side in check. In addition, there's a possibility that the strategic competition between the US and Russia over issues such as arms control will intensify as seen by the scrapping of the INF³⁾ by the US. The conflict over jurisdiction of the border area west of the Himalayas between China and India is still ongoing with a bloody clash between the two nations occurring in June 2020.

The European region faces a variety of internal and external challenges including

²⁾ Islamic State of Iraq and Syria.

³⁾ Intermediate-range Nuclear Forces Treaty.

the UK's withdrawal from the European Union (EU) and tensions between the US and Europe over NATO's defense cost burden-sharing issue. In addition, tension between the EU and Russia continues as the EU extended its economic sanctions against Russia for six months, which had been scheduled to end in late July 2020, in relation to the annexation of the Crimean Peninsula by Russia.

In the Middle East, violent extremist factions like ISIS are weakening, but the years-long civil war in Syria and Yemen is unlikely to end in the near term. Meanwhile, Iran's threat to block the Strait of Hormuz after the US announced its withdrawal from the JCPOA⁴⁾ in May 2018 and restored its sanctions against Iran escalated tensions in the region, and the conflict between Israel and Palestine persists as well. On the other hand, with an agreement to normalize ties between the United Arab Emirates, Bahrain, and Israel in 2020, the situation in the Middle East is expected to change.

Political and economic instability continues in Africa as well due to power struggles between political forces, ethnic conflicts, and terrorism by violent extremists caused by chronic issues such as low development. Attacks by extremist Islamic militants are still occurring in countries in the Sahel region⁵⁾ and in Somalia and other East African nations, while pirate attacks in the waters of the Gulf of Guinea in West Africa are rapidly increasing.

3. International Cooperation on Responding to Security Threats

As the world continues to experience the spread of COVID-19, the need for cooperation and collaboration in the international community is increasing. Given that transnational and non-military security threats such as infectious diseases, climate change, cyber terror, and terrorism are not limited to individual countries or certain regions, countries around the world are strengthening their international cooperation efforts through solidarity and cooperation to overcome the common crisis.

Through the 2020 extraordinary G20 summit on COVID-19 held in March 2020, the Special ASEAN Plus Three (APT) Summit on COVID-19 in April, a WHO meeting in May, an APEC summit in November, and a G20 video summit in November, the participating leaders vowed to work together with international organizations in responding to COVID-19, and urged the international community to take joint action. Cooperation in the international community is underway as well, including the provision of disinfection and quarantine supplies to countries in need

⁴⁾ An agreement on Iran's nuclear issue signed in July 2015 with the permanent members of the UN Security Council and Germany (P5+1) as Joint Comprehensive Plan of Action (JCPOA).

⁵⁾ Refers to an area south of the Sahara Desert and the five neighboring nations in that area: Niger, Mali, Mauritania, Burkina Faso, and Chad.

of medical assistance and fundraising for the development of COVID-19 vaccines and treatments.

In addition, to effectively respond to cyber threats, the international community continues to cooperate through the Global Conference on Cyberspace (GCCS), GGE⁶⁾, OEWG⁷⁾, SDD⁸⁾ Cyber Working Group, and ADMM-Plus⁹⁾ Experts' Working Group on Cyber Security.

As for providing rescue and recovery support measures for large-scale disasters, discussions on cooperation by utilizing multilateral security consultative bodies such as the ARF¹⁰⁾, RHCC¹¹⁾, and regional consultative bodies under the UN Office for the Coordination of Humanitarian Affairs (OCHA) are in progress.

6) Group of Governmental Experts.

7) Open-Ended Working Group.

8) Seoul Defense Dialogue.

9) ASEAN Defense Ministers' Meeting-Plus.

10) ASEAN Regional Forum.

11) Regional HADR (Humanitarian Assistance Disaster Relief) Coordination Center.

Security Environment of Northeast Asia

Amid the deepening strategic competition between the US and China in Northeast Asia following the COVID-19 pandemic, China and Russia are strengthening strategic solidarity while countries including Japan are continuously strengthening military power and expanding their influence. Such security environment coupled with COVID-19 and the Korean Peninsula denuclearization variable is increasing the fluidity and uncertainty of the regional security structure.

1. Regional Security Situation

While the strategic competition and conflict between the US and China are expanding to the political, economic, and military areas, uncertainty in Northeast Asia is also growing due to the dynamics between the US, China, Japan, and Russia. In particular, tensions in the region are escalating further due to the global spread of COVID-19 and military activities of the US and China in the South China Sea.

Under the policy "peace through strength", the US classified China and Russia as "Revisionist Power" in its National Security Strategy (NSS) and National Defense Strategy (NDS), and officially declared its intention to commit to a long-term, strategic competition with them. And based on the Indo-Pacific Strategy, the US is strengthening bilateral and multilateral cooperation with countries in the region. In particular, the US is continuously expanding its investment in force modernization and readiness posture enhancements to include the reinforcement of forces deployed in the Asia-Pacific region, strengthening of conventional forces, modernization of nuclear deterrence capabilities, and the bolstering of missile defense capabilities in the US mainland by continuously increasing its defense budget.

During the 19th National Congress of the Communist Party of China in October 2017, China, as a road map to realize the Chinese dream, presented the goals of modernizing socialism based on a moderately prosperous society (xiaokang shehui)¹²⁾ between 2020 and 2035 and a full-scale construction of a socialist powerhouse by "fostering a strong world-class force" by 2050. It is expected to set out a foreign policy to establish a new international order led by China based on the "community of common destiny". In September 2020, China declared to its people

¹²⁾

"Xiaokang shehui" is a stage of social development in China that is supposed to follow the stage of "wenbao," meaning warmth and fullness. While "wenbao" is about meeting the basic needs of citizens, "xiaokang sheshui" refers to a middle-class society in which its members are able to enjoy culture and leisure.

and the world that the country overcame COVID-19, and is seeking to expand its influence through active disinfection and quarantine support for the international community while emphasizing the superiority of its system.

Japan is adhering to the principle of maintaining the "exclusively defense-oriented policy"¹³⁾ based on its pacifist Constitution. However, it is also seeking to shift to a more proactive defense policy under the reasoning of "proactive pacifism based on the principles of international cooperation"¹⁴⁾ to provide safety for Japan and realize peace, stability, and prosperity in the international community. In addition, Japan is aiming to enhance its operational capabilities in space, cyber, and electromagnetics through "multidimensional integrated defense"¹⁵⁾ based on its "multidimensional joint defense force" concept, reflecting the changes in the security environment including North Korea's nuclear and missile development and China's military buildup.

Russia continues to strengthen its defense capabilities by modernizing its military force and developing nuclear and space weapons while strengthening its strategic cooperation with China within Northeast Asia. Meanwhile, disputes with the US over the withdrawal from the Intermediate-Range Nuclear Forces Treaty and the New START (US–Russia Strategic Arms Reduction Treaty) are deepening.

2. Defense Policies and Military Trends of Neighboring Countries

The US maintains its strategic and military superiority in Northeast Asia while China, Japan, and Russia are vying to build up their military strength, mainly their naval and air forces. [Chart 1-1] summarizes the military strength of the four major powers that are surrounding the Korean Peninsula.

13)

It is a passive defense strategy in accordance with the spirit of the Peace Constitution. According to this strategy, defense forces are utilized only when attacked by the other party, and the use and sustainment of defense forces is limited to a minimum within the scope necessary for self-defense.

14)

Fundamental ideology of national security written in Japan's National Security Strategy. The idea is that Japan should contribute to securing peace, stability, and prosperity of the international community more proactively than ever in line with its national power.

15)

Ability to carry out cross-domain operations by enhancing the overall capability through the synergy of organically integrating the capabilities of all areas including new areas such as space, cyber, and electronic warfare in addition to existing areas such as land, sea, and air (Source: Japanese Defense White Paper)

[Chart 1-1] Military Strengths of the Four Major Powers Surrounding the Korean Peninsula



* Sources: The Military Balance 2020 (International Institute for Strategic Studies, February 2020) and the National Defense Authorization Act for Fiscal Year 2020.

United States

In the 2017 National Security Strategy (NSS) and the 2018 National Defense Strategy (NDS), the US set its core interests as protecting the homeland and the American people, promoting national prosperity, preserving peace through strength, and expanding American influence, and underscored the need to maintain its military superiority to support these efforts through strength. Meanwhile, assessing China and Russia as nations in strategic competition, the US is pursuing a long-term position of keeping these nations in check in various areas including diplomacy and security.

In 2019, the US Department of Defense announced the "Indo-Pacific Strategy", which embodies the NSS and NDS, presenting a free and open Indo-Pacific as its vision. It also stressed that this vision can be realized through joint forces that possess lethal capabilities and the solidarity among strong allies and partners. And to achieve this, the US is exerting efforts to enhance its readiness posture and promote partnerships and regional networks. To this end, the US continues to promote the modernization of military forces and force enhancements, while seeking to improve

the military capabilities of allies and friendly nations by enhancing interoperability through combined drills in the region. The US is bolstering cooperation with existing allies and partners, and seeking opportunities to cooperate with new partner countries. It is building an expanded security network by boosting smaller-scale multilateral cooperation, as seen in the ROK–US–Japan, US–Japan–Australia, and US–Japan–Australia–India relationships.

On the military front, the US is establishing an optimized Joint Forces Support System by developing the Joint Concept for Access and Maneuver in the Global Commons (JAM-GC). It is also implementing the Dynamic Force Employment, which increases the operational unpredictability and the strategic flexibility of strategic assets. Furthermore, the US continues its efforts to systematize joint operational concepts that reflect new operational requirements. This concept aims to integrate the military capabilities of each armed service by further dispersing the deployment of forces but connecting them with advanced battlefield networks, and is being pursued in the direction of encompassing the Army's MDO¹⁶⁾, the Air Force's ACE¹⁷⁾, the Navy's DMO¹⁸⁾, and the Marine Corp's EABO¹⁹⁾. Also, it is continuing to pursue a multilayered missile defense system and is modernizing its nuclear capability triad consisting of Intercontinental Ballistic Missiles (ICBMs), Submarine-Launched Ballistic Missiles (SLBMs), and strategic bombers. The US has deployed advanced naval and air force assets in the Asia-Pacific region such as stealth fighters including the F-22 and the F-35, the P-8 Poseidon maritime patrol aircraft, Virginia-class nuclear submarines, unmanned underwater vehicles, and strategic bombers.

In December 2019, President Trump signed into law with bipartisan support from both the House of Representatives and the Senate the National Defense Authorization Act (NDAA) for Fiscal Year 2020, which compiled the largest defense budget ever. As such, the US has increased its defense budget every year since 2016 and consolidated the foundation for its pursuit of "peace through strength". The 2020 NDAA authorizes a USD 21 billion year-on-year increase in the defense budget, which amounts to USD 738 billion and represents about 3.3% of the US Gross Domestic Product (GDP) and the addition of 1,400 active-duty personnel while comprehensively addressing contents related to the strengthening of military modernization and readiness posture, threat responses, support for allies and partners; and servicemember welfare issues. In particular, the NDAA reemphasizes the threats from China and Russia and recommends policies focusing on these threats while urging the materialization of the Indo-Pacific strategy in the perspective of responding to China.

¹⁶⁾ Multi Domain Operations

¹⁷⁾ Agile Combat Employment

¹⁸⁾ Distributed Maritime Operations

¹⁹⁾ Expeditionary Advanced Base Operations

The US Army reduced its end-strength from the current 487,500 to 480,000 and approved and compiled the budget for purchasing 165 tactical and multipurpose vehicles and M1 tanks, 48 AH-64E helicopters, 98 UH-60 helicopters, and 53 Paladin self-propelled artillery. The US Navy increased its end-strength by 5,100 from its current 335,400, and approved the force enhancement projects to procure 18 vessels including 2 Virginia-class submarines, 3 Arleigh Burke-class destroyers, and 1 new Gerald R. Ford-class aircraft carrier. The US Air Force saw an addition of 3,700 to its 329,100 end-strength and the budget for acquisition and performance improvement of existing fighters such as the F-35 and F/A-18 was compiled as planned. Force enhancements including the KC-46 aerial refueling tanker were also approved.

In addition, with an aim to strengthen its nuclear capabilities, the NDAA compiled the budget for ground-based strategic missiles, long-range cruise missiles, Colombian-class submarines, and B-21 bombers while emphasizing research on new technologies such as space-based ballistic-missile interception system and on strengthening homeland defense capability.

Furthermore, following the 2019 proposal of limiting the reduction of USFK's troop level to below 22,000, the 2020 NDAA prescribed an obligation on the US Secretary of Defense to verify that: (a) the reduction of the USFK troop level to below 28,500 is in accordance with US security interests; (b) such reduction does not impede the security of allies in the region; and (c) appropriate discussion were carried out with allies including ROK and Japan. Meanwhile, ROK and the US are evaluating the role of the USFK through the annual Security Consultative Meeting (SCM) and are continuing to confirm the US commitment to defend the ROK.

The US is also continuing to strive to strengthen its security posture in space and cyberspace, and through the NDAA has mandated the Department of Defense to submit annual reports to Congress on cyber attacks and intrusions by Russia, Iran, North Korea and China. As seen by the inclusion of a new provision establishing a senior level position to coordinate and oversee the overall cyber policy of the Department, the US is continuing to expand its cyber capability efforts. In addition, the US is accelerating efforts to maintain a comparative advantage in the space domain, and the creation of the Space Force as the sixth US military service force²⁰⁾ is a result of such effort.

Meanwhile, as changes in the US security policy are expected with the inauguration of the Biden administration in January 2021, close cooperation between ROK and US defense authorities is required to manage all alliance issues in a direction that strengthens the combined defense posture.

20)

Army, Navy, Air Force,
Marine Corps, Coast
Guard, and Space Force

China China, with the goal of building a strong world-class military, is adjusting its military system and organization and reforming its defense policies and institutions for the modernization and efficiency of the military. Since President Xi Jinping's declaration of reducing 300,000 troops in 2015, China has completed its military reform including the establishment of the combined operational command organization, transition to six military types (Ground Force, Navy, Air Force, Rocket Force, Strategic Support Force, and Joint Logistics Command), and reorganization from seven military regions to five theater commands, and it is spurring defense policy and institution reform such as the improvement of the joint operations command system in 2019.

The People's Liberation Army Ground Force (PLAGF) has accelerated its transition from "regional defense to full-scale operation" to meet the strategic requirements and has enhanced its operational capabilities by simplifying the operational command system from a group army–division–regiment–battalion system to a group army–brigade–battalion system.

The PLA Navy (PLAN) is improving its strategic deterrence, counterattack, and maritime maneuvering and joint operational capabilities for the construction of a modernized navy capable of "offshore defense and defense of national interests in the open sea". In particular, while focusing on developing modernized weapons and equipment such as aircraft carriers and new nuclear submarines in order to reinforce its open sea capabilities, the PLAN established the PLAN Marine Corps (PLANMC) to strengthen its amphibious operations execution capabilities.

The PLA Air Force (PLAAF) is improving its early warning, air strike, and air defense capabilities in order to achieve the strategic goal of "air-space integration and attack-defense combination".²¹⁾ Also, it is continuing to pursue the field deployment of platforms such as airborne early warning and control aircraft and aerial refueling tankers to enhance its long-range operational capabilities and carry out attack missions.

With the goal of "possessing both nuclear and conventional missile capabilities and providing deterrence for the entire region", the PLA Rocket Force (PLARF) is striving to enhance its nuclear deterrence, second-strike, and intermediate and long-range precision strike capabilities. It is also pursuing the field deployment of next-generation intermediate and long-range ballistic missiles and new ICBMs while focusing on developing new weapons systems as seen through the test firing of a new medium-range ballistic missile capable of carrying a Hypersonic Glide Vehicle (HGV) warhead in response to the US missile defense system.

The PLA Strategic Support Force (SSF) is responsible for carrying out aviation,

21)

The goal of informatization and integration of Air and Space Forces and building a powerful and modern strategic Air Force with both attack and defense capabilities

space, cyber operations, information collection, electronic, and psychological warfare operations. With the goal of defense science and technology innovation, it is strengthening the in-depth development of civil-military integration by absorbing superior private sector technologies in various fields where the military and the private sector converge such as artificial intelligence (AI), unmanned aerial vehicles and unmanned system, information technology, and network safety, as well as strengthening defense science capabilities and acquiring advanced overseas technologies.

The PLA Joint Logistics Support Force (PLAJLSF) was formed to establish a centralized command related logistics support and a military theatre support system. It supports strategic maneuver of PLA units while overseeing supply and logistics support operations at the Wuhan Joint Logistics Support Base. Meanwhile, five support centers located in five theater regions are in charge of service support for responsible operational units.

In order to strengthen its defense mobilization capability, China is striving to build a reserve capacity as a paramilitary organization capable of executing missions during emergency situations and wartime by focusing on improving the militia structure and expanding the mobilization capacity. In particular, it is assessed that the People's Armed Forces Maritime Militia (PFAMM) possesses the capacity and scale to carry out military operations such as reconnaissance, camouflage, feint operations, and logistics support.

Recently, China has been actively engaged in military activities to expand its influence in the region and respond to the US's freedom of navigation operations in the South China Sea and enhanced cooperation with Taiwan. Amid the COVID-19 pandemic, China conducted patrol activities near the South China Sea and offshore drills in the Pacific Ocean as well as joint drills with major partners such as Pakistan, Thailand, and Cambodia. Moreover, after elevating its partnership with Russia in 2019 to a "new era full-scale strategic partnership", the gradual increase in joint military drills and expansion of cooperation in strategic hi-tech fields are expected.

22) They include the new enactment of the International Peace Support Act and the revision of the Self-Defense Force Act, Ship Inspection Operations Act, International Peace Cooperation Act, Armed Attack Situations Response Act, and Act Concerning Measures to Ensure Peace and Security in Situations That Will Have an Important Influence on Japan's Peace and Security.

Japan In July 2014, under the mantra of "proactive pacifism", Japan changed its constitutional interpretation of exercising the right to collective self-defense, and has been since expanding the role of the Japan Self-Defense Forces (JSDF). By revising the "Guidelines for US–Japan Defense Cooperation" in April 2015, and amending national security laws and regulations²²⁾ in September of the same year, Japan created the legal basis to use force by invoking the right of collective self-defense against existential threats that may not necessarily be

direct attacks to Japan. Should Japan deem a situation to significantly affect Japan, Japan may now provide rear-area support including refueling and munitions supply not only to the US forces, but also to other nations' forces without geographical limitations. The range of JSDF activities and types of missions have been extended to include rescue operations for overseas Japanese nationals, protection of US and other foreign troops in action with the JSDF, and security assistance and escort missions in the context of peacekeeping operations (PKO). In addition, Japan is improving its operational capabilities in space, cyber, and electromagnetic fields by building a "multidimensional integrated defense capability", reflecting the rapidly changing security environment including North Korea's nuclear and missile development and China's military buildup. To that end, Japan established the "multidimensional integrated defense force establishment committee" headed by the Minister of Defense in March 2019, and is seeking to improve its defense capabilities.

The Japan Ground Self-Defense Force (JGSDF) is strengthening its high-level mobility and surveillance capabilities to promptly respond to various contingencies in Japan's territorial islands. In April 2018, the JGSDF established the Ground Central Command²³⁾ for the rapid and flexible employment of its divisions and brigades; deployed coastal observation units, surface-to-ship and surface-to-air missile units near Senkaku/Diaoyudao Islands; and launched the Amphibious Rapid Deployment Brigade tasked with amphibious operations. A cyber unit and an electromagnetic field operations unit were newly organized under the Ground Central Command to strengthen operational capabilities in new areas.

The Japan Maritime Self-Defense Force (JMSDF) has been upgrading the response capabilities of its frigate fleet and carrying out force buildup²⁴⁾ for its submarine and fixed-wing patrol aircraft units in order to defend its coastal waters and secure sea lanes.

The Japan Air Self-Defense Force (JASDF) is maintaining air alert and control units for full-time surveillance of the airspace around Japan. In April 2014, the JASDF founded the E-2C equipped Airborne Early Warning Group in Okinawa and increased the number of F-15 fighter aircraft units in January 2016 to strengthen the defense posture in the southwestern region. Japan is pursuing the expansion of its air defense capabilities and operational radius through the introduction of a total of 147 F-35s which include the existing 42 F-35s and an addition of 42 F-35Bs capable of short-distance takeoff and vertical landing, and by newly establishing air refueling and transport units and unmanned aerial vehicle units.

In order to respond in space, cyber, and electromagnetic fields, Japan is establishing an SSA²⁵⁾ system to secure stable use of space and improve capabilities

23)

It is an operations command-level unit in charge of the rapid and flexible unified operation of the JGSDF's units across the country. It is equivalent to the ROK Army's Ground Operations Command.

24)

In its force buildup efforts, by 2023, the JMSDF will increase the number of frigates from 47 to 54, that of Aegis destroyers from 6 to 8, that of patrol helicopters from 76 to 80, and that of submarines from 16 to 22.

25)

Space Situational Awareness.

such as information collection, communication, and positioning. In 2020, Japan newly formed the Space Operations Squadron under the JASDF and is looking to expanding the size of this unit and commencing actual operations. For the strengthening of capabilities in the cyber domain, Japan has reinforced the personnel in the cyber defense forces and newly organized a cyber defense unit in the JGSDF. It is also promoting the system connectivity among each JSDF service, collection of radio wave information, and maintenance of measurement devices.

Russia Russia has been working on defense reforms including structure and organization reform of the Russian Armed Forces, salary increases for servicemembers, and the improvement of military housing. Despite worsening economic conditions due to falling international oil prices and prolonged economic sanctions by the West, the Russian government is continuing to implement the national rearmament plan and is carrying out the modernization of its weapons systems which include the development of hypersonic weapons.

The Russian Ground Forces, with the goal of military modernization, is establishing new units, modernizing its equipment, and reinforcing its organization with a focus on reinforcing the mobility and independent operation capabilities centered on mechanized infantry units and tank units. In 2019, the Ground Forces created 11 new units including 1 tank unit and is continuing to upgrade the performance of tanks, armored vehicles and artillery, and field deploy new equipment while partially implementing a recruitment system to replenish troops. Externally, Russia is accumulating combat experience by mainly dispatching special mission forces to battle zones in Syria. Meanwhile, national-level strategic command staff training and combined training with neighboring countries such as China are being carried out to strengthen combined and joint operational capabilities.

In 2018, the Russian Navy built three Borei-class strategic nuclear submarines and is continuing to strengthen its nuclear deterrence capabilities, while continuing to build new vessels including amphibious assault ships and aircraft carriers. The Navy is developing advanced asymmetric strategic weapons such as the hypersonic cruise missile "Zircon", "Kalibre-M", a supersonic cruise missile capable of carrying nuclear warheads, and the nuclear-powered underwater drone "Poseidon". Externally, Russia is improving its force projection capability through long-distance open sea training by the North Sea Fleet and Pacific Fleet as well as regular combined training with China and India.

The Russian Aerospace Forces is also making efforts for equipment modernization and advanced aircraft development. For fighters, Russia is developing SU-57 and

MIG-41 with stealth capabilities. In particular, the SU-57 was delivered to the Aerospace Forces for the first time in 2019 for testing. For bombers, PAK-DA with stealth capabilities is being developed while upgrades are being carried out for electronic equipment and engines of the TU-22M long-range bomber and the TU-160 strategic bomber. Lastly for the air defense weapon system, Russia began to introduce S-350s, a low-altitude air defense weapon system, in March 2020, and it is estimated that the S-500, a high-altitude air defense weapon system, will also be field deployed in the near future.

The Strategic Missile Forces is continuing to retire old missiles and increasing the rate of modernization by replacing the old missiles with new missiles such as the RS-24 (Yars) and RS-28 (Sarmat). Since the introduction of RS-24 in 2011, older missiles such as the RS-12M (Topol-M) are in the process of being replaced by RS-24s, and the testing of the RS-28 is being carried out with the aim of introduction in 2021. In particular, the RS-28 missile is expected to be equipped with avant-garde, a hypersonic glide airframe.

North Korean Situation and Military Threats

Since State Affairs Commission Chairman Kim Jong-un took office in 2011, North Korea has declared the completion of "state nuclear capability" in 2017 by focusing its capabilities on advancing nuclear and missile capabilities, advocating the "Byungjin" policy of simultaneously developing its economy and nuclear weapons. In 2018, North Korea introduced the "line to focus all efforts on economic construction" as a new strategic line and pursued active summit diplomacy, advocating the goal of denuclearization of the Korean Peninsula. However, the deadlock in denuclearization negotiations has been prolonged since the breakdown of the US–North Korea Hanoi Summit in 2019. While in 2020, even in a situation of deepening economic difficulties due to COVID-19 and sanctions, North Korea is seeking to strengthen its operational posture through the enhancement of its nuclear and missile capabilities and reinforcement of selective conventional forces on the pretext of strengthening its self-defensive military power.

1. North Korean Situation

Internal Situation

Since State Affairs Commission Chairman Kim Jong-un took office in 2011, North Korea has focused on advancing its nuclear and missile capabilities. It declared the completion of "state nuclear capability" in 2017 after launching various types of ballistic missiles and conducting its sixth nuclear test. In the 2018 New Year's address, Pyongyang emphasized the legitimacy of its "Byungjin" policy of simultaneously developing its economy and nuclear capabilities and highlighted the mass production and field deployment of nuclear warheads and ballistic rockets.

At the 3rd Plenary Meeting of the 7th Central Committee of the Workers' Party of Korea on April 20, 2018, North Korea declared the success of the "Byungjin" policy and officialized the "line to focus all efforts on constructing a socialist economy" as its new strategic line. In the 2019 New Year's message, it emphasized economic construction through "self-reliance" and declared that it would not produce, test, use, or proliferate nuclear weapons while expressing its resolve for complete denuclearization.

Chairman Kim emphasized the "economic construction through the reinforcement

of an independent economic foundation" at the 4th Plenary Meeting of the 7th Central Committee on April 10, 2019, and once again stressed that economic sanctions should be overcome through "self-reliance" during a keynote address at the Supreme People's Assembly for the first time since taking office on April 12. Accordingly, in order to achieve progress on "the five-year strategy for national economic development", the mobilization of the military was expanded to major construction projects such as Samjiyeon District, Yangdok Hot Spring Cultural Recreation Center, Wonsan-Galma Tourist Zone, and Eurangcheon Power Plant under the slogan "Let the People's Army take charge of both fatherland security and socialist construction".

Meanwhile, as the deadlock was prolonged after the breakdown of the US–North Korea denuclearization negotiations in 2019, North Korea presented a "frontal breakthrough" focusing on "economic construction" while maintaining its "nuclear deterrence mobilization posture" as a new strategic line through the 5th Plenary Meeting of the 7th Central Committee in late December.

Due to the COVID-19 pandemic in 2020, Pyongyang switched to the national emergency quarantine system at the end of January to control its border and movement of residents, making efforts to block the inflow and spread of COVID-19. To this end, a series of policy meetings were convened to realign and refine quarantine measures and regulations to block infectious diseases while emphasizing the implementation of a strict quarantine system. In July in particular, Pyongyang held an emergency meeting of the General Political Bureau, ordering a complete shutdown of Kaesong City. It has also strengthened the national emergency quarantine system, fearing possible inflow of COVID-19 by North Korean defectors who re-entered the country.

The prolonged sanctions and increased economic hardship due to the pandemic and massive damage caused by torrential rains and typhoons in the summer have intensified the residents' difficulties, making it difficult for the North Korean government to achieve the national goals set at the beginning of the year. As a result, Pyongyang made efforts to complete the disaster recovery project earlier by mobilizing the members of Workers' Party and military units on a large scale, emphasizing the unity of the "party-military-people".

Chairman Kim emphasized "the great people of the country" in his speech at a military parade to celebrate the 75th anniversary of establishment of the Party and expressed numerous times his gratitude to the residents who had overcome COVID-19 and the disasters.

North Korea is expected to continue emphasizing self-reliance to overcome the

economic hardships aggravated by the prolonged sanctions and the pandemic and seek internal solidarity by strengthening its ideological armament and internal control. In particular, it is estimated that North Korea will continue to advance its nuclear and missile capabilities in the name of strengthening its self-reliant defense capabilities and exert all efforts in achieving economic results by mobilizing all available manpower and resources with the goal of substantially improving the lives of the residents by 2022 which will be the 110th anniversary of Kim Il-sung's birth.

Inter-Korean Policy

The conditions for inter-Korean dialogue to resume were prepared as North Korea sent a delegation to the 2018 Winter Olympics in response to the ROK government's efforts to establish peace on the Korean Peninsula including the Berlin Initiative in July 2017. Based on this, an inter-Korean summit was held on April 27 for the first time in 11 years since 2007, leading to the adoption of the Panmunjeom Declaration. Another summit was held in Pyongyang from September 18 to 20, where the two Koreas agreed on the September Pyongyang Joint Declaration ("Pyongyang Joint Declaration") and the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain ("September 19th Military Agreement").

In 2019, North Korea defined the Panmunjom Declaration, the Pyongyang Joint Declaration, and the September 19th Military Agreement as a de facto declaration of non-aggression in its New Year's Address, and raised expectations for inter-Korean reconciliation and cooperation by showing its willingness to reopen the Kaesong Industrial Complex and resume tours to Mt. Kumgang.

After the breakdown of the US-North Korea Hanoi Summit in February 2019, however, North Korea has become passive towards inter-Korean dialogue and exchanges, and Chairman Kim on April 12 urged the South Korean government to promote an independent policy toward the North in his keynote address at the Supreme People's Assembly.

Since then, while arguing that the ROK's force enhancement activities such as the introduction of F-35s and ROK-US combined exercises are in violation of the inter-Korean military agreement and that they are causes of exacerbation in inter-Korean relations, North Korea is generally complying with the Comprehensive Military Agreement(CMA), including the implementation of measures to prevent accidental clashes on land and at sea.

While the North Korea did not respond to the ROK's proposal for inter-Korean dialogue and cooperation, Chairman Kim on October 23 visited Mt. Kumgang and ordered the demolition of facilities of ROK companies. In November, coastal

artillery firing drill was conducted during his visit to Changlin Island located north of the Northern Limit Line (NLL).

Although inter-Korean relations were not mentioned in the results of the 5th Plenary Meeting of the 7th Central Committee announced on January 1, 2020, a letter from Chairman Kim related to COVID-19 was delivered to the ROK government in March in which a hint of willingness to improve inter-Korean relations was included.

On May 3, however, North Korea carried out a provocation by firing 14.5mm anti-aircraft machine gun rounds from a guard post in the Demilitarized Zone (DMZ) in Cheorwon-gun, Gangwon-do at a ROK guard post (GP).²⁶⁾ In June, North Korea demolished the Inter-Korea Liaison Office after cutting all inter-Korean communication lines on the pretext that ROK civic groups scattered propaganda leaflets into North Korea. Following these actions, North Korea announced a military action plan involving military measures against the ROK, but the plan did not lead to actual implementation as the announcement was suspended.

In September, North Korea shot and killed a ROK citizen who crossed into North Korean waters in the West Sea and the ROK responded sternly by condemning the North's atrocity and demanding punishment of those responsible and a joint investigation. In response, Chairman Kim extended his regrets and apologies in a message while expressing a willingness on improving inter-Korean relations during his speech at a military parade marking the 75th anniversary of the founding of the Party.

Foreign Policy

On account of responding to the tough sanctions imposed by the international community, North Korea, under the diplomatic principle of "independence, peace, and goodwill", continues to make efforts to improve its surrounding environment by strengthening diplomatic ties with socialist countries and through summit diplomacy with countries surrounding the Korean Peninsula.

Since official dialogue with the US were cut off in 2012 due to the abrogation of the US–DPRK Leap Day Deal²⁷⁾, Pyongyang has focused on advancing its nuclear capabilities despite the US government's constant demand for denuclearization. In particular, North Korea in August 2017 unveiled the "Guam strike plan" and in November, launched a Hwasong-15 ICBM-class ballistic missile as part of a program to develop long-range missiles capable of reaching the US mainland.

However, in March 2018, Pyongyang, after expressing its willingness for "denuclearization of the Korean Peninsula" and dialogue with the US, declared a "moratorium on nuclear and IBCM development" on April 20 and carried out an

26)

Since the signing of the September 19th Military Agreement, the agreement was violated by North Korea twice after the coastal artillery firing drill on Changlin Island (November 23, 2019) and the firing of gun shots at a ROK GP in the Central Front (May 3, 2020).

27)

On February 29, 2012, North Korea agreed to suspend long-range missile development and uranium enrichment in exchange for assistance from the US.

event on May 24 to dismantle the Punggye-ri nuclear test site to which international journalists were invited. On June 12, 2018, the first-ever US–North Korea Summit took place in Singapore, and North Korea agreed to build new relations with the US, denuclearize the Korean Peninsula, and repatriate the remains of US soldiers killed in the Korean War. The remains of 55 soldiers were repatriated on July 27.

However, the relationship between the US has been stalled since the breakdown of the US–North Korea Hanoi Summit in February 2019. The two countries agreed to resume working-level negotiations at a sudden meeting between the leaders of the ROK, North Korea and the US in June, but the working-level negotiations in Stockholm in October ended without significant results.

At the conclusion of the 5th Plenary Meeting of the 7th Central Committee announced in early 2020, Pyongyang declared that it would continue to develop strategic weapons until the hostile US policy is withdrawn and a peace regime on the Korean Peninsula is established. In addition, in commemoration of the second anniversary of the Singapore summit, North Korea again emphasized its "nuclear war deterrence," insisting that it would not resume negotiations until corresponding compensations from the US are made, thus prolonging the deadlock in US–North Korea dialogue.

Meanwhile, North Korea unveiled a new type of ICBM and SLBM during a military parade marking the Party's 75th anniversary in October 2020. "War deterrence" was also declared, emphasizing that it would not be used "preemptively" without mentioning the US thus leaving room for future dialogue with the US.

North Korea's relationship with Japan has seen no concrete progress despite the Stockholm Agreement²⁸⁾ signed in May 2014. Prime Minister Abe expressed his willingness to hold an "unconditional summit" with North Korean leader Kim Jong-un after the US–North Korea summit in 2019. In September, North Korea-Japan friendly delegates from Yamanashi Prefecture visited North Korea. Since taking office in September 2020, Yoshihide Suga has also expressed his enthusiasm to meet with Leader Kim without conditions to resolve the abduction issue. However, talks between North Korea and Japan have yet to begin in earnest, with North Korea demanding for settlement of unresolved issues from the Japanese colonial era and for a shift from Japan's pressure policy against North Korea.

North Korea's relations with China have fluctuated due to North Korea's nuclear development program. Bilateral relations were strained after North Korea's third nuclear test in 2013, but through five summit meetings from 2018 to 2019, the traditional friendship with China was restored. The North Korea-China summit was held before and after the US–North Korea dialogue thereby strengthening their

28) During the director-level talks between the two countries' foreign ministries held in Stockholm, Sweden, on May 26, 2014, North Korea agreed to launch a new inquiry into Japanese abductees and other Japanese nationals who are residing in its territory in exchange for the partial easing of sanctions imposed by Japan.

strategic cooperative relations. After President Xi Jinping's visit to Pyongyang for the first time in June 2019 since his inauguration, the two countries agreed to strengthen their exchanges and cooperation in areas such as economy and personnel. Meanwhile, North Korea continues to make efforts to maintain its traditional friendship with China despite restrictions on normal trade and human exchanges following the blockade of the border between North Korea and China in late January due to COVID-19 in 2020.

Since the launching of the North Korea-Russia Economic Cooperation Committee in 2014, North Korea has maintained an amicable relationship with Russia after the declaration of the "Year of Friendship" and the adoption of a joint resolution in March 2015. Chairman Kim made his visit to Vladivostok to hold a summit with President Putin for the first time on April 25, 2019. In November, Choi Sun-hee, First Vice Minister of Foreign Affairs of North Korea, visited Russia and held the first strategic dialogue with Igor Morgulov, Russia's Deputy Foreign Minister. In a situation where personnel exchanges were restricted due to COVID-19 in 2020, Chairman Kim sent a congratulatory message to President Putin on the 75th anniversary of Russia's victory, expressing his willingness on developing friendly relations between North Korea and Russia.

2. North Korea's Military Strategy and Military Command Structure

Military Strategy

In 1962, in accordance with the principle of "self-defense in national defense"²⁹⁾ embedded in the Juche ideology, North Korea adopted four military guidelines and has since continued to bolster its military strength. Chairman Kim, upon succeeding his father as the leader of North Korea, proposed the "four core strategic lines" as a new strategic line to build the military of the people into a powerful military. The four core strategic lines refer to (a) creating a politically and ideologically stronger Korean People's Army (KPA), (b) creating a morally stronger KPA, (c) developing the KPA into an army of sophisticated tactics, and (d) making the various branches of KPA stronger.

While maintaining a military strategy centered on guerrilla warfare, hybrid warfare, and blitzkrieg, North Korea is also exploring a variety of strategies and tactics. It has also selectively enhanced the performance of its conventional weapons and built up asymmetrical capabilities such as nuclear weapons, WMD³⁰⁾, missiles, long-range artilleries, submarines, Special Operation Forces, and cyber units. Since May 2019, North Korea has been test-firing new short-range ballistic missiles based

²⁹⁾

Article 60 of North Korea's Constitution provides, "The State shall implement the line of self-reliant defense, the import of which is to arm the entire people, fortify the country, train the army into a cadre army and modernize the army on the basis of equipping the army and the people politically and ideologically."

³⁰⁾

Weapons of Mass Destruction

on solid fuel; in particular, it is operating a 6,800-strong unit of cyber-warfare specialists and is working to enhance cyber capabilities by continuing R&D on latest technologies.

During contingencies, North Korean forces is highly likely to resort to guerilla attacks that mainly employ asymmetric capabilities to shape favorable conditions and end the war as soon as possible. In July 2019, Chairman Kim mentioned the "Party's military strategic plan" during his visit to the construction site of a new submarine and once again emphasized the "Artillery Force Reinforcement Guideline" proposed at the 4th Artillery Competition in 2020. Therefore, there is a possibility of a shift in its military strategy considering external strategic environmental changes and internal conditions such as economic difficulties.

Military Command Structure

Chairman Kim wields full command and control over the North Korean military as he concurrently serves as the Supreme Commander of the KPA and the Chairman of the party's Central Military Commission.

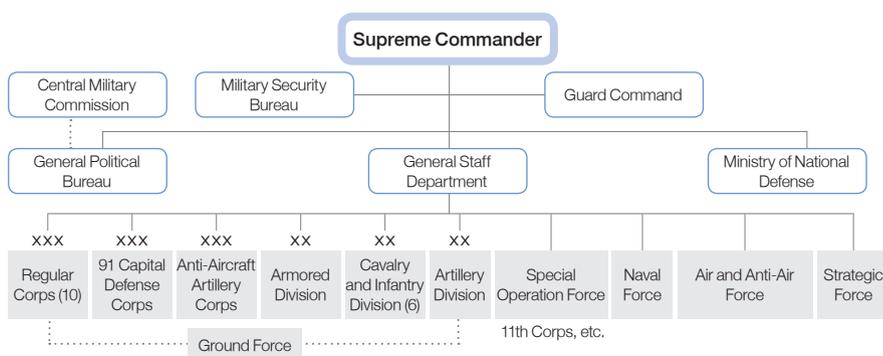
The State Affairs Commission, as the supreme policy decision-making agency in North Korea, carries out decision-making activities on key policies such as the national defense force build up project. The Supreme Commander of the KPA has under his command the General Political Bureau, the General Staff Department, the Ministry of National Defense, the Military Security Bureau, and the Guard Command. The General Political Bureau supervises party organs within the military and is responsible for matters related to political ideology. The General Staff Department has the command authority over military operations, and operates five military types-KPA Ground Force, KPA Special Operation Force, KPA Naval Force, KPA Air and Anti-Air Force, and KPA Strategic Force. The Ministry of National Defense³¹⁾ represents the North Korean military externally and exercises military administrative authority including military diplomacy, logistics, and finance. The Military Security Bureau is in charge of investigation, pretrial, and execution of all military criminal activities in the military, while the Guard Command is responsible for suppressing dissident coups against the regime, protecting the personal safety of the supreme leader and his family members, and guarding and managing the residence.

The Central Military Commission, pursuant to the Charter of the Korean Workers Party, deliberates and decides upon measures necessary for implementing the party's military policy and guidelines, and provides guidance in overall defense affairs at the party level. The military command structure of North Korea is visualized in [Chart 1-2] below.

31)

The Ministry of People's Armed Forces has been renamed the Ministry of National Defense in October 2020.

[Chart 1-2] North Korea's Military Command Structure



* XXX: Corps XX: Division

3. Military Capabilities

Ground Force

The Ground Force is comprised of 10 regular forward- and rear-deployed corps, 91 Capital Defense Corps, Anti-Aircraft Artillery Corps, 1 armored division, 6 mechanized divisions³²⁾, and 1 artillery division under the control of the General Staff Department. The road construction corps and the specialized construction units such as military engineering corps are under the control of the Ministry of National Defense and the General Political Bureau, respectively.

North Korea maintains a readiness posture capable of carrying out a surprise attack at any given time by positioning 70% of its Ground Force south of the Pyongyang-Wonsan line. The forward-deployed 170 mm self-propelled guns and 240 mm Multiple Rocket Launchers (MRLs), for instance, provide North Korea with the capability for a large-scale and concentrated surprise fire targeted at the Greater Seoul Metropolitan Area. It is focusing on building up its military force by operating various MRLs that are powerful enough to strike the entire Korean Peninsula, such as the recently developed 300 mm MRLs³³⁾ and super-large MRLs with extended-range munitions and precision-guided munitions. The armored and mechanized units have more than 6,900 tanks and armored vehicles, and it has recently developed new tanks with improved maneuverability and survivability as well as an armored vehicle with various anti-tank guided missiles and mobile artillery, replacing old forces. Key assets of the North Korean Ground Force and its new assets identified at the military parade marking the 75th anniversary of establishment of its ruling party are as shown in [Chart 1-3] and [Chart 1-4] below.

32)

Two mechanized corps were renamed to divisions; organized a total of six mechanized divisions including the existing four.

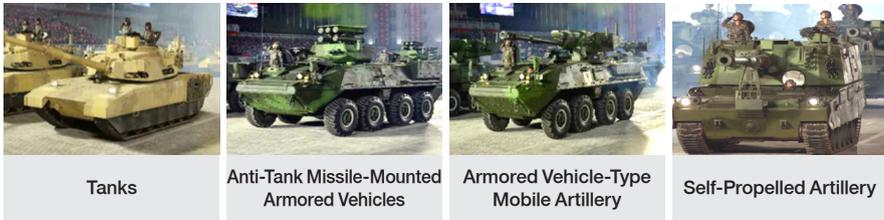
33)

North Korea has been conducting several test launches since 2012, and the assets were unveiled at the military parade on the 70th anniversary of establishment of the Workers' Party of Korea in October 2015. Meanwhile, the improved versions of the assets were unveiled during the 75th anniversary in October 2020.

[Chart 1-3] Key Assets of the North Korean Ground Force



[Chart 1-4] New Key Assets Identified at the Military Parade Marking the 75th Anniversary of Its Ruling Party (October 10, 2020)



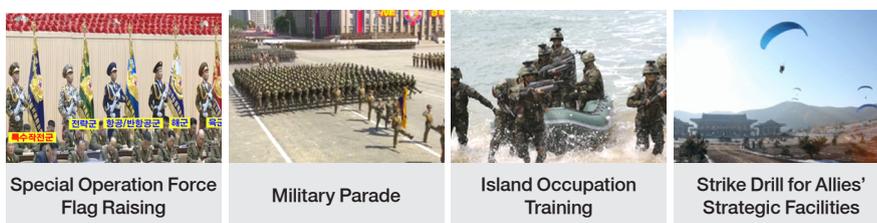
Special Operation Force

The KPA classified Special Operation Force³⁴⁾ as a separate military unit to strengthen the status of special warfare units. Special warfare units are organized in various ways by unit and echelon, such as 11th Corps³⁵⁾, special operation battalions, light infantry divisions and brigades, sniper brigades of the front corps, sniper brigades of the Naval Force and the Air and Anti-Air Force, and light infantry brigades of the front divisions. The troop level is estimated to be around 200,000. Special warfare units are expected to use wartime tunnels or various infiltration means such as submarines, air-cushion vehicles (ACVs), AN-2 aircrafts, and helicopters to infiltrate the forward and rear areas and conduct hybrid operations in the form of striking major units and facilities, assassinating key figures, and disturbing the rear area. They are also carrying out strike training by establishing mockups of our strategic facilities as well as air, sea, and ground infiltration training while continually reinforcing its forces as seen through the modernization of armaments. Major activities of the North Korean Special Operation Force are as shown in [Chart 1-5].

34) 11th Corps, marine and air sniper brigades, and special operation battalions are classified as Special Operation Force; separate command is not organized / Commander unidentified

35) Strategic special warfare units, also known as Storm Corps

[Chart 1-5] Major Activities of the North Korean Special Operation Force



Naval Force

The Naval Force is composed of 2 fleet commands, one for the East Sea and one for the West Sea, 13 naval squadrons, and 2 maritime sniper brigades under the Naval Command.

With 60% of its forces positioned south of the Pyongyang-Wonsan line, the North Korean Naval Force possesses the capability to carry out a surprise attack anytime. However, its capacity for deep-sea operations is limited because its forces consist mainly of small, high-speed vessels.

Surface forces are mostly composed of around 490 small, high-speed vessels such as guided missile boats, torpedo boats, small patrol craft, and fire support patrol craft. Their mission is to support the advancement of the Ground Force in connection with ground operations while also carrying out coastal defense operations. More recently, the Naval Force has built and field deployed new medium-to large-sized vessels with some of them equipped with anti-ship missiles³⁶⁾ to enhance its long-range strike capability.

Underwater forces consist of some 70 Romeo-class and midget-type submarines. They are designed to disrupt sea lanes, lay mines, attack surface vessels, and assist special warfare units' infiltrations. The North Korean Naval Force is continuing to build up its forces by constructing new submarines capable of launching Submarine-Launched Ballistic Missiles (SLBMs)³⁷⁾.

The amphibious forces are composed of more than 250 vessels including ACVs and high-speed landing crafts with most of them being small-sized vessels. The amphibious force is expected to infiltrate special warfare forces into our rear area using these vessels to strike major military and strategic facilities and secure key landing shores. The coastal defense forces deploy a number of coastal artillery and surface-to-ship missiles along the east and west coasts to conduct missions such as attacking ships approaching from the sea and defending against landing attempts. Recently, North Korea has been improving its coastal defense capabilities by carrying out performance upgrades of surface-to-ship missiles³⁸⁾ and extending their range. Key vessels and surface-to-ship missiles of the North Korean Naval Force are as shown in [Chart 1-6].

³⁶⁾ North Korea unveiled the missile test in the waters off Wonsan on February 6, 2015, with an estimated range of about 100km.

³⁷⁾ Submarine-Launched Ballistic Missile

³⁸⁾ New surface-to-ship missiles were unveiled during the 70th anniversary of establishment of the regime (September 9, 2018), while at the 75th anniversary of establishment of its ruling party, launchers were increased from the existing 4 to 8 and the transporter erector launchers (TELS) replaced with the newly improved surface-to-ship missiles with an estimated range of about 200km.

[Chart 1-6] Key Vessels and Surface-To-Ship Missiles of the North Korean Naval Force



Air Force The North Korean Air Force consists of five flight divisions, one tactical transport brigade, two air force sniper brigades, and air defense units under the Air and Anti-Air Force Command³⁹⁾.

The North Korean Air Force, with around 1,580 aircraft, has positioned its forces in four different zones. North Korea is postured to attack quickly with minimal preparation by deploying about 40% of its 810 combat mission aircraft south of the Pyongyang-Wonsan Line, and has the ability to infiltrate special warfare forces using AN-2 and helicopters.

It is also continuing its efforts to improve the efficiency and modernize its air force by retiring old training aircraft, producing additional AN-2s and light aircraft and field deploying them, and developing various reconnaissance and attack drones. However, due to limitations in introducing new combat mission aircraft, its air defense capability is being reinforced through the development and realignment of new surface-to-air missiles.

The North Korean air defense system, centered around the Air and Anti-Air Force Command, integrates aircraft, surface-to-air missiles, anti-aircraft artilleries, and radar air defense units. SA-2⁴⁰⁾ and SA-5⁴¹⁾ surface-to-air missiles are deployed in forward areas in the eastern and western regions, while SA-2 and SA-3⁴²⁾ surface-to-air missiles and anti-aircraft artilleries are concentrated in the Pyongyang area to form a densely layered air defense system. Moreover, it is assumed that the North Korean Air Force has developed a variety of electronic jamming equipment, including GPS jammers, as additional means for air defense.

A large number of radar air defense units such as ground-controlled interception bases and early warning bases are spread out across North Korea, enabling coverage of the entire Korean Peninsula. To increase the detection accuracy of radar air defense units and reduce the response time, North Korea is currently setting up an automated air defense command and control system. Key aircraft and surface-to-air missiles of the North Korean Air Force are as shown in [Chart 1-7].

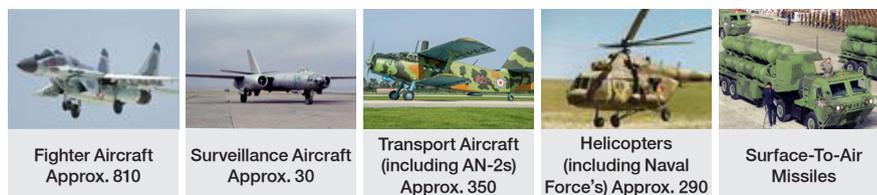
³⁹⁾ The Air Force Command has been renamed the Air and Anti-Air Force Command in May 2012.

⁴⁰⁾ A guided missile system for striking mid- to high-altitude targets, with a maximum range of 56km

⁴¹⁾ A guided missile system for striking high-altitude targets, with a maximum range of 250km and that was developed to complement the SA-2

⁴²⁾ A guided missile system for striking medium-range, low- to med-altitude targets, with a maximum range of 25km

[Chart 1-7] Key Aircraft and Surface-To-Air Missiles of the North Korean Air Force

**Strategic Force**

It is estimated that North Korea has organized 13 missile brigades that operate Scud, Nodong, and Musudan rockets under the Strategic Force which is a separate military command. It is likely to perform functions similar to those of China's Rocket Force and Russia's Strategic Missile Troops.

To enhance its strategic attack capabilities, North Korea has continuously developed nuclear weapons, ballistic missiles, and chemical and biological weapons. Since activating the 5MWe reactor located in the Yongbyon nuclear complex in the 1980s, it is assessed that North Korea possesses around 50kg of weapon-grade plutonium obtained by reprocessing spent fuel rods. It is also believed to possess a substantial amount of highly enriched uranium (HEU) through its uranium enrichment program. Considering that a total of six nuclear tests have been conducted between October 2006 and September 2017, it is assessed that its ability to miniaturize nuclear weapons has reached a significant level.

After beginning ballistic missile developments in the 1970s, North Korea produced and field deployed Scud-B and Scud-C with ranges of 300km and 500km, respectively, in the mid-1980s. In the late 1990s, North Korea field deployed the Nodong missile with a range of 1,300km and, later, the Scud-ER, which is a scud missiles with extended range. In 2007, North Korea field deployed the Musudan missile with a range of over 3,000km. Through these successive additions to its missile inventory, North Korea has gained direct strike capabilities against the ROK and the surrounding countries of the Korean Peninsula.

Since 2012, North Korea has conducted in earnest test launches of missiles that have been field deployed or are under development. In 2017, Pyongyang fired Hwasong-12 missiles into the North Pacific Ocean, and test-fired Hwasong-14 and Hwasong-15, which are capable of posing threats to the US mainland. However further confirmation is required as North Korea hasn't conducted actual range test launches to verify whether it has acquired the atmosphere reentry technology. No missile test was conducted in 2018. Since 2019, however, North Korea test-launched a number of solid-fuel short-range ballistic missiles which have operational advantages

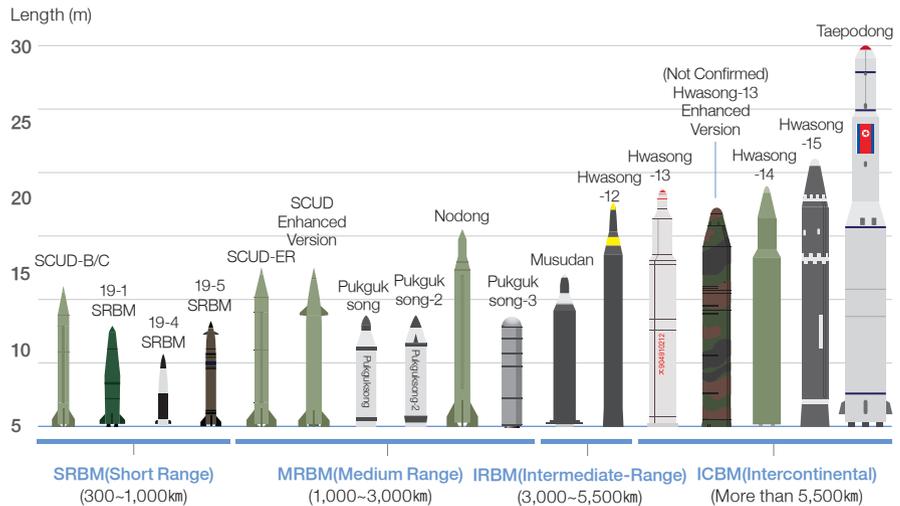
and the Pukguksong-3 which is a new type of submarine-launched ballistic missile (SLBM).

At the military parade marking the 75th anniversary of establishment of its ruling party in October 2020, North Korea unveiled a total of nine types of ballistic missiles including a new intercontinental ballistic missile (ICBM) and a new SLBM marked "Pukguksong-4." The new missiles identified at the military parade are shown in [Chart 1-8]. The types and ranges of ballistic missiles currently being developed or possessed by North Korea are shown in [Chart 1-9] and [Chart 1-10].

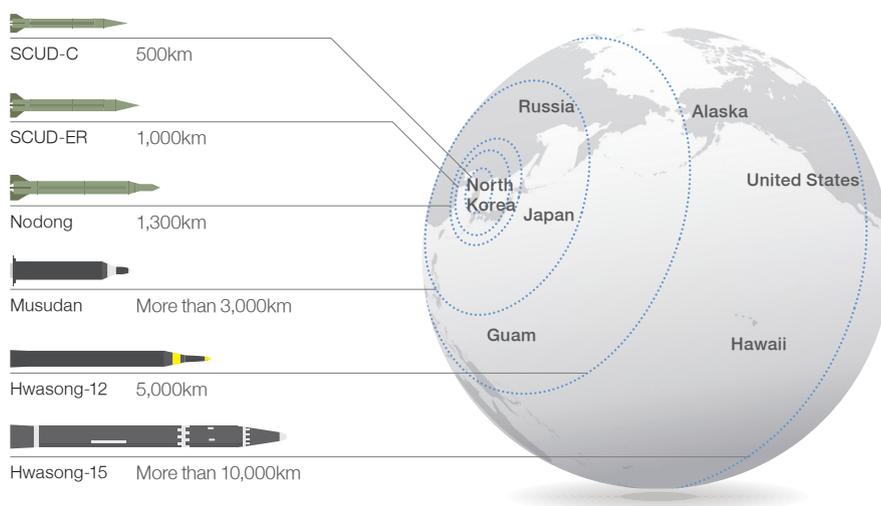
[Chart 1-8] New ICBM and SLBM Unveiled at the Military Parade Marking the 75th Anniversary of Establishment of Its Ruling Party



[Chart 1-9] Types of North Korean Ballistic Missiles in Inventory or Under Development



North Korea began producing chemical weapons in the 1980s and it is estimated that it has in storage an estimated 2,500~5,000 tons of chemical weapons. Sources indicate that North Korea is capable of cultivating and producing various types of biological agents, such as anthrax, smallpox, and pest.

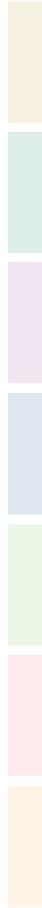
[Chart 1-10] Ranges of North Korean Missiles**Sustainability**

The Reserve Forces of North Korea is composed of the Reserve Military Training Unit, which is subject to combat mobilization; the workplace-based and regional Worker-Peasant Red Guards; the Red Youth Guard, which is a military organization in high schools; and paramilitary units. Those in the age range between 14 and 60 are subject to mobilization, which correspond to 7,620,000 or roughly 30% of the population. The Reserve Military Training Unit, which can augment the combat capability of the regular armed forces during contingency, is 600,000 strong. The unit maintains a level of training comparable to that of regular armed forces. The status of the reserve forces in North Korea is shown in [Chart 1-11].

[Chart 1-11] North Korean Reserve Forces

Category	Strength	Remark
Total	Approx. 7.62 million	
Reserve Military Training Unit	Approx. 600,000	Equivalent to the ROK's mobilization reserve forces (men aged 17~50 years, unmarried women aged 17~30 years)
Worker-Peasant Red Guards	Approx. 5.7 million	Equivalent to the ROK's local reserve forces (men aged 17~60 years, women aged 17~30 years who are not in the Reserve Military Training Unit)
Red Youth Guard	Approx. 1 million	Advanced middle-school military organization (boys and girls aged 14~16 years)
Paramilitary units	Approx. 320,000	Guard Command, Ministry of Social Security, etc.

North Korea is estimated to have secured war supplies that could last one to three months during wartime. It is estimated that there are more than 300 munitions factories in North Korea, including more than 100 civilian factories designed for transformation into armament factories in a short span of time during wartime, which are equipped with a wartime mobilization system enabling the factories to produce military supplies rapidly during contingencies. Major military supply production and storage facilities are believed to have been fortified underground to ensure wartime survivability, with the ability to produce major weapons and ammunition except combat mission aircraft. However, it is assessed that North Korea is facing difficulties in fostering its military industry and maintaining war sustainability in a steadfast manner as energy and raw material shortages intensify due to the prolonged international sanctions against North Korea.



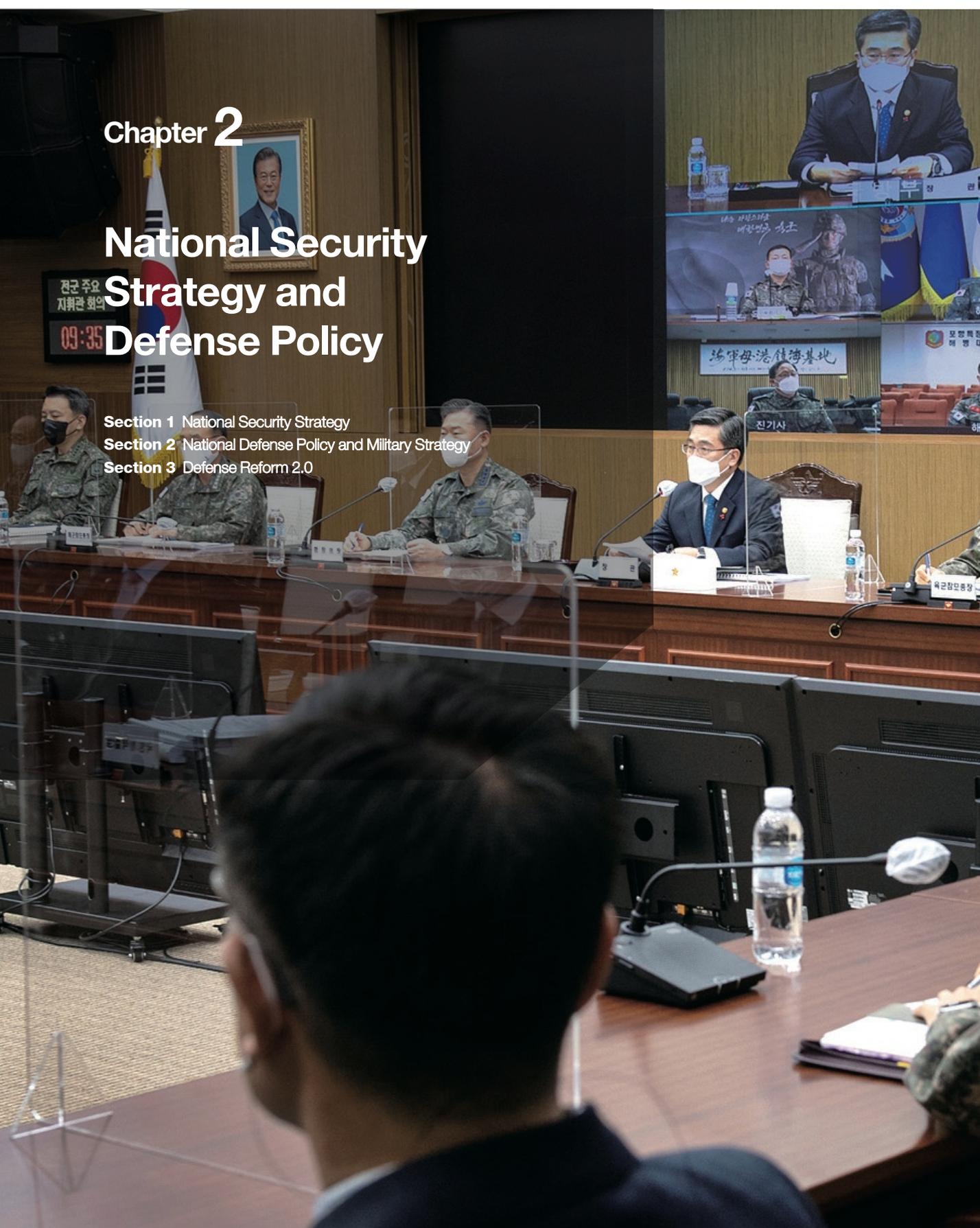
Chapter 2

National Security Strategy and Defense Policy

Section 1 National Security Strategy

Section 2 National Defense Policy and Military Strategy

Section 3 Defense Reform 2.0





ROK Armed Forces Senior Leaders Seminar (December 2020)

National Security Strategy

The Moon Jae-in administration's national vision is "A Nation of the People, a Just Republic of Korea" with "a peaceful and prosperous Korean Peninsula" as its goal of governance in the field of security. Accordingly, the Moon administration has established a National Security Strategy (NSS) to realize this goal and is implementing its NSS to resolve the North Korean nuclear issue and establish permanent peace on the Korean Peninsula while maintaining a robust national security posture.

1. National Vision and Security Objectives

To build a just nation of the people, the Moon Jae-in administration set its national vision as "A Nation of the People, a Just Republic of Korea" and designated five goals of governance: a government committed to serving its citizens; an economy centered on the co-prosperity of all; a nation that ensures the well-being of its citizens; balanced development across the nation; and a peaceful and prosperous Korean Peninsula. Regarding the goal of governance for security, "a peaceful and prosperous Korean Peninsula", the administration established three national security objectives: a peaceful resolution of the North Korean nuclear issue and the establishment of permanent peace; contribution to peace and prosperity in Northeast Asia and the world; and the realization of a society where people's safety and lives are protected.



Peaceful Resolution of the North Korean Nuclear Issue and the Establishment of Permanent Peace

Korean nuclear issue by comprehensively pursuing complete denuclearization of the Korean Peninsula, establishment of a peace regime, confidence building between the two Koreas, and implementation of arms control. At the same time, the Moon administration will enhance the national defense capabilities of the ROK based on the robust ROK–US alliance, thereby supporting the establishment of permanent peace on the peninsula.

Through concerted efforts with the international community, the Moon administration will achieve a peaceful resolution of the North

Contribution to Peace and Prosperity in Northeast Asia and the World

the efforts to achieve peace and cooperation by fostering an environment that brings peace and prosperity to Northeast Asia and the world, while promoting the country’s national interest. First, the ROK will take the lead in resolving the Korean Peninsula issues through regional cooperation based on the ROK–US coordination. In addition, the ROK will consolidate its political and economic cooperation with India, ASEAN and other Eurasian countries, and contribute to peace, stability, and mutual prosperity in the region by institutionalizing regional cooperation. Furthermore, the Moon administration will actively participate in resolving security issues across the world, such as climate change, international terrorism, infectious diseases, and refugee crises.

The Moon administration will strive to elevate the status of the ROK as a nation that is leading

Realization of a Society that Protects People’s Safety and Lives

the people, and protect their safety and lives from cyber-threats, terrorism, disasters, safety accidents, and various threats and risks.

The Moon administration will protect the properties and rights of individual citizens from the standpoint of the

2. Tenets of the NSS

To achieve its goal of governance for security, "a peaceful and prosperous Korean Peninsula", the Moon administration adopted strategies to be implemented in the fields of national defense, unification, and diplomacy. These strategies include taking

the initiative in the pursuit of a peaceful and prosperous Korean Peninsula; realizing strong national security through steadfast defense; pursuing well-balanced and cooperative diplomacy; and ensuring the people's safety and protecting their rights.

**Taking the Initiative
for a Peaceful and
Prosperous Korean Peninsula**

As a directly involved party of Korean Peninsula issue, the Moon administration will continue its efforts for peace and prosperity on the Korean Peninsula. Once progress is made on the North Korean nuclear issue and favorable conditions are set, the Moon administration will create a virtuous cycle of peace and prosperity by fully implementing the "Korean Peninsula New Economic Initiative"¹⁾. Furthermore, the Moon administration will develop a sustainable inter-Korean relationship through regular inter-Korean talks, wider exchanges and cooperation across multiple fronts, and the legislation of inter-Korean agreements.

As a directly involved party of Korean Peninsula issue, the Moon administration will continue its efforts for peace and prosperity on the Korean Peninsula. Once progress

**Ensuring Strong National Security
through Steadfast Defense**

The Moon administration will establish a robust security posture by realizing a steadfast national defense with the mindset that "our defense is our responsibility". It will maintain a firm defense posture to prepare for transitional security situations and, based on an ironclad ROK-US alliance, establish a new ROK-led combined defense system by completing an expeditious transition of wartime Operational Control (OPCON). By robustly pursuing "Defense Reform 2.0"—an intensive, future-oriented national policy applying Fourth Industrial Revolution technology—the Moon administration will improve the transparency and efficiency of the ROK's defense programs and reinforce the country's national defense capacity so that the people do not grow anxious during transitions in the external environment. In addition, the Moon administration will cultivate a military that walks hand-in-hand with the people by ensuring the human rights of servicemembers, improving the conditions for service, and creating a new barracks culture.

The Moon administration will establish a robust security posture by realizing a steadfast national defense with the

¹⁾ It is the core element of the "realization of a new economic community on the Korean Peninsula," which is one of the three goals of "Moon Jae-in's Policy on the Korean Peninsula." It aims to secure a new growth engine for the economy by promoting inter-Korean economic cooperation and to cultivate a foundation for economic unification by inducing changes from North Korea.

**Pursuing Well-Balanced,
Cooperative Diplomacy**

The Moon administration will pursue well-balanced and cooperative diplomacy by expanding the scope of cooperation to ASEAN, Europe, Middle East, and Africa while strengthening its cooperation with the four countries surrounding the Korean Peninsula. First, while the Moon administration is further advancing and developing the ROK-US alliance into a comprehensive relationship

The Moon administration will pursue well-balanced and cooperative diplomacy by expanding the scope of cooperation to ASEAN, Europe,

that encompasses security, economic cooperation, personnel exchanges and global leadership, the Moon administration will contribute to peace and stability in Northeast Asia and peacefully resolve the North Korean nuclear issue by strengthening cooperative diplomacy with the surrounding countries. In addition, the Moon administration will widen the horizon of the country's diplomacy and expand the foundation for peace and prosperity on the Korean Peninsula by pursuing the New Northern Policy and New Southern Policy²⁾. It will work together with the international community to address transnational threats such as natural disasters, infectious diseases, drugs, and refugee issues. Moreover, the Moon administration will actively pursue international cooperation and contributive diplomacy to a degree that befits the country's national standing in areas such as public diplomacy, global economy, climate change and development cooperation.

Ensuring Public Safety and Protecting Their Rights

The Moon administration will establish an integrated disaster management system and reinforce its on-site response capability to enable responses to large-scale accidents and disasters at all times. It will enhance the national-level capability of the ROK against cyber-threats, terrorism and other nonmilitary security threats, and strengthen the country's protection system for citizens living overseas to ensure that there are no shortfalls in protecting them.

²⁾ The government is currently working toward the Northeast Asia Plus Community for Responsibility Sharing to foster favorable conditions for peace and prosperity in the surrounding areas beyond the Korean Peninsula and Northeast Asia. The New Southern Policy is a diplomatic policy that aims to enhance amicable political, economic, cultural, and personal cooperation with 10 ASEAN members and India to a level corresponding to the cooperation with Korea's surrounding nations. The New Northern Policy aims to create a new growth engine for the Korean economy and pursue mutual prosperity by linking the transportation, logistics, and energy infrastructure of Korea and Eurasian countries north of the Korean Peninsula (Russia, China, Mongolia, and Southeast Asian countries) while promoting peace and stability in the Eurasian continent including the peninsula.

National Defense Policy and Military Strategy

The Ministry of National Defense (MND) is pursuing six National Defense Policy (NDP) tenets to realize the vision of a "competent security and robust national defense". The MND will continue to carry out the fundamental mission of maintaining a robust military readiness posture and gain the public's faith in the ROK Armed Forces by cultivating a barracks culture that is attractive to both prospective servicemembers as well as their family. Furthermore, the MND will support the establishment of permanent peace on the Korean Peninsula with strength by reinforcing the national defense capabilities of the ROK based on the solid ROK-US alliance.

1. National Defense Objectives

The national defense objectives are "protecting the nation from external military threats and invasion"; "supporting a peaceful unification of the Korean Peninsula"; and "contributing to regional stability and world peace".

Protecting the Nation from External Military Threats and Invasion

The ROK Armed Forces considers any force that threatens and violates the sovereignty, territory, people, and properties of the ROK as an enemy. The relationship between South and North Korea has alternated between military confrontation, reconciliation, and cooperation. However, a new security environment was shaped in 2018 for the denuclearization and the establishment of peace on the Korean Peninsula with three inter-Korean summits, as well as the first-ever US-North Korea summit. In particular, in September 2018, the military authorities of the two Koreas signed and began the implementation of the "Agreement to Implement the Historic Panmunjom Declaration in the Military Domain", thereby creating a foundation for easing military tension and confidence building.

Nevertheless, North Korea's WMDs are a threat to peace and stability on the Korean Peninsula. Consequently, the ROK Armed Forces will provide military support towards complete denuclearization and establishment of permanent peace on the Korean Peninsula and will continue to prepare for all possible situations. In addition, the ROK Armed Forces will continue to advance their ability to respond to

transnational and nonmilitary threats such as terrorism, cyber-attacks, large-scale disasters, and other potential threats.

Supporting a Peaceful Unification of the Korean Peninsula

Peace is an issue of the country's survival and a national interest of the highest level. Peace is also the foundation for achieving peaceful unification.

Without robust security, peace can neither be maintained nor built. To this end, the ROK Armed Forces will support peace on the Korean Peninsula through strength by establishing a ROK-led defense capabilities.

Contributing to Regional Stability and World Peace

Based on a solid ROK–US alliance, the ROK Armed Forces will contribute not only to stability in Northeast Asia, but

also to world peace, by promoting amicable and cooperative relationships with the surrounding nations, and by proactively participating in international peacekeeping operations as well as defense cooperative exchanges.

2. National Defense Vision and Tenets of the NDP

National Defense Vision

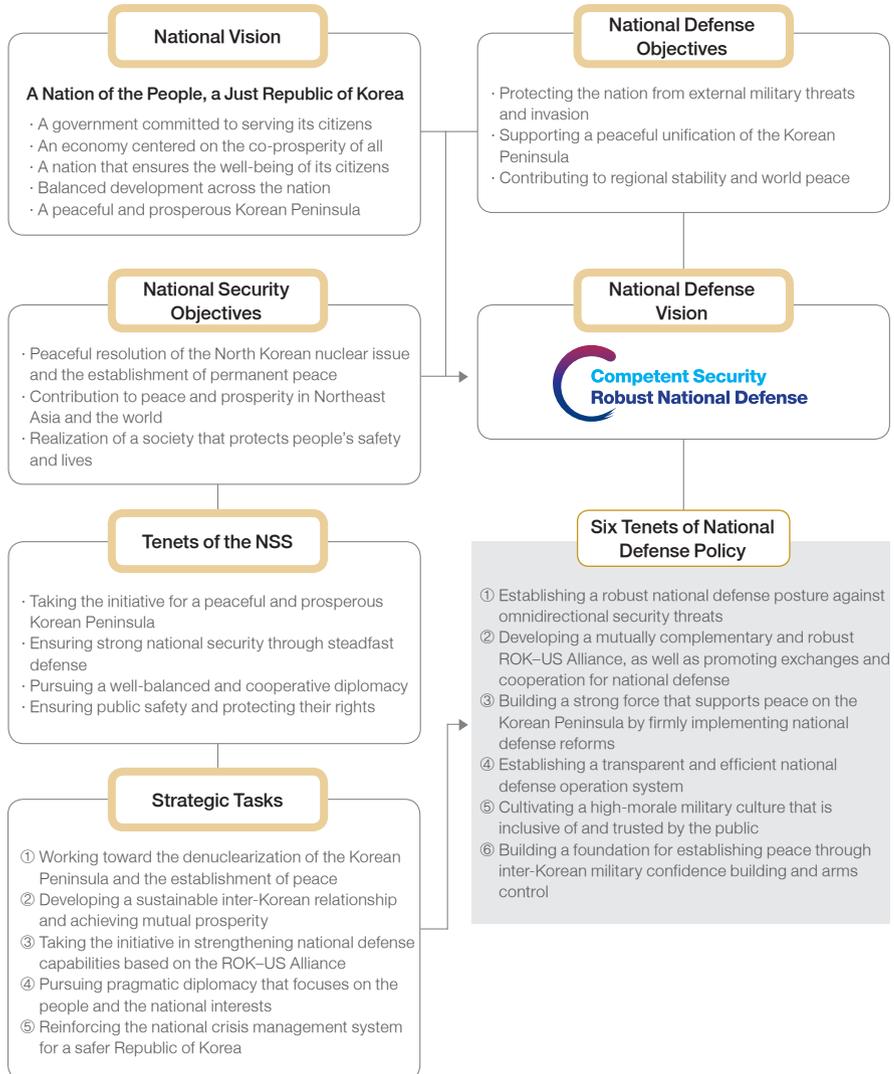
The ROK Armed Forces has set "competent security and robust national defense" as the vision for national defense. "Competent security" signifies protecting the safety and lives of the people and safeguarding the territory and sovereignty of the ROK from external and internal threats and invasion "through strength" by acquiring a ROK-led war capability based on advanced military force, field-based education and training, and strong mentality. "Robust national defense" signifies establishing an omnidirectional military readiness posture that guarantees victory in battle by deterring and actively countering enemy provocations through ROK-led defense capabilities based on the ironclad ROK–US alliance.

Tenets of the National Defense Policy

The ROK Armed Forces is implementing six national defense policy tenets, which serve as consistent policy directions guiding the realization of its national defense vision: (1) establishing a robust national defense posture against omnidirectional security threats; (2) developing a mutually complementary and robust ROK–US alliance and promoting exchanges and cooperation for national

defense; (3) building a strong force that supports peace on the Korean Peninsula by firmly implementing national defense reforms; (4) establishing a transparent and efficient national defense operation system; (5) cultivating a high-morale military culture that is inclusive of and trusted by the public; and (6) building a foundation for establishing peace through inter-Korean military confidence building and arms control. The NSS and the NDP are listed in [Chart 2-1].

[Chart 2-1] National Security Strategy and Defense Policy



**Establishing a Robust National
Defense Posture Against
Omnidirectional Security Threats**

Based on the robust ROK–US combined defense posture, the ROK Armed Forces maintains omnidirectional military readiness posture to deter provocations from not just North Korea but also from any potential threat, and respond with prompt and firm action in the event of a provocation. At the same time, the ROK Armed Forces will enhance its ability to respond to cyber-attacks, terrorism, infectious diseases, and disasters, as well as develop an integrated civilian-government-military-police defense posture to protect the safety and lives of the people. In order to build a military centered on combat missions, the ROK Armed Forces will strengthen the spiritual and mental force of servicemembers and create an education and training environment based on advanced science and technology where field-based education and training are possible at any time.

**Developing a Mutually Complementary
and Robust ROK-US Alliance,
and Promoting Exchanges and Cooperation
for National Defense**

Based on the robust ROK–US alliance, the ROK and the US will pursue an expeditious transition of wartime OPCON in a stable manner in order to realize a combined defense system led by the ROK Armed Forces. In addition, the ROK Armed Forces will develop the alliance into a mutually complementary relationship, promote exchanges and cooperation for national defense, and expand and develop upon the success of overseas deployment of ROK troops to shape a more favorable strategic environment for the ROK.

**Building a Strong Force that Supports
Peace on the Korean Peninsula by Firmly
Implementing Defense Reform**

The ROK Armed Forces will firmly implement Defense Reform 2.0 to proactively respond to changes in the security environment and omnidirectional security threats, as well as support peace and prosperity on the Korean Peninsula based on strength. To this end, the ROK Armed Forces will work toward "steadfast national defense" where the ROK assumes responsibility for national defense by building a strong, elite military powered by advanced technology that enable flexible responses to omnidirectional security threats.

Establishing a Transparent and Efficient National Defense Management System

technology of the Fourth Industrial Revolution to enhance the efficiency, openness, and transparency of the overall national defense system. To this end, the ROK Armed Forces plans to lay the legal foundation for maintaining political neutrality and to continue to expand the public's participation in the policy making process. In addition, the ROK Armed Forces will establish and actively implement measures to eradicate corruption in defense acquisition programs and take strict measures to reduce defense expenditures by increasing the efficiency of national defense management.

To keep up with changes in social conditions and public demands, the ROK Armed Forces will adopt the

Cultivating a High-Morale Military Culture that is Inclusive of and Trusted by the Public

improving conditions and ensuring their human rights to allow them to fully focus on their combat missions. In addition, the ROK Armed Forces will continue to strive to earn the public's trust and support by actively and preemptively protecting the people's lives and safety through efforts, such as providing proactive support during national disasters and advancing the interests of the people.

The ROK Armed Forces will cultivate an advanced barracks culture that reflects social changes by drastically

Building a Foundation for Establishment of Peace through Inter-Korean Military Confidence Building and Arms Control

Armed Forces will work towards military de-escalation and inter-Korean confidence building. The ROK Armed Forces will pursue stable military assurance measures in connection with the progress from inter-Korean exchanges and cooperation projects and will seek realistic arms control measures in line with advances made towards denuclearization and the establishment of a peace regime.

To resolve the North Korean nuclear issue and shape the conditions to establish permanent peace on the Korean Peninsula, the ROK

3. Military Strategy

Military strategy set up the military strategic objectives to realize the NSS and NDP in military domain and specifies the concept to employ military forces and direction

to develop military forces to meet these objectives.

Objective In consideration of sudden changes in the security environment, the ROK Armed Forces must prepare for North Korean threats simultaneously, potential threats, and nonmilitary threats. The objective of the military strategy is to deter provocations and aggression from external forces and, if deterrence fails, achieve victory in the early phase "with the least damage within the shortest time".

Concept The concept of the ROK Armed Forces' military strategy is to flexibly respond to changes in the security environment and omnidirectional security threats while acquiring the capabilities to deter and respond dominantly to omnidirectional threats based on the ironclad ROK–US alliance. When it comes to the North Korean threats, ROK Armed Forces will establish and implement a strategy for arms control capable of establishing a peace regime in the long term and reduce the likelihood of outbreak of war by reducing the threats posed by North Korea. Demonstrating strong deterrence based on the robust ROK–US alliance and possessing the capabilities and posture to achieve complete victory during contingencies are also part of the military strategy. Through these actions, the ROK Armed Forces will deter North Korea's provocations and aggressions, prevent accidental military collisions, and manage situations to be stable with both rapid responses and de-escalation measures in case of a provocation. In case deterrence fails, the concept is to terminate the war in the early phase "with the least damage within the shortest time".

The military strategy includes working closely with the neighboring countries during peacetime to shape a favorable strategic environment and preventing conflict with neighboring countries by enhancing the ROK's deterrence capabilities. The ROK Armed Forces will also preemptively prepare and actively respond against cyber-threats by establishing comprehensive response strategies. When it comes to nonmilitary threats, the military strategy is to prevent such threats by ensuring military readiness to protect ROK citizens at home and abroad as well as establishing an information sharing and joint response system with inter-agencies. In case of an actual threat, the goal is to restore stability promptly on with a rapid response.

Direction of Military Force Development

The objective for military force development of the ROK Armed Forces is to build a military power capable of responding flexibly to omnidi-

rectional security threats, including those from North Korea and other potential threats. The ROK Armed Forces is to acquire the capabilities required to lead combined operations by reorganizing the military structure (command, unit, troop, and force structure) to be prepared for wartime OPCON transition. The military force development objective also includes acquiring the required capabilities to effectively respond to cyber and space threats and establishing an operations execution system, as well as reinforcing the military support system to actively counter nonmilitary threats such as terrorism, international crimes, and disasters.

Defense Reform 2.0

With the goal of creating a "strong military" that supports peace and prosperity of the Republic of Korea based on strength at an early date, the MND has adopted and is pushing ahead with more feasible "Defense Reform 2.0 Basic Plan" in order to achieve the objectives of the reform.

1. Goal and Tenets

The MND selected the early creation of a "strong military" that supports peace and prosperity of the Republic of Korea with strength as the goal of Defense Reform 2.0. "Strong military" means a military capable of taking the initiative in responding to omnidirectional security threats, an elite military powered by cutting-edge technology and a military managed in a way that befits the standing of a developed country.

The three tenets of Defense Reform 2.0 are: (1) strengthen the structure and foundation to enhance defense capabilities to take the lead in national defense; (2) fully utilize the Fourth Industrial Revolution technology to overcome the ROK's limitations on its resources and adapt to future battlefields; and (3) gain nationwide support by pursuing a national defense reform that is in line with the demands of the nation and society.

The goal and the tenets of Defense Reform 2.0 are based on the National Defense Reform Act enacted in 2006 and are in line with the national defense reforms promoted by previous administrations. However, it is true that there have been repeated adjustments and delays due to various changes in security conditions. Recently, omnidirectional security threats have emerged, including deepening instability in the security environment of Northeast Asia as well as threats from North Korea, and increasing transnational and nonmilitary threats such as disasters, terrorisms, and cyber-attacks. It is no longer possible to postpone national defense reforms due to the rapid deterioration of the conditions for implementing defense policies, such as shortage of military service resources due to a population cliff and

public demand for human rights and welfare. Thus, the feasibility of Defense Reform 2.0 has been greatly enhanced by securing the required budget and promoting the enactment and revision of laws and regulations with the aim of completing more realistic reforms within the current administration's term.

2. Tasks

In addition to the 43 tasks in the four major fields-military structure, defense operation, military culture, and defense projects-tasks in the field of smart defense innovation, which applies Fourth Industrial Revolution technology to all areas of national defense, have been added to Defense Reform 2.0.

Military structure reform involves creating an elite military structure based on cutting-edge science and technology so that it can take the initiative and respond resiliently to omnidirectional security threats. To this end, unit reorganization will be pursued with the goal of reducing the number of standing troops from 618,000 (2017) to 500,000 by 2022 and reducing the number of army divisions from 39 to 33 in line with such reduction. Although the number of troops and units will be reduced, actual combat capabilities will be strengthened through the reorganization of the combat-oriented defense manpower structure, including reinforcement of officers in combat units, expansion of the civilian workforce in the non-combat field, and fielding of cutting-edge weapons systems.

Defense management reform aims to realize an advanced national defense management system by enhancing high efficiency, reliability, and openness. Accordingly, the MND will adjust the number of general officers, shorten the period of mandatory service, increase the proportion of female soldiers, establish civilian control, and improve participation of and communication with the public.

Military culture reform involves the establishing a military culture instilled with morale and willingness to serve by guaranteeing human rights and welfare of the soldiers to a point that satisfies the demands of the people. The MND will strive to reform the military justice system and abolish the military confinement facilities to protect servicemembers' human rights and improve their welfare.

Defense projects reform aims to secure international competitiveness in terms of efficiency, transparency, and expertise. To achieve this, initiatives such as improvements to defense acquisition education and human resources system, creative and challenging R&D, re-establishment of the roles of defense R&D agencies, and stringent measures on prevention of corruption will be pursued.

Smart defense innovation involves fostering a smart, strong force through defense innovation based on the cutting-edge technology of the Fourth Industrial Revolution. The MND will realize efficient defense management by cultivating ready-for-combat warriors based on the live, virtual, constructive (LVC) training system and managing the life cycle of defense resources. At the same time, the MND will continue to innovate its technology and foundations by creating a super-connected, super-intelligent, and super-converged defense infrastructure, and innovate its force system to prepare for future wars through intelligent and advanced weapon systems.

3. Outcomes

Along with the implementation of Defense Reform 2.0, the MND is also making efforts to apply advanced science and technology of the Fourth Industrial Revolution in all areas of defense. The current assessment is that the progress with implementing plans regarding Defense Reform 2.0 so far is on track to achieving the final goal, taking one step further towards enhancing the national defense capacity and expeditiously creating a strong military.

In terms of military structure, the MND laid the foundation for the development of future command structure, such as reorganization of the Joint Chiefs of Staff (JCS). In 2019, the ROK Army established the Ground Operations Command, which integrated the First ROK Army (FROKA) and the Third ROK Army (TROKA). In conjunction with the inactivation of four divisions, the total number of standing troops of the Army, Navy, and Air Forces was reduced to 555,000 in 2020. The Navy reorganized its Special Warfare Flotilla while the Marine Corps activated an aviation battalion. The Air Force reorganized its units, including the activation of a reconnaissance wing and a space operations unit. Reorganization is also being carried out in the defense manpower structure by increasing the ratio of officers by 4.3%p in 2020 (2017: 31.6%; 2020: 35.9%) in tandem with the reduction of troops, and by expanding the civilian workforce. Furthermore, in order to respond to omnidirectional security threats, the MND is significantly reinforcing its combat power by fielding cutting-edge weapons systems such as MRLs, unmanned aerial reconnaissance vehicles, submarines (KSS-III), and F-35As. The MND is also in the process of formulating a long-term military structure development plan to adapt to the future security environment, considering potential changes in threats, alliances, resources, and technology after the full implementation of Defense Reform 2.0.

As for the defense management, the following efforts have been made: (a) transition

of additional director-general and director-level positions in the MND to the civilian workforce; (b) reduction in the period of mandatory military service by 64 days in the Army; (c) downsizing the total number of general officers by 46; (d) increase in the proportion of female servicemembers to 7.4% and improvements in their working conditions; (e) development of force operational capability based on advanced ICTs including Big Data and IoT and the installation of scientific training centers for reserve forces with the introduction of virtual simulation shooting equipment; and (f) expansion of the scientific training system such as the application of the smart reserve force training management system. Moreover, further improvements have been made management, as well as installation of community-friendly military facilities by relaxing and lifting military installation protection zones (428.8km², which is 147 times the size of Yeouido), including civilian control line and the removal of barbed-wire fences (34.7km) along coastlines and rivers. To respond to transnational and nonmilitary security threats in relation to COVID-19, the MND has expanded the existing task of "reinforcing professional competencies in preparation for terrorism and disaster" to a more comprehensive task of "developing non-traditional threat defense response system" and is proactively enhancing the military's response capabilities by developing relevant laws and systems, such as improving structures and organizations, and strengthening the military's support capabilities.

Regarding the barracks culture, the Military Service Act was revised in December 2019 to provide an alternative option to military service for those who object to conscription based on religious beliefs; in August 2020, the military disciplinary guardhouse system was replaced with human rights-friendly military training to guarantee servicemembers' human rights. Also, the a probe committee investigating deaths in the military was established to support the efforts to ascertain the truth of questionable deaths in the military. Furthermore, the MND has drastically improved the service conditions for enlisted servicemembers through measures such as a pay raise (i.e., KRW 540,900 for an army sergeant in 2020), increase in passes after work hours on weekdays, full permission to use mobile phones, self-development subsidies (KRW 100,000 per person in 2020), and a 50% increase in financial aid to attend online college courses. The MND also improved the housing support system to increase the number of officers who own a house and strengthened its employment support for discharged soldiers while shaping the conditions to enable enlisted servicemembers to fully concentrate on their duties by making it easier to use military hospitals, as well as simplifying procedures for using private hospitals. Furthermore, designation of adjudicators and reduction of punishment by officers with convening authority are being strictly controlled and monitored, while the

system where military prosecutors can voice their opinions is currently in place. The MND will actively pursue a reform of the military justice system through measures such as the integration of a military court within the Ministry and the establishment of military prosecutor's office in each service.

For defense projects, the Defense Acquisition Project Council has been newly established to build an efficient collaborative system. The MND has also launched a rapid technology acquisition project, a pilot project to promptly apply advanced technology, namely the Fourth Industrial Revolution technology. Government support for defense projects is increasing significantly through the expansion of core technology and parts localization projects, pilot operation of defense innovation clusters, and support for job creation in the defense industry and industry-led R&D to strengthen R&D capabilities in the private sector. Moreover, practical measures, such as reinforcing the anti-corruption system through revising the Code of Conduct for Public Officials at the Defense Acquisition Program Administration (DAPA) and regulating reemployment of retired officials, were implemented in order to fundamentally prevent corruption in the defense industry, while improve the efficiency and transparency of defense projects. The MND is committed to developing the defense industry in a way it contributes to national interests by leading a government-wide effort to promote defense exports.

With the launch of the "Fourth Industrial Revolution Smart Defense Innovation Promotion TF" in January 2019, the MND aims to accelerate defense reform through the Fourth Industrial Revolution Smart Defense Innovation and to promote comprehensive and concrete defense innovation. The TF selected 71 projects for nine major tasks targeting three areas of innovation—defense management, technology and infrastructure, and military force systems—and secured the required budget, with tangible outcomes through systematic project management so far. The MND is bolstering cooperation at the government level by having its implementation plan reviewed and passed at the Presidential Committee on the Fourth Industrial Revolution and pursuing the task through cooperative work with relevant ministries, such as the Ministry of Science and ICT (MSIT) and the Ministry of Trade, Industry, and Energy (MOTIE). In particular, the MND is strengthening its national defense R&D capabilities to contribute to the win-win growth of civilians and the military by promoting various tasks such as development of ground-penetrating radar (GPR) and autonomous vehicles for the recovery of remains, creation of intelligent and smart troops, and military medical Big Data system. Here, the military utilizes the civilian's excellent technical capabilities and provides test beds for the private sector, thereby verifying civilian technology. Accordingly, the MND will continue to

pioneer and push ahead with new projects in line with the technological development of the Fourth Industrial Revolution, while continuing to build a "digitally strong military and smart defense" by creating tangible outcomes through civilian–government–military cooperation.

An appropriate level of defense resources has been secured to ensure steady implementation of Defense Reform 2.0. For the 2020 defense budget, a budget of more than KRW 50 trillion has been secured—an increase of 7.4% from 2019 in terms of the main budget. The total amount of financial resources in the 2021–2025 defense mid-term plan is planned to be approximately KRW 300.7 trillion. Moreover, around KRW 16.7 trillion was allocated for force enhancement in carrying out the tasks under Defense Reform 2.0, such as military structure reorganization based on advanced science and technology (8.5% increase from 2019). Efforts are being made to further expand nuclear and WMD response forces and—essential forces against transnational and nonmilitary threats—through continuous acquisition of the required budget. The budget for force management cost reached KRW 33.4 trillion (6.9% increase), which was used for defense management and barracks culture reforms, including the increase in civilian workforce for the redesign of defense manpower. Furthermore, in order to lay the legal foundation for Defense Reform 2.0, 70 cases of enactment and revision requirements were identified in a total of 56 laws and ordinances, including the National Defense Reform Act, while 37 cases of them related to 32 laws including the Military Service Act have already been successfully enacted and revised. Especially in 2019, the MND provided systematic support to the defense reform by passing legislations related to the introduction of "an alternative service program for military service objectors based on religious beliefs, etc" and "a military education system", both of which have received a nationwide interest.

Chapter 3

Safeguarding Peace by Establishing a Robust Defense Posture Against Omnidirectional Security Threats

Section 1 Establishing a Robust Defense Posture

Section 2 Reinforcing Counter Capabilities Against Nuclear and other WMD Threats

Section 3 Establishing a Response System for Transnational and Nonmilitary Security Threats

Section 4 Establishing an Integrated Civilian–Government–Military–Police Defense Posture

Section 5 Education and Training Focused on Combat Missions and Strengthening the Spiritual and Mental Force





Establishing a Robust Defense Posture

The ROK Armed Forces maintains a combined defense posture based on the robust ROK–US alliance that is capable of countering local and full scale war provocations from North Korea. For effective crisis management, the ROK Armed Forces has established surveillance and early warning posture, enhanced its crisis management system, and maintains readiness posture against provocations such as infiltrations, provocations and terrorism on land, at sea, and in the air, and cyber-attacks. Furthermore, in preparation against a full scale war provocation by North Korea, the ROK Armed Forces is enhancing wartime operational capabilities and strengthening the ROK–US combined defense posture while acquiring and maintaining the necessary forces, equipment, and supplies to expand their war sustainability.

1. Military Organization and Forces

Organization of the Joint Chiefs of Staff

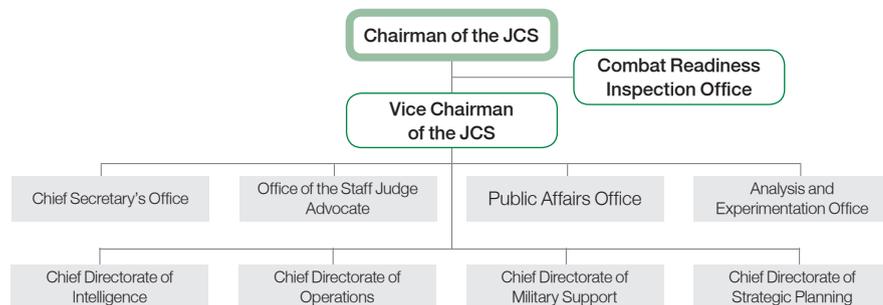
The Joint Chiefs of Staff (JCS) commands and supervises the combat operation units of the Army, Navy, and Air Force, and conducts joint and combined operations by commanding and supervising joint units. The JCS also carries out civilian-government-military-police integrated defense operations and tasks associated with martial law. The JCS was set up and operated within the MND as a non-permanent organization until it was officially established in 1963 under its current name.¹⁾ It consists of the Chairman, a Vice Chairman, five offices, and four chief directorates. The organization of the JCS is shown in [Chart 3-1].



ROK Armed Forces promotional video

1) Combined Chiefs of Staff Council in 1948, Joint Chiefs of Staff Council in 1954, and Combined Chiefs of Staff Bureau in 1961.

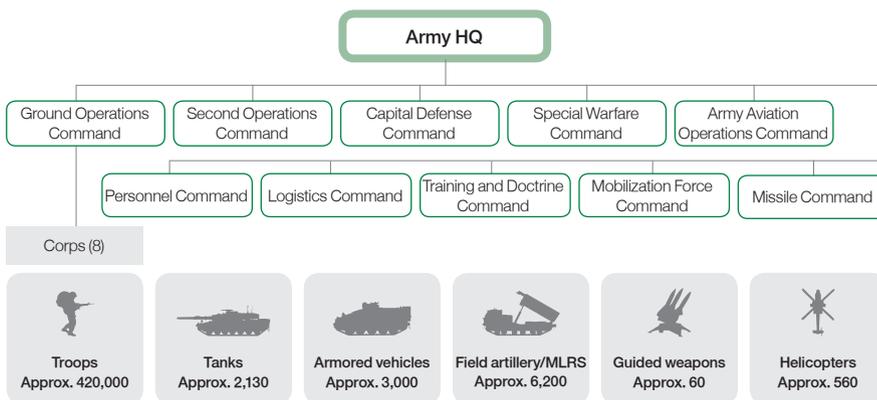
[Chart 3-1] Key Organization of the Joint Chiefs of Staff



The JCS strengthens jointness through close mutual support and integration with the Army, Navy, and Air Force and continues to advance its task performance system to perform its inherent missions and functions. Also, it continues to strengthen warfighting capabilities led by the ROK Armed Forces by systematically developing its organizational structure, functions, and military capabilities that are optimized for future joint operations in preparation for wartime Operational Control (OPCON) transition.

Army The Army consists of the Army Headquarters, two Operations Commands, Capital Defense Command, Special Warfare Command, Army Aviation Operations Command, Missile Command, Mobilization Force Command, and support units. Key organizations and assets of the Army are shown in [Chart 3-2].

[Chart 3-2] Key Organizations and Assets of the Army



* Tanks, armored vehicles, and field artillery/MLRS include the forces of the Marine Corps.
 * The Ground Operations Command was established on January 1, 2019.

The Ground Operations Command integrates all operational elements within its operation area to conduct various ground operations. The Second Operations Command carries out the mission of maintaining stability and war sustainability of the joint rear area through integrated civilian-government-military operations. The Capital Defense Command protects key facilities and urban infrastructure of Seoul to ensure the city maintains its functions as the capital. The Special Warfare Command is responsible for special operations in wartime and carries out peace support operations during peacetime, while the Army Aviation Operations Command is in charge of aviation operations. The Mobilization Force Command ensures the combat readiness posture of mobilization divisions and mobilization



Army promotional video



Navy promotional video



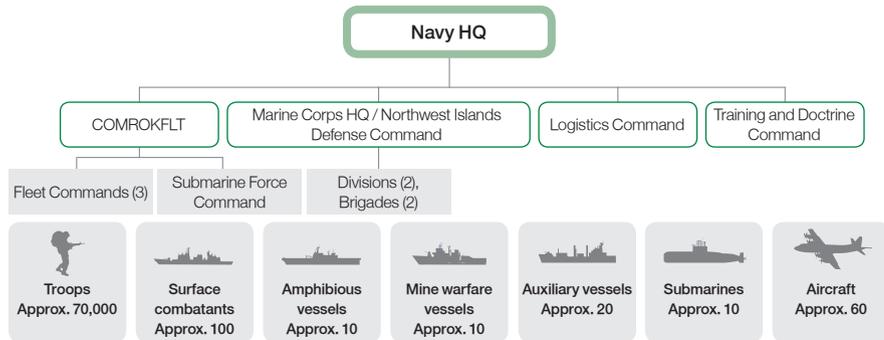
Marine Corps promotional video

support groups during peacetime to provide corps level units with mobilization divisions and supplement battalions capable of exerting combat power equal to that of standing troops in wartime. Other commands are responsible for personnel and logistics support as well as education and training.

While efficiently utilizing its existing forces to the fullest extent, the Army is restructuring its units so that they can carry out rapid decision operations in order to realize the concept of future joint operations. To achieve this objective, the Army is steadfastly acquiring its surveillance and reconnaissance capabilities including the dronebot combat system²⁾ that utilizes reconnaissance, attack, and electronic warfare drones, as well as its maneuver and strike capabilities such as K2 battle tanks, Korean Utility Helicopters, and multiple launch rocket system (MLRS)³⁾.

Navy The Navy consists of the Navy Headquarters, the Republic of Korea Fleet (COMROKFLT), Marine Corps Headquarters, Northwest Islands Defense Command, and support units. Key organizations and assets of the Navy are shown in [Chart 3-3].

[Chart 3-3] Key Organizations and Assets of the Navy



* Around 29,000 troops of the Marine Corps are included.

COMROKFLT has command authority over naval operations as a whole and conducts anti-surface⁴⁾, anti-submarine⁵⁾, mine and countermine⁶⁾, and amphibious operations. Fleet Commands defend their assigned areas by deploying combatants such as destroyers, frigates, patrol vessels, and patrol killer mediums. The Submarine Force Command executes submarine operations. The Marine Corps Headquarters executes amphibious operations and defense operations of its assigned areas and strategic islands, and operates a Quick Maneuver Force. The Northwest Islands Defense Command is responsible for security and defense missions regarding the northwest islands. Other commands are in charge of logistics support as well as

2) Dronebot is a portmanteau of drone and robot. It refers to a manned and unmanned combat system to supplement or replace the capability of a manned combat system.

3) As a weapon capable of delivering massive and concentrated firepower at once, it is a launch system in which multiple rockets are mounted in rectangular or cylindrical launchers.

4) Its operations are aimed at securing and maintaining maritime control and destroying or neutralizing the enemy's maritime forces using surface combatants, submarines, and aircraft.

5) It conducts operations to destroy or neutralize the enemy's submarines to defend freedom of navigation in the maritime zones.

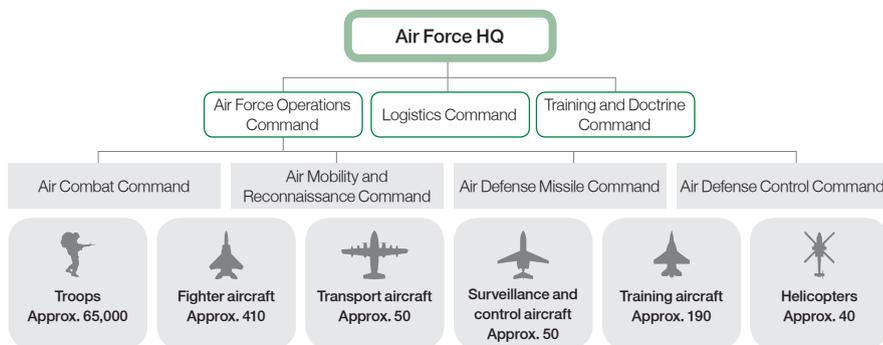
6) It also conducts operations of interdicting or neutralizing the enemy's naval forces with the help of mines, or repulsing the enemy's attempts at using mines.

education and training.

To effectively respond to various types of surface, underwater, and airborne threats, the Navy is operating its multidimensional forces in an integrated manner by acquiring next-generation submarines, destroyers, frigates and patrol killer mediums, Aegis-class destroyers, maritime patrol aircraft, and maritime operations helicopters. The Marine Corps will further develop its capabilities to carry out a diverse range of missions including multidimensional and high-speed amphibious operations and the defense of strategic islands.

Air Force The Air Force is composed of the Air Force Headquarters, Air Force Operations Command, and other operational and support units. Key organizations and assets of the Air Force are shown in [Chart 3-4].

[Chart 3-4] Key Organizations and Assets of the Air Force



Air Force promotional video

The Air Force Operations Command commands overall air operations and conducts counter-air (CA) operations⁷⁾, air interdiction (AI) operations⁸⁾, and close air support (CAS) operations⁹⁾ as well as operations to effectively counter nuclear, missile, and long-range artillery threats. The Air Combat Command executes assigned combat missions under the control of the Air Force Operations Command and ensures that all combat mission aircraft exert their combat power. The Air Mobility and Reconnaissance Command is responsible for air mobility and aerial refueling, surveillance and reconnaissance, early warning and air control, special missions, and search-and-rescue (SAR) missions, and ensures that the air mobility forces exert their combat power. The Air Defense Missile Command is in charge of defense against a variety of airborne threats, such as ballistic missiles and aircraft, while the Air Defense Control Command is responsible for air control, aerial surveillance, aircraft identification, and air operation support within the Korean peninsula theater.

7) Operations aimed at neutralizing or destroying the enemy's aerospace forces and anti-air system to gain air superiority

8) Operations aimed at restricting the enemy's augmentation, replenishment, and mobility before its military capabilities can be used by stopping, disrupting, delaying, or destroying them

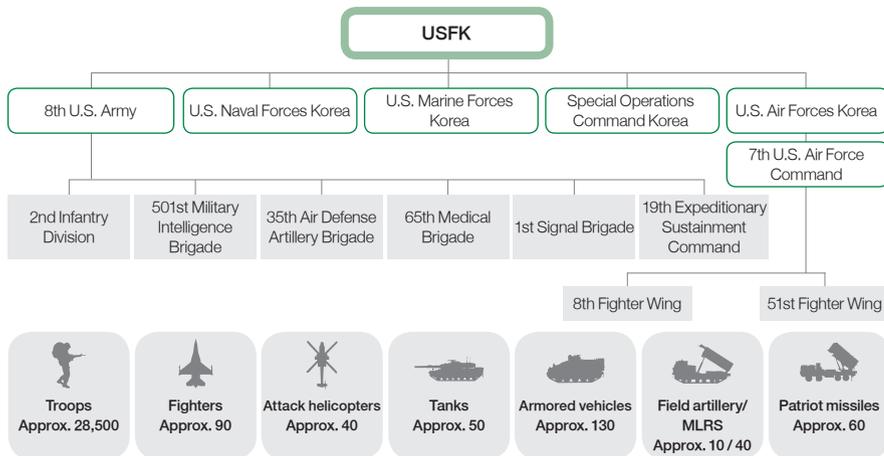
9) Operations consisting of attacking the enemy's military forces close to friendly forces to support friendly forces' surface attack, counterattack, or defense operations

The Air Force will achieve overwhelming air superiority by continuing to acquire the highly advanced fighters such as the F-35A, and will expand its air surveillance and reconnaissance capabilities by introducing medium- to high-altitude reconnaissance unmanned aerial vehicles (UAV).

United States Forces Korea and Augmentation Forces

The United States Forces Korea (USFK) consists of the 8th US Army, US Naval Forces Korea, US Marine Forces Korea, Special Operations Command Korea, and US Air Forces Korea. The USFK commander concurrently serves as the commander of the UN Command and the commander of the ROK–US Combined Forces Command. Key organizations and assets of the USFK are shown in [Chart 3-5].

[Chart 3-5] Key Organizations and Assets of the USFK



US augmentation forces that deploy to the Korean Peninsula during contingencies to support the defense of the ROK consist of 690,000 troops, 160 vessels, and 2,000 aircraft from the Army, Navy, Air Force, and Marine Corps. The augmentation forces are deployed incrementally depending on how the crisis develops. It is done in two different modes—Flexible Deterrence Option (FDO)¹⁰⁾ and Time Phased Force Deployment Data (TPFDD)¹¹⁾—pursuant to Article 2 of the Mutual Defense Treaty between the ROK and the US. When a crisis builds up on the Korean Peninsula, the FDO, which aims to deter war and mitigate the crisis, is executed to deploy the designated forces. If an actual war begins, combat and support units will be reinforced in accordance with the TPFDD to ensure the execution of the ROK–US combined operations plan.

10) A series of political, economic, diplomatic, and military options that are part of the CFC Crisis Action Standard Operating Procedures and that have to be promptly executed to deter war

11) Force deployment list and data of the US augmentation forces for the execution of the ROK–US joint operational plans

For the defense of the Korean peninsula, the ROK Armed Forces will closely consult with the US on developing augmentation forces deployment plans so that there is no decline in the overall combat power between the two countries.

2. Maintaining Readiness Posture Against Local Provocations

Establishing a Surveillance and Early Warning Posture

Based on the close ROK–US combined intelligence surveillance posture, the ROK Armed Forces maintains a surveillance and early warning posture against North Korea and military readiness posture that can immediately respond to North Korean provocations. By utilizing the consolidated and analyzed intelligence in operations, of which are collected not only from the ROK–US combined information assets but also domestic and international agencies, the ROK Armed Forces maintains military situations in a stable manner.

Moreover, the ROK Armed Forces also maintains a surveillance posture in preparation for military activities by neighboring countries in our airspace and waters, and continues to strengthen its independent surveillance capabilities through force enhancement that includes medium and high-altitude reconnaissance UAV, multipurpose satellites, and military reconnaissance satellites.

Developing a Crisis Management System

To effectively respond to various provocation threats from North Korea, the ROK Armed Forces has firmly established the ROK forces-led crisis management system and the ROK–US bilateral crisis management system. The "National Defense Crisis Management Directive" was revised in March 2020 based on the National Security Strategy Guidelines, the National Defense Policy, and the Basic Plan for Defense Reform 2.0. Enhancements have also been made on crisis management manuals for the security field. In addition, the ROK Armed Forces maintains an around-the-clock crisis management posture through various means such as devising whole-of-government response measures that are ironed out at national security strategy game¹²⁾ sessions wherein high-level policymakers from the relevant ministries participate.

At the same time, the ROK Armed Forces continues to improve its crisis management system to firmly respond to any provocations from North Korea by reinforcing combined crisis management exercises and refining the ROK–US joint crisis management system.

12)

It is a form of a practice wherein experts in the security field identify issues by considering various factors such as politics, military, society, and economy for major security situations through discussions and derive policy alternatives

**Establishing a Readiness Posture
Against Land, Sea, and Airspace
infiltrations and Provocations**

In spite of agreeing to the issues related to the Northern Limit Line (NLL) through the Agreement on Reconciliation, Non-aggression, and Exchanges and

Cooperation (1991) and the Protocol on the Implementation and Observance of Chapter 2, Nonaggression (1992), North Korea has carried out provocations on land, at sea, and in the air that nullifies the effectiveness of these agreements. Especially, North Korea has continuously attempted high-intensity provocations in the northern waters of the West Sea and the five northwest islands area. The five northwest islands and the Northern Limit Line (NLL), which is the practical maritime boundary line, have been defended robustly by the ROK Armed Forces, and the ROK Armed Forces will continue to firmly adhere to the principle of observing the NLL and will sternly respond to any type of provocations against the NLL.

With the GOP scientific security systems established in 2016, considerable progress has been made to the ROK Armed Forces' security posture, and for any shortfalls identified while operating the systems, the ROK Armed Forces will continue to upgrade and improve the systems' performance in the future thereby further developing the ROK Armed Forces' readiness posture against infiltration and provocations in an evolutionary manner.

The ROK Armed Forces will also establish a robust military readiness posture through close ROK–US cooperation to deter provocations by North Korea and to strongly and sternly retaliate in the event of a provocation. At the same time, through the implementation of the Comprehensive Military Agreement (CMA), the ROK Armed Forces will provide military support to the various efforts of the ROK government to establish peace on the Korean Peninsula.

The ROK Armed Forces maintains a surveillance and immediate response posture that covers the entire Korean peninsula in order to firmly defend the ROK's entire territorial land, waters, and airspace in the East Sea, West Sea, and South Sea, including the northwest islands as well as Marado Island, Ulleungdo Island, and Dokdo Island. In particular, the ROK Armed Forces maintains a firm commitment and resolute readiness posture to safeguard Dokdo Island which is evidently the ROK's territory—historically, geographically, and according to international laws as well.

To effectively respond to the changing operational environment, the ROK Armed Forces will optimize its surveillance, decision-making, and strike systems in the contact areas on land, at sea, and in the airspace, and continuously bolster its core fighting capabilities.

Maintaining a Readiness Posture Against Other Types of Provocations

The ROK Armed Forces has been enhancing the civilian-government-military-police integrated defense posture in preparation for potential terrorist and cyber-attacks against key national infrastructure and public facilities in the capital area and rear areas. To complete the posture for executing integrated defense operations led by the heads of local government, a civilian-government-military-police information-sharing system has been built and is being operated while the integrated readiness posture is being reinforced through the development of operational plans and response manuals for each type of provocation as well as periodical defense exercises and training. In addition, to swiftly counter diverse threats of terrorism, a military counter-terrorism special forces unit and counter-terrorism operations units for various types of terror threats have been additionally designated. The ROK Armed Forces has also been establishing a thorough counter-terrorism readiness posture by improving counter-terrorism operations carried out by the civilian-government-military-police integrated defense system and enhancing the support posture for the integrated defense system.

In addition, the ROK Armed Forces will strengthen the civilian-government-military-police cooperation system by setting up a collaboration system with the Ministry of Science and ICT (MSIT) and updating the crisis response manual for GPS signal disturbance to counter North Korea's global positioning system (GPS) jamming attempts, and will continue to improve preparedness and response capabilities against cyber-attack attempts.

3. Maintaining a Readiness Posture Against Full Scale War

Enhancing Wartime Operations Execution Capabilities

North Korea continues to improve its conventional force qualitatively and maintains a posture capable of launching surprise attacks and engaging in blitzkrieg with minimal repositioning in contingencies by deploying the bulk of its key forces in the forward area south of the Pyongyang-Wonsan line.

In preparation for the North Korea's threat of a provocation for a full-scale war, the ROK Armed Forces continues to enhance ROK-US bilateral operational plans, certifies and refines them through annual ROK-US theater-level combined command post exercises (CPX)¹³⁾.



Dokdo, the beautiful island of Korea

13)

It is an exercise for mission execution by commanding officers and staff organizations of different echelon levels. During the exercise, they practice the relocation and operation of a command post as well as the procedures of command and staff activities under various scenarios while maintaining communications. They also learn operational plans and the application of standards operating procedures (SOPs).

[Chart 3-6] Area of Responsibility by the ROK Armed Forces



* Map source: National Geographic Information Institute

In particular, in preparation for wartime OPCON transition, the ROK Armed Forces maintains a robust combined readiness posture by conducting combined certification assessment¹⁴⁾ during ROK–US combined exercises and has established a readiness posture against a full-scale war by improving its capabilities to conduct operations and lead combined exercises.

In addition, the ROK government's Ulchi exercise was integrated with the Taegeuk exercise, a ROK-only exercise of the ROK Armed Forces, thereby launching the Ulchi Taegeuk exercise¹⁵⁾.

Combined field maneuver training exercises (FTX)¹⁶⁾ fully utilize the advanced weapons systems and operational management system of the ROK–US combined forces under the principle of "ensuring a balanced combined readiness posture throughout the year". Various additional training methods are applied to enhance the capability to conduct combined operations.

The ROK Armed Forces is developing concepts to conduct operations in preparation of a full-scale war aimed at achieving a complete victory "with minimum damages within the shortest period of time". The ROK Armed Forces will maintain steadfast combined operational capabilities through ROK–US combined exercises and trainings. In case of contingencies, it will employ combined and joint forces to end the war at an early stage by achieving decisive victories in all domains including ground, air, sea, space, and cyber.

Strengthening the ROK–US Combined Defense Posture

The ROK Armed Forces is maintaining and enhancing the combined defense posture based on a robust ROK–US alliance capable of firmly responding to North Korea's provocation for a full-scale war. With the robust combined defense posture and military readiness posture, the ROK Armed Forces' efforts are underway to pursue wartime OPCON transition systematically and proactively under close consultation with the US.

The Armed Forces of the ROK and the US will coordinate closely and exert efforts to maintain a much stronger combined defense posture even after wartime OPCON transition.

Moving forward, the two countries will continue to strengthen their combined defense posture by stably managing alliance issues through various defense consultative bodies.

Reinforcing War Sustainability

In order to reinforce sustainment capabilities, the ROK Armed Forces is acquiring and maintaining forces, equip-

14)

It is conducted to verify and assess the mission execution capability of the future ROK–US Combined Forces Command (CFC) which is led by the ROK Armed Forces.

15)

It is an exercise to improve national emergency preparedness capability and military readiness posture in the concept of comprehensive security through crisis response training for large-scale complex disasters and wartime preparation exercises at the level of national-scale war.

16)

Field Training Exercise

ment, and supplies necessary to conduct war in accordance with wartime requirements and current capabilities while improving procurement, maintenance support, and logistics systems in an innovative way.

First, to guarantee the operating rate of equipment during wartime and peacetime, the ROK Armed Forces has been improving core maintenance capabilities and maintenance environment through smart factories and remote maintenance support systems using the core technologies of the Fourth Industrial Revolution. The ROK Armed Forces also has established maintenance support system based on civilian-military cooperation to resolve logistics support issues exceeding the military's maintenance capability, and has been pursuing logistics support projects based on performance-based logistics (PBL).

In order to secure an independent munitions support capability in preparation for wartime OPCON transition, the ROK Armed Forces has acquired critical munitions necessary for operations and established and implemented policies on storage management, performance maintenance, and explosives disposal support.

The ROK Armed Forces will further reinforce its sustainment capabilities by integrating and utilizing resources available at home and abroad as well as expanding international logistics cooperation.

Reinforcing Counter Capabilities Against Nuclear and other WMD Threats

The ROK Armed Forces has been strengthening the ROK–US combined capabilities and posture as well as its own capabilities and posture to effectively deter and respond to nuclear and missile threats from North Korea. The ROK Armed Forces will continue to strengthen its counter capabilities and posture against North Korean nuclear and other WMD threats until the complete denuclearization and establishment of a permanent peace regime on the Korean Peninsula. In particular, efforts will be made to build key forces as early as possible in order to acquire deterrence and response capabilities.

1. Developing Deterrence and Response Capabilities Against Omnidirectional Nuclear and Missile Threats

Developing a ROK-US Tailored Deterrence Strategy and Facilitating the Implementation of US Extended Deterrence

The ROK and the US have enhanced their combined deterrence and response capabilities based on the

bilateral "Tailored Deterrence Strategy (TDS)"¹⁷⁾ to effectively counter North Korean nuclear and missile threats.

TDS, which is a ROK–US joint deterrence and response strategy tailored for the Korean Peninsula in consideration of the characteristics of the North Korean leadership and North Korea's nuclear and missile threats has been upgraded from the concept of general extended deterrence¹⁸⁾ provided by the US TDS and covers both military and nonmilitary response measures that can be implemented in all crisis scenarios, from the stage in which North Korea threatens to use nuclear weapons to the stage in which nuclear weapons are actually used. TDS is significant in that it allows for the ROK and the US to maximize the deterrence and response effect against North Korean nuclear and missile threats by providing a bilateral response framework that makes most of the deterrence ways and means available to the two allies.

To develop the TDS and facilitate the implementation of the US extended deterrence commitment, the ROK and the US operate various policy consultative bodies

17)

The ROK Minister of National Defense and the US Secretary of Defense approved the Tailored Deterrence Strategy at the 45th SCM held in October 2013. It is the first deterrence strategy that the United States set up with an individual ally. Its strategic concept is more advanced than the general concept of "extended deterrence" because it is optimized for the situation on the Korean Peninsula.

18)

The US commitment to provide deterrence for its allies using the full range of military capabilities, including nuclear, conventional, and missile defense capabilities

including the Deterrence Strategy Committee (DSC) and the Extended Deterrence Strategy and Consultation Group (EDSCG). The DSC—a deputy ministerial-level regular consultative body that meets biannually during the Korea–US Integrated Defense Dialogue (KIDD)—holds intensive discussions on various and substantial measures



Deterrence Strategy Committee (September 2019)

to deter and respond to North Korean nuclear and missile threats. In particular, the DSC has conducted a ROK–US Extended Deterrence Joint Study from 2018 to 2019 to derive substantial measures to strengthen the capabilities to deter and respond to nuclear and missile threats. The joint study was approved by the 9th DSC held in September 2019 and was reported to the 51st SCM in November 2019. The ROK Minister of National Defense and the US Secretary of Defense assessed that the ROK–US Extended Deterrence Joint Study contributed to strengthening extended deterrence, and pledged to continue to explore jointly measures to enhance implement the TDS while considering the effects of changes in the security environment on the Korean Peninsula.

Also, in accordance with the DSC, the ROK and the US conduct an annual tabletop exercise (TTX)¹⁹ regarding the use of extended deterrence means. In the 6th TTX held in February 2019, measures to increase the execution capability of the TDS were discussed, focusing on six areas: planning, threat evaluation, regional security cooperation, capability enhancement, strategic communications, and joint exercises.

Meanwhile, the EDSCG is a regular consultative mechanism jointly run by the two countries' defense and foreign affairs authorities. In principle, the high-level meeting of the EDSCG, attended by vice-ministerial-level officials, is held on a biennial basis, and its plenary session involving director general-level officials is organized every year. Through the EDSCG, the ROK and the US ensure that the means of extended deterrence are not limited to military (M) elements only, but are expanded to encompass diplomatic, informational, and economic (DIE) elements, thereby amplifying their deterrence and response effects.

A key example of close policy coordination between the ROK and the US is the 2018 Nuclear Posture Review (NPR)²⁰ published in early February 2018. From the early stages of drafting the NPR, the MND presented the ROK's opinions and discussed the direction of the writing through multiple consultations with the US. As a result, the US laid out clear objectives for North Korea's denuclearization in the 2018 NPR and

19) A discussion-based exercise to discuss ways for deploying means of US extended deterrence in a particular simulated scenario (Table Top Exercise)

20) The 2018 NPR is the fourth edition, and the previous editions were published in 1994, 2001, and 2010. The NPR contains the US president's guidance on the administration's nuclear policies and strategies as well as the nuclear force and posture.

clearly stated that any nuclear attacks by North Korea will not be tolerated.

Going forward, the ROK Armed Forces will continue to facilitate the implementation of the US extended deterrence commitment based on the TDS and bolster the ROK–US combined deterrence and response capabilities.

Developing the Alliance’s Counter-Missile Strategy

Based on the TDS, the ROK and the US are continuously developing the "ROK–US Alliance Comprehensive Counter-Missile Strategy", also

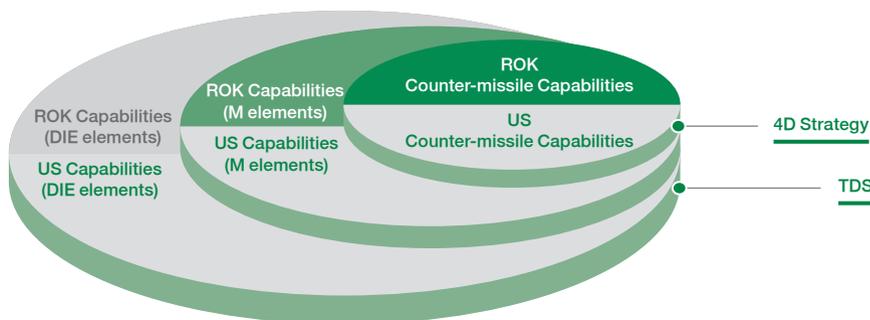
known as the "4D Strategy", to prepare for North Korea’s ballistic missile threats.

The two countries reached an agreement on the "4D Operational Concept"²¹⁾ at the 46th SCM in 2014, and approved the implementation guidance on the 4D Operational Concept at the 47th SCM in 2015. The guidance includes concrete instructions based on the 4D Operational Concept. Since 2016, the ROK and the US have been developing ways to implement, based on the guidance, the concept in five fields including the alliance’s decision-making, planning, command and control, exercise and training, and capability development.

21) Refers to the ROK–US Alliance Comprehensive Counter-Missile Strategy, with "comprehensive" referring to the improvement of overall capabilities in all areas including detecting, disrupting, destroying, and defending (4D) to prepare for ballistic missile threats. The concepts of each area are as follows:

- Detect: Support efforts to disrupt, destroy, and defend using intelligence, surveillance, and reconnaissance (ISR) assets;
- Disrupt: Strike North Korea’s fixed infrastructure that support missile operations;
- Destroy: Directly strike North Korean ballistic missiles as well as transporter erector launchers (TELs); and
- Defend: Intercept North Korean ballistic missiles launched toward the ROK.

[Chart 3-7] TDS and 4D Strategy



* DIE: Diplomacy, Information, Economy
 * M: Military

In the 9th DSC held in 2019, the ROK and the US established the "4D Operational Execution Concept"²²⁾ for the practical implementation of the 4D Operational Concept. The two concepts were integrated and is referred to as the 4D Strategy. Fundamentally, the alliance is sharing concepts of conducting operations and developing specific operational procedures to prepare for North Korean ballistic missile threats.

The ROK Armed Forces will continue to enhance the alliance’s comprehensive counter-missile capabilities and posture in order to effectively respond to various ballistic missile threats from North Korea.

22) It is the ROK–US joint operation stage to effectively counter North Korean ballistic missile threats; it consists of Detect, Decide, Defeat, and Defend.

Building Key Forces to Deter and Respond to Nuclear and Missile Threats

While implementing the 4D Strategy, the ROK Armed Forces has built a "WMD Response System"

consisting of a "strategic strike system" and the "Korean Air and Missile Defense (KAMD)" to secure autonomous deterrence and response capabilities against omnidirectional security threats. Efforts are being made to build the key forces of the "WMD Response System" as early as possible.

The "strategic strike system"²³⁾ realizes deterrence by both denial²⁴⁾ and punishment²⁵⁾ to deter and counter a full range of asymmetric threats from all sides. For this, the ROK Armed Forces is building forces equipped with long-distance surveillance capabilities and precision strike capabilities.

The KAMD is comprised of systems for detection, command and control, and interception. It detects and intercepts missiles launched toward the ROK at the early stage and disseminates warnings to minimize damage. The ROK Armed Forces continues to acquire multi-layered defense²⁶⁾ capabilities optimized for the battlefield environment of the Korean Peninsula by expanding the defensible areas and improving its detection and interception capabilities in preparation against omnidirectional missile threats. In particular, the ROK Armed Forces will further enhance its own missile defense capabilities by securing additional missile defense systems developed with domestic technology. At the same time, the ROK Armed Forces will continue to develop the alliance's response capabilities by bolstering its interoperability with USFK's missile defense system.

Through the early establishment of the WMD Response System, the ROK Armed Forces will steadfastly secure deterrence and response capabilities to prepare for omnidirectional security threats.

Supporting the Policies for the Denuclearization of the Korean Peninsula

The ROK Armed Forces supports the government's efforts to fundamentally and peacefully resolve the North Korean nuclear issue as well as strengthening its capacity to

deter and respond to the North Korean nuclear and missile threats.

The MND supports the government's efforts to achieve complete denuclearization and establish a permanent peace regime on the Korean peninsula by utilizing various defense-diplomacy channels and defense consultative mechanisms while seeking ways to effectively utilize the ROK Armed Forces' support capabilities such as intelligence and logistics support, language interpretation, and verification. The MND also continues its efforts to manage military specialists that can be utilized

23)

The concept that covers the existing kill chain system and the Korea Massive Punishment and Retaliation (KMPPR) system

24)

The concept in which a country acquires capabilities to deny the enemy's attainment of a particular strategic objective and, therefore, make the enemy give up its plan to attack upon recognition that the level of damages and risks from an act of aggression would exceed potential gains

25)

The concept in which one threatens to retaliate to make his enemy refrain from taking action upon recognition that the costs of the action would be greater than the expected gains

26)

A defense system, composed of multiple interceptor systems, is capable of counterattacking the enemy's missiles in more than one engagement

during the verification of denuclearization and devise concrete support measures.

However, until North Korea's threats are substantively reduced, the MND will maintain its military readiness posture to counter nuclear and missile threats from North Korea and will continue the force buildup as planned. If a complete denuclearization of the Korean Peninsula is achieved and a permanent peace regime is established following a substantial reduction of North Korea's threats, the MND will readjust the ROK Armed Forces' readiness posture and force requirements to actively respond to various nuclear and missile threats at that point of time.

2. Development of Capabilities Against Chemical and Biological Threats

Development of CBRN Readiness Posture

The ROK Armed Forces actively seeks various measures to not only respond to North Korea's chemical, biological, radiological, and nuclear (CBRN) threats but also transnational and nonmilitary threats such as CBRN related accidents terrorism and infectious diseases.

Having established a close ROK–US combined defense system, the ROK Armed Forces continues to monitor North Korea's CBRN-related activities using combined intelligence assets and maintains a readiness posture that can detect early signs of attack and neutralize them in contingencies. Also, CBRN units and medical units are organized at each echelon to establish CBRN reconnaissance, decontamination, and treatment system. The ROK Armed Forces has acquired protective equipment and materials, such as gas masks, protective gears, decontamination agents, and related medicine, and has built CBRN protection facilities to further improve its protection capabilities. In particular, the ROK Armed Forces is strengthening its CBRN protection, detection and identification capabilities by field deploying new CBRN equipment that has applied cutting-edge science technology.

Meanwhile, the ROK Armed Forces employs expanded regional CBRN Rapid Response Teams (CRRTs) and national special task force units for CBRN terrorism to promptly respond to CBRN-related accidents and terrorism, and continues to develop military support measures such as establishing a CBRN response system centered on the ROK CBRN Defense Command.

Government-wide Integrated Response and Strengthening Cooperation with Relevant Agencies

The ROK Armed Forces maintains a government-wide integrated response posture to

counter CBRN threats, CBRN related accidents and terrorism as well as infectious diseases, and a close cooperation system with the relevant agencies.

In response to situations such as African Swine Flu (ASF), hazardous chemical spills, and COVID-19²⁷⁾, the ROK Armed Forces will immediately deploy available forces including CBRN units to protect the safety and property of the people and will make every effort to support early damage recovery.

[Chart 3-8] Support from CBRN Units

As of November 2020 (unit: cases)

Year	Total	ASF	Avian Influenza	Foot-and-Mouth Disease	Chemical Accidents	Other (Forest Fire, Water Supply)
2018	2,129	None	802	120	13	1,194
2019	4,434	2,103	394	376	71	1,490
2020	2,854	2,263	246	None	82	263

In addition, the ROK Armed Forces continues to conduct civilian–government–military–police integrated exercises in conjunction with the Safe Korea Exercise and the Hwarang Exercise to improve the ability to respond to CBRN at the pangovernment level. At the same time, the ROK Armed Forces actively participates in bioterrorism response training events and evaluation conferences organized by the Korea Disease Control and Prevention Agency (KDCA) and in the joint training for national radiological disaster prevention organized by the Nuclear Safety and Security Commission (NSSC) to enhance civilian–government–military–police integrated response capabilities.



Quarantine support in response to COVID-19 (March 2020)

The ROK Armed Forces will thoroughly maintain its military readiness posture against North Korea’s CBRN threats and will further strengthen the cooperation system with relevant agencies to respond to transnational and nonmilitary threats that may hinder the safety of the people.

Strengthening ROK–US Alliance and International Cooperation

The ROK Armed Forces continues to enhance the ability to respond to CBRN threats through cooperation with allies. Since 1997, the ROK MND and the US Department of Defense (DoD)

²⁷⁾ Quarantine support in response to COVID-19 (February 24 – November 30, 2020): 3,351 times (31,611 people, 24,062 units of decontamination equipment)

have been operating the Counter-Proliferation Working Group (CPWG), an annual director general-level consultative body with participation from the relevant agencies of both countries, to block the spread of WMD and develop joint response capabilities. The group was renamed as the Countering Weapons of Mass Destruction Committee (CWMDC) in 2017, and their policy consultations have been strengthened since. In the CWMDC meeting held in October 2019, the two countries discussed various policies and military measures on removing the North Korean WMD threat and preventing the spread of North Korean WMD and developing ROK–US joint response capabilities, and agreed to continue strengthening cooperation between the ROK and the US.



ROK–US CWMDC (October 2019)

Moreover, the ROK and the US have been conducting Able Response (AR), a ROK–US bio-defense exercise since 2011 to improve combined response capabilities against bio-threats, and Adaptive Shield, a ROK–US CBRN exercise which include all areas of CBRN since 2017.

With the participation of relevant agencies from both countries, Adaptive Shield overhauls the crisis response system against possible CBRN crisis on the Peninsula, holds discussions on joint response options to enhance nation-wide response capabilities, and examines cooperation and response system between relevant agencies in preparation for large-scale damages.

Furthermore, the ROK is a state party to both the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC), and the ROK Armed Forces carries out various activities to implement these conventions. Korea Arms Control Verification Agency, in particular, performs as the national escort body during the periodical inspection by the Organization for the Prohibition of Chemical Weapons (OPCW) that verifies the state parties' implementation of the CWC thereby enhancing the credibility and transparency of observing and implementing international conventions. Meanwhile, since 2005, the ROK CBRN Defense Command has been annually conducting the OPCW's international anti-chemical weapons training course for Asian state parties including the Philippines, India, and Bangladesh.

The ROK Armed Forces will continue to strengthen coordination between the ROK and the US while expanding cooperation with international organizations including the United Nations and OPCW.

Establishing a Response System for Transnational and Nonmilitary Security Threats

The MND is building a response system for not only traditional security threats but also transnational and nonmilitary security threats such as cyber attacks, terrorism, disasters, and space threats to protect the safety and lives of the people. The MND is strengthening its cybersecurity and space defense capabilities to respond to threats in cyberspace and space and is pursuing the establishment of a terrorism prevention and response system in preparation for threats of terrorism at home and abroad. In addition, the MND is safeguarding the lives and safety of service members and the people by promptly providing manpower and equipment support based on a preemptive disaster readiness posture for both military and national disasters. In the event of overseas disasters, the MND actively takes part in international cooperation activities, thereby strengthening the international cooperation system to respond to overseas disasters.

1. Bolstering National Defense Cybersecurity Capabilities

Developing Defense Cybersecurity Policies and Strategies, and Cyberwarfare Mission Execution System

Means and techniques of threats in cyberspace have become diversified and more intelligent with the development of ICT

and infrastructure, and all military tasks and operations are highly dependent on cyberspace. Accordingly, the ROK Armed Forces is strengthening their defense cybersecurity capabilities to create, maintain, and protect a defense cyberspace that is accurate and safe and to secure an edge in cyberspace.

For the first time in 2019, under the supervision of the Office of National Security, the ROK government announced the National Cybersecurity Strategy, the top guideline of the national cybersecurity policy. To materialize the strategy, related agencies such as the MND, the MSIT, and the Ministry of Interior and Safety (MOIS) participated in formulating the National Cybersecurity Basic Plan and Action Plan. The MND set up the vision and goals of defense cybersecurity in connection with the strategy and devised the National Defense Cybersecurity Policy in October 2019, which presented mid- to long-term development goals and plans. The policy specifies the defense policy directions of the National Defense Policy and the Basic Plan for

Defense Reform 2.0 in terms of cybersecurity and incorporates policy tasks such as developing a cybersecurity mission execution system, fostering specialized and elite cyberwarfare professionals, advancing cyber-attack response capabilities, and strengthening international cybersecurity cooperation.

In order to strengthen cyber-operation posture and effectively respond to cybersecurity threats, the MND, in 2019, established a cyber-operation execution system centered on the JCS and an organic cyber-operation control and reporting system among the JCS, the Cyber Operations Command and each service. In February of the same year, "the ROK Cyber Command" was reorganized to the "Cyber-Operations Command" and was designated as a joint force to ensure the command conditions of the Chairman of the JCS. Meanwhile, the MND reorganized the "Cyber-Protection Center" of each service into "Cyber-Operations Center" and reinforced its manpower thereby transforming the center into an organizational structure suitable for conducting cyber-operations.

Developing Cybersecurity Organizations and Training and Cultivating Cyber-Specialists

Cyber-operation is a field where operational capability is more dependent on the expertise of the specialists than in other battlefields. To enhance the expertise of

cyber-specialists, the MND is developing a comprehensive specialist management system where "acquisition-training-appointment-promotion" is linked.

Having established a cyber-specialty for officers and noncommissioned officers (NCOs) in 2019 and cyber-positions for the civilian military employees in 2020, the MND has built a foundation for the stable acquisition and management of cyber-specialists. By identifying the knowledge, skills, and literacy necessary for cyber-task performance of the ROK Armed Forces, the MND will incorporate the necessary competencies for each position into the "Defense Cyber-Task System" and, based on this, plans to improve the qualification standards, career paths, and education and training systems of national defense cyber-specialists.

Meanwhile, the education and training system to cultivate cyber-specialists was also reorganized in line with the creation of cyber-specialties and positions. In 2020, the MND reorganized the education system to gradually improve the operational capabilities of cyber-specialists according to the type of cyber-operations and the level of mission competency, and established an Officer Advanced Course in addition to the Officer Basic Course—the mandatory remedial training course for officers working in the cyber-field that has been in operation since 2016. The MND will continue to develop substantial education and training programs in order

to demonstrate the ROK Armed Forces' capabilities in various cyber-operation situations.

Expanding Cyber-Forces and Advancing Response Capabilities

The ROK Armed Forces is expanding various cyber-forces to ensure the safety of cyberspace from cyber-attacks that are on the rise and getting more sophisticated every day. A cyber-operation system that integrates and visualizes various kinds of information necessary for cyber operations was established, enabling prompt decision making and command and control by commanders, and cyber-forces are being built focusing on detection and analysis systems that identify abnormal behaviors on the network such as malicious codes. In line with the rapidly changing cyber-environment, the MND plans to enhance its capability to effectively respond to unstructured cyber-attacks with the help of the latest technologies including AI and to continuously reinforce the functions and performance of the cyber-operation system.

The ROK Armed Forces is advancing their response capabilities to enable rapid and systematic measures in a cyber-crisis situation by periodically conducting cyber-simulation training and expanding mutual cooperation with civilian and government agencies.

Strengthening International Cooperation in Cybersecurity

As hostile acts inside cyberspace, where the whole world is connected, are transnational threats that are difficult for a single country to solve, trust and cooperation among countries are essential for effective response. For this reason, the ROK Armed Forces is strengthening their international cooperation in the cybersecurity domain through various bilateral and multilateral consultation channels.

The most active country in cybersecurity is the US. Based on the traditional ROK-US alliance, the ROK MND and the US DoD have been operating the Cyber Cooperation Working Group since 2014 and through the group, the two countries have shared cyber-threat information and discussed on cooperation and exchange plans in the fields of technology, human resources, and organizations. The ROK and the US aim to maintain close partnerships by specifying and substantializing cooperation matters.

As a multilateral cooperation channel, both countries have been operating the Cyber Working Group since 2014 in the Seoul Defense Dialogue, an annual multilateral security consultative body at the vice-ministerial-level hosted by the

MND. Around 20 to 30 countries participate in the Cyber Working Group every year to share the status of cyber-threats and also to maintain active exchanges, such as introducing cybersecurity policies and systems of each country. The MND will continue to develop the Cyber Working Group into a major multilateral consultative body in the field of defense cyber-cooperation, strengthening the cyber-capabilities of the participating countries and building trust among them. Moreover, since 2018, the MND has participated in the Experts' Working Group on Cyber Security in the ADMM-Plus, which consists of 10 ASEAN countries plus 8 countries including the ROK and the US and has been conducting tabletop exercises (TTX) to share national cybersecurity policies and strengthen crisis management skills in the event of cyber-threats. From 2020 to 2023, the ROK will undertake the task of co-chairing the Expert Working Group on Cyber Security with Malaysia to identify cooperation tasks of developing cybersecurity-related policy capacity and technological capability of member states and to generate outcomes that will strengthen international partnerships with the ASEAN and the ASEAN Plus countries.

2. Establishing a Posture to Prevent and Counter Domestic and Overseas Terrorism

Threats of Domestic and Overseas Terrorism

Recently, the total number of terrorism incidents has decreased due to the US military's Operation Inherent Resolve and the impact of COVID-19.

However, the threats of terrorism around the world—including the unrest in the Middle East due to the US–Iran conflict and retaliatory acts of terror by ISIS and Al-Qaeda related to the conflict between France and Islam—are expected to continue. Until now, there has been no direct attacks by international terrorist organizations in Korea, yet crimes similar to acts of terror have occurred, such as constructing improvised explosive devices and terror threats using drones are also increasing.

Developing Policies, Institutions, and Systems Against Terrorism

To effectively counter the growing threat of terrorism, the ROK Armed Forces is striving to enhance their counterterrorism

system and operational capabilities of counterterrorism operations units. Through the revision of the "MND Directive on Counterterrorism Activities" in 2019 and 2020, the ROK Armed Forces has developed a counterterrorism safety activities system for handling major national and military events. More dedicated organizations such

as the Military Counterterrorism Information Council and the Military Terrorism Investigation Headquarters were designated, thereby supplementing the ROK Armed Forces' missions and roles. In addition, the "military working-level crisis response manual for terrorism" and the "integrated operations manual" have been refined to determine at an early stage suspicions or possibilities of terrorism, and a system has been established that enables the military, police, and fire department to jointly respond in an integrated manner when conducting initial on-site actions.

Reinforcement of Professional Competencies in Military Counterterrorism Operations

The ROK Armed Forces has reinforced the formation of military counterterrorism operations units such as the 707th Special Mission Group and established the "standards for deploying counterterrorism equipment and materials" which can be commonly applied for each type of counterterrorism operation. Based on this, the "comprehensive development plan for counterterrorism equipment and materials" was devised and is being systematically implemented to provide the units with professional competencies.

Considering the fact that most of the state-designated counterterrorism operations units are concentrated in the capital area and the western region, more "counterterrorism special mission units" and "anti-CBRN terrorism special mission units" were additional designated by region thereby establishing a rapid counterterrorism operations system that can carry out counterterrorism operations within the golden hour.

Promoting Comprehensive Countermeasures Against Drone Terrorism

As seen in the drone attacks on Saudi Arabian oil facilities and unidentified drones flying over Hanbit and Kori nuclear power plants, drone terrorism on key national infrastructure has become a realistic threat not only on foreign soil but also on the Korean Peninsula. Accordingly, the ROK government is pursuing a government-wide "comprehensive countermeasures plan against drone terrorism" led by the National Counter Terrorism Center (NCTC). In preparation for the threat of drone terrorism, the MND provided military aircraft radars to six nuclear power plants and oil reserve bases, and is conducting R&D activities through the Agency for Defense Development to secure anti-drone capabilities such as anti-aircraft laser weapons. In addition, measures to counter drone attacks were improved by supplementing the military working-level crisis response manual for terrorism and the integrated

defense guidelines related to the protection of important national facilities, and these measures are currently being applied and implemented in the field.

Support for Major National Events

In preparation for major international events hosted by the government, the ROK Armed Forces made improvements in their counterterrorism activities and safety measures by deploying more than 20,300 service members and 1,307 types of equipment. This resulted in a series of successful events in 2019, including the World Aquatics Championships in Gwangju, the ASEAN-ROK Commemorative Summit in Busan, the Seoul Defense Dialogue (SDD), the Seoul International Aerospace & Defense Exhibition (ADEX), the International Maritime Defense Industry Exhibition (MADEX), as well as the Defense & Security Expo Korea (DX-Korea) in 2020.



Counterterrorism training during the Gwangju World Aquatics Championships (June 2019)



Comprehensive national counterterrorism training (November 2020)

Establishing a Counterterrorism Cooperation System at Home and Abroad

The ROK Armed Forces is maintaining a solid pangovernment response system against domestic terrorism threats. By participating in a comprehensive national antiterrorism training conducted by the NCTC in November 2020, the ROK Armed Forces established a system for sharing information and disseminating the situation among related agencies, and at the same time, enhanced the capability of government–military–police integrated response to complex terrorism threats. In order to effectively respond to international terrorism threats, the ROK is striving to strengthen its counterterrorism capabilities by establishing an information sharing and cooperation system through international counterterrorism cooperation, and to achieve this, the MND participates in ADMM-Plus Experts' Working Group on Counter Terrorism and combined terrorism response trainings.

The ROK Armed Forces will strive to enhance their civilian–government–

military–police integrated operational system and capabilities against terrorism threats at home and abroad and will continue to collaborate and cooperate on counterterrorism with friendly nations and members of the international community.

3. Establishing a Proactive and Preemptive Support System to Overcome National Disasters

Strengthening Disaster Prevention Activities in the Military

In a situation where the public’s interest and demand for military safety is increasing, the MND is enhancing its disaster prevention activities in military facilities to protect the lives and safety of service members and sending them back to their families in good health. In particular, the MND is operating a site-centered preemptive disaster prevention system considering that many units are deployed in mountainous areas and old facilities are scattered nationwide.

In a situation where the public’s interest and demand for military safety is increasing, the MND is enhancing its disaster prevention activities in military facilities to protect the lives and safety of service members and sending them back to their families in good health.



Safe Korea Exercise (September 2019)



Ulchi Taegeuk exercise in response to high-speed train derailment accidents (May 2019)

The MND has been reinforcing daily safety inspections and periodic safety tests on aging military facilities and vulnerable areas exposed to risks of accidents. In order to preemptively remove the risk factors through a nationwide safety diagnosis, the MND carried out a comprehensive national safety diagnosis in 2020 which led to safety inspections of 55,994 sites. And by inviting civilian experts in each field during the entire process of the national security diagnosis, its credibility was further enhanced.

In addition, the ROK Armed Forces has been bolstering their disaster response capabilities through education and training as well as the establishment of a civilian-government-military coordination system that enables systematic disaster

management throughout all phases including disaster prevention, preparation, and recovery. With the "working-level crisis response manual for different types of disasters" updated, the MND continues to use the manual in actual safety exercises and refines it by actively participating in the Safe Korea Exercise conducted annually under the supervision of the MOIS. During the Ulchi Taegeuk exercise in June 2019, the civilian–government–military integrated response system was solidified after conducting training in response to high-speed train derailment accidents with the Ministry of Land, Infrastructure, and Transport (MOLIT).

To provide prompt support not only in disasters within the military but also in situations requiring military assistance, the MND operates a disaster control center in Army, Navy, and Air Force units at every echelon—approximately 400 centers in total—and maintains emergency response systems and organic cooperation with relevant agencies, including municipal governments and local fire stations. Furthermore, the MND organizes annual military-wide conferences for disaster-related officers and conducts specialized trainings which help improve the disaster response capabilities of disaster-related officers in units of every echelon.

Support for National Disasters

With the increase in the level of damages caused by recent disasters such as earthquakes, forest fires, droughts, and torrential rains, protecting the lives and property of the people and supporting the public in overcoming disasters have become one of the major missions of the ROK Armed Forces. For the past five years, the ROK Armed Forces has been fulfilling missions at the forefront of disaster sites to protect the lives and property of the people. Around 980,000 troops and 77,000 pieces of equipment for disaster relief and damage restoration activities were deployed during this period. Details on the support status are as shown in [Chart 3-9].

Due to an increase in forest fires in early April 2019, the ROK Armed Forces deployed five military helicopters to combat forest fires in the Gangwon-do area. 8,180 troops and 546 pieces of equipment, including 35 firefighting helicopters, were deployed when a large forest fire occurred in Goseong, Gangwon-do, thereby minimizing damages to the military. Moreover, support was immediately provided for civilian damage recovery, assisting the local residents to safely return to their homes without delay. In the case of the Hungarian cruise ship sinking in May 2019, seven members of a ROK naval rescue team, consisting of rescuers with experience in the Sewol Ferry rescue, were dispatched to the on-site rescue operation and devotedly carried out operations to rescue Korean civilians even under adverse field conditions in Hungary.



The ROK Armed Forces protecting the daily lives of people

[Chart 3-9] The Military's Aid to Civilians in the Past Five Years

As of November 30, 2020

Year	Activities	No. of Support Personnel	No. of Equipment Pieces
	Total	978,348	76,963
2016	Forest fire and fire	5,180	180
	Foot-and-mouth disease, avian influenza (AI) and pine wilt disease control	5,658	577
	Drought, heavy rainfall, Typhoon Chaba, and earthquake damage support	55,227	594
	Heavy snowfall damage restoration, building collapse aid, and marine pollution damages restoration	5,573	47
	Missing civilians' search and rescue	2,111	95
	Railroad and cargo labor union strike control	35,410	400
	Forest fire and fire	23,707	169
2017	Drought, heavy rainfall, and typhoon damage support	39,003	1,736
	Missing civilians' search and rescue	2,473	152
	Foot-and-mouth disease and AI control	33,042	3,279
	Heavy snowfall and earthquake damage support	17,474	659
	Forest fire support	8,970	186
2018	Drought, heavy rainfall, and typhoon damage support	16,125	8,168
	Missing civilians' search and rescue	1,165	219
	Foot-and-mouth disease and AI control	10,452	1,246
	Heavy snowfall and earthquake damage support	7,848	13
2019	Forest fire and fire	22,442	526
	Heatwave, drought, typhoon, heavy rainfall, and heavy snowfall	64,745	2,319
	Missing civilians' search and rescue	4,208	748 (15 military dogs)
	Blocking the spread of AI and ASF	108,985	7,490
	Railroad and cargo labor union strike control	3,900	-
	Marine pollution, Incheon red water, etc.	908	401
	Forest fire and fire	1,984	89
2020	Heatwave, drought, typhoon, heavy rainfall, and heavy snowfall	128,699	17,063
	Missing civilians' search and rescue	5,604	778
	Blocking the spread of AI and ASF	60,161	6,108
	Public support for COVID-19	307,294	24,469

On November 9 of the same year, a helicopter crashed after being dispatched from the Forest Service to evacuate injured seamen from a fishing boat working in the Dokdo area. In response, the ROK Armed Forces provided advanced equipment such as military ships capable of underwater navigation including the ROKS Cheonghaejin and aircraft lighting for SAR at night. As a result, three among the missing persons were rescued and the fuselage and the flight recorder of the crashed helicopter were recovered. Even in succeeding disasters such as the sinking of a civilian fishing boat due to a fire near Jeju Island, the ROK Armed Forces conducted maritime accident rescue activities utilizing advanced military assets for rescuing missing persons and searching and recovering fishing boat, which contributed to



Troops deployed to a forest fire in Goseong, Gangwon (April 2019)



Cheonghaejin Ferry lifting the fuselage of a firefighting helicopter that crashed near the Dokdo Island (November 2019)

solidifying the people’s trust in the military.

During the spread of ASF in China, Mongolia, Vietnam, and etc in August 2018, the ROK government strengthened its response to block the inflow, but on September 16, 2019, the first case of ASF was confirmed in the ROK at a pig farm in Paju, Gyeonggi-do. Accordingly, the ROK Armed Forces, in cooperation with related agencies and local governments, have greatly contributed to the prevention and blocking of the spread of ASF in the border areas²⁸⁾ by supporting the capture of wild boars and search of carcasses, disinfection efforts at farm posts and mobile control posts, and aerial disinfection activities.

The longest rainy season (54 days), which occurred from June to August in 2020, and typhoons²⁹⁾ that passed by the Korean Peninsula three times in a row after the rainy season caused massive damage³⁰⁾ to the people and properties across the country. With 31 cities (si), counties (gun), and districts (gu) declared as special disaster zones, the MND dispatched military cooperative officers to 66 provincial offices, cities, and counties to check the need for recovery support for preemptive recovery. For five cities and counties (Jecheon and Chungju of Chungcheongbuk-do, Icheon of Gyeonggi-do, Namwon and Gurye of Jeollanam-do) where the demand exceeded the support capacities of regional defense divisions, the MND deployed available units including seven Special Warfare Command units and the 1st Marine Division for early damage recovery. In particular, military bridge equipment (Medium Girder Bridge) was installed for the residents to use in place of the damaged bridge in Inje-gun, Gangwon-do and around



Cheonma unit under the ROK Army Special Warfare Command

28)

As of November 30, 2020, the ROK Armed Forces deployed 166,236 troops and 12,734 pieces of equipment to block and prevent the spread of ASF.

29)

No. 8 Typhoon Bavi (August 26), No. 9 Typhoon Maysak (September 3), No. 10 Typhoon Haishen (September 7)

30)

Casualties: 53 (50 deaths, 3 missing), Property damage: KRW 1.26 trillion

128,000 man-days and 17,000 pieces of equipment were deployed to support a series of operations such as the search for missing people of the ship that was capsized near the Uiam Dam and the search for lost mines in flooded areas. These activities contributed to overcoming national disasters and stabilizing the people's lives.

COVID-19 Response and the National Defense Rapid Support Group

The outbreak of COVID-19, a new infectious disease that broke out in 2019, has resulted in cumulative total

of 34,201 confirmed cases and 526 deaths (as of November 30) after the first infection case was confirmed in the ROK on January 20, 2020. Five cities and counties in Daegu-Gyeongbuk region were declared as special disaster zones for the first time in the country. COVID-19 posed a serious threat to national health and economic activities.

The MND worked closely with the Central Disaster Management Headquarters to convert military hospitals in Daejeon, Daegu, and Goyang into infectious disease hospitals and accommodate confirmed civilian patients. In addition, the MND dispatched medical and operating personnel to more than 100 residential treatment centers and temporary housing facilities for overseas Koreans and medical and special quarantine personnel to airport and port quarantine stations. Around 306,000 man-days and 24,000 equipment including decontamination cars were deployed to acquire and distribute masks and quarantine supplies that were urgently required for public safety and carry out road and facility quarantine and disinfection activities.

In March 2020, the MND launched the National Defense Rapid Support Group led by the Director General of Logistics Management Bureau to effectively respond to support requirements unlike ordinary natural disaster support requirements which include quarantine and transportation requirements exceeding the scope of cooperation between the responsible units in the region and local governments on COVID-19 response and requests for support from central government agencies such as the Ministry of Economy and Finance and the Ministry of Food and Drug Safety. The Defense Rapid Support Group provided various types of support such as distribution of masks, emergency transport of quarantine supplies, nationwide quarantine and disinfection, and welfare support for vulnerable groups. Moreover, the group provided prompt support through dedicated teams for each region including Seoul, Gyeonggi-do, Daegu and Gyeongsangbuk-do, and Chungcheong-do area by operating rapid support cooperation officers in cities and provinces which enabled the group to preemptively confirm the support requirements of the local governments before they made requests for support. Through these efforts, the group greatly contributes to the national-level response effort to overcome COVID-19.

The ROK Armed Forces' public support activities are greatly contributing to the effort of assisting those people in difficult situations to be able to go back to work as early as possible. The MND will continue to protect the lives and properties of the people by promptly and actively deploying troops and equipment in the event of national disasters in the future.

Establishing a Military-Wide Integrated Disaster Management System

With disasters occurring frequently due to the ongoing climate change, there is a growing demand to establish a comprehensive management system for all four stages of disaster management (prevention-preparation-response-recovery), including a disaster prediction system, which will strengthen the ROK Armed Forces' disaster response capabilities. Accordingly, in order to integrate the disaster management information system operated by each service, the MND laid out an overall roadmap of a system that will be operated in an integrate manner by carrying out an Information Strategy Planning (ISP) project in 2019 to build a military-wide integrated disaster management information system.

Based on this, response measures will be promptly disseminated through real time information sharing between the MND and each service branch, and the MND plans to establish an efficient civilian-government-military support system by sharing the military's emergency rescue support capabilities for national disasters in connection with the systems of related organizations such as the MOIS National Disaster Management System (NDMS).

Strengthening the Capacity of Emergency Rescue Support Agencies

In May 2019, the MND signed a memorandum of understanding (MOU) with the National Fire Agency to establish an effective disaster response cooperation system and to protect the lives and property of the people. To take prompt safety and recovery measures, the two agencies continue to develop their disaster preparedness capabilities to cooperate with each other on matters related to sharing of information, mutual support in the form of human resources,



MOU on the establishment of disaster response cooperation system between the MND and the National Fire Agency (May 2019)

supplies, and equipment, strengthening of emergency patient transport systems, and joint responses to disasters with multiple casualties.

4. Establishing an International Cooperation System for Overseas Disaster Reliefs

Overseas Disaster Relief Support

Large scale disasters in several countries recently have proven to be difficult for the affected countries to carry out recovery activities on their own

thus it has become necessary for the international community to take joint action in the perspective of humanitarian assistance. In response to such needs, the MND is promoting international disaster response cooperation activities by providing support in the form of deploying the "Korea Disaster Relief Team" and transporting relief supplies and equipment in case of a massive overseas disaster.

Overseas disaster relief activities carried out by the MND over the past 10 years are summarized in [Chart 3-10].

[Chart 3-10] Overseas Disaster Relief Support in the Past 10 Years

Date	Region (Type of Disaster)	Activities
March 2011	East Japan (earthquake and tsunami)	· 10 transport aircraft (C-130) (4 times), 58.8 t of relief supplies; transported 102 rescue personnel
October 2011	Turkey (earthquake)	· 100 military tents
November 2013	Philippines (typhoon)	· 9 transport aircraft (C-130) (4 times), 329 t of relief supplies; transported 2,022 personnel including a rescue team
April 2016	Kumamoto Prefecture, Japan (earthquake)	· 2 transport aircraft (C-130), relief supplies worth USD 110,000 (tents, blankets, instant rice, and drinking water)
July 2018	Laos (dam collapse)	· 5 transport aircraft (C-130) (3 times), 23 t of relief supplies; transported 20 medical personnel
October 2018	Indonesia (earthquake)	· 3 transport aircraft (C-130) (between October 8 and November 30), 170 tents, 456 t of international relief supplies
July 2020	East Timor / Philippines (COVID-19)	· 1 transport aircraft (C-130), 200,000 and 400,000 quarantine masks (6) for each country

Establishing an Overseas Disaster and International Cooperation System

In 2019, the MND participated in six international conferences and drills—including the ADMM-Plus

Experts' Working Group on Humanitarian Assistance and Disaster Relief (ADMM-Plus EWG on HADR) and its combined exercise, and the Regional Consultative



Combined exercise of ADMM-Plus EWG on HADR (July 2019)



5th Session of RCG on Humanitarian Civil-Military Coordination for Asia and the Pacific (December 2019)

Group (RCG) on Humanitarian Civil-Military Coordination for Asia and the Pacific—to provide prompt, efficient humanitarian assistance and to solidify the international cooperation system for disaster relief in the event of various types of disasters. Following the earthquake and tsunami in Sumatra, Indonesia, the combined exercise of the ADMM-Plus EWG on HA/DR³¹⁾ was held in Malaysia in July to discuss the following procedures in the event of a disaster: dispatching disaster relief troops, obtaining related information before and after the dispatch, and conducting cooperation measures. The participating countries also carried out discussion on ways to cooperate with international organizations.

Furthermore, the MND participated in the 5th Session of the RCG on Humanitarian Civil-Military Coordination for Asia and the Pacific³²⁾ for the first time to solidify the overseas disaster relief system through in-depth discussions on various topics such as information sharing between humanitarian assistance and disaster relief operations and development plans for civilian–military cooperation systems related to logistics support.

5. Development of Defense Space Power

Strengthening the Foundation for the Development of Defense Space Power

While complying with international norms on the peaceful use of space³³⁾, the MND is making various efforts such as supplementing laws and systems and reinforcing organizations and human resources to develop the defense space power of the ROK Armed Forces.

In 2018, the MND participated in the revision of the "Basic Plan for the Promotion of Space Development", which establishes the mid- to long-term goals of

31) ADMM-Plus Experts' Working Group on Humanitarian Assistance and Disaster Relief

32) A meeting held for the purpose of discussing current issues throughout disaster response, including humanitarian civil-military cooperation in the Asia-Pacific region and use of foreign military assets. The 5th session took place in Chiang Mai, Thailand.

33) In 1967, the UN led the signing of the "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty)". The Outer Space Treaty prohibits the arrangement of surrounding tracks around the Earth with any kind of WMD.

governance and the basic directions for national space development. The revised Basic Plan provides the basis for the development of military reconnaissance satellites and space threat surveillance systems. In the following year, the "Basic Plan for the Development of Defense Space power" was revised, reflecting the changes

in the space security environment. In accordance with the mid- to long-term development goals for defense space power, the revised plan presents four key areas—establishment of a policy framework, development of an operating system, buildup of space capabilities, and expansion of internal and external cooperation—and detailed implementation tasks for each field.

To establish a policy framework for the development of defense space power, the MND has legislated and revised the relevant laws and is carrying out R&D activities for space technology. While bolstering the organizations in charge of space-related affairs at the JCS and each service branch, the MND is fostering space specialists by offering educational opportunities at home and abroad. With an aim to secure space surveillance capabilities over the Korean Peninsula, the MND launched the ROK Air Force Satellite Surveillance Control Unit—the ROK's first space unit—in 2019. The unit was renamed as the "ROK Air Force Space Operations Unit" the following year. Also in 2020, the ROK's indigenous military communications satellite was launched, making the ROK the 10th country in the world to acquire a military satellite. The MND plans to continue to acquire various space assets such as surveillance and reconnaissance satellites and early warning satellites in order to fully strengthen its space capabilities. Efforts will be made to strengthen civilian-military space technology cooperation for the development of defense space power and to further expand cooperation with friendly nations including the United States and France in the space domain.

Moreover, the MND will endeavor to enhance its defense space power while maintaining a close cooperation system with related ministries and agencies considering the changes in the space security environment.



Establishment ceremony of the ROK Air Force Satellite Surveillance Control Unit (September 2019)



Launch of ANASIS-II

Development of Defense Space Power **Based on the ROK-US Alliance**

Based on the ROK-US alliance, the ROK and the US are exploring various areas of cooperation in the

domain of space as well. In particular, the two nations hold the "Space Cooperation Working Group" every year, and share information on space situational awareness (SSA)³⁴⁾ to jointly respond to space threats.

In 2012, the two countries signed the "Terms of Reference for the ROK–US Space Cooperation Working Group (SCWG)" at the 44th ROK–US SCM. The Space Cooperation Working Group held 15 meetings since the signing and achieved various cooperation outcomes including the sharing of pending defense space policy issues, training, fostering, and exchanges of space workforce, cooperation in SSA, and participation in exercises related to international space situational measures. In 2019 in particular, the ROK and the US discussed ways to expand SSA information sharing and activate space workforce exchanges for joint responses against space threats. And in 2020, the two nations confirmed the joint objective of shaping the conditions for an even closer collaboration on developing the alliance's space policy.

In September 2014, to jointly respond to space threats, the two countries signed the "MOU on SSA Service and Information Sharing", and based on the agreement, the ROK Armed Forces is receiving SSA information from the US Space Command. Since the installation of the Air Force Space Intelligence Center (later named as Korea Space Operations Center) in July 2015, the ROK has been carrying out several tasks such as analyzing space threats based on the SSA information provided by the United States and conducting exercises related to space situational measures in preparation for events such as satellite collisions. The Korea Space Operations Center(KSpOC), in particular, maintained close communication with the US by sharing satellite orbit information with the US Combined Space Operations Center during the launch of Cheollian 2B (February 2020). The center also participated in settling the satellite in the target orbit through cooperation with related agencies.

At the 52nd ROK–US SCM held in October 2020, the two countries agreed to further explore measures for cooperation to strengthen space capabilities as an alliance. At the same time, they have agreed to further expand bilateral and multilateral joint exercises to improve the alliance's space operational capabilities and continue to seek opportunities to foster space specialists.



Exercise related to international space situational measures (September 2019)

34) A concept of providing information (prediction and warning) to users by collecting and analyzing data from both ground and space systems to prepare for space hazards such as falling and collision of space objects.

Establishing an Integrated Civilian–Government–Military–Police Defense Posture

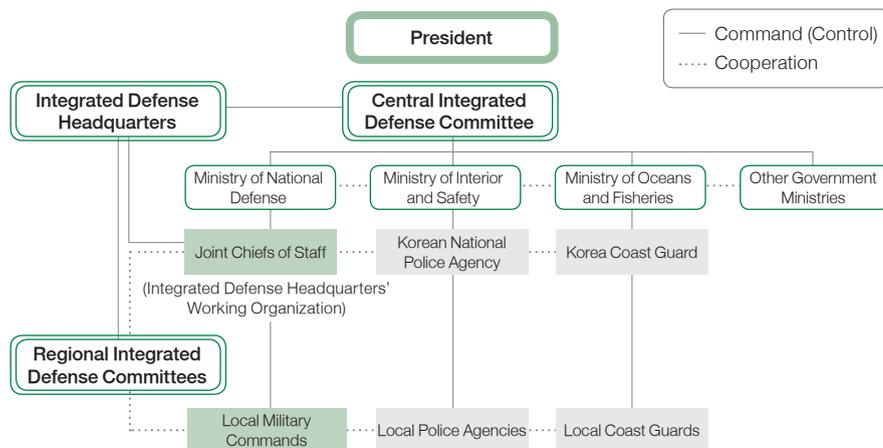
To effectively respond to a variety of security threats that continue to grow, the ROK Armed Forces continues to enhance the integrated civilian–government–military–police defense posture by organically integrating all national defense elements and building a cooperative system with relevant agencies and municipal governments.

1. Operation of Integrated Defense Organizations

Integrated Defense Organization

To foster defense elements and firmly establish an integrated defense posture, the ROK government operates integrated defense organizations such as the Central Integrated Defense Committee, the Integrated Defense Headquarters, the Regional Integrated Defense Committees, and the Integrated Defense Support Headquarters. Each command is committed to hold stable and seamless defense operations, and the cooperation structure for each organization is as shown in [Chart 3-11].

[Chart 3-11] Integrated Defense Command and Cooperation System



The Central Integrated Defense Committee is the highest decision-making body in matters related to integrated defense, reporting to the Prime Minister. The committee deliberates and decides upon the following: national-level integrated defense policies, integrated defense operations and training guidelines, declaration or lifting of an integrated defense situation, coordination of tasks related to integrated defense between government ministries and related organizations, and cost of mobilizing national defense elements according to integrated defense operations.³⁵⁾

Integrated Defense Headquarters

The Integrated Defense Headquarters is responsible for integrated defense operations. With the chairman of the JCS serving as its director, the organization establishes and coordinates integrated defense policies, evaluates and supervises the integrated defense posture, conducts a comprehensive analysis of the status of integrated defense operations, and devises response measures. It also develops the Integrated Defense Operations and Training Guidelines and related plans, and conducts various tasks associated with their implementation including adjustment and control, cooperation with relevant organizations in the integrated defense system, and consultations and adjustments on matters related to project execution. It also supervises a working committee on integrated defense³⁶⁾ for coordination within the government and for an uninterrupted execution of integrated defense works.

Regional Integrated Defense Committees

The Regional Integrated Defense Committees are set up in 17 metropolitan and special self-governing cities and provinces including the Seoul Metropolitan City and 228 cities, counties, and districts. They are chaired by metropolitan city mayors, provincial governors, city mayors, county governors, and district office heads. Each Regional Integrated Defense Committee deliberates and decides upon matters including declaring or lifting an integrated defense situation at a local level³⁷⁾, establishing support measures for integrated defense operations, designating vulnerable areas or repealing the designation thereof, and effectively fostering and operating national defense elements and support measures.

Integrated Defense Support Headquarters

The Integrated Defense Support Headquarters, established at the level of a Metropolitan City, province, city, county, district, town (eup), township (myeon), and neighborhood (dong), develops and implements plans for supporting integrated defense operations and training. They also set up and operate an

35)

According to Article 4 of the United Defense Act, the Prime Minister serves as the chairperson of the Central Integrated Defense Committee, and its committee members are the ministers of government departments including the Minister of Economy and Finance, the Minister of the Office for Government Policy Coordination, the Minister of Patriots and Veterans Affairs, the Minister of Government Legislation, the Minister of Food and Drug Safety, the director of the National Intelligence Service, the director of the Integrated Defense Headquarters (Chairman of the JCS), and other persons prescribed by the Presidential Decree.

36)

In accordance with the Presidential Decree No. 398 and Article 8 of the United Defense Guidelines, the committee is composed of the working-level directors of government departments including the MND and the JCS, and all military headquarters and Operations Commands.

37)

In accordance with Article 5 of the United Defense Act, among the Regional Integrated Defense Committees, only the committees of metropolitan and special self-governing cities and provinces including the Seoul Metropolitan City can declare and lift an integrated defense situation.

integrated defense all-source situation room while fostering and supporting national defense elements and establish resident report systems in vulnerable areas in integrated defense. They provide support for mobilization tasks related to integrated defense operations and for the establishment of a regional joint press center, and implementation of matters reviewed and resolved by the Regional Integrated Defense Committees.

2. Improvement and Development of an Integrated Defense Execution System Centering on the Heads of Local Governments

As the scope of security has gradually expanded to nonmilitary threats such as natural and social disasters, infectious diseases, and safety accidents that were not previously recognized as threats, the ROK government is striving to improve and develop the integrated defense execution system to respond to various elements posing threats to the safety of the people.

Strengthening the Integrated Defense Capabilities

The 52nd (2019) and 53rd (2020) Central Integrated Defense Committee evaluated military readiness posture and integrated defense posture against military threats as well as nonmilitary threats such as new terrorism using drones, disasters and infectious diseases, and safety accidents, and devised government-wide preparedness measures through in-depth discussions between government ministries and local governments. As a result, in 2019, a total of 14 follow-up tasks in four areas were derived and promoted, including the reinforcement of integrated defense capabilities centered on the heads of local governments. In particular, Presidential Directive No. 398 on Integrated Defense Guidelines was revised³⁸⁾ for the first time in 9 years since its enforcement in 2010. In 2020, the committee drew up 10 key tasks in four areas, including the performance enhancement of integrated defense training to establish an overall response posture at the pan-government level in response to various security threats and the establishment of a response posture in preparation for new types of terrorism using drones. The integrated defense working-level committee quarterly analyzes the implementation outcomes of each government ministries, related agencies, and local governments and carries out close communication and collaboration with the related departments and organizations to improve the performance of integrated defense.

38)

As of March 1, 2019, the Presidential Directive No. 28 was revised to Presidential Directive No. 398 after supplementing 23 areas, including the amendment of the United Defense Act and its Enforcement Decree after 2010 and the setup of control zones when the alert posture is issued.

Enhancing the Performance of Integrated Defense Training

The Integrated Defense Headquarters ensures the safety of people from various threats such as nonmilitary threats that may occur during wartime and peacetime. 17 metropolitan cities and provinces across the country are divided into 11 zones to conduct a comprehensive rear-area training (Hwarang Training) where all national defense elements participate to diagnose, supplement, and develop the integrated defense operation system for each region. In particular, the Integrated Defense Headquarters expanded and reorganized an integrated government evaluation team³⁹⁾ that has been in effect since 2018, and subject matter experts in related fields conducted exclusive evaluations of related organizations focusing on site-oriented actions to strengthen the integrated defense capability centered on the heads of local governments. The level of integrated defense posture was also further improved at the regional level. For uninterrupted integrated defense operations during contingencies, the Headquarters derived legal and institutional supplementation elements and promoted the amendment of the United Defense Act (1 case) and its Enforcement Decree (3 cases), the United Defense Guidelines (Presidential Directive No. 398) (3 cases), and the detailed enforcement guidelines of integrated defense (9 cases). The amendment was performed according to the amendment procedure of laws and regulations.

3. Establishing an Integrated Defense Information Sharing System and Strengthening Cooperation

In 2011, the ROK government integrated the control functions of CCTVs installed for various purposes such as ensuring the safety of residents and preventing crimes, and has been promoting the establishment of an integrated CCTV control center to enable the joint response of the related organizations to various situations occurring in each region. As a result, in 2019, integrated control centers were built in all 228 local governments. Furthermore, the center is being developed into a social infrastructure system united with the intelligent information society (ICBAM)⁴⁰⁾.

As a result of the 52nd Central Integrated Defense Committee Meeting in 2019, the ROK government has implemented a development plan to conduct integrated operation of CCTV control centers and the Integrated Defense Support Headquarters. Integrated operations enable the heads of local governments to judge the situation and take countermeasures in a timely manner while monitoring the site in real time at the Integrated Defense Support Headquarters during integrated

39)

The team is composed of the Integrated Defense Headquarters, the MOIS, the National Intelligence Service, the Korean National Police Agency, the Korea Coast Guard, the National Fire Agency, and about 30 to 40 personnel working at the departments in charge of key national infrastructure. It evaluates the integrated defense posture of local governments in 17 metropolitan cities and provinces, regional police agencies, maritime police agencies, fire and disaster headquarters as well as key national infrastructure.

40)

An intelligent, hyper-connected society of all objects in both the real world and the actual field using advanced ICT: Internet of Things (IoT), Cloud, Big data, Artificial Intelligence (AI), Mobile, as well as 3D printing, biotechnology, and cyber-physical system.

defense operations and events of terrorism and disaster. The ROK government also built a system to enable the sharing of footages recorded at the integrated CCTV control centers with the Integrated Defense Support Headquarters. As of December 2020, the system is installed in 207 locations across 228 cities, counties, and districts, and installation for 48 other sites is underway.



Integrated CCTV Control Center

Furthermore, with the cooperation of local governments, the ROK government is establishing a video information sharing system between the integrated CCTV control centers and the command post of responsible local military units. The system will enable the sharing of real-time information with the responsible units in the event of a disaster, including counterterrorism and counter-infiltration operations on a regional basis, quick response at the early stage, and increase the efficiency of civilian-government-military-police-firefighting integrated operations. In 2020, the system was successfully installed in 101 areas across 228 cities, counties, and districts. The ROK government will continue to build the system in the following year, regarding it as a core task among the integrated defense tasks.

Education and Training Focused on Combat Missions and Strengthening the Spiritual and Mental Force

With a goal of "fostering strong combatants and combat troops that are capable of fighting and defeating the enemy", the ROK Armed Forces is carrying out various activities such as enhancing the school education systems, reinforcing realistic unit trainings and enhancing the spiritual and mental force of servicemembers. The ROK Armed Forces seeks to acquire competent personnel to foster competent cadres and offers a variety of educational programs to nurture creative military professionals.

1. Acquiring Competent Personnel and Fostering Military Professionals

Acquiring Competent Personnel

With the implementation of Defense Reform 2.0, the ROK Armed Forces is being reorganized into an elite force centered on officers and adopting advanced weapons systems, increasing the demand for competent cadres. Meanwhile, it is estimated that acquiring capable cadres will become increasingly challenging as the number of people wanting to serve as officers or NCOs decreases as the population eligible for military service continues to decrease and the youth employment rate increases.

To acquire talents, the ROK Armed Forces has reinforced the professionalism of servicemembers and are expanding the candidates for long-term service officers so that more personnel can stably serve in the military. The overall quota of cadres will be adjusted in a way that reduces the recruitment of new appointees by cutting down the number of staff sergeants as well as first and second lieutenants while increasing the number of cadres serving a long-term career as soldiers. By doing so, the ROK Armed Forces plans to gradually enhance their workforce management system into a "small-scale acquisition and long-term utilization" system. The system will lead to the acquisition of competent personnel and the long-term utilization of an experienced workforce, and will contribute to the enhancement of the ROK Armed Forces' combat power.

Additional efforts to acquire competent personnel include the short-term service

grant to better compensate officers and NCOs intending to serve a short term. The MND is also providing benefits such as grants for additional military service⁴¹⁾. The grant is given in the form of tuitions to university and vocational college students hoping to serve for a medium term so that they have the opportunity to receive higher education in connection with military service as a cadre. With these measures, the ROK Armed Forces will gain stable access to outstanding mid- and short-term service officers in preparation for a situation wherein it becomes difficult to acquire manpower.

Fostering Creative Military Specialists

The MND offers two programs—Specialized Degree Education and Overseas Military Education—to foster creative military specialists capable of actively responding to the changes in future battlefield environments, such as changes brought by the Fourth Industrial Revolution, and leading innovations in the defense field.

Specialized Degree Education is aimed at fostering military professors, researchers, and experts in special technology fields. Outstanding domestic and international educational institutions offer master’s and doctoral degree programs, and around 300 trainees are selected as candidates every year for programs mainly in advanced science and technology fields, including AI and robotics—the leading technologies of the Fourth Industrial Revolution and for smart defense.

Overseas Military Education is aimed at fostering regional experts and training students to acquire advanced military knowledge, operate weapons systems, and master combat techniques. Around 320 candidates are sent every year to study in various types of educational institutions including defense graduate schools, command and general staff colleges, and military occupation schools in some 40 countries. To foster expert personnel in preparation for the wartime OPCON transition and regional experts to support the military domain of the New Southern and New Northern policies, Overseas Military Education destinations are diversifying to include countries in Southeast Asia, Eurasia, Middle East, South America, and Africa.

41)

A grant given to university and technical college students under the condition that they serve an additional period, in addition to their mandatory service period, when appointed as officers or NCOs. The amount of the grant is similar to college and university tuitions.

2. Development of the School Education System

Objectives

The MND and each military services are enhancing the school education system with a focus on improving development training and education to foster elite servicemembers and refresher training to meet the demands in the battlefield. The lecture-based education method has been

transformed into a student-led participation-based education and problem-solving education. Meanwhile, the MND continues to review educational requirements to meet the changes in the defense environment such as the introduction of cutting-edge weapons systems and advancements in science and technology, and is reflecting these requirements into education curriculums. The MND has been improving the education systems of military academies to foster elite officers, operating the Reserve Noncommissioned Officers' Training Corps (RNTC) for the stable recruitment and fostering of excellent NCOs, enhancing the training system for newly enlisted soldiers to improve the skill level of servicemembers, and vitalizing online defense education programs. It is also enhancing the personnel training system and the joint and combined operations training system in connection with Defense Reform 2.0. The overview of the school education is shown in [Chart 3-12].

[Chart 3-12] An Overview of Courses Offered by the Educational Institutions of the Three Branches and Units Directly Controlled by the MND and Joint Units

Category	Total	Army	Navy	Air Force	Marine Corps	Units Directly Controlled by the MND and Joint Units
Development Training and Education	35	14	7	8	5	1
Refresher Training and Education	2,344	776	908	434	28	198

As of 2020 (unit: number of courses)

Improving Education Systems at Military Academies

To foster creative and proactive elite officers, the educational systems at military academies have been enhanced. To ensure cadets' autonomy, military academies have created an environment for self-directed learning and strengthened "participation-based education" that involves projects, as well as classes, that focus on discussions and presentations led by cadets. Moreover, to ensure realistic military training that reflects battlefield demands, military academies have established cadet training objectives linked to the officer basic course program and conducted training tailored to those objectives. The MND conducts two-to-three week field-oriented joint education for every freshmen, sophomore, and junior cadets to enhance their understanding on and recognition of the importance of joint operations. The first-year cadets learned about the Army by experiencing scientific combat training as well as through daytime and nighttime guard duties at GOP units. The second-year cadets boarded naval vessels—such as amphibious assault ships and destroyers—to form a sound perspective toward their

nation and broaden their understanding of the Navy. They visited the neighboring countries of the Korean Peninsula as well as the major domestic islands (Ulleungdo, Dokdo, and coastal waters of Jeodo, etc.) and conducted the "joint cruising training for cadets of the three military academies" to experience various kinds of maritime training and life aboard naval vessels. For third-year cadets, they have undergone courses to understand the Air Force through field trips to Air Force operations units and air navigation training. Since 2019, the joint cruising training for cadets of the three military academies was further expanded to include the Korea Armed Forces Nursing Academy (KAFNA). Education on jointness is also conducted at the Korea Army Academy at Yeongcheon (KAAY).

**Official Operation of the Reserve
Noncommissioned Officers' Training Corps**

Since 2015, the MND has piloted the RNTC program in six junior colleges to gain stable access to and foster outstanding NCO candidates, and in 2019, the plan to officially operate and expand the RNTC was finalized. As a result, the Navy and the Air Force have been officially operating the RNTC program since January 1, 2020 while the Army and the Marine Corps started the program on April 1, 2020. From 2017 to 2020, a total of 643 NCOs were appointed and are performing their duties. The 5th and the 6th RNTC are enrolled in the military academies at present.

**Improving the New
Enlistee Training System**

The MND has improved the training system for newly enlisted soldiers to prevent the decline of soldiers' proficiency, which may occur due to the shortening of the service period based on Defense Reform 2.0. Reflecting the opinions from the field units, the MND improved the curriculum to focus on core subjects such as personal firearm shooting, combat fitness test, and spiritual and mental force enhancement that meet the mission and roles of the unit. Specialized training of each service was also enhanced which include the Army's outdoor comprehensive training for 4 days and 3 nights including an all-night march, the Navy's maritime training, the Air Force's survival skills training, and the Marine Corps' abandon-ship drills and combat swimming.

**Vitalizing Online Defense
Education**

The ROK Armed Forces has been expanding their online education offerings so that field units can minimize off-duty hours due to attendance of on-site education courses. Online education also ensures the prompt provision of quality

education to a large number of trainees. Those who are eligible for education take online orientation programs before attending the on-site education course, while field units can take the various lectures provided by each educational institution without temporal and spatial constraints. As of 2020, a total of 52 Military-Massive Open Online Course (M-MOOC)⁴²⁾ programs are offered in 19 institutions, including the Joint Forces Military University (JFMU), KAFNA, Defense Agency for Spiritual and Mental Force Enhancement, and Army Infantry School. The MND plans to expand Internet-based online education to guarantee necessary military education to servicemembers without restraints.

Improving the Training System for Civilian Military Employees

The overall training system for the civilian military employees is also being improved as per the expansion of the number and roles of civilian military employees in accordance with Defense Reform 2.0. The MND plans to improve the training system for newly employed civilians, which has been implemented separately by each service, to a more systematic form of integrated training for the entire military starting in 2023. With regards to refresher training for grade 6 and below, the curriculum was reviewed and supplemented focusing on cultivating the competencies and knowledge required for each position. Furthermore, the MND aims to strengthen knowledge and leadership training by newly establishing a long-term training course for grade 4 and grade 5 managers. Improvements are expected in the personnel policy for the civilian military employees in order to conduct specialized degree education in the domains of defense administration, technology, and research in the medium and long terms.

Establishing Joint and Combined Operations Training System

In preparation for future warfare and wartime OPCON transition, the MND is establishing a training system for each rank of officers to foster military specialists with the capability to conduct joint and combined operations. The joint training of the military academies has been expanded in the officer training course, while basic literacy courses related to joint education were newly established in the ROTC and Officer Candidate School curriculum. For the refresher curriculum for company-grade officers, the MND has added courses for understanding the basic concepts of the organization and formation of other military forces and the execution of joint and combined operations. Moreover, in order to provide a number of personnel with specialized education in joint and combined operations—which was conducted only for a small

42) A military education system without maximum enrollment limits and that is open to all and offers web-based courses. Military - Massive Open Online Course)

number of selected people from major and lieutenant colonel officers—the MND is planning to offer distance education and short-term courses targeted for 2021. Joint and combined policy manager courses are also offered to colonels working in policy departments and joint units. Courses related to joint and combined operations were further expanded and reflected in the education courses for high-level policymakers for those who are to be promoted to brigadier generals.

The MND has reinforced the role of the JCS in joint and combined operations training. Furthermore, the MND maintains its efforts to improve the conditions and environment of military education, such as reinforcing the qualification requirements for joint staff universities to acquire excellent instructors.

3. Reinforcing Realistic Unit Training

Objectives The ROK Armed Forces reinforces realistic unit training by actively responding to changes in the educational and training environment including changes in the security environment, shortening of the service period, increased urbanization, and conflict with the public.

To foster the ability to conduct joint and combined operations, the MND has further expanded joint training activities at home and abroad and formed joint units incorporating the army, navy, and air force, providing more opportunities for personnel to receive training.

Moreover, to improve the unit combat performance capabilities and overcome training restrictions, the ROK Armed Forces is expanding its scientific training system by applying advanced technologies of the Fourth Industrial Revolution.

Key Training and Exercises of the Army, Navy, Air Force, and Marine Corps The Army is reinforcing its individual combatant and unit training, expanding the LVCG (Live, Virtual, Constructive, Gaming) training, and conducting various joint exercises for combat-oriented realistic training and exercises.

In order to strengthen individual combat capabilities, which are the basis of the Army's combat capabilities, the Army is fostering the ability to overcome the battlefield situation through physical training focused on combat missions. Every year, the best 300 warriors in individual and team units are selected and rewarded, creating an atmosphere where combat experts are given preferential treatment. To realize a "mission-based training and exercise", training is carried out according



ROK Army's KCTC training



Combat flight simulator (October 2020)



ROK-US Special Operation Training (April 2020)

to the Mission-Essential Task List (METL), which selects tasks that should be conducted by each unit.

To overcome various restrictions on education and training such as the shortened service period, extreme weather, and civil complaints, the Army is also committed to strengthening the LVCG using advanced science technology. Moreover, after developing and improving the existing battalion-level Korea Combat Training Center (KCTC) training system for 7 years, it has been operated as a brigade-level training system since 2018. The Army has also activated bilateral battle training of small units in the post or arbitrary areas through the expansion and deployment of the Multiple Integrated Laser Engagement System (MILES)⁴³⁾ to field units.

In addition, the Army is improving its ability to respond to various contingencies by using a simulator, which involves firing, controlling, and tactical simulation in a virtual battlefield environment. The Battle Command Training Program (BCTP), which uses computer simulation techniques, is also used to enhance the combat command capabilities and integrated combat force management capabilities of commanders and staff. In the future, the Army plans to build a synthetic training environment that integrates actual training (live), simulator training (virtual), BCTP using computer simulation techniques (constructive), and war-gaming (gaming) into a scientific training system.

In order to develop combined operations execution capabilities and enhance interoperability, the Army is conducting various combined exercises such as ROK-US special operations, irregular warfare, cooperative training, air assault training, and high-altitude low opening training. In particular, the Army is strengthening its combined small units scientific training at the US 8th Army's Vandal Training Center and its combined small unit training at the National Training Center in the United States. Joint exercises carried out by the Army for the past three years are summarized in [Chart 3-13].

43) Education and training equipment using advanced science technology such as laser launcher and detector

[Chart 3-13] The Army's Joint Exercises During the Past Three Years

(Unit: times)

Year	Total	Domestic			Overseas		
		Subtotal	ROK-US	Multilateral	Subtotal	ROK-US	Multilateral
2018	33	31	31	-	2	-	2
2019	91	89	89	-	2	1	1
2020	30	29	29	-	1	1	-

* In 2020, joint exercises were adjusted under the ROK-US agreement due to COVID-19

The Navy conducts realistic cooperative⁴⁴⁾ and joint exercises consistent with the battlefield environment in the East Sea, West Sea, and South Sea, and enhances its operational capabilities through ROK-US bilateral and multilateral combined exercises. The Navy conducts cruise training every year to cultivate mission execution capabilities of cadets and promote national interest.

The joint forces on the ground, air, and sea participate in cooperative and joint exercises consisting of various types of operations including anti-surface, anti-submarine, and anti-air operations. Major cooperative and joint exercises include maritime maneuvers, northwestern island defense, joint response exercise against local provocations near the NLL, joint amphibious training, and East Sea territory defense training. During these training activities, the Navy verifies the performance of precision-guided weapons and maximizes its operational capability through live-fire training.

To establish a combined defense posture and strengthen the ROK-US alliance, the Navy is strengthening multilateral combined exercises, including the ROK-US combined exercise, that promote humanitarian aid and military cooperation. ROK-US combined exercises are carried out in various forms to enhance the operational execution capabilities of the combined forces and increase interoperability between the two countries' forces. They include ROK-US passing exercises (PASSEX), combined theater anti-submarine warfare training, mine warfare training, rescue warfare training, and special warfare training. Examples of multilateral combined training and exercises include Cobra Gold, Western Pacific Mine Countermeasure Exercise (WPMCMEX), Rim of the Pacific Exercise (RIMPAC), (KOMODO)⁴⁵⁾ which is a multilateral rescue exercise, the joint field training exercise (FTX) of ADMM-Plus maritime security



ROK Navy's cruise training

⁴⁴⁾ Cooperation of two or more units that do not have a command relationship to achieve a certain common purpose

⁴⁵⁾ Komodo is an island on an archipelago of the Lesser Sunda Islands in Indonesia.



FTX conducted with ADMM-Plus maritime security division(May 2019)

division, and the Search-and-Rescue Exercise (SAREX) conducted with neighboring nations including Japan and Russia. In recent years, the ROK has expanded the PASSEX with neighboring and partner countries including Australia, Canada, and New Zealand. The combined exercises carried out by the Navy for the past three years are summarized in [Chart 3-14].

[Chart 3-14] The Navy's Joint Exercises During the Past Three Years

(Unit: times)

Year	Total	Domestic			Overseas		
		Subtotal	ROK-US	Multilateral	Subtotal	ROK-US	Multilateral
2018	66	58	51	7	8	-	8
2019	81	68	61	7	13	1	12
2020	88	75	70	5	13	4	9

Cruise training⁴⁶⁾ is conducted for about 100 to 140 days by dividing the world into four routes by region. The routes are changed every year. Since the first cruise training in 1954, the Navy conducted the longest training for 141 days in 12 countries in 2019. In the following year, amid the difficulties brought about by COVID-19, the Navy visited two countries for 60 days and conducted ocean navigation training in order to cultivate practical adaptability. Moreover, the Navy contributes to raising the ROK's stature through military exchanges and cooperation with visiting countries during cruise training and by holding events to show appreciation toward the countries that participated in the Korean War and consolatory events for overseas Korean residents, and carrying out defense industrial cooperation.

The Air Force conducts independent and joint exercises of various scales as well as domestic and overseas joint exercises to build omnidirectional military preparedness and improve the ability to conduct aerospace operations with initiative.

Independent exercises include Soaring Eagle, a large scale training covering the entire airspace of Korea, strike package training, air-to-air shooting and air-to-ground bombing training, defensive counter-air comprehensive training, and surveillance and reconnaissance training. Meanwhile, joint exercises include joint air defense training, emergency air interdiction training, counter-fire warfare, close air support, international water joint training in the northwest region, and large-scale maritime refugee SAR training.

Combined exercises conducted domestically include the Korea Flying Training aimed at improving the performance of large-scale combined air operations, Combined Flying Training Event (CFTE) and Combined Special Operations Training (Teak Knife) for improving wartime operational capability, and Combat Search And



The ROK Air Force's joint maritime refugee SAR training

⁴⁶⁾ Ocean navigation training for fourth-year cadets of the Naval Academy

Rescue Training Event (CSAR-TE). In 2019, to further expand combined exercise opportunities, the Air Force newly established the medium-sized Combined Forces Exercise (CFE), Buddy Wing Bravo exercise conducted on a small scale between the ROK–US combat squadrons, and combined close air support training.



Combined Forces Training (November 2019)

The Air Force has regularly participated in overseas combined exercises including multinational combined theater-level air training (Red Flag-Alaska) and humanitarian assistance and disaster relief cooperation training among countries in the Pacific Rim (Cope North), while the combined war damage repair training (Silver Flag) is improving the Air Force’s wartime damage recovery capabilities. The Air Force has also been participating in the US advanced airborne tactical training since 2018 to improve its ability to perform special operations such as infiltration and drop tactics. The Air Force currently seeks participation in various overseas combined exercises to improve its ability to conduct combined operations with various countries, secure interoperability, and exchange tactics. The combined exercises carried out by the Air Force for the past three years are summarized in [Chart 3-15].

[Chart 3-15] The Air Force’s Joint Exercises During the Past Three Years

(Unit: times)

Year	Total	Domestic			Overseas		
		Subtotal	ROK–US	Multilateral	Subtotal	ROK–US	Multilateral
2018	21	18	17	1	3	-	3
2019	22	18	17	1	4	1	3
2020	68	66	66	-	2	-	2

In tandem with the various types of training and exercises, the Air Force continues to improve its SSA capability and its ability to conduct combined space operations through scientific training using ground simulators, Air Combat Maneuvering Instrumentation (GPS-ACMI), and Electronic Warfare Training System (EWTS) and Global Sentinel, an international combined exercise for safe space operations and enhancement of space cooperation.

The Marine Corps regularly conducts amphibious training at least twice a year to develop capabilities to execute forcible entry operations. It maintains the highest level of operational readiness posture through a variety of training and exercises

including rapid task force training, combined and joint exercises, and the tactical training of different echelons.

Am-phinibious trainings cultivate the Marine Corps' combined and joint forcible entry operations, while the capabilities of the rapid task forces are being reinforced through defensive operations, stabilization operations,

and nonmilitary operations on the northwestern islands. In addition, the Marine Corps conducts northwest islands augmentation training as well as field training in Ulleungdo and Jejudo Islands.

The Marine Corps conducts and participates in a variety of combined exercises. The ROK and US Marine Corps conduct the Korea Marine Exercise Program (KMEP)⁴⁷—a combined tactical echelon-level exercise—at least 20 times a year to develop the capabilities of each specialty branch and enhance combined operational capabilities. The ROK Marine Corps also participates in Cobra Gold, Khaan Quest, RIMPAC, and other combined overseas exercises. Also, by observing overseas exercises such as the Talisman Saber training in Australia and Kamandag training in the Philippines, the Marine Corps is working on expanding its participation in overseas multilateral combined exercises starting in 2021. The combined exercises carried out by the Marine Corps for the past three years are summarized in [Chart 3-16].



Joint amphibious exercise (April 2020)

[Chart 3-16] The Marine Corps' Joint Exercises During the Past Three Years

(Unit: times)

Year	Total	Domestic			Overseas		
		Subtotal	ROK-US	Multilateral	Subtotal	ROK-US	Multilateral
2018	15	12	12	-	3	-	3
2019	25	24	24	-	1	-	1
2020	8	7	7	-	1	-	1

Tactical training for different echelons are aimed at attaining completeness in the Marine Corps' execution of operations to lead and manage isolated battlefields. Moreover, the Marine Corps is actively carrying out tactical training linked to unit-specific airborne training, amphibious raid training, and guerrilla training. In addition, the Marine Corps is enhancing realistic training into engagement training that utilizes scientific training while conducting amphibious operation PASSEX at battalion—or lower—level and regular amphibious ship loading training.

47)

An ROK-US combined exercise for tactical marine units conducted in the ROK with the objective of enhancing combined operation execution capabilities and interoperability between the two countries' Marine Corps through a systemic approach

Joint Exercises and Training

In preparation for the rapidly changing security situation, the ROK Armed Forces is reinforcing joint⁴⁸⁾ exercises⁴⁹⁾ to enhance joint operational capabilities and maintain a firm military readiness posture.

The Ulchi Taegeuk Exercise—a ROK Armed Forces’ independent exercise that integrates the ROK government’s Ulchi Exercise and Taegeuk Exercise,—is conducted to strengthen the national crisis management capabilities and maintain the military readiness posture through wartime transition exercises. The exercise is carried out in two parts. The National Crisis Response Exercise (Part 1) is conducted to master the integrated situation management and response procedures centered on the MND, JCS, and each service headquarters in cooperation with central and local administrative agencies, while the Wartime Preparation Exercise (Part 2)—the ROK Armed Forces’ independent CPX—is participated by all combat staff in operation command-level units and above to master pre- wartime transition procedures and initial response procedures including the declaration of integrated defense due to local provocations and the raising of defense readiness posture under the support of a computer simulation model.

Hoguk Training⁵⁰⁾ is a defensive field maneuvering training conducted annually under the supervision of the JCS in order to cultivate joint warfare capabilities, integrated combat capability management, and operational support capabilities. It reinforces the coordination of all armed forces and operation commands by creating an integrated situation under the JCS’s control and maximizes the integrated response capabilities and existing force operations.

The Hwarang Training is a rear-area training participated by all operational elements of the civilian, government, military, and police forces, and conducted under the supervision of the Integrated Defense Headquarters. The goal of this training is to achieve proficiency with the implementation and support procedures on wartime and peacetime integrated defense operational plans. The training is also aimed at establishing an integrated defense posture centering on the local governments, embedding security awareness in residents, and promoting a mutual understanding of the importance of security. In particular, with the rising demand of active response at the level of integrated defense against transnational and nonmilitary security threats such as disasters and terrorism, the ROK Armed Forces conducts Hwarang training to assess the practical response system of all national defense elements and cultivate integrated response capabilities.

48) Activities, operations, and organizations involving more than one branch of a country’s armed forces for a common goal

49) Exercise aimed at improving proficiency with operational plan execution procedures, and conducted as close as possible to the real combat considering the operational plans, doctrines, and battlefield environments

50) Practical activities carried out by individuals and units to gain military knowledge and combat skills through action to effectively execute their assigned missions

Combined Exercises and Training

To maintain military readiness posture under the combined defense system and to enhance the warfighting capabilities of combined forces, the ROK and the US have been reinforcing combined⁵¹⁾ exercises and training with an emphasis on upgrading the combat readiness posture and capabilities to execute and sustain combined operations. Since 2019 considering the changing security situations, the ROK and the US are conducting a new combined command post training (CCPT) biannually (first and second half of the year) which replacing the Key Resolve (KR) exercise and the Ulchi Freedom Guardian (UFG) exercise. The CCPT is a ROK–US combined theater-level CPX conducted to assess the combined defense posture and gain proficiency in implementing warfighting procedures through a computer-simulated battlefield scenario.

In preparation for wartime OPCON transition, the JCS took the lead in 2017 and 2018 in the areas of planning, operation of opposing forces, and after-action review thereby developing the capabilities to conduct theater-level combined exercises led by the ROK Armed Forces. In particular, the Initial Operational Capability (IOC) certification assessment was concurrently conducted during CCPT in the second half of 2019 thereby practicing the ability to lead combined operations with a future command structure.

With the CCPTs conducted twice a year, the ROK Armed Forces will firmly maintain the ROK–US combined defense posture, improve the ROK Armed Forces’ operational capabilities, and conduct certification assessment under the future command structure to meet the conditions for wartime OPCON transition.

Although the Foal Eagle (FE) training was a key exercise to improve ROK–US combined operational capabilities, it came to an end in 2019 under the mutual agreement between the ROK MND and the US DoD, as part of the military’s support towards the effort to induce North Korea’s denuclearization. Nevertheless, the ROK Armed forces has conducted separate combined exercises throughout the year, making every effort to maintain a robust combined defense posture.

Since 2018, the ROK Armed Forces has implemented the Joint Training System (JTS)⁵²⁾—a theater-level exercise and training system—in the headquarters of each service, operations commands, and joint units for a systematic management of the training system. Various war-game models for joint and combined exercises were also developed and applied to improve the ROK Armed Forces’ ability to conduct and to continuously develop efficient combined exercises and training measures.

51)

Cooperative relationship between the military units or government organizations of two or more allied nations

52)

The JTS was introduced to the JCS in 2012, the Operations Command in 2017, and the headquarters of each service and joint units in 2018.

4. Strengthening the Spiritual and Mental Force

Education to Form a Firm Perspective Toward the Homeland and National Security

The ROK Armed Forces system-atically conducts spiritual and mental force education to help servicemembers form a sound perspective toward their homeland

and national security, and to cultivate a soldierly mindset and an unwavering resolve to prevail. While maintaining an unwavering perspective toward national security in the rapidly changing security environment, the ROK Armed Forces continues to emphasize the importance of the military's inherent mission and preparedness, thereby establishing an omnidirectional military readiness posture. To embed a clear perspective in servicemembers, they are educated that North Korea is the subject of exchange and cooperation for the establishment of peace on the Korean Peninsula but is still a realistic military threat, and that they must be prepared and capable of inflicting decisive punishment in case of North Korean provocations.

With a goal of "Spiritual Armament before Combat Skills Proficiency", the spiritual and mental force education for newly enlisted soldiers focuses on turning the new enlistees into soldiers armed with unwavering soldierly mindset. They are educated with a curriculum focused on the military spirit of unwavering resolve to prevail and the perspective toward the homeland and national security, while training programs and barracks life as a whole are used as platforms for spiritual and mental education.

Spiritual and mental force education for servicemembers is carried out in two different ways—school-based education and unit-level education. In case of school-based spiritual and mental force education, presentation- and discussion-oriented education and hands-on instructors' training have been strengthened to equip the servicemembers with the necessary capabilities to become instructors. The unit-level spiritual force education is conducted centered on commanding officers and is offered in a systematic and repetitive manner on a daily, weekly, and half-year basis.

Acquiring Strong Soldierly Mindset by Improving the Teaching and Learning Paradigm

To maximize the performance of spiritual and mental force education and the servicemembers' learning immersion, the ROK Armed Forces

is drastically improving and promoting the "teaching and learning paradigm". By switching from the existing lecture and discussion-oriented education to a hands-on, self-directed education⁵³⁾, the servicemembers themselves are able to establish

53)

Education consisting of lectures integrated with online lectures, book concerts, culture and arts, and soldiers-led participation programs such as "I am a master instructor," wherein servicemembers become instructors themselves.

mental preparedness and enhance their inner growth and pride in military service.

The ROK Armed Forces also helps the servicemembers acquire a strong soldierly mindset by letting them naturally understand war history and indirectly access historical sites through mission-oriented educational content⁵⁴⁾, "soldierly mindset in movies" program, and the pilot development of digital textbooks⁵⁵⁾ combined with advanced science and technology.

Expansion of History Education Program to Boost Patriotism and Pride

More courses are added to the history curriculum to help the servicemembers raise their awareness of history, patriotism, and pride. The history education on the Greater Korea Independence Army and the Korea Independence

Army are reflected in the annual plan for the servicemembers' spiritual and mental force education, and collaboration programs are being carried out with the Independence Hall of Korea.

In addition, special efforts are made to encourage servicemembers to develop the right perception of history and to boost their patriotism and comradeship by offering education programs according to major occasions and producing and broadcasting special documentary⁵⁶⁾ films. The ROK Armed Forces will continue to foster an unwavering soldierly mindset and maintain strong mental preparedness through innovation in educational techniques and substantial education.

Operation of the Defense Agency for Spiritual and Mental Force Enhancement

The Defense Agency for Spiritual and Mental Force Enhancement is an educational institution that specializes in military spiritual and mental force. Its primary tasks are to conduct education to instill military spirit in servicemembers and help them establish perspectives toward the homeland and national security, research combat development concerning spiritual and mental force and related doctrines, and develop contents for spiritual and mental force education for servicemembers.

As the only agency that offers military spirit-specialized curriculum in the military,



Visit to the Independence Hall of Korea as part of the experiential learning activities of the history education program

54)

Production of contents in connection with the servicemembers' missions in each military unit (e.g., territorial airspace intrusion response, GOP complete operation, territorial sea defense mission)

55)

An educational technique that provides experiences without going to the field using technologies such as virtual reality (VR) and augmented reality (AR), which are highly immersive and realistic

56)

A documentary film commemorating the 100th anniversary of establishment of the Provisional Government (2019) and a documentary film commemorating the 70th anniversary of the Korean War (2020)

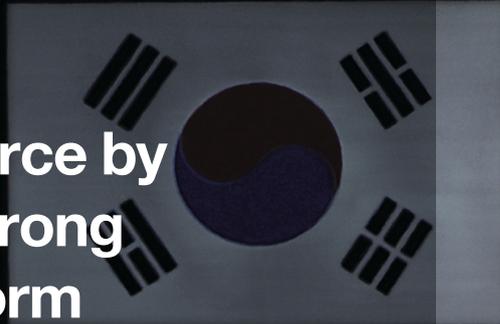
it also offers a variety of specialized courses, such as mandatory refresher courses for public affairs officers and NCOs, culture and arts, unification and security. It has also developed and supplied advanced contents on the spiritual and mental force of servicemembers. Other tasks of the agency include hosting seminars to promote the development of spiritual and mental force and calling for research papers.

**Character Education for
Servicemembers**

To foster outstanding servicemembers who are positive and responsible citizens of a democratic society, the ROK Armed Forces is also enhancing the character education system for servicemembers, with an emphasis on seven fundamental values—creativity, courage, responsibility, respect, cooperation, loyalty, and justice. Intensive character education by civilian experts is coupled with video-based education in everyday life.

Chapter 4

Building an Innovative Force by Promoting Strong Defense Reform



Section 1 Reorganizing the Elite Unit Structure Using Advanced Technology

Section 2 Reorganizing Defense Manpower Structure Focused on Operation and Combat and Priming the Reserved Forces into an Elite Force

Section 3 Force Enhancement Based on Jointness

Section 4 Creation of a "Strong, Digital Military and Smart National Defense" Based on the Fourth Industrial Revolution Technology





Reorganizing the Elite Unit Structure Using Advanced Technology

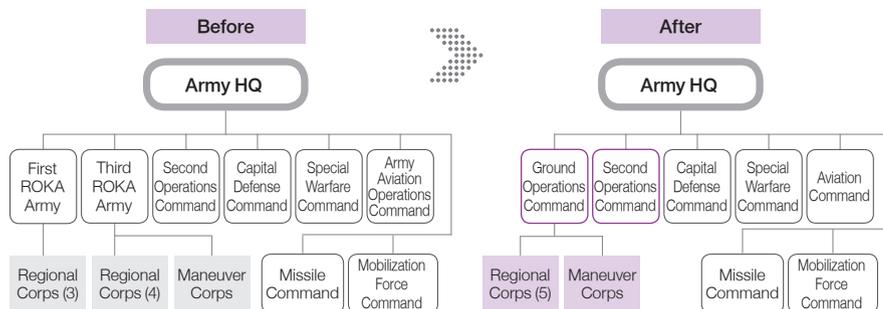
In order to respond to omnidirectional security threats, the MND is in the process of reorganizing the current troop-intensive unit structure of the ROK Armed Forces into an elite structure using advanced science and technology.

1. Reorganizing the Unit Structure of Each Service

Army The unit structure of the Army is being reorganized in a way that it becomes capable of conducting rapid decisive operations. By 2022, the Army will reduce the number of standing troops by 118,000—from 483,000 to 365,000. In conjunction with the reduction of standing troops, the number of field army commands has been reduced from 3 to 2, corps from 8 to 6, and divisions from 39 to 33.

On January 1, 2019, the Ground Operations Command was created by integrating the First ROK Army (FROKA) and the Third ROK Army (TROKA) in order to enable the Army to lead combined and joint ground operations. Regional corps have been reorganized to execute independent operations by axis by establishing a corps-centered operation execution system, and the maneuver corps has been reorganized to enable rapid decisive operations by significantly improving mobility and fire support capabilities. The Second Operations Command is continuously enhancing its operational execution capabilities in the vast rear area by reorganizing the existing homeland reserve divisions into local defense divisions to enable integrated defense

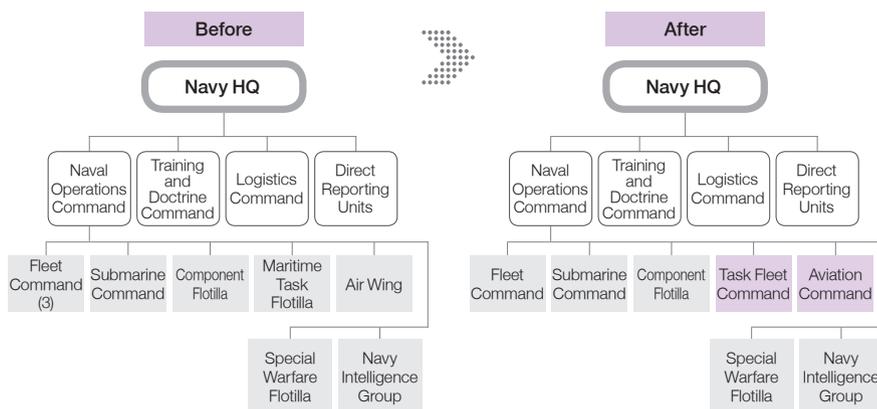
[Chart 4-1] Army Unit Structure Reorganization Plan



operations and its sustainment capabilities. The Army unit structure reorganization plan is shown in [Chart 4-1].

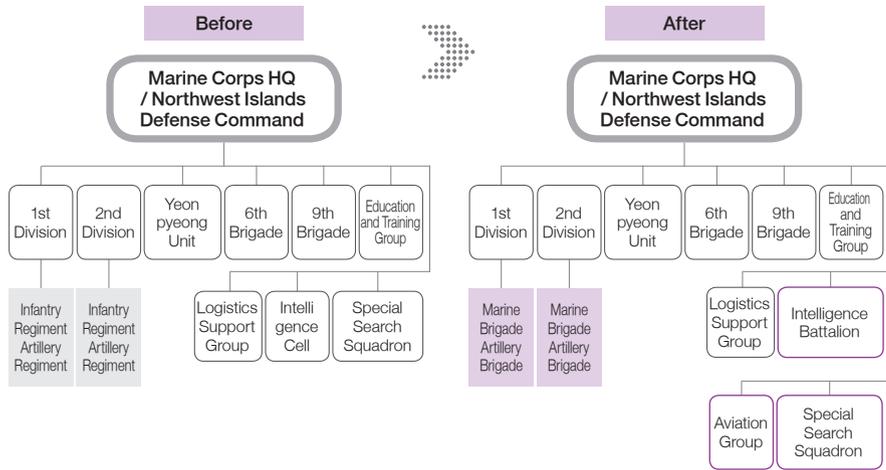
Navy The Navy is being reorganized into a unit structure capable of carrying out multidimensional maritime operations above surface, underwater, and in the air. The Maritime Task Flotilla will be reorganized and operate as the Task Fleet Command to conduct independent operations of maneuver units in remote and offshore seas in conjunction with the enhancement of destroyer forces. To ensure the integrity of maritime air operations in the vast sea, the air wing will be reorganized to operate as an aviation command in connection with various force enhancements including maritime patrol aircraft and maritime operational helicopters. The Navy unit structure reorganization plan is shown in [Chart 4-2].

[Chart 4-2] Navy Unit Structure Reorganization Plan



Marine Corps The Marine Corps is restructuring its forces as a marine-air-ground task force capable of executing various types of missions such as defending strategic islands and carrying out multidimensional, high-speed amphibious operations and rapid response operations. The Headquarters Marine Corps will organize an intelligence battalion, a special search battalion, and an aviation group to enable operation command and joint operations such as amphibious operations and command operations. The infantry regiments subordinate to divisions will be reorganized as brigade-level units with reinforced intelligence, maneuver, and fire capabilities, and the artillery regiments as artillery brigades with counter-artillery detection and long-range precision strike capabilities. The Marine Corps force restructure plan is shown in [Chart 4-3].

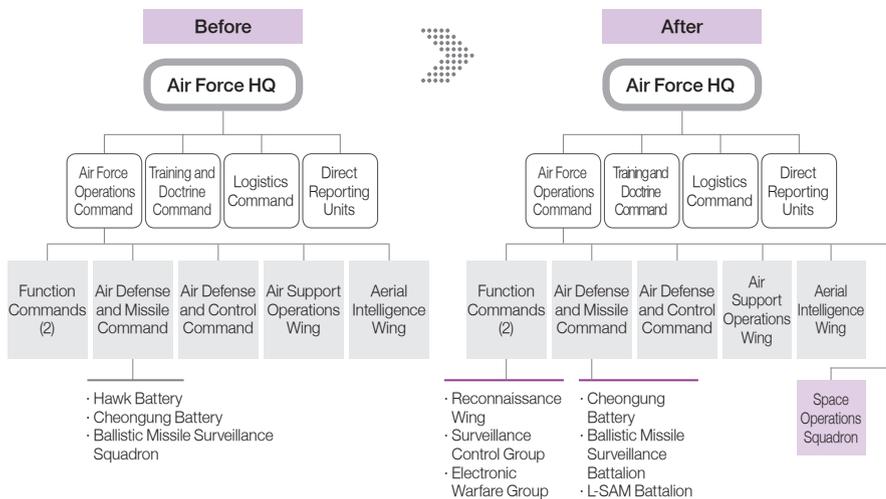
[Chart 4-3] Marine Corps Unit Structure Reorganization Plan



Air Force

The Air Force is under restructuring of its forces to enable strategic deterrence and aerospace operations. A space operations squadron was launched to provide surveillance capabilities for satellite activities over the Korean Peninsula. In addition, a reconnaissance wing was established to efficiently integrate and operate existing reconnaissance assets and medium and high-altitude reconnaissance UAV that will strengthen the Air Force’s surveillance and reconnaissance capabilities. For the medium–and long-term plan, the Air Force will establish a surveillance control group and an electronic warfare group in connection with the fielding of joint moving target surveillance control aircraft and electronic

[Chart 4-4] Air Force Unit Restructure Plan



warfare aircraft. In addition, the Hawk Battery will be reorganized and operated as the Cheongung Battery for complex and wide area multi-layer defense, and the Air Defense and Missile Command will be reorganized with the establishment of a ballistic missile surveillance battalion and a long-range surface-to-air missile (L-SAM) battalion. The Air Force unit restructure plan is shown in [Chart 4-4].

2. Reorganizing the Joint Units and Units Under Direct Control of the MND

The restructuring of the joint units and units under the direct control of the MND focuses on improving the expertise of the respective services and the balance among them, expanding the civilian workforce, ensuring organizational efficacy, strengthening jointness, and ensuring proper command range in consideration of the effective execution of unit missions and the implication of dismantling joint units and units directly controlled by the MND.

To achieve this, the Defense Security Support Command has reconfigured its organization and functions to meet its missions, which include military security, counterintelligence, and defense security support. The command relationship of the defense posture inspection team was adjusted from the MND to the JCS in order to strengthen the inspection function of the Chairman of the JCS and to ensure the Chairman's command and oversight over operational units. The Joint Forces Military University (JFMU) was placed under the command of the Korea National Defense University (KNDU) while maintaining its jointness education. The Army, Navy, and Air Force colleges under the JFMU were placed under the command of each service to cultivate the expertise required by each service. The ROK Cyber Command was transitioned from a unit directly controlled by the MND to the Cyber Operations Command, a joint unit, to reinforce its operational capabilities in the cyber-battlefield.

In addition, the manpower structure has been reorganized in ways to improve combat power and expertise by transferring active duty servicemembers working in administrative and support units to combat units and filling these positions with civilian workforce who are able to make longer commitments in the roles. To further improve the expertise and specialties of each service, some units under direct control of the MND will either be consolidated, or their functions will be transferred to each service.

Reorganizing Defense Manpower Structure Focused on Operation and Combat and Priming the Reserved Forces into an Elite Force

The MND will gradually reduce the number of standing troops to 500,000 by 2022 in line with the future strategic environment, military strategy, and unit reorganization plans. To prevent the loss of combat power due to fewer troops, active duty noncombatant positions will be transferred to combat units, and those noncombatant positions will be filled with the civilian workforce, further accelerating the reorganization of the military manpower structure centered around operations and combats. Efforts are also being made in priming the reserve forces into an elite force by applying advanced technologies to the reserved forces training system and promoting the introduction of a peacetime service program for reserve forces.

1. Reducing the Number of Standing Troops to 500,000

Considering the projected supply and demand for military service resources, the MND plans to gradually reduce the number of standing troops to 500,000 by 2022 in connection with the future strategic environment, military strategy, and unit reorganization plans. The number of troops in the Army will be reduced to around 365,000, while the Navy, Marine Corps, and Air Force will remain unchanged.

[Chart 4-5] Standing Troops Reduction and Civilian Workforce Expansion Plan

Category	2017	2020	2022
Defense Workforce (Standing troops + Civilian workforce)	Approx. 650,000	Approx. 602,000	Approx. 558,000
Total	Approx. 618,000	Approx. 555,000	Approx. 500,000
Standing Troops	Approx. 483,000	Approx. 420,000	Approx. 365,000
Army	Approx. 483,000	Approx. 420,000	Approx. 365,000
Navy (Marine Corps)	Approx. 70,000 (Approx. 29,000)	Approx. 70,000 (Approx. 29,000)	Approx. 70,000 (Approx. 29,000)
Air Force	Approx. 65,000	Approx. 65,000	Approx. 65,000
Civilian Workforce (Proportion compared to defense workforce)	Approx. 32,000 (5%)	Approx. 47,000 (7.8%)	Approx. 58,000 (10.4%)

The number of standing troops was 618,000 in 2017; as of 2020, however, it has been reduced to 555,000 through deactivation of various units and organizational streamlining. The total number is expected to be reduced to 500,000 by the end of 2022, and the reduction plan is shown in [Chart 4-5]. Moreover, the military structure has been converted from a troop-intensive type to an advanced weapons-based technology-intensive type, and the combat power will in fact be strengthened as a result despite the reduction of the standing troops by priming the manpower structure into an elite force centered around seasoned officers instead of soldiers.

2. Reorganizing the Defense Manpower Structure Focused on Operation and Combat

Redesigning the Defense Manpower Structure

Since the promotion of Defense Reform in 2006, the ROK Armed Forces has reduced the number of standing troops and augmented officers, mainly NCOs, in positions that require proficiency and expertise.¹⁾ Recruiting military officers, however, is expected to face challenges in the future because of the forecasted decline in young adult population and unemployment rate in the mid-to long-term. Also, a countermeasure needs to be in place to prevent the loss of combat power caused by the reduction of standing troops and the shorter period of mandatory military service. Accordingly, the MND has refined the existing manpower restructuring plan that focused on increasing the number of officers and designed a defense manpower concept that incorporates all servicemembers—civilian military employees, and other types of civilian workers—and formulated the "Defense Manpower Structure Reorganization Plan" that would efficiently reposition the defense manpower.

Based on this, first, the manpower quota will be redesigned by service, status, and rank in line with the unit structure and size of troops according to the Defense Reform 2.0; second, noncombatant areas will be managed by the civilian workforce, such as civilian military employees, while servicemembers will be mainly assigned to operations and combat positions; and third, the rank structure of officers and NCOs will be transformed from the inefficient pyramid shape of "large-scale acquisition and short-term utilization of officers" to a pot shape of "small-scale acquisition and long-term utilization of officers", taking into consideration the future prospect of recruiting junior officers, employment of high-tech weapons, and the necessity to secure proficient combat power.

¹⁾ Compared to 682,000 at the end of 2005, the number of standing troops was reduced by 127,000 to 555,000 at the end of 2020, while the number of NCOs was increased by 32,000 from 97,000 to 129,000

The MND is enhancing the feasibility of such defense manpower restructuring plan by reflecting this plan into mid-term and annual unit plans, and through these efforts, the ROK Armed Forces is anticipated to evolve into a strong elite military centered around skilled officers.

Expanding the Civilian Workforce in Noncombatant Fields

To prevent the potential loss of combat power due to the reduction in standing troops and to enhance the expertise

and continuity of defense administration, the MND is expanding its civilian workforce in noncombatant areas. Under the goal of expanding the proportion of civilian workforce²⁾ to approximately 10% of the total defense manpower by 2022 (5% in 2017), approximately 6,000 civilians were added to the civilian workforce in 2019 and about 4,000 in 2020, which raised the proportion of civilian workforce to approximately 7.8% as of 2020.

Civilians are replacing active duty personnel in noncombatant positions, except for combat and command and control positions that must be performed by servicemembers. Within the civilian workforce, civilian military employees will mainly replace positions that require expertise and continuity, particularly those in maintenance and budgeting. Civilian workers, on the other hand, will take over areas where civilian expertise can be readily utilized, such as computation, facilities and installations management, and languages.

Reinforcing the Manpower of Current Operation Units

In order to maintain round-the-clock combat readiness despite the reduction of standing troops, the MND is reinforcing the man-

power of current operation units, which conduct 24-hour operational missions, such as GOP and coast guard operations, air defense surveillance and reconnaissance, and initial response measures. GOP and the coast guard troops have been reinforced as the top priority in 2019, while the air defense surveillance and reconnaissance troops were reinforced in 2020. Also, the MND will continue to reinforce counterterrorism units and post guard personnel.

Adjusting the Quota of General Officers and Rationalizing Ranks

In 2018, the MND selected the reduction in the number of general officers as a core task of Defense Reform 2.0 and

established the "General Officer Quota Adjustment Plan" to reduce the number of general officers from 436 at the end of 2017 to 360 by 2022. As of 2020, the number

²⁾ Civilian workforce is divided into "civilian military employees" and "civilian workers"

was reduced by 46 after the adjustment plan came into force; the final goal is expected to be achieved by 2022.

3. Priming the Reserve Forces into an Elite Force

Establishing Mobilization Readiness Posture

In order to secure deterrence capabilities and strengthen war sustainability, the MND continues to develop the defense mobilization system to support military operations by efficiently mobilizing all human and material resources available during wartime or national emergencies.

In terms of troop mobilization, the MND is organizing and managing reserve forces based on a focus strategy that maintains the overall size of reserve forces but adjusts the number of trainees per year, considering the changes in the defense environment, such as the restructuring of the military and the decline in reserve resources. The efficiency of resource management is also being enhanced under the cooperation with the Military Manpower Administration (MMA), including improvements in the mobilization designation method, such as designating outstanding resources mostly from major combat units at the beginning of war.

To enhance the efficacy of the mobilization execution plan, the MND is considering the wartime mobilization capabilities, such as the availability of resources and the production capacity of companies, from the initial stage of each service filing its requirements. The MND is optimizing the mobilization requirements by verifying the submitted requirements through a joint requirements review with relevant ministries.

In particular, the mission execution system of the ROK Army's Mobilization Force Command, which was activated in 2018, is making contributions to exercising combat power at the level of standing forces. Force enhancement requirements of mobilization-oriented units³⁾ are incorporated in the defense planning documents⁴⁾ and the budget for combat-critical materials is being obtained so that these units can perform their missions immediately during contingencies. In addition, the mission execution capabilities of the mobilization force are being reinforced through the designation of mobilization centered on elite resources, part-time service system of reserve officers, and more realistic training.

Reserve Forces Organization and Resource Management

Reserve forces are organized and managed to prepare for wartime and national emer-



Reserve forces protecting the security of the ROK

3) It refers to the mobilization division, mobilization support group (mobilization supplement battalion), and mobilization resource convoy group, which are subordinate units of the Mobilization Force Command with peacetime organization rate of less than 10%.

4) The Joint Military Strategy (JMS) and the Joint Strategic Objective Plan (JSOP)

gencies that are tantamount to the former. They conduct mobilization training and prepare for regional defense and disasters during peacetime, and conduct missions such as expansion and activation of active duty units, replenishment of troops, and civilian–government–military integrated defense operations during contingencies such as wartime. In accordance with the Reserve Forces Act and the Military Personnel Management Act, reserve officers serve in the reserve forces until the retirement age of each active duty rank, with servicemembers serving in the reserve forces for eight years after discharge. As of December 2020, the size of the reserve force is roughly 2.75 million, of which roughly 6,000 are female reserve forces and special reserve forces organized as volunteer reservists⁵⁾. Reserve forces consist of 3,194 regional reserve units established in administrative districts and 823 workplace reserve units installed in the workplaces. Reserve forces are managed and operated by each delegated military unit. To reinforce the role of reserve forces in the event of natural and social disasters such as COVID-19, the MND has pushed ahead with system improvements such as the revision of the Directive on National Defense Mobilization Service.

Developing the Reserve Forces Training System

The MND plans to manage training sites, improve efficiency in managing budgets, and improve the capabilities of the reserve

forces in executing their missions through realistic training. Accordingly, 208 reserve forces training centers scattered across the country will be integrated into 40 scientific reserve forces training centers by 2024. The scientific reserve forces training center includes urban combat training centers where squad-level training is possible by utilizing a video simulation shooting range capable of zeroing, qualification and squad combat shooting, as well as an automated indoor shooting range to prevent noise in the vicinity and several battle training equipment.⁶⁾ Improvements are also being made in training performance through a smart reserve

forces training management system, which manages the entire training courses in real time from admission and training evaluation to discharge. As of 2020, a total of 12 scientific reserve forces training centers have been built and an additional system of virtual reality (VR)-based video simulation system has been adopted.



Virtual reality (VR) simulated shooting

⁵⁾ Those selected among ROK citizens aged 18 years or older who volunteered to the reserve forces in accordance with Article 3 of the Reserve Forces Act.

⁶⁾ All of the two-way battle training equipment consisting of laser firearms, detectors, training control and analysis system, electronic display board, etc.

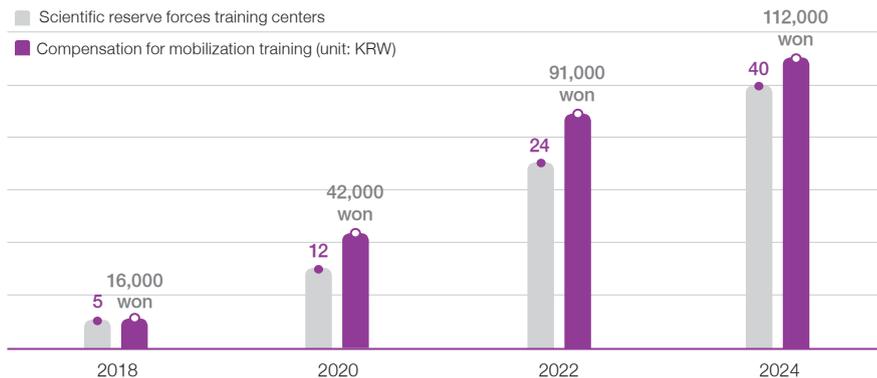
In collaboration with the local governments, the training centers will be open on weekends when there is no training to make the space available to local residents, such as security field trips.

[Chart 4-6] Smart Reserve Forces Training and Management System



To modernize the facilities in the mobilization training centers, the MND plans to complete the construction or renovation of 116 facilities including mobilization dormitories, dining facilities for reserve forces, and security education centers by

[Chart 4-7] Changes in Scientific Reserve Forces Training Centers and Monetary Compensation for Mobilization Training



2025. As of 2019, a total of 56 facilities have been newly built or renovated, with seven additional facilities in 2020.

In order to enhance the mission execution capabilities of the reserve forces, the training system will be enhanced to a wartime mission-oriented training system by improving training subjects and period and establishing a training model, in connection with the reorganization of reserve forces. To boost morale of the reserve forces and encourage their participation in training, the MND plans to increase compensation for mobilization training to the level of a sergeant's salary⁷⁾ by 2022, and to improve the system so that compensation is also provided for regional reserve forces training, where only actual expenses such as transportation and lunch expenses are currently paid for.

Introduction of Peacetime Service Program for Reserve Forces

Since 2014, the MND has implemented the "part-time service system for reserve force officers"⁸⁾ to prepare for a decline

in combat power due to the reduction in active duty servicemembers and to achieve a higher level of mobilization readiness posture. The MND verified that the system resulted in shorter battle preparation time and improved unit combat power.⁹⁾ In 2020, the MND implemented the "Peacetime Service Program for Reserve Forces", which extends the assembly and training period of the current system, while adding retired veterans to the roster to expand the scope of the system.

To that end, the MND has established a theoretical background and a process of introducing the Peacetime Service Program for Reserve Forces, and is planning to legislate¹⁰⁾ the program through an amendment of the Military Service Act and the Reserve Forces Act. The MND also intends to build a consensus on the introduction of the program by holding and further expanding the related discussion sessions. When legal grounds are set in the future, the system will be applied to the Army and gradually expanded to all services.

7)

By 2022, the MND plans to raise the sergeant's salary by 50% of the minimum wage in 2017 (KRW 6,470) and to raise the compensation for mobilization training to KRW 91,000, the same level.

8)

It is a system that calls up and trains cadres designated for mobilization-captains and lower level cadres-in the battalion level or lower in mobilization-oriented units such as the Mobilization Division within 30 days. Starting with 79 officers in the Army in 2014, there are currently 1,769 officers (1,749 in the Army, 20 in the Navy) as of 2020. Starting 2021, the MND plans to promote the operation in all forces including the Air Force and Marine Corps.

9)

Analysis results submitted by the Army analysis and evaluation group (September 2018 - January 2019): Combat preparation time reduced by 16 hours (75 hours → 59 hours), combat force improved by 13%.

10)

- ① Formation of peacetime service reserve forces and establishment of grounds for the operation.
- ② Extension of period of the call for training for mobilization of peacetime service reserve forces selected according to the job value, from the current 30 days a year to more than 30 days.
- ③ Promotion of partial amendment of the Military Service Act and the Reserve Forces Act in order to allow veterans to be incorporated into reserve forces when applying for the service.

Force Enhancement Based on Jointness

In order to establish a strong defense posture against omnidirectional security threats, the ROK Armed Forces is promoting force enhancement based on jointness. In particular, their core forces are being expanded to respond to omnidirectional threats, including North Korean nuclear and WMD threats. The ROK Armed Forces is also supporting force enhancement through the defense force enhancement project.

1. Basic Direction of Force Enhancement and Major Force Enhancement Projects

Basic Direction of Force Enhancement

In order to build forces that can effectively respond to omnidirectional security threats, the MND is reinforcing its key military capabilities, focusing on crucial military capabilities including strategic deterrence, operational response, and comprehensive response capabilities. First and foremost, in preparation for potential threats especially those from North Korea, the MND will prioritize building base forces including surveillance and reconnaissance, command and control (C2) and communication systems led by the ROK Armed Forces; establishing strategic deterrence capabilities including counter-nuclear and WMD forces; and acquiring operational response capabilities to repel external military provocations at an early stage and achieve complete victory during contingencies by reinforcing essential forces for each battlefield function required for military restructuring. The ROK Armed Forces' ability to respond to nonmilitary threats such as cyber and space threats, terrorism, and disasters will be further enhanced and the ability to protect national interests, including protection for overseas Korean nationals, will be secured.

At the level of battlefield functions, the battlefield recognition forces will gradually acquire military reconnaissance satellites, multipurpose satellites, medium-altitude reconnaissance UAV, and multi-source video convergence systems to reinforce the surveillance capabilities over the Korean peninsula and areas of interest.

Furthermore, the MND will acquire UAV for reconnaissance, thermal observation devices (TOD-III), and multi-functional observation devices to improve battlefield visualization and day and night surveillance capabilities of each unit.

For command and control (C2) and communication forces, the MND will ensure theater and joint command and control capabilities through improving the C4I¹¹⁾ systems of the joint forces and each service while facilitating the battlefield situation awareness down to the tactical units by establishing a C4I system for battalions and below. Also, the MND will continue to secure high-speed, high-volume information distribution capabilities and enhance interoperability during combined and joint operations through upgrading joint tactical data links, air-to-ground communications radios, and Link-16¹²⁾.

For the ground forces, the MND will strive for an early expansion of highly powerful and ultra-precision ground-to-ground missile forces and counterfire warfare capabilities and will reinforce armored and mechanized warfare and aviation forces for conducting high-speed, deep maneuver warfare in preparation for North Korean threats of nuclear weapons, missiles, and long-range artillery. Furthermore, ground and air maneuverability will be reinforced to improve rapid response and decisive operational execution, and the MND will establish a manned and unmanned hybrid combat system to ensure the survival of combatants.

For the naval forces, the MND will acquire destroyers (KDX-III), frigates (FFX), submarines (KSS-III), maritime patrol aircraft-II, and maritime operations helicopters to prepare for potential threats from North Korea and maintain maritime dominance around the Korean Peninsula, further enhancing the MND's ability to protect maritime rights and interests.

For the air forces, the MND will establish covert penetration and long-range precision strike capabilities to be able to take the initiative in deterring and responding to omnidirectional threats. To achieve air superiority in the operation area, the MND will also continue to acquire next-generation fighters (FX-II), ROK's indigenous fighters (KF-X), KF-16 upgrade, large transport aircraft, and all-weather precision guided weapons.

For the defense forces, the MND will acquire multi-layered defense capabilities such as ballistic and aircraft defense capabilities and long-range artillery interception capabilities, and gradually improve its Electro-Magnetic Pulse (EMP) and CBRN protection capabilities. Moreover, protective capabilities of individuals, facilities, and equipment will be reinforced to ensure survivability in the early stage of war.

11)
Command, Control,
Communication, and
Computer Intelligence

12)
Digital tactical data links
used between the ROK and
US Combined Forces

2019 Force Enhancement Projects

The 2019 defense budget amounted to KRW 46.7 trillion, of which KRW 15.4 trillion was allocated to force enhancements, representing a 13.7% increase from 2018. The major force enhancement projects for 2019 are shown in [Chart 4-8].

[Chart 4-8] Major Force Enhancement Projects in 2019

Weapons Systems	Ongoing Projects	New Projects
Battlefield Awareness / Command-Control, and Communication	<ul style="list-style-type: none"> · Military reconnaissance satellite · Tactical Information Communication Network (TICN) · High-altitude reconnaissance UAV (HUAV) 	<ul style="list-style-type: none"> · Multi-source video convergence system · Performance enhancement of ballistic missile operation and control station · Korean Variable Message Format (KVMF)
Maneuver / Fires	<ul style="list-style-type: none"> · K2 tank, wheeled combat vehicle · 230 mm MLRS · Light tactical vehicle 	<ul style="list-style-type: none"> · Combat engineer vehicle (CEV) · Armored amphibious assault bridge · Laser-based anti-aircraft weapon (Block I)
Maritime Assets	<ul style="list-style-type: none"> · Gwanggaeto III-class destroyer (Batch II) · Jangbogo III-class submarine (Batch I/II) · Ulsan-class (Batch II) 	<ul style="list-style-type: none"> · Autonomous underwater vehicle for mine reconnaissance
Air Assets	<ul style="list-style-type: none"> · Performance improvement of F-35A and KF-16 · Aerial refueling tanker · ROK's indigenous fighter (KF-X) 	<ul style="list-style-type: none"> · Lead-in Fighter Trainer II · T-50 simulator

2020 Force Enhancement Projects

The 2020 defense budget amounted to KRW 50.2 trillion, of which KRW 16.7 trillion was allocated to force enhancements, representing a 8.5% increase from 2019. The major force enhancement projects for 2020 are shown in [Chart 4-9].

[Chart 4-9] Major Force Enhancement Projects in 2020

Weapons Systems	Ongoing Projects	New Projects
Battlefield Awareness / Command, Control, and Communication	<ul style="list-style-type: none"> · Military reconnaissance satellite · Medium-altitude reconnaissance UAV (MUAV) · Tactical Information Communication Network (TICN) 	<ul style="list-style-type: none"> · ROK's Joint Tactical Data Link System (JTDLS) Completion Type · Mobile long-range surveillance radar
Maneuver / Fires	<ul style="list-style-type: none"> · K2 tank, wheeled combat vehicle · 230 mm MLRS 	<ul style="list-style-type: none"> · Individual combat system · 120 mm self-propelled mortar · Light machine gun II
Maritime Assets	<ul style="list-style-type: none"> · Gwanggaeto III-class destroyer (Batch II) · Jangbogo III-class submarine (Batch I/II) · Maritime patrol aircraft II 	<ul style="list-style-type: none"> · Destroyer (KDDX) · Gumdoksuri-B Batch II
Air Assets	<ul style="list-style-type: none"> · Performance improvement of F-35A and KF-16 · ROK's indigenous fighters (KF-X) 	<ul style="list-style-type: none"> · GPS guided bomb (2000 lbs-class) VI

2. 2021~2025 Mid-Term Defense Force Enhancement Plan

The MND plans to invest KRW 100.1 trillion from 2021 to 2025 to accelerate Defense Reform 2.0 and establish a strong defense posture against omnidirectional security threats. The MND's core forces will be enhanced to be able to respond to various nuclear and WMD threats, and military reorganization will be centered on advanced forces. Moreover, the MND will actively respond to nonmilitary threats such as cyber-threats, terrorism, and disasters, and guarantee conditions for strengthening defense R&D capabilities related to the Fourth Industrial Revolution and revitalizing the domestic defense industry. Efforts will also be made to protect national interests such as maintaining international peace and protecting overseas Korean nationals.

First, to respond to nuclear and WMD threats, the MND will secure advanced and wide-range long-distance surveillance and reconnaissance capabilities by field deploying military reconnaissance satellites and medium-altitude reconnaissance UAV. The command and control system will also be intelligent and improved so that it can be linked with the real-time strike system; the surveillance and reconnaissance information will be integrated and transmitted via the Military Satellite Communications System II, Tactical Information Communication Network (TICN), and Joint Fire Operating System Korea (JFOS-K). The MND will secure missile power capable of long-range precision strike, F-35A capable of stealth strike, and Jangbogo-III submarines. Furthermore, KAMD capabilities will further be improved through the development of long-range ground-to-air guided weapons and medium-range ground-to-air weapons (Patriot) performance upgrades to enable multi-layered defense against enemy's ballistic missile attacks.

The following force buildup plans are intended for the military restructuring centered on cutting-edge forces. The ground forces will obtain reconnaissance UAV, counter-battery radar II, 230 mm MLRS, and tactical ground-to-ground guided weapons II to expand surveillance and striking ranges. The fielding of new equipment, including 81 mm mortar-II, 120 mm self-propelled mortar, and medium tactical vehicles will help maximize the force's survivability, mobility, and combat capabilities, thereby reducing operating troops. Maritime and amphibious forces are expected to enhance surface, underwater, and anti-aircraft operations capabilities through the fielding of Korean destroyers and frigates, logistics support ship II, and ship-to-ship, anti-aircraft and anti-submarine guided missiles. Multidimensional, high-speed amphibious operation capabilities are also expected to be enhanced with the acquisition of utility helicopters and high-speed landing craft. The air forces will

gain air superiority through the fielding of F-35A stealth aircraft, ROK's indigenous fighters (KF-X), and air controllers, while securing electronic strike capabilities and enhancing air transportation capabilities with the deployment of electronic warfare aircraft and large transport aircraft.

In preparation for nonmilitary threats such as cyber and space threats, terrorism, and disasters, the MND will lay the foundation for strengthening effective space capabilities and is planning to expand its capabilities to respond promptly to acts of terror and its transportation and rescue capabilities for disasters by field deploying micro-satellite system, space weather forecast and warning system, anti-aircraft laser weapons, and large-scale transport ships. Furthermore, the MND will contribute to the development of defense industry and revitalization of the economy by expanding its investment in the defense R&D field and investing in 8 major national defense strategy technologies¹³⁾ such as ultra-high-speed and high-power precision strikes, the manned and unmanned hybrid combat execution, and in cutting-edge defense science technology of the Fourth Industrial Revolution.

3. Efficient Pursuit of Defense Force Enhancement Projects

Modification of Laws and Regulations regarding Defense Acquisition

The MND has been revising laws and regulations relevant to defense acquisition projects to enhance the transparency, expertise, and efficiency of defense force enhancement projects and

to revitalize the defense industry.

First, in relation to defense acquisition projects, the MND has structured the existing single defense acquisition project law system into three decentralized systems by creating individual laws for the defense industry promotion field and the defense science and technology field. In 2020, the Act on the Development and Support of the Defense Industry was enacted to systematically support the development of the defense industry. Through the enactment, the MND designated projects that are large-scale or high-risk as national policy projects for the defense industry and established a basis for guaranteeing benefits such as reductions in penalties for delay. In the field of R&D, the MND introduced an agreement-based method to defense R&D, which had been promoted only through contract-based methods, by enacting the Act on the Promotion of Innovation in Defense Science and Technology, and introduced challenging and innovative R&D support measures such as expanding the sincere performance recognition program, which has been applied

13)

- 8 National Defense Strategy Technologies
- ① Autonomous and AI-based surveillance and reconnaissance
 - ② Super-connected intelligent command and control
 - ③ Super high-speed and high-power precision strike
 - ④ Future-oriented promotion and stealth-based platform
 - ⑤ Manned and unmanned mixed force warfighting
 - ⑥ Cutting-edge technology-based individual combat system
 - ⑦ Cyber-active response and future protection
 - ⑧ Future cutting-edge new technology

only to technology development, to the R&D of select weapons systems. The MND plans to enact subordinate statutes containing detailed operational plans for the system that are included in the two laws enacted in 2020 and enforce them in 2021 while continuing to make system improvements for the smooth promotion of future defense projects.

In 2019, among the four subcommittees of the Defense Acquisition Program Promotion Committee, the MND integrated three subcommittees that were operated based on defense acquisition project promotion stages (project planning, project management, and follow-up management such as logistics procurement) into one committee under the jurisdiction of the Defense Acquisition Program Administration (DAPA) to streamline the decision making process. Major issues—from the project planning stage to execution and contract management—were reviewed in one subcommittee so that decisions could be made from a comprehensive perspective on the overall project. As a result, the subcommittees of the Defense Acquisition Program Promotion Committee have been reorganized into two subcommittees: the Subcommittee on Military Force Policy under the jurisdiction of the MND and the Subcommittee on Defense Project Planning and Management under the jurisdiction of the DAPA.

System improvements have also been made to induce defense companies to reduce costs. Since the existing defense cost was a way to compensate companies for the actual costs incurred, no incentives were given to companies for cost reduction. Accordingly, the MND laid the foundation for enhancing the transparency and efficiency of defense acquisition projects by introducing the concept of standard cost¹⁴⁾ in the defense industry field for the first time in 45 years since the introduction of the defense cost standard in 1974 which improved the cost structure in its entirety so that the cost reduction efforts of the company could be compensated with profits. In addition, various policies were promoted at the same time, such as compensating appropriate costs for related activities, to simplify the complex defense cost profit structure and to encourage the export and R&D of defense companies.

In 2018, the MND expanded the application of the cap on the maximum amount of liquidated damages for delay¹⁵⁾ from existing prototype production contracts to first mass production contracts. Considering the fact that a number of unexpected risk factors may arise even in the initial mass production stage due to the nature of defense projects, which require high precision, the MND reduced the burden on companies participating in the defense industry by applying this cap mass production contracts.

14)

It refers to the cost calculated by the quantity and price standard by scientific research for a certain operation; even if a company performs the operation at a lower cost than the standard cost, the cost is calculated as standard cost, so the savings can be regarded as the profit of the company.

15)

To ensure that the liquidated damages for delay system—which imposes a certain percentage of liquidated damages for delay on the contract amount as a means of securing the contractual performance of the contract partner—does not act as an excessive burden on the contract partner, the MND has set the total amount of liquidated damages for delay at 10% of the contract amount (Paragraph 4, Article 61 of the Enforcement Decree of the Defense Acquisition Program Act).

Requirement Review and Analysis and Evaluation

The MND is implementing a requirement review program that verifies the appropriateness of the weapons system requirements determined by the JCS, considering the national finances and conditions for acquiring the defense budget.

Having reviewed 34 requirement cases between 2019 and 2020, the MND recommended requirements revision and identified various potential risks that may occur during projects at an early stage. Moreover, the relevant procedures were improved to reflect the results of the necessary follow-up measures after requirement reviews into the mid-term defense plan starting from 2019.

The MND also conducted 572 analysis and evaluations between 2019 and 2020 to support rational decision making for promoting projects. The improvement requirements derived from the analysis and evaluation of the MND led to actual system improvement such as introduction of the field operation test system, contributing to the implementation of efficient defense improvement projects. In 2019 in particular, efforts were made to achieve jointness, such as supporting the budget for research on analysis tasks required by the JCS.

Execution of Tests and Evaluations

Tests and evaluations are conducted to determine whether a weapons system or a core technology that is due to be acquired through purchase or R&D meets the military's performance standards and criteria.

From 2019 to 2020, the MND has conducted tests and evaluations for a total of 181 projects, since taking over the responsibility of testing and evaluating from the DAPA in 2014.

To eliminate redundancy of tests and evaluations performed between the MND and the JCS, the MND plans to transfer the authority of devising and determining test and evaluation plans to the JCS and promote the signing of the Test and Evaluation Program (TEP)¹⁶⁾ for cooperation in tests and evaluations and mutual use of test facilities between the ROK and the US. By doing so, the MND expects to streamline test and evaluation processes, develop test and evaluation technologies, and overcome the limitations of domestic tests and evaluations.

¹⁶⁾ Test and Evaluation Program

Creation of a Strong, Digital Military and Smart National Defense Based on the Fourth Industrial Revolution Technology

In 2019, through defense innovation that applies the science and technologies of the Fourth Industrial Revolution to all fields of defense, the MND formed the "Fourth Industrial Revolution Smart Defense Innovation Task Force" to create a "strong, digital force, smart national defense" and is carrying out various efforts with each service. The MND plans to select tasks and projects and reflect the required budget thereof related to three major innovation fields which are technology and infrastructure innovation to create a super-connected, super-intelligent, and super-converged defense infrastructure, defense operation innovation to implement transparent, efficient defense operations, and force system innovation to prepare for future warfare through intelligence and advancement of weapon systems, and achieve tangible results through systematic project management.

1. Establishment of Defense Infrastructure for Future Social Changes

Applying Cutting-Edge ICT to the Defense Domain

The MND is promoting "smart defense innovation" by applying cutting-edge ICT¹⁷⁾ of the Fourth Industrial Revolution to the defense domain, taking advantage of the world's best ICT infrastructure and public consensus as opportunity factors.

First, the MND is creating a super-connected, super-converged defense infrastructure that connects defense resources with infrastructure similar to neural networks. Advancement projects are being carried out in network infrastructure environments such as building next-generation military broadband convergence network and forming defense mobile and cloud environment. In order to ensure the security and flexibility of wireless data communications in line with the creation of a super-connected defense environment, various development measures are also being promoted to improve the wireless encryption policy.

Moreover, the MND plans to transform all fields of defense operations to become intelligent-based by applying advanced technologies such as AI and big data. By



Smart defense
innovation

¹⁷⁾
Information and
Communication
Technologies

establishing an "intelligent situation sharing and integrated surveillance system" centered on the command posts, the MND will analyze and share information collected from various sensors to provide battlefield information in real time and establish an "AI-based decision support system" to acquire AI-based command and control capabilities. To block cyber-threats and ensure stable operation of cutting-edge weapon systems, the MND will further advance the AI-based "cyber-defense system" and newly build a "cyber-operation situation visualization system".

Super-Connected, Super-Intelligent Network-Based Advancements

The MND plans to build a super-connected broadband convergence network and expand common intelligent services that can be used anytime, anywhere by collecting and converging data based on cloud in order to proactively prepare for the changing security environment and the development trend of ICT.

First, the MND is promoting a future-oriented, next-generation military broadband convergence network project in order to build a super-connected battlefield environment. The military broadband convergence network, built as Build Transfer Lease (BTL) in 2011, has significantly improved the information infrastructure of field units by accommodating 8,000 lines. However, it is facing limitations such as aging equipment and increasing demand for large-capacity video services. As a result, in order to be able to respond to changes in the future battlefield environment, a next-generation military broadband convergence network is being built that enables a flexible and intelligent network configuration, and is capable of operation analysis and super-speed, high-capacity information transmission. The MND also plans to build a defense mobile environment that enables unclassified and classified work and transmissions by introducing wireless networks and terminals with enhanced mobility, security, and survivability, and plans to drastically improve the mobile communications environment to enable smart operation of military power.

An integrated foundation for the defense information system service will be established to store and utilize the data collected through the super-connected network on cloud. To this end, the MND will establish a defense cloud proliferation strategy and a defense integrated data center advancement and information strategy plan to replace aging infrastructure and information resources and provide the best services by managing and operating them efficiently.

Moreover, a development plan is being established to apply AI—a key technology of the Fourth Industrial Revolution—to national defense in a systematic and strategic way. The development plan will include development strategies in all related fields,

such as creation of an ecosystem and AI ethics and culture, to introduce AI to the defense domain. The MND also plans to improve the defense data management system, which is the basis for utilizing AI, and to cultivate more specialists. Continuous efforts will be made to develop ROK's defense AI through the introduction of AI and its efficient use in the defense domain.

Strengthening Interoperability

In future wars, interoperability between systems is critical as surveillance, command and control, and strike systems and information systems need to be connected through a network to share information and synchronize battlefield situations in real time based on military science and technology developments. Accordingly, the ROK Armed Forces has secured their own "tactical data link¹⁸⁾ standard conformance testing" certification ability for surveillance, command and control, and strike systems, and they plan to integrate the established interoperability system into a single system for each resource management and information system for the efficiency of interoperability and the standardization of interoperability between the weapons system and the force support system. The MND is striving to improve the level of interoperability by updating the defense informatization standards¹⁹⁾ according to the development trend of ICT and the defense and security environment and verifying whether the latest standards are being applied.

18) Real-time digital communications network for information exchange between information systems for weapons systems and operation of weapons systems

19) Information technology standards applied to secure compatibility and interoperability between systems when developing information systems

20) A scientific technique that predicts and verifies the experimental results through simulation in an environment that models characteristics and functions similar to the battlefield

21) A state-of-the-art practical training system capable of integrated operation by composing Live (actual-maneuver simulation training), Virtual (virtual simulation training), and Constructive (wargame simulation training) systems into one synthetic environment

Implementing Smart Information Services

In order to create new values of defense work and to implement smart information services that can support big data-based decision making, the MND is advancing information systems in major fields such as personnel, military, and finance. The MND also plans to improve the accessibility and compatibility of defense informatization services so that everyone, including civilians, can utilize quality services. Meanwhile, open software is being introduced and improvements are made in education for fostering talented personnel for defense software. The software operation capability of servicemembers are being maximized through AI-software convergence education.

A variety of simulation systems are also utilized to enhance combined exercises and training led by the ROK Armed Forces and their analysis capabilities. The MND is developing a defense modeling and simulation (M&S)²⁰⁾ system by establishing a simulation analysis pilot system that applies advanced technologies such as AI and big data and by developing a live, virtual, constructive training system (LVC)²¹⁾ combined with cutting-edge communication technologies.

2. Realizing ICT-Based, High-Efficiency, Advanced Defense Operations

Cultivating JLVC Training-Based Real Combat Warriors and Units

In order to actively respond to dynamics in various war aspects and overcome limitations in training that stems from social and environmental changes such as urbanization, the ROK Armed Forces is expanding the use of scientific training system that applies the technologies of 4th Industrial Revolution.

All service components are working on the establishment of scientific combat training centers where maneuvering and live-fire of personnel and equipment are integrated with scientific systems. MILES equipments are also being developed and distributed, enabling simulated shooting similar to real settings with the use of laser beam. The ROK ensures realistic training environment through expanding the application of simulated training with the use of VR and AR. The MND also plans to establish a synthetic training environment that will integrate and link various scientific education and training systems in the future.

Improving the Quality of Life for Servicemembers Using Big Data

The MND is improving the quality of life for servicemembers by supporting safe and healthy barracks life utilizing big data ²²⁾ in various fields such as meals, clothing, and medical care.

Regarding meals for servicemembers, the MND has established an optimal meal demand prediction system using the meal operation data, and improved servicemembers' satisfaction by implementing a pilot project of "automated meal service measurement system".

For clothing, size measurement using "3D scanning" is currently in use as a pilot project for servicemembers in training centers to provide clothing and personal equipment suitable for the actual body size of each soldier.

The MND plans to further expand the automated meal service measurement system and 3D scanning to provide meals that cater to the taste of servicemembers and clothing and personal equipment optimized for the body shape of each servicemember.

In the medical field, a mobile remote diagnosis and treatment system is being established that enables quick response by sharing the information on emergency patients being transferred with the Medical All-Source Situation Center in real time. An analysis system that can support the decision making of medical staff with the use of military medical big data is also being facilitated.

²²⁾ Technology that extracts values and analyzes results from data that include a large set of both structured and unstructured data—instead of in the form of database—that are beyond the capabilities of existing database management tools

For the mobile telemedicine system, a pilot project was initiated to build a system using the LTE-based system for the Armed Forces Medical Command, trauma centers, and 8 military hospitals. The system was temporarily expanded and operated in isolation facilities and temporary screening clinics to improve accessibility to the medical treatment of servicemembers isolated due to COVID-19 and to prevent infection. The military medical big data analysis system is based on the Defense Medical Information System (DEMIS)²³⁾, and the development of analysis system technologies—such as the chest X-ray diagnosis system and the support system for drug prescription—is being promoted in cooperation with the Ministry of Science and ITC. Among these, the X-ray diagnosis system is in progress as a pilot project for military hospitals.

The MND plans to increase the survival rate of patients by supporting the optimal decision of doctors through big data of DEMIS and create a military medical environment that can respond to various emergencies by expanding mobile remote diagnosis and treatment.

Moreover, it plans to establish a smart talent management system that can systematically manage the service cycle of servicemembers—from before enlistment to post-discharge—and use it in various fields such as acquiring and cultivating optimal talents suitable for military characteristics, appointing qualified personnel, and supporting employment after discharge.

Improving Efficiency Through Defense Resource Life Cycle Management

The MND seeks to improve the productivity of defense operations by utilizing various advanced tech-

nologies for the life cycle management of defense resources such as military supplies and military installations.

In terms of equipment maintenance, the MND is building a parts management system that can accurately predict the equipment life and demand for spare parts demand using big data. It is also promoting the establishment of smart factories²⁴⁾ that apply a status-based maintenance system and a remote maintenance support system utilizing sensor data and advanced ICT.

First, with regard to equipment life and demand for repair parts, a demand prediction model was developed and is applied to improve the accuracy in predicting the demand for repair parts. The MND is building a parts discontinuation management information system to cope with the increased cost and reduced equipment operation rate due to parts discontinuation.

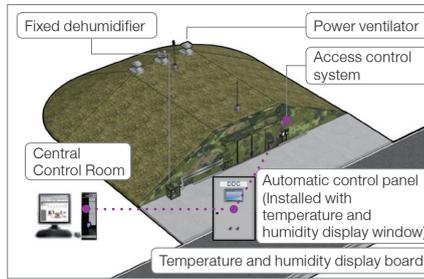
Moreover, a status-based maintenance system is being established based on sensor

23) A system that converts handwritten medical records into integrated electronic medical records and connects them to a network so that any unit can access the same medical records

24) An intelligent production factory that improves productivity, quality, and customer satisfaction by applying ICT combined with digital automation solutions in the production process from design and development to manufacturing and distribution. It is a futuristic factory where the facilities and equipment are installed with IoT to collect process data in real time, analyze it, and enable control by the factory itself



Equipment maintenance using AR



Smart Magazine (igloo type)

data collected by attaching sensors to major equipment of the Army, Navy, and Air Force and a remote maintenance support system is being promoted using VR and AR to provide quick support to marine vessels and remote units that are experiencing difficulty in dispatching specialized maintenance units.

The MND will build a foundation to apply the status-based maintenance system from the weapon acquisition stage, and enhance the functions of smart factories in the field of military maintenance by expanding the units and equipment subject to the remote maintenance system.

When it comes to ammunition management, the MND is establishing a smart ammunition storage²⁵⁾ that automatically controls the temperature and humidity in the ammunition storage and monitors fire using IoT²⁶⁾ to ensure ammunition performance and safety. A guided munition life cycle management system is also being created based on big data to improve the accuracy in predicting the demand for guided munitions. To this end, the MND is establishing standards for applying smart ammunition storages for ammunition type and is building 7 smart ammunition storages as a pilot project. It is also promoting the computerization of guided munition data in the integrated defense logistics information system.

In the future, after analyzing the storage management performance of smart ammunition storages, the MND plans to supplement the deficiencies and expand the smart ammunition storage initiative to the entire military starting in 2025. The MND will continue to improve the accuracy in predicting demands and the operation rate of guided munitions by developing a demand prediction model for each guided munition.

In the field of military supply management, big data is utilized to predict and calculate the appropriate life cycle for timely replacement. The MND seeks to reduce manpower and streamline logistics operations for efficiency through automated loading and unloading, screening, and packaging tasks by establishing a smart logistics center that apply robots and automated devices. Currently, the MND has

25) Ammunition that enables remote automatic control from the Central Control Room by installing biometric access control sensors, automatic CCTVs and surveillance sensors, temperature and humidity automation facilities, fire monitoring sensors, etc

26) Technology that connects various objects to the Internet by embedding sensors and communication functions and through wireless communication

begun a big data prediction model pilot project for 6 items—including personal equipment, bedding, and general goods—and established a comprehensive plan for smart logistics centers by implementing a pilot project for on-site management of military supplies and research service for the operation of a smart logistics center based on robots and big data. The MND plans to gradually expand life span analysis items and introduce smart logistics centers.

Win-Win Development of Civilian–Government–Military in Major Technical Fields

To effectively introduce advanced technologies that are developing day by day, it is essential to utilize civilian experts and technologies, hence providing the

private sector with opportunities to experiment and generate profits.

First, the MND is making efforts for the early introduction of 3D printing²⁷⁾ technology in the defense domain. Currently, the civilian–government–military are working together to develop defense metal parts manufacturing technology as part of a research project led by the Ministry of Trade, Industry, and Energy. The MND is continuing the education to cultivate defense specialists with 3D printing manufacturing technology in each service to acquire 3D printing defense manpower.

The MND plans to gain specialized 3D printers tailored to the characteristics of each service and enhance the efficiency of logistics support by producing defense parts that are discontinued or are difficult to procure. More robots for operational sustainability support will be used to solve fatigue problems caused by the reduction of human resources and heavy weight and repetitive work in the field of operational sustainability. The ROK Army achieved results in reducing work hours by conducting test and evaluation of muscle-assisted robots²⁸⁾ in the ammunition and engineering units of the Army. Currently, a passive-type wearable robot²⁹⁾ pilot project is being promoted. The MND is planning to promote technology development as a civilian-military technology cooperation project, select a test unit, and conduct a wearable robot pilot project.

Drones, a cutting-edge technology that major advanced countries are paying attention to, are also highly utilized in the field of defense. Accordingly, the MND is promoting the de-



Upper limb strength support wearable robot

27) 3D printer refers to the machine itself that prints three-dimensional objects based on a three-dimensional design, while 3D printing is the entire process of printing three-dimensional objects with a 3D printer, by not only printing three-dimensional objects but also creating the desired result through the process of designing

28) A robot that can support the muscles by supplementing human physical limitations and strengthen physical abilities (muscle strength, endurance, etc.), It is classified into an exoskeleton-type system and a suit-type system according to the structure and operation method.

29) A passive robot that does not use power and a robot that improves the wearer's physical ability through a drive unit control or a mechanical mechanism after measuring signals from the human body

ployment of transportation drones to provide quick support to remote and isolated units which are restricted from access during contingencies. Currently, the MND is conducting preliminary research on drones for transporting military supplies, evaluating the utilization of excellent commercial drones, and promoting technical cooperation projects for both civilian and military use. In the future, more drones for transporting military supplies are expected to be used in the Army Logistics School and the logistics support brigades, while empirical evaluation and verification will also be conducted accordingly.

3. Advancement of Military Power that Apply Cutting-Edge Technology

Securing a Weapons Systems that Apply Fourth Industrial Revolution Technologies

For a country to gain its own independent defense capabilities that can proactively respond to changes in the future security environment, it is necessary to

continue the development of advanced weapons systems and core and original technologies, including a strategy for promoting defense R&D.

The DAPA presents the direction of each project by establishing a core technology roadmap for each weapon system every year to secure the core technologies necessary for the R&D of weapons systems in advance. The DAPA also prepares the "Core Technology Plan" every year according to the 8 fields of defense strategy technology³⁰⁾ of the "Defense Science and Technology Advancement Policy" for mid- to long-term core technology planning.

In the "2020-2034 Core Technology Plan", the MND presented 140 core technologies for each defense strategy technology through the analysis of key points and strategies for securing major technologies for each of the 8 fields of defense strategy technology. In the "2019 Defense Science and Technology Survey"³¹⁾, the MND derived requirements for core technology development by utilizing a survey and analysis technique of work breakdown structure (WBS) on 33 key weapons systems and strengthened the defense technology planning required to build a weapons system with advanced technologies by analyzing the connection with the 8 fields of defense strategy technology.

To utilize civilian R&D capabilities needed for future battlefield innovation in the defense fields, the MND plans to contribute to national R&D activities in various ways and extend the scope of application by developing defense technologies and weapons systems for 10 fields—advanced sensors, AI, VR, AR and mixed reality

30)

As fields of technology that require strategic R&D to achieve defense goals, they include mature private new technologies applicable to national defense. The eight fields are:

- ① Autonomous and AI-based surveillance and reconnaissance
- ② Super-connected intelligent command and control
- ③ Super high-speed and high-power precision strike
- ④ Future-oriented promotion and stealth-based platform
- ⑤ Manned and unmanned combined combat performance
- ⑥ Cutting-edge technology-based individual combat system
- ⑦ Cyber-active response and future protection
- ⑧ Future cutting-edge new technology

31)

A document which is published every three years by the Defense Agency for Technology and Quality in accordance with Article 32 of the Defense Acquisition Program Act and Article 137 of the Regulations on Defense Acquisition Program Management. For the document to be used for future weapons system's core technology planning and the survey and analysis on previous research conducted, it presents the level of defense science and technology, the development status and trend of weapons systems and technologies, and the directions for R&D of technologies that are required in the future.

(MR), quantum information, cybersecurity, IoT and Internet of Everything (IoE), energy, new materials, 3D/4D printing, and unmanned robots.

**Promoting Future Challenge
Defense Technology Development
Project³²⁾**

In keeping with the advancement of weapons systems and the increasing speed of technological developments, the MND is creating conditions for task

planning to enable the implementation of challenging and innovative national defense R&D projects that generate weapons system requirements in contrast to the existing defense R&D planning system based on requirements of each service, and is building a system to implement such task.

The DAPA has been piloting the future challenge defense technology development project since 2018, and is making efforts to improve the efficiency of project which include the Agency for Defense Development selecting 13 projects through public participation and holding technical contests.

In 2019, the types of future challenge defense technology development projects were diversified into PM planning³³⁾, technology competition, and project competition to encourage participation by the private industry, academia, and research experts.

Moreover, the "Act on the Promotion of Innovation in Defense Science and Technology" was enacted in March 2020 to provide legal grounds for the project, enabling stable project promotion. By expanding the future challenge defense technology development project through budget increases and discovery of new projects, the MND will continue to exert efforts to develop challenging and innovative technologies and to create requirements for new-concept weapons systems utilizing these technologies.

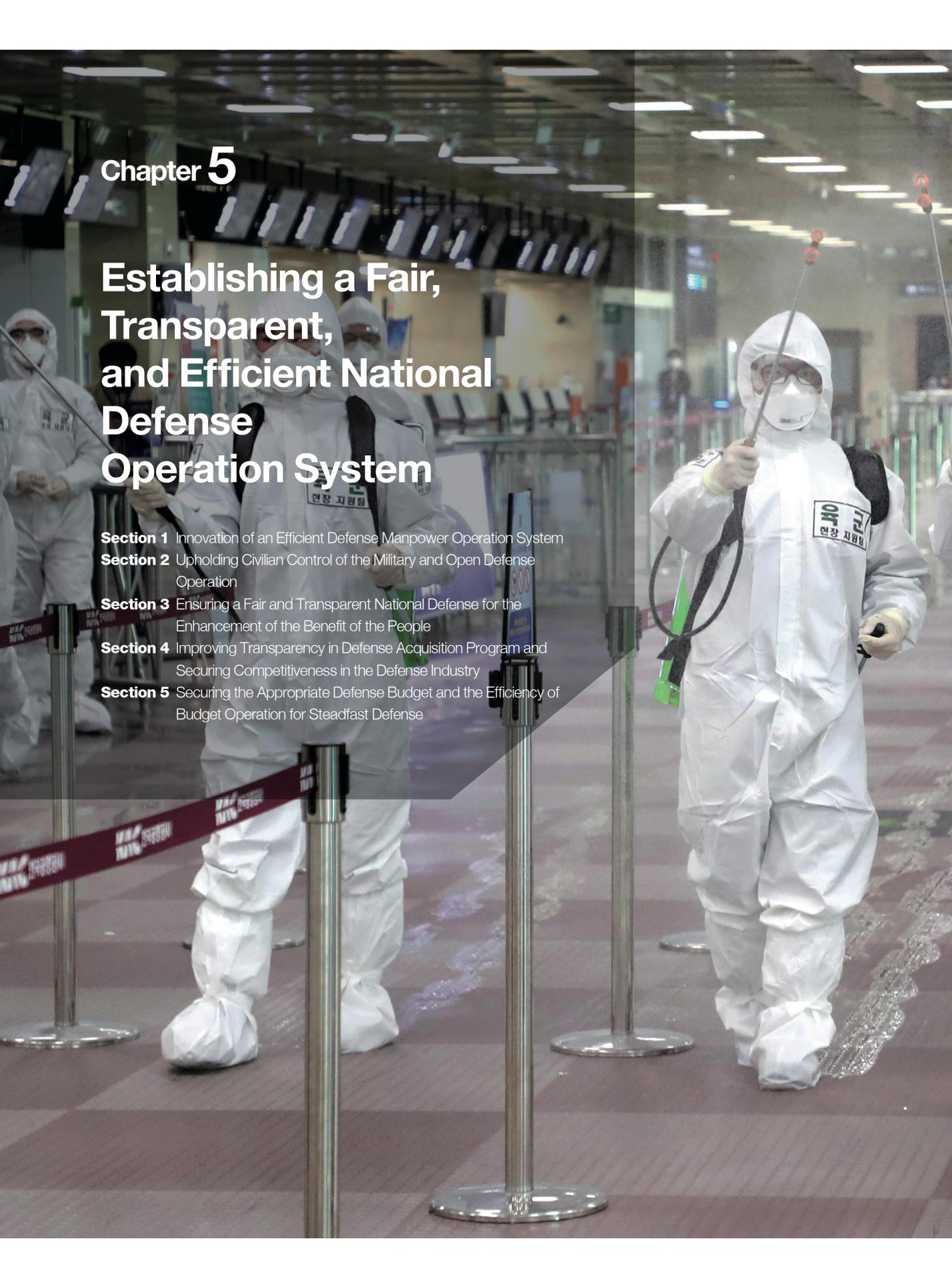
32)
Innovative and challenging defense science and technologies with the purpose of applying them to weapons systems wherein the requirements are not determined or are not scheduled under Article 15 (1) of the Defense Acquisition Program Act

33)
A planning method wherein a project manager (PM) directly plans the detailed technical tasks of the program and autonomously performs entire tasks from selection to management and evaluation of the supervising research institutes

Chapter 5

Establishing a Fair, Transparent, and Efficient National Defense Operation System

- Section 1** Innovation of an Efficient Defense Manpower Operation System
- Section 2** Upholding Civilian Control of the Military and Open Defense Operation
- Section 3** Ensuring a Fair and Transparent National Defense for the Enhancement of the Benefit of the People
- Section 4** Improving Transparency in Defense Acquisition Program and Securing Competitiveness in the Defense Industry
- Section 5** Securing the Appropriate Defense Budget and the Efficiency of Budget Operation for Steadfast Defense





The Army's support for COVID-19 quarantine

Innovation of an Efficient Defense Manpower Operation System

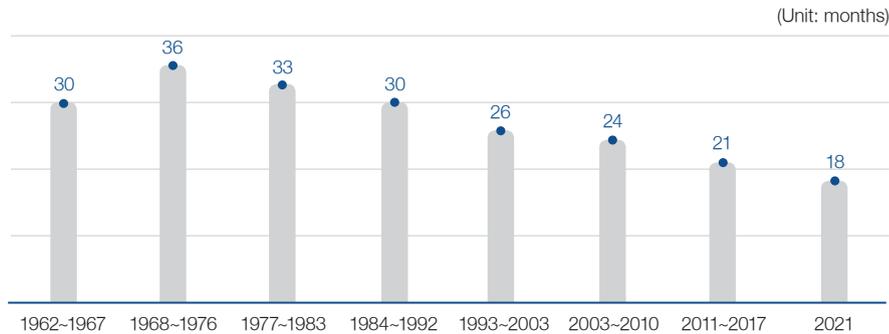
The MND is shortening the military service period to meet the public demand for easing the burden of military service. In preparation for the expected shortage of troop resources due to the shortening of the service period, the MND is increasing the proportion of female servicemembers and improving their working conditions while implementing military expertise-oriented human resource management to prevent force deterioration.

1. Shortening the Mandatory Military Service Period

Implementing the Service Period Reduction Plan

Starting on October 1, 2018, the MND has shortened the military service period of servicemembers to develop the ROK Armed Forces into technology-intensive, strong elite forces. The service period for the Army and the Marine Corps was curtailed from 21 to 18 months, the Navy from 23 to 20 months, and the Air Force from 24 to 22 months with an additional 1 month reduction following a revision of the Military Service Act. Determined by the time of enlistment, the service period is gradually shortened by one day on a two-week basis to prevent any significant differences. In case of the Army, the reduction of the service period started with those who enlisted on January 3, 2017 and were discharged on October 1, 2018. The shortened period will reach the full three-month term with those who will enlist on June 15, 2020 and will get discharged on December 14, 2021. The discharge date for each enlistment date can be found with the discharge date calculator available at the Military Manpower Administration (MMA) website. The shortening of the service period is expected to allow servicemembers to return to the civilian society earlier and, therefore, contributes to the efficient use of the country's human resources.

[Chart 5-1] Changes in the Length of the Military Service Period (applicable to the Army)



Measures to Prevent Force Deterioration

To prevent force deterioration caused by the shortened service period, cutting-edge defense technologies for modern warfare will be strengthened, and the manpower structure will be restructured into one centered on officers and NCOs with positions requiring proficiency to be filled by NCOs. Moreover, the training system for enlisted personnel will be enhanced, and realistic training will be reinforced to improve their proficiency as early as possible through scientific training. At the same time, noncombatant missions will be minimized by increasing civilian military employees and civilian workers to help servicemembers focus on combat missions during their service periods. Such reform in the defense manpower operation system will further bolster the ROK's military power.

2. Increasing the Proportion of Female Servicemembers and Providing Favorable Working Conditions

Acquiring Superior Female Workforce

The necessity to expand female military manpower is increasing as women's role in society continues to expand and due to the reform on transforming the military into a technology-intensive one. To increase the proportion of female servicemembers, the MND is gradually recruiting female junior cadres (second lieutenants and staff sergeants) in accordance with the 2018-2022 Plan for Female Workforce Expansion Plan, which aims to increase the proportion of female servicemembers to at least 8.8% by 2022.

As of the end of November 2020, the total number of female servicemembers stood at 13,665, accounting for 7.4% of the total number of cadres (officers and NCOs) as

suggested in the expansion goal in 2020. After expanding the female servicemember workforce by up to 8.8% at the end of 2022, the MND plans to determine whether to further expand the female workforce considering the direction of defense reform and the conditions for acquiring active-duty resources.

Managing Female Servicemembers According to Gender Equality

For the efficient utilization of female servicemembers, the MND has devised the same regulations for female servicemember positions as those of male servicemembers.

Also, favorable conditions are provided for pregnancy, childbirth, and childcare while any disadvantages thereof in terms of personnel management are prohibited. In July 2018, the National Defense Personnel Management Directive was revised to abolish the restriction on female servicemembers' assignment to certain units and positions and apply the same standards for career management regardless of gender. In May 2019, the MND established standards for adding female positions in policy departments and combat units, and made it mandatory for the ratio of female servicemembers working in policy departments—including the MND, the JCS, the Combined Forces Command (CFC), and each service headquarters—to be higher than the ratio of female field officers in order to promote their career advancements. In addition, regulations were put in place for each service to report the status of commander and staff positions in combat units to the MND every year.

Assisting the Servicemembers' Work-Life Balance

To promote work-life balance for both genders, the MND has established a system to improve the conditions of female ser-

vicemembers when it comes to pregnancy, childbirth, and childcare. At the end of 2019, in relation to pregnancy and childbirth, leave up to three days for spouse's miscarriage or stillbirth and leave up to ten days for pregnancy examination leave were made available to servicemembers. Also, in order to assist childcare, childcare leave for families with two or more children was expanded to three days a year from two days a year.

As of the end of 2020, the MND operates a total of 139 daycare centers and 45 co-parenting centers, and is expanding the number of childcare facilities annually in consideration of the legal standards and childcare requirements. Since 2019, the MND has subsidized the labor cost of one nighttime nursery teacher for 89 military daycare centers with 20 or more personnel, allowing servicemembers to use the centers when night care is needed during training, watch duty, or other duties.



Moreover, by introducing a family-friendly certification system¹⁾ to military units and gradually expanding the program, the MND is strengthening commanders' responsibility for creating work-family balance conditions and promoting better organizational culture.

**Creating a Working Environment
Safe from Sexual Violence**

The MND is creating a safe working environment by conducting sexual violence prevention activities and reinforcing the expertise of the officer in charge of handling sexual violence cases and the victim protection and support system. In order to eradicate sexual violence in the military, the MND offers gender awareness courses and reflects the completion or non-completion of these courses in HR management to include promotions and assignments. Cooperation with related organizations and civic groups is also being carried out. The MND is annually increasing the number of counselors for sexual grievances and professional investigative personnel—experts in supporting victims—and holding annual civilian-government-military integrated workshops to eradicate sexual violence. Furthermore, by strictly applying the "One-Strike Out System", sex offenders, after receiving criminal punishment, are submitted to a disciplinary review without exception and a disciplinary determination standard based on severe disciplinary action is applied during the review.

In 2019, a gender awareness course was added to the curriculum of each military academy as a regular course. Likewise, through a study of the Military Sexual Violence Survey conducted in the same year, the MND was able to identify the pattern of sexual violence in the military and derived the requirements for policy improvements. The MND designates a special period for sexual violence prevention throughout the military during summer and at the end and start of a new year and checks the implementation status of sexual violence prevention activities, and further enhances the support system for victims of sexual violence. The MND plans to reflect changes in the patterns of sexual violence incidents occurring in the military, supplement the system that prevents sexual violence and protects the victims, and upgrade the education program to improve gender awareness.

¹⁾ A system that grants certification after assessing public institutions and private companies that operate family-friendly systems in an exemplary manner (childbirth and childcare support, flexible work system etc.) (Operated by the Ministry of Gender Equality and Family)

[Chart 5-2] Integrated Support System for Victims of Sexual Violence

Category	Consultation / Report	Medical Treatment	Law
Inside the military	<ul style="list-style-type: none"> • Defense Help Call / Gender Equality Policy Division (MND) • Gender Equality Center in each military • Counselors for sexual grievances (Corps level) • Director for gender equality (Division level) 	<ul style="list-style-type: none"> • Mental Health Promotion Center of the Armed Forces Capital Hospital * Hospital dedicated to provide medical support for victims of sexual violence 	<ul style="list-style-type: none"> • Public defender • Witness Support Officer (accompanied with trusted person)
Outside the military	<ul style="list-style-type: none"> • Sunflower Center (31 centers): Counseling, medical treatment (fees incurred for some treatments), free legal support • Sexual violence counseling centers (168 counseling centers nationwide) 		

Expansion of Essential Facilities for Female Servicemembers

The MND is also expanding the essential facilities for women (restrooms, shower rooms, etc.) in each service following the increase in the number of female servicemembers due to the abolition of limitation of female servicemember deployments to certain units and positions, increased number of newly commissioned female officers and the expansion in selection of female servicemembers for long-term service. After identifying the requirements for expansion through a complete enumeration survey of women’s essential facilities and gender impact assessment, MND installed 121 buildings in the units that were not equipped with essential facilities for women in 2019. A total of 210 independent rooms were also provided for the heads of guard posts in the ROK Army’s general post (GOP).

By 2021, the MND plans to build essential facilities for women in all military units that female servicemembers can serve at. (Army and Marine Corps: independent platoon level and higher; Navy and Air Force: battalion level and higher).

The MND also strives to improve the service conditions for female cadres whose numbers are gradually increasing through focused efforts on improving the aging cadre quarters and supplementing the shortage of quarters.



Essential facilities for female servicemembers (outside)



Essential facilities for female servicemembers (inside)



GOP guard post toilet

3. HR Management Centered on Military Expertise

Fostering Balanced Talents by Gender, Origin, Branch, and Specialty

Forming an organization with personnel of diverse characteristics through balanced HR management

that does not discriminate gender, origin, branch, or specialty contributes to enhancing the future competitiveness of the organization.

Accordingly, the MND is striving to overcome the limitations in performance-oriented HR management and improve the diversity and equity of the organizational structure.

First, the MND is expanding the selection of outstanding female servicemembers to achieve gender-balanced HR management. As a result, the number of female servicemembers promoted to the rank of lieutenant colonel and colonel has increased by 360% from 22 in 2016 to 79 in 2020. Moreover, in 2019 a female officer reached the rank of major general for the first time, and another female officer became a brigadier general for the first time in the military intelligence branch.

[Chart 5-3] Female Servicemember Promotions by Rank in the Past Five Years

(Unit: person)

Category	2016	2017	2018	2019	2020
Captain → Major	159	146	212	215	236
Major → Lieutenant Colonel	20	35	51	63	71
Lieutenant Colonel → Colonel	2	6	7	5	8
Colonel → Brigadier General	0	3	2	2	1

To achieve origin-balanced HR management, the MND has expanded the assigning of non-academy graduate officers to key positions such as policy departments which were mainly filled by academy graduate officers by improving the HR management. Also, the promotion rate of non-academy graduate officers has been gradually increased since 2018. The MND will continue to strengthen the careers and competencies of all officers regardless of their origin and enhance the competitiveness of the military organization by conducting promotion assessment based on free competition that takes into account the individuals' abilities and qualities instead of their origins.

To promote balanced HR management by branch and specialty, the MND encourages the revitalization of military service by promoting excellent personnel who have served sincerely to the end of their service periods, breaking away from the

previous practice of promoting a servicemember based on his or her specific branch or specialty. Moreover, the MND is striving to foster balanced talents in various fields by selecting those with expertise in specific fields and who have the ability to lead the development of the military.

The MND will further streamline policy directions, implementation systems, and policy contents related to balanced HR management by conducting policy studies for balanced HR management suitable for the future security environment.

Establishing an HR Management System that Fosters Top-Notch Experts in Each Field

The MND is also making considerable efforts to train top-notch experts in each field to prepare for changes of trends in future wars and the transformation

to a technology-intensive military structure. In connection with Defense Reform 2.0 in particular, the HR management system is being improved with the focus on enhancing the expertise and utility of cyber-experts, combined and joint experts, and acquisition experts.

First, the MND re-established the concept of "cyber-experts" in order to develop the ability to respond to the rapidly increasing cyber-threat and to carry out cyberwarfare. Accordingly, the opportunity to become a cyber-expert, which was previously given to officers only, has been expanded to all ranks including NCOs and civilian military employees. Active duty cyber-experts receive a cyber-specialty or qualification while a cyber-field was newly established for civilian military employees through revision of related laws and regulations in March 2020. By 2021, the MND plans to gradually acquire experts according to the HR acquisition goal for each status by, and to designate cyber-expert positions in consideration of annual unit reorganizations and organizational changes and enhance the expertise of cyber-experts by operating the designated positions by rotation.

The "combined and joint training experts" system fosters and utilizes human resources to lead the process of OPCON transition and subsequent combined operations. The positions are divided into two classes²⁾ depending on the level of jointness and language proficiency. First, the verification for expert position appointment was strengthened so to ensure objectivity. The language proficiency standard, which had been set too high, was eased to adjust to appropriate standards. In addition, the pool of experts was expanded by granting qualifications to those who received commissioned education for more than 6 months in English-speaking countries. The MND plans to activate the rotation of combined and joint training experts to the JCS, ROK-US Combined Forces Command, joint units, and field

2)

- Group A: Positions that require high level of jointness and language skills (49 positions)
- Group B: Positions that require general level of jointness and language skills (320 positions)

units, strengthen the position management for them to be assigned first to designated combined and joint positions, and support the continuous improvement of the servicemembers' language skills by offering more opportunities such as short-term overseas training, various training courses, and individual deployment.

In the case of acquisition experts, the MND intends to foster force experts with expertise in all stages of the force work system of "proposing requirements-acquisition-operation" by designating acquisition and force positions within the MND, the JCS, the DAPA, and each service and by improving the job rotation. First, the acquisition and force positions are designated regularly within the MND, the JCS, the DAPA, and each service to enhance the military HR management and maintain work connectivity within the positions. To supplement the DAPA acquisition experts' understanding of "proposing requirements" and "operation" and the relative lack in experience in operating forces in field units, the job rotation was further enhanced among the DAPA, the MND, the JCS, and each service, and the maximum job rotation duration (5 years) is strictly managed so that force specialists in each service can equally experience other project-related positions in the DAPA. The MND plans to inspect the status of rotation of acquisition experts and force specialists in each service to ensure that the above-mentioned improvements are being implemented in a satisfactory manner.

Upholding Civilian Control of the Military and Open Defense Operation

The MND has established the principle of civilian control where the representatives elected by the people manage and operate the military in a democratic way and is promoting the civilian control of the military in national defense and guaranteeing political neutrality to allow the ROK Armed Forces to concentrate on their inherent missions. Moreover, the MND is also striving to gain public trust by carrying out active defense policy PR activities, engaging people to participate in the policymaking processes, and developing anti-corruption and integrity measures together with the civilian sector, thereby realizing an open national defense operation.

1. Promoting Civilian Control of the Military³⁾

Civilian Control of the Military

The MND is pursuing civilian control of national defense to establish the principle of civilian control over national defense policies and guarantee the conditions for the ROK Armed Forces to devote themselves to their inherent missions.

Civilian control of the military is significant in that it is one of the basic principles of a democratic nation under the Constitution and other laws, and national defense needs to be subject to democratic control within the bigger framework of government policies.

Since the inauguration of the Moon administration in 2017, the administration has emphasized the need to re-establish the roles of the MND and each military service, and rebuild the ROK Armed Forces as the "Advanced Armed Forces of a Democratic Nation Trusted by the People" based on the principle of civilian control and political neutrality.

Accordingly, the MND, while guaranteeing the political neutrality of the ROK Armed Forces by establishing the principle of civilian control to ensure, is promoting the execution of national defense tasks that meet the public's standards, and is promoting the national defense civilian control promotion plan under the goal of providing the conditions for the Armed Forces to focus on their inherent missions.

From 2017 to 2020, the MND replaced three deputy minister-level positions previously held by reserves with regular public officials and converted six director-

3)

According to this principle, key national defense policies need to be determined by the president elected through a popular election; the Minister of National Defense, who is a member of the administrative cabinet; and civilian expert groups. In addition, military power should be used in accordance with the political and diplomatic decisions of the state.

general and director-level positions that require administrative expertise, except those requiring the expertise of active duty personnel, to regular public official positions, thereby achieving results in civilian control. Based on such efforts, if civilian manpower with expertise in the defense and military fields is to be gradually increased and servicemembers are to be assigned based on positions that require military expertise, the MND will be able to establish optimal defense policies for the use of military force, while the ROK Armed Forces will be able to focus on their inherent missions.

Furthermore, to achieve civilian control in major positions in defense education and research institutes, which aim to enhance expertise in the field of defense education and research, in 2017, a civilian was appointed as the president of the Korea Institute of Defense Analysis (KIDA). The MND is seeking to revise the Act on the Establishment of the Korea National Defense University to also appoint a civilian instead of a general officer as the president of the Korea National Defense University.

Discussions are underway with the relevant ministries to convert some of the positions for professors from active duty personnel to civilian professors to secure outstanding faculty so as to strengthen the educational capabilities of the Korea National Defense University and the military academies.

Enhancing the Expertise of Public Officials in the MND in Security and Military Areas

To create an environment where civilian officials with expertise in the security and military areas and professional soldiers develop mutually in

accordance with the trend of civilian control, public officials at the headquarters of the MND need to enhance their military expertise in order to understand and empathize with the positions of each service.

To this end, the MND operates a customized education system by rank to enhance the military expertise of its officials. For public officials to advance to higher ranks, they are required to complete a mandatory training course on military operations and weapons systems to gain military expertise. The MND intends to strengthen the decision-making capabilities of public officials in management positions, such as high-ranking public officials in particular, by offering a curriculum in international affairs and security strategies.

Going forward, the MND will continue to make efforts to enhance the military expertise of public officials for the successful implementation of civilian control of the military.

2. Political Neutrality of the ROK Armed Forces

Revising the Relevant Laws to Eradicate Political Intervention

The ROK Armed Forces carries out the sacred mission of defending the country and protecting the lives and property of

the people through national security.

Accordingly, the Constitution and other laws stipulate the Armed Forces' obligation to be politically neutral, ensuring the execution of their inherent missions. However, considering that military servicemembers are not free of pressure from superiors due to the military's vertical rank and command-obey structure, there still remains a factor that can induce political intervention by servicemembers.

To address this issue, the MND plans to revise the relevant laws and regulations to eradicate any political involvement caused by political pressure and to enhance political neutrality.

Until now, there was no basis for severe punishment if an outside public official instructed servicemembers to intervene in politics. Also, there was no obligation to report unethical orders to meddle in politics nor legal provisions protecting whistleblowers. Hence, the MND seeks to revise the Framework Act on Military Status and Service and the State Public Officials Act to impose greater punishment when an outside public official instructs a servicemember to engage in unethical political intervention, to mandate the reporting of political meddling instructions, and to provide a legal basis for securing the whistleblower's confidentiality and rewarding the corresponding whistleblower. In addition, the MND plans to revise the Military Unit Management Directive by supplementing the "Code of Conduct on Political Neutrality of the Military" and the "Detailed Standards of Conduct".

The people's trust in the military is the basis of the military's combat power, and such trust is guaranteed only when the military is faithful to its inherent duties. Therefore, the ROK Armed Forces will continue to improve the legal foundation for compliance with political neutrality obligations to eradicate possible political interventions inside and outside the military, offering an environment where servicemembers can focus on their inherent duties.

Raising the Awareness of Servicemembers to Comply with Political Neutrality

The MND has allowed the use of mobile phones in the military as part of the

creation of a barracks culture that guarantees human rights and basic rights of each servicemember. As servicemembers are able to express their personal opinions

including posting comments on political issues at any time, there are growing concerns over the possibility of their comments violating political neutrality. Therefore, it is necessary to raise the awareness of servicemembers to comply with political neutrality, now more than ever.

To keep pace with such changes in the barracks environment, the MND is striving to raise the awareness of servicemembers by presenting clear and specific codes of conduct and conducting regular education on these codes.

First, education materials were provided to servicemembers to help them understand the laws and the guidelines in an easier way by suggesting examples for each case. To maintain political neutrality in the existing guidelines on the use of mobile phones in the military, the MND added essential rules to be observed by servicemembers when using social media, and made additional efforts to prevent online violation of political during the by-elections and the 21st legislative elections which took place after the use of mobile phones were allowed.

Throughout the year, the MND is also raising the awareness of servicemembers by offering education and giving emphasis on observation of political neutrality. Education is conducted in consideration of the forgetting curve and the cycle of troop rotation, and servicemembers are being supervised to practice the guidelines on the use of mobile phones on a daily basis to recognize and implement the values of observing political neutrality.

3. Open Management of National Defense

Promoting Active Policy PR Activities

To gain public trust, the MND is actively promoting its key policies, including Defense Reform 2.0, through various channels such as the press, digital media, and on-site communication. In addition, to communicate directly with the public to gain their understanding and consensus on national defense policies, the MND continues to carry out PR activities focused on public participation through the "Communication Experts Group"⁴⁾ composed of experts in various fields such as smart and innovation, media and culture, and medical care and "Online Supporters (M-Friends)"⁵⁾ composed of college students.

As the first step of reaching a consensus among the public, the MND is producing online and mobile promotional contents considering the increasing influence of these platforms. In 2020, in line with the increase in the dissemination speed of information via YouTube, the MND produced a new video titled "Real Military

4) Launched in 2015, the group aims to discover defense policies and to utilize the talents of experts in various fields such as smart and innovation, culture, medical care, media, and PR (27 members in 2019 → 31 members in 2020).

5) An online press corps composed of college students and general public interested in the national defense policies. Centering on public communication, the organization was launched in 2016 to promote online PR activities on national key policies (45 members in 2019 → 50 members in 2020).

"Battle Royale" following the existing "K-Weapon" video to enhance the public's understanding of military weapons systems and barracks culture, and continued to communicate with the public.

In spite of the influence of online media, the MND has also continued to carry out PR activities through broadcasting⁶⁾, which still has a high ripple effect, providing an opportunity to advance towards a military trusted by the people. In April 2019, a special exhibition was held related to the CMA titled "The Path to Peace through Strong National Defense". More than 35,000 military officials and civilians visited the exhibition, which ended with positive feedback such as "the exhibition consisted of high-quality cultural content that was easy for the civilians to understand". In particular, the MND's advertisement "Strong Force that Creates Peace", which reveals the power of the ROK Armed Forces, was also featured in the exhibition, and won the Special Jury Prize at the 27th Advertising of the Year Award hosted by the Korea Advertising Society. Furthermore, a program titled "Those Who Cross the Line: Panmunjom Special" was also broadcast on MBC, which is one of the public broadcasters of the ROK, to form public consensus on the CMA.



ROK Armed Forces: Strong Force that Creates Peace



Launching of the 5th M-Friends



72nd Anniversary of ROK Armed Forces Day Challenge

The "Thank you Soldiers" campaign is conducted every year to instill pride in servicemembers and is promoted as one of the events that encourage communication with the public. In particular, the MND hosted an online campaign dubbed "Send Your Warmest Regards, The 1001 Challenge"⁷⁾ to commemorate the 72nd anniversary of the ROK Armed Forces Day. The campaign was to encourage servicemembers and citizens amid the pandemic by exchanging messages of support and gratitude with each other.

Moreover, in collaboration with "Daum Kakao", photos of public support activities to overcome the pandemic—such as giving support for those placed under quarantine, carrying out prevention measures, and giving medical treatments—were posted on "Kakao Gallery", recording more than 500,000 views and embedding in the

public the commitment of the ROK Armed Forces to protect the people. In particular, this online exhibition of showcasing the various COVID-19 sites provided an opportunity to create public consensus on government activities in a situation where visiting each region was difficult due to social distancing and other limiting factors.

The influence of digital media such

6) "Military Medical System Reorganization" (SBS) in June 2019, "Use of Mobile Phones After Training" (KBS) in July 2019, "Documentary Three Days: 72 Hours in the Korea Armed Forces Nursing Academy" (KBS) in April 2020, "Special Documentary Commemorating the 70th Anniversary of the Korean War" in June 2020 (three terrestrial TVs), etc.

7) A public participation campaign hosted to celebrate the 72nd Armed Forces Day wherein the general public and the servicemembers post messages of support and encouragement on the Challenge website.



The 1001 Challenge - Letters to encourage the servicemembers

as YouTube is expected to expand further as communication via online has increased worldwide since the outbreak of COVID-19. In line with such changes in society, the MND will expand its activities of promoting interactive public communication by establishing a customized strategy for each policy consumer.

Enhancing Public Participation in Policymaking Processes

The MND is innovating national defense with the public under the goal of "restoring public status through participation and trust." In addition, to enhance the transparency and effectiveness of defense policies through "participation and cooperation" which is a government innovation strategy, the MND is offering more opportunities in public participation and collecting their opinions in key policymaking processes.

To further improve the transparency and accountability of national defense policies, the MND has been implementing the "Transparent Policy System", disclosing the overview of policies with high public interest and major implementation details to the public. In the past, projects subject to disclosure were unilaterally selected by the MND; from 2018, however, the "Transparent Policy System with Public Participation" where some projects are selected based on public participation was introduced. With the implementation of the system, the MND fulfills the people's right to know and enhances the defense policymaking processes together with the citizens.

Moreover, the MND invites public participation every year to select and operate the "People's Participation Group in National Defense Information Disclosure"—which contributes to the quality improvement of information disclosure by monitoring and providing opinions on the information disclosed by the ministry. Public services are also being improved by forming and operating the annual "People's Design Group" where the people and service designers participate in the making of defense policies as policy users.

Developing Anti-Corruption and Integrity Measures Based on Civilian-Government Partnership

The MND is working toward strengthened anticorruption and integrity measures aimed at implementing dignified national defense by expanding the people's participation and monitoring of overall national defense policies and their implementations, and building an anti-corruption system based on civil-government partnership.

The MND has established and is operating an anti-corruption system where

the public directly participates and performs in policy monitoring. Some of the anti-corruption programs include the "Integrity Ombudsman" program, where civilian experts, according to their independent positions, perform functions such as receiving reports, carrying out audits, and recommending correctives against corruption in the military, and the "Civil-Public Council for Corruption-Free National Defense," where defense agencies and people from all walks of life including civic groups cooperate to discuss military anti-corruption policies.

In addition, the MND has carried out various activities such as regular integrity education for the entire military and a "Defense Integrity Essay" contest to raise the servicemembers' awareness of integrity as one of the core values of public officials. To induce public officials to internalize their own integrity, a whistleblower policy was also activated under an anonymous reporting system which lifted concerns on personal information leakage.

Through such efforts, the level of integrity of the MND has improved every year in the integrity assessment of public organizations conducted by the Anti-Corruption & Civil Rights Commission. Furthermore, the MND plans to promote more effective anti-corruption and integrity measures to meet the people's expectations consistently.

In order to encourage and protect whistleblowers, the MND is planning to update the disposition criteria for those who interfere with the whistleblower policy or violate the duty to protect whistleblowers. The MND is also taking part in the active promotion of compensation measures for whistleblowers who have contributed to the development of defense. Furthermore, the MND will implement transparent, clean, open defense operations by systematically expanding public surveillance and participation in defense operations as a whole, such as by operating the "Integrity Ombudsman" program and the "Civil-Public Council for Corruption-Free National Defense".

Ensuring a Fair and Transparent National Defense for the Enhancement of the Benefit of the People

The MND is advancing its military service system to foster an environment for a fair imposition of military duty, and to enhance fairness and aggressiveness in carrying out military service. In addition, the MND endeavors to eliminate inconveniences and promote national convenience according to transparent procedures to the extent that they do not interfere with operations. Accordingly, the MND is relocating military air bases, building military installations for shared growth with the local communities, reforming national defense regulations, and carrying out eco-friendly projects.

1. Ensuring Fair Enforcement of Military Service Obligation and Improving the Military Service Administration

Separate Management of Military Service Compliance by Public Figures

and their children, athletes, pop culture artists, and high income earners and their children, the ROK government has monitored their military service process in real time. With the help of the system, the ROK government detected suspects of deliberate weight gain and identified unfair cases where some pop culture artists and athletes delayed their military service by abusing the system. The ROK government

After introducing a separate management system for military service of Grade 4 or higher public officials

[Chart 5-4] Cases of Improvements in Unfair System

Category	Before	After
Short-term overseas travel permit system	<ul style="list-style-type: none"> • Within the scope of a year at a time, total of 3 years 	<ul style="list-style-type: none"> • Within the scope of 6 months at a time, total of 2 years (maximum of 5 times)
Conscription date postponement system	<ul style="list-style-type: none"> • Postponement without age restriction when taking an examination, such as private qualification examination 	<ul style="list-style-type: none"> • Restrictions on postponement for people aged 28 years or older when taking an examination, such as private qualification examination
	<ul style="list-style-type: none"> • Postponement until the end of May of the year following graduation without age restrictions when enrolling at graduate school 	<ul style="list-style-type: none"> • Restrictions on postponement for people aged 28 years and above when scheduled to enroll at graduate school

also improved the related systems and regulations to detect and correct such violations.

In addition, the ROK government endeavors to gain public sympathy and trust in fair military service by improving the culture and awareness of military service obligation. The government makes sure that the separate management of military service compliance by public figures is well-explained to the popular culture and arts-related businesses and the system is publicized through online platforms such as YouTube to raise awareness on fair military service.

Prior Disclosure of Military Service Records For Confirmation Hearings

Ever since the introduction of the military service record disclosure system in 1999, only the public official candidates⁸⁾ who require the National Assembly's consent or appointment were obligated to report their military service records to the National Assembly for subsequent disclosure. However, based on the need for in-advance verification of public official candidates such as Cabinet member candidates and the need to satisfy the people's right to know, as of May 29, 2018, Cabinet member candidates are now also required to report and disclose their military service records to the National Assembly when a confirmation hearing request is submitted to the National Assembly. Starting October 24, 2019, military service units and branches were added to the disclosure items. This requirement is expected to establish and spread a culture of voluntary military service compliance.

Improving the Physical Examination for Military Service

For a fair and accurate military service judgment test, the MND has adopted the latest medical equipment and is operating a system which entrusts private hospitals to conduct physical examinations for the socially disadvantaged, such as recipients of basic livelihood security, to reduce the burden of medical checkup costs. Since 2017, latent tuberculosis tests were conducted annually to minimize the incidence of tuberculosis (TB) patients in military units, and starting in 2019, TB test results were issued free of charge. Enhancements in psychological testing are also underway by adopting advanced psychological test tools and conducting a three-step thorough checkup.

Reasonable Improvement of the Alternative Service Program

The necessity of improving the alternative service program, which was introduced in 1973 for the purpose of fostering national infrastruc-



Improvement of the alternative service program

8)
• Public official candidates requiring the National Assembly's consent: Candidates for Prime Minister, Chairman of Board of Audit and Inspection, Chief Justice of Constitutional Court, Chief Justice of Supreme Court, and Supreme Court Justices.
• Public official candidates requiring the National Assembly's appointment: Candidates for Constitutional Court Justices (3) and National Election Commission Members (3).

ture, enhancing national prestige, and effectively utilizing military service surplus—was raised based on factors such as the sharp reduction in military manpower resources due to the decrease in fertility rate, the weakening of the initial purpose to changes in national status, and issues related to fairness vis-à-vis active duty servicemembers. Accordingly, the ROK government formed a consultative body between the MND and related ministries in December 2018 and deliberated on and confirmed the "Measures for improving the alternative service program" during a government affairs review and coordination meeting in November 2019.

Based on the Measures, the ROK government has selected four promotion tasks and detailed tasks as shown in [Chart 5-5], and has implemented these tasks smoothly through system improvements and revision of laws and regulations since 2020.

[Chart 5-5] Major Measures for Improving the Alternative Service Program

Promotion tasks		Details
1	Acquiring military resources	<ul style="list-style-type: none"> Reducing the number of people assigned to alternative service Improving the fairness in terms of service intensity
2	Strategic use of national human resources	<ul style="list-style-type: none"> Supporting national strategic industries for alternative service personnel Establishing utilization plans for each competent ministry
3	Strengthening service management	<ul style="list-style-type: none"> Designating departments in charge of service management, organizing manpower Reinforcing punishment for insolvent workers, etc.
4	Guarantee of human rights and other rights of alternative service personnel	<ul style="list-style-type: none"> Payment of remuneration during basic military training, establishing an integrated reporting center Preventing unfair treatment by an employer, etc.

Support for Physically and Economically Vulnerable in Fulfilling Their Military Service Obligation

Customized services are offered to encourage those who are physically or economically vulnerable to participate in fulfilling their military service obligation. When an economically vulnerable person liable for military service needs additional checkup from a private hospital during a physical examination for military service, the MND is providing support to help fulfill their obligation by supporting free consignment checkup and giving additional points or priorities when recruiting them as enlisted or industrial workers, thus helping the said target group of people to be able to diligently fulfill their service. Through such benefits, the MND aided a total of 1,894 economically vulnerable persons liable for military service in 2019. Since 2020, benefits are also being provided to the physically vulnerable by allowing those with malignant blood diseases such as leukemia to get a curtailment in their military service period through document screening only without undergoing any physical examination.

Military Service Distinguished Family Enhancement Project

The MMA has been promoting the "Military Service Distinguished Family Enhancement Project" since 2004 to create a social atmosphere

where those who faithfully fulfilled military service feel pride and are respected from the people. The MMA selects military service distinguished families who have completed active service for three generations (direct lineal descendant of the 1st generation to the 3rd generation), with the Korean Independence Army added in 2013 and independence patriots in 2020. A military service distinguished family is awarded a certificate and a commendation, and is provided with preferential benefits such as discounts and waiver of usage fees when using national, public, and private facilities. The project helps create a culture of voluntary military service with pride in fulfilling their military service obligation.

[Chart 5-6] Statistics of Military Service Distinguished Families

(Unit: year, families, person)

Category	Total	2004-2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Family	6,395	760	302	301	545	497	466	560	492	714	741	1,017
Military service completed	32,376	3,431	1,426	1,444	2,642	2,520	2,490	2,932	2,670	3,779	3,820	5,222

2. Relocating Military Air Bases Through a Fair Procedure

In accordance with the Special Act on the Relocation of Military Air Bases and Support Therefor enacted in 2013, the MND plans to relocate military air bases in Daegu, Suwon, and Gwangju to relieve the noise impact of residents living near military air bases and to contribute to urban development.

In March 2018, the MND selected two regions as candidates for the relocation site for the Daegu military air base in Gyeongsangbuk-do Province: the area of Ubo-myeon, Gunwi-gun and the area of Bian-myeon, Uiseong-gun and Sobo-myeon, Gunwi-gun.

In 2019, based on agreements with the local communities, the MND decided and announced the areas surrounding the relocation sites and reviewed and passed the criteria and procedure for selecting the relocation site incorporating the results of deliberative survey on citizens' opinion. And based on this, after reviewing and passing a plan to support the areas surrounding the relocation sites that fully reflects the opinions of the residents gathered by way of holding a public hearing on the

draft support plan, the MND requested the heads of the local governments of the relocation candidate sites to hold a majority vote in their respective districts.

In January 2020, a referendum on the relocation of the Daegu military air base was conducted for the Gunwi-gun and Uiseong-gun residents, and the heads of Gunwi-gun and Uiseong-gun in July applied to host the relocation of the Daegu military air base. As a conclusion, the MND finally selected the joint candidate areas of Bianmyeon, Uiseong-gun and Sobomyeon, Gunwi-gun as the relocation site during a selection committee meeting in August. The MND plans to support the Daegu City Government in devising a basic plan for the construction of a military air base and sign an MOU on endowment and concession with the city government. With such efforts, the MND will continue its active support for the Daegu military air base relocation and construction project.

As for the Suwon military air base, Hwaong District in Hwaseong-si, Gyeonggi-do was selected as a preliminary relocation candidate site in February 2017. The final selection will be made after forming favorable conditions and consensus on relocating the air base to Hwaseong.

As for the Gwangju military air base, the feasibility evaluation of the relocation proposal submitted by the Gwangju City Government was completed in August 2016. The preliminary relocation candidate site will be selected after forming friendly conditions through communication and consultation with local governments on areas suitable for military air base relocation in the Jeollanam-do Province.

In the future, the MND will continue to promote the military air base relocation project in a fair, transparent manner based on communication and dialogue. To this end, the MND plans to sufficiently collect the opinions of local governments and local residents through civilian–government–military councils and meetings with civic groups.

3. Military Installations for Shared Growth with Local Communities

Removal of Coastal and Riverside Barbed Wire Fences

The removal of barbed wire fences installed in the coastal and riverside areas for military border operations has been continuously demanded by local governments as they have been a hindrance to the development of tourism resources. In the past, when a local government requested for removal, the barbed wire was removed or replaced with surveillance equipment only in sections approved by a military operational feasibility review with the local government's

budget (or government funding of 50% of cost). However, as part of Defense Reform 2.0, the MND is actively responding to the needs of the local community, and is at the same time promoting the removal project of coastal and riverside barbed wire fences to convert them into a scientific boundary system using advanced equipment.

Accordingly, the MND conducted operational feasibility reviews of coastal and riverside barbed wire fences in 2018 and removed 169.6 kilometers of barbed wire fences, in addition to the section already approved for removal.

[Chart 5-7] Results of the Operability Assessments of Coastal and Riverside Barbed Wire Fences

(Unit: km)

Category	Target	Sections Previously Approved for Removal	Operability Assessment Results			
			Total	Do Not Remove	Remove Immediately	Remove after Installing Surveillance Equipment
Total	413.3	114.62	298.68	129.08	34.67	134.93
Ground Operations Command (East)	183.55	92.02	91.53	52.36	0.31	38.86
Ground Operations Command (West)	178.52	22.6	155.92	49.84	24.24	81.84
Second Operations Command	51.23	-	51.23	26.88	10.12	14.23

The MND removed a total of 34.67km of barbed wire fence in sections where immediate removal was required and completed the installation of surveillance equipment in the removal sections⁹⁾ after reinforcing surveillance equipment in 2020. To enhance citizens' convenience and vitalize the local economy, the MND will continue to build military installations and promote shared growth with the local communities based on their cooperation to the extent that it does not interfere with military operations.

Removal of Unused and Abandoned Installations

To minimize inconveniences among the people and ensure shared growth with local residents through military installation projects, the MND is currently pursuing the removal or improvement of unused military installations across the country.

While the ROK Armed Forces has been removing unused or abandoned military installations, there still exist installations that are no longer used regularly due to advancements in surveillance equipment and the reduction of military manpower and installations that have become obsolete following the disbandment or reduction

⁹⁾ The sections where local governments plan to implement the removal of barbed wire fences and the restoration of the area by 2021 following the installation of surveillance equipment in the previous year by the MND and the ROK Armed Forces

of the relevant units.

In response to such issues, in 2018, the MND conducted on-site inspections and operational feasibility reviews on all unused installations in and outside military premises for systematic removal. Based on the findings, the MND plans to carry out active measures in removing unused installations which fall under the removal requirements by comprehensively considering multiple factors, such as installations that impede local governments' development plans or are likely to cause damage to the landscape and become a possible crime zone due to long-term neglect, as well as the urgency, the operability, and the safety of troops.

Resolution of Private and Public Lands Occupied Without Permission

After the Korean War, during the process of establishment and maintenance of military units, the ROK Armed Forces has inevitably occupied private and public land for reasons such as failure to conduct boundary surveys, urgent operations, and unknown whereabouts of land owners. Therefore, in order to guarantee the people's property rights and to enhance trust in the military, the MND continues to discover and normalize private and public lands used by the military without legal compensation.

As of early 2019, out of the total private and public lands of 54,580,000m² occupied and used by the ROK Armed Forces, 21,550,000m² of the lands is being occupied unlawfully. Consequently, the MND purchases the lands that are still used and needed by the ROK Armed Forces, leases the lands required for temporary use, and returns the unused lands due to reasons such as relocation of the relevant units after undergoing land restoration process, including removal of installations and soil remediation.

Moreover, in 2019, the MND preemptively disclosed facts about unauthorized occupation and provided guidance on the national reparation procedure to more than 12,000 land owners which were occupied unlawfully, breaking away from the existing method of responding only to civil complaints. As a result, national compensation for unauthorized occupation—which had stood at around KRW 1.5 billion per year—reached a total of KRW 13.6 billion by November 2020, further guaranteeing the people's property rights.

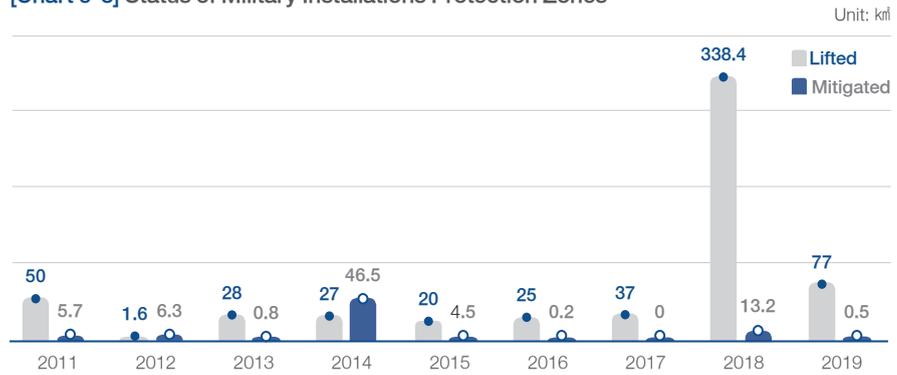
By means of increasing the relevant budget and expanding the criteria for return, the MND will make continuous efforts to enhance public trust in the ROK Armed Forces and secure the legitimacy of land usage through early resolution of private and public lands occupied without permission.

Mitigating Military Installations Protection Zone Regulations

To guarantee the residents’ property rights, ease their inconvenience in the surrounding areas of the military installations, and provide a stable environment for military presence, the MND has

been implementing a policy to lift the designation of military installations protection zones or taking mitigation measures such as changing the designation from a controlled protection zone to a limited protection zone. In line with this policy, with the exception of areas surrounding military installations that must be protected for uninterrupted military operations, military installations protection zones are currently being lifted or mitigated by the MND. In 2018, a total of 351.6km² of military installations protection zones were lifted or mitigated, which is 121 times the area of Yeouido, and a total of 77.5km² were lifted or mitigated in 2019 which is 27 times the area of Yeouido.

[Chart 5-8] Status of Military Installations Protection Zones



Furthermore, military consultations on land development are being consigned by the MND to local governments for areas where it is difficult to lift the designation of military installations. Through continuous expansion of the scope of consultations and consignments, the MND intends to shorten the period of consultations and promote the administrative convenience of the people.

[Chart 5-9] Status of Consignment Areas

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Area	55	40	93	47	344	57	8	25	37	64

The MND has also endeavored to revise related laws and regulations, aiming to alleviate the inconvenience of residents living near military installations and to guarantee their property rights. The Enforcement Decree of the Protection of

Military Bases and Installations Act and its Enforcement Rules were revised¹⁰⁾ to waive military consultations when changing the purpose of buildings in military installations protection zones¹¹⁾ and to allow the expansion and reconstruction of small-scale installations inside explosives-related protection zones.¹²⁾

Enactment of the Military Noise Compensation Act and Implementation of Follow-Up Measures

Until now, when local residents were seriously affected by the noise generated during military operations and training, they received compensation only if a residents' lawsuit was filed and a court ruled in favor of the lawsuit. Accordingly, the MND enacted the Act on Noise Prevention and Damage Compensation for Military Airfields and Military Shooting Ranges (hereinafter the Military Noise Compensation Act) to establish a legal basis for residents living in areas requiring countermeasures against noise and help them receive compensation upon request.

As follow-up measures pursuant to the enactment of the law, the MND is planning to establish a "Basic plan for noise prevention and damage compensation, etc.", survey the noise impact to design a noise map, install an automatic noise measurement network to devise noise reduction measures in areas requiring countermeasures against noise, and establish manuals for the payment of noise compensation. The MND aims to build a consensus through various processes of collecting opinions such as briefing sessions for local governments and local residents and explanations to the National Assembly.

With the enactment of the Military Noise Compensation Act and a series of follow-up measures, the MND will guarantee a comfortable living environment for residents and establish a stable foundation for carrying out military activities.

Continuing Efforts for Co-Existence between the ROK Armed Forces and Local Governments in the Border Areas

In accordance with Defense Reform 2.0, the MND is pushing for a reorganization of the ROK Armed Forces from the former quantitative, troop-oriented structure to a cutting-edge unit structure. Accordingly, the MND plans to integrate and coordinate units deployed to two or more areas into one location for each region by 2025. Coordination includes disbanding units, launching new units, and expanding existing units.

Until now, when local residents were seriously affected by the noise generated during military operations and training, they received

10) Amendment of the Enforcement Decree of the Protection of Military Bases and Installations Act (June 25, 2019) and the Enforcement Rules of the Protection of Military Bases and Installations Act (July 8, 2019)

11) In accordance with the Building Act, except for the three groups of facility purposes (facilities for hazardous substances, power generation facilities, and facilities for telecommunications) out of 29 groups, military consultation is exempted when changing the purpose of a building.

12) Authorized for additional expansion and reconstruction of small-scale communal facilities and facilities for agriculture, forestry, and fishery industries with a total floor area of 660m² or less in the protection zones around explosives-related facilities



Signing of work agreement for shared development (December 2019)

In the process of reorganizing the units, the reduction of units and troops is likely to affect the local economy in border areas such as Gangwon-do Province, where the military accounts for a large portion of the local population and economy. Recognizing that the border areas have a close relationship with the ROK Armed Forces and



Shared Development Council in Gangwon-do Border Area (January 2020)

that they have shared sacrifices with the military in the field of national security, a meeting was held in 2019 with the Minister of National Defense together with the heads of local governments of each metropolitan area to seek ways for cooperation on co-existence with the residents in the border areas.

To strengthen cooperation with the Gangwon-do border areas (Goseong, Yanggu, Inje, Cheorwon, and Hwacheon), which are suffering relatively harsher difficulties due to the reduction of troops and units, a cooperation agreement on shared development was made with the Minister of National Defense, the governor of Gangwon-do Province, and heads of the five counties (gun) in the border areas. The MND also organized the 1st Director General-level Shared Development Council to resolve practical issues. Along with such efforts, the MND plans to expand and regularize the Director General-level Shared Development Council to Gyeonggi-do Province and Incheon to continue with its productive efforts for cooperation on co-existence in the future. These efforts are expected to lay the foundation for the stable implementation of Defense Reform 2.0 and the vitalization of regional economy in the border areas.

Promoting Shared Use of Military Installations

Due to the lack of public sports and welfare facilities in the local communities, the demand for

opening military installations to the public is increasing. In response, the MND is seeking ways to use military installations as resident-friendly spaces. In 2018, a guideline that stipulates the basis for promotion and the specific operation methods for opening military installations to civilians was enacted, and at the same time a standard contract that will be applied when the management of open facilities is entrusted to local governments was also prepared. In addition, through a complete enumeration survey on military installations, 24 installations were determined as possible open facilities by the MND, and 16 of them have been opened to the public as of the end of 2020.

As a result, living conditions in areas that lack sports and welfare facilities have been improved, easing the welfare infrastructure imbalance among regions and allowing more efficient use of national resources.

The MND will continue to stay active to discover more military installations that can be opened to the public and contribute to the welfare of residents and the foundation for co-existence between civilians and the military.

4. National Defense Regulatory Reforms

Regulatory Reforms in the Domain of Defense

In line with the "redesigning of regulations for public welfare and innovation", which is one of the tasks set by the ROK government, the MND has made efforts to enhance the public's awareness of regulatory reforms by improving the regulatory reform method centered on discovering individual tasks.

In 2019, the MND introduced the government liability system on proving the need for regulations¹³⁾, a new method of promoting regulatory reforms, and, from the people's perspective, reviewed once again the tasks that were deemed unacceptable among the task proposals submitted to the local governments or through the Regulatory Reform Sinmungo (Open Voice System) after the inauguration of the current administration. As a result, inconveniences in people's lives were relieved, such as easing access control in border areas and regulations on drone flight and filming in no-fly zones. Also, public officials' awareness of regulatory reforms was raised by applying the active interpretation method of laws and regulations¹⁴⁾ to support active administration activities, and the people's rights and interests were enhanced by reflecting these initiatives when revising laws and regulations in the defense domain.

In 2020, the MND supported regulatory reforms in new industries, one of the

13)

A method of promoting regulatory reforms that transferred the responsibility for the proving of the need for regulation; so that the government proves the necessity of maintaining the regulation, instead of companies or people proving the non-necessity of regulations, and— if it is difficult to prove— revises and updates the regulations.

14)

It is to interpret and to apply flexibly "what can be done if not prohibited by the law" when interpreting laws and regulations. The MND is promoting such interpretation to make quick response to changes in the social environment such as technological development and to support active administration within the scope that does not impede military operations.

government's key directions for reform, and focused on finding and improving tasks that can alleviate inconveniences in people's lives in the domain of defense. The MND also contributed to vitalizing the drone industry by designating free zones for drone filming and simplifying approval processes. Also, by expanding the test location from Seoul only to locations across the nation when holding a written test to recruit civilian military employees supervised by the MND, inconveniences and economic burdens of the test takers living in provincial areas due to transportation have been resolved.

The MND continues to discover and improve tasks that will guarantee public conveniences and reduce social costs by simplifying the process of converting military driver's licenses into civilian licenses and easing regulations on military installations protection zones.

Based on such measures, the MND is committed to discovering and carrying out tasks that people are aware of and promoting regulatory improvements; for new or reinforced regulations, the MND Regulatory Innovation Review Committee¹⁵⁾ is committed to strictly appraising the appropriateness of the regulations, thereby contributing to the improvement of people's benefits.

Adjustment of Safety Distance from Ammunition Depots

The MND designates and implements the minimum safe distance from ammunition depots as military installations protection

zones to protect the lives and property of the residents. However, the designation of protection zones limits the residents' exercise of their property rights and the execution of local development projects, including restrictions on the construction or expansion of buildings and public roads.

To address the restrictions on the local residents living near ammunition depots, the MND is promoting modernization by replacing degraded ground-based ammunition depots (31% of all depots nationwide) with underground-based and igloo-type ammunition depots as much as possible. In particular, under the recognition that underground ammunition depots use the land most efficiently and improve the ammunition depot support capabilities, the MND will endeavor to ensure the safety of the people and exercise of their property rights by promoting the construction of new underground ammunition depots considering various factors such as geological considerations in building new underground depots and actively reflecting these factors into mid- to long-term policies.

15)

A committee established in accordance with the Regulatory Task Operation Directive to determine the subject, scope, method, etc. of a regulation and to review its feasibility in case of newly establishing or reinforcing administrative regulations. It consists of more than six but less than 15 internal members and civilian members (legal, regulatory reform experts, etc.)

5. Environment-Friendly Management of the ROK Armed Forces

Expanding and Improving Environmental Pollution Control Facilities within Military Premises

To prevent water pollution caused by wastewater and sewage¹⁶⁾ released from military installations, the MND has established and operates a total of 4,422 environmental pollution control facilities within military premises, including sewage treatment stations, wastewater treatment stations, and local government pipeline connections, as of November 2020.

To conserve the soil environment, the MND inspects 4,107 facilities subject to soil contamination control¹⁷⁾ pursuant to the Soil Environment Conservation Act, and uses the findings for restoration activities including soil remediation projects. Furthermore, to prevent soil pollution caused by oil spillage and other accidents, the MND installed 18,095 soil pollution control facilities out of a total of 20,709 soil pollution control facility requirements such as drum storage yards¹⁸⁾ and tank dikes¹⁹⁾ that have been identified as of 2020, installed 328 additional soil pollution control facilities in 2020, and plans to install 2,286 additional facilities in the coming years.

Implementing Environment-Friendly National Defense Facility Projects

The MND is committed to protect servicemembers from being exposed to harmful materials including asbestos and radon. Accordingly, the MND is striving to maintain buildings containing asbestos, reduce radon emissions, and improve working sites with hazardous environments.

After conducting a complete enumeration survey on buildings containing asbestos through an expert agency from March to September 2019, 11,612 buildings in total were confirmed to contain asbestos. Among them, the management and maintenance plans for asbestos-containing buildings within military premises were supplemented for 7,703 buildings—excluding 3,909 buildings that overlap with other projects such as unit relocation and unused installations demolition—and asbestos-containing materials were removed in 604 buildings in 2019 and 779 buildings in 2020. The MND aims to complete the demolition and removal of asbestos-containing buildings and substances by 2025, thereby promoting the health of servicemembers.

Referring to the results of a survey conducted on barracks dormitories between 2012 and 2015, radon reduction project was completed by 2019 after applying Active Soil Depressurization and indoor ventilation²⁰⁾ to 583 buildings that exceeded the standards. Pursuant to the Framework Act on Military Status and Service, radon

16)

- Sewage: Water contaminated by a mixture of liquid or solid produced by a community of people or along economic activities (Article 2 of the Sewerage Act)
- Wastewater: Water containing liquid or solid pollutants and that cannot be used as is (Article 2 of the Water Environment Conservation Act)

17)

Facilities that are likely to cause significant soil contamination (Article 2 of the Soil Environment Conservation Act), which include oil tanks with a capacity of 20,000 or more

18)

Areas where the floor is paved in the oil drum storage yards of the unit to prevent soil contamination caused by oil spillage

19)

A bathtub-shaped structure that blocks oil spillage from ground oil tanks

20)

- Active Soil
 - Depressurization: A method of drawing out air in soil beneath a building (depressurizing soil to prevent radon inflow into indoors)
 - Indoor ventilation: A method of installing ventilation systems to extract indoor air and bring in outdoor air

measurement is conducted every two years on facilities subject to indoor air quality management, and radon reduction facilities are to be installed when any facility exceeds the standards.

To improve the environment in hazardous working sites, the MND identifies installations exceeding the environmental standards among the 2,500 installations performing plating and maintenance works for ammunition depots through annual working environment assessments and working environment surveys conducted every five years. As for the removal of hazardous materials, local exhaust ventilation systems, ventilators, and dust collectors²¹⁾ are installed in facilities that exceed the environmental standards. In addition, if servicemembers take special health examinations on request and health issues are discovered, the MND provides support by replacing the work personnel with a substitute and if needed providing support related to hospitalization.

Reducing Particulate Matter and Implementing a Comprehensive Management Plan

Faced with the increase of high-density fine particulate matter, the MND established the Comprehensive Fine Particle Management Plan in 2018 to align its

policies with those of the government and protect the health of servicemembers. At present, the MND has identified and promoted 13 tasks in two areas—reduction of particulate matter (PM) emission and unit management—in the military.

As a key measure in the area of unit management, the MND distributed anti-PM masks in 2020 for 50 days based on the number of days announced as "bad" (PM-2.5) in the annual PM forecast. Since the first installation of air purifiers in ROK Army training centers in 2018, the MND increased the number of air purifiers with additional installations at recruitment training centers, in command and control rooms, barracks dormitories, and hospital wards in each service in 2019. More purifiers were installed in reserve military dormitories, restaurants, and lecture rooms at educational institutions the following year.

In 2019, as a key measure in the area of reducing PM emissions in the military, the MND completed the replacement of old diesel vehicles, such as commercial jeep, buses, and trucks registered before 2005. To increase the supply of eco-friendly or green vehicles, the mandatory purchase rate of green vehicles were set at 80% or higher when purchasing passenger cars. Moreover, by 2028, the MND aims to acquire hybrid vehicles accounting for 50% of passenger cars in the military and plans to expand the supply of compressed natural gas (CNG) and electric vehicles through a pilot project.

21)

- Local exhaust ventilation system: processes dusts, gas, and vapors produced
- Dust collector: collects and removes solid or liquid particles floating in the air

Improving Transparency in Defense Acquisition Program and Securing Competitiveness in the Defense Industry

The ROK government is enhancing the transparency in defense acquisition programs by developing sophisticated measures to prevent corruption in defense acquisition programs and cultivating an environment for the active promotion of defense projects. It is also improving the defense acquisition system in an efficient manner by refining the weapons system acquisition procedures and establishing a system for collaboration. The ROK government is strengthening R&D capabilities in defense fields by improving defense R&D execution system and utilizing defense R&D capabilities in defense fields. It is also striving to build the competitiveness in the defense industry and vitalize defense exports by building a foundation for growth in the defense industry.

1. Enhancing Transparency in Defense Acquisition Programs

Developing Sophisticated Measures to Prevent Corruption in Defense Acquisition Programs

The MND and the DAPA are developing sophisticated measures to prevent corruption in order to enhance public trust in defense acquisition program and transparency in pursuing the programs. In order to eradicate collusive ties between the military and the business, the MND and the DAPA have the scope of retired public officials subject to examination for employment by defense contractors, mandated the reporting of any private contacts, and are pursuing the introduction of an employment record management system for retired public officials.

The Agency for Defense Development (ADD) and the Defense Agency for Technology and Quality (DTAQ), which are government-funded defense institutions, have also bolstered their internal and external monitoring and supervision system to prevent corruption and established a code of conduct with a standard matching that of government agencies and implemented an ethical audit program to enhance the integrity of employees. Additionally, to create a fair and transparent work environment, clear standards were established for various evaluations, inspections, and regulatory decision-making conducted under the government-funded institutions

The MND and the DAPA are developing sophisticated measures to prevent corruption in order to enhance public trust in defense acquisition program and transparency in pursuing the programs. In order to eradicate collusive ties between the military and the business, the MND and the DAPA have the scope of retired public officials subject to examination for employment by defense contractors, mandated the reporting of any private contacts, and are pursuing the introduction of an employment record management system for retired public officials.

and the participation of external experts were further extended.

In addition, a registration system, which was previously applied to munitions sales agencies²²⁾, will be applied to all defense acquisition program brokers²³⁾ so that all companies that help in bidding and fulfilling contracts for defense projects will be operated under legal and institutional management. Accordingly, an institutional mechanism will be devised to impose fines and penalties on brokers who operate without undergoing the registration process and to discipline public officials who make unauthorized contact with the brokers. To crack down on corruption in defense acquisition programs, considering the characteristics of defense programs, penalty systems and sanctions are being reinforced such as: (a) extending the scope of the "punitive surcharge" imposed on companies involved in corruption and irregularity; (b) introducing the "One-Strike Out System" that cancels the registration and permanently prohibits registration if a company commits an irregularity once; and (c) applying an aggravated punishment of 1.5 times the punishment standard defined by the criminal code for public officials involved in corruption.

22)

An agency or a group that intermediate or act for a foreign enterprise throughout the course of concluding a contract and executing the contract by and between the foreign enterprise and the Minister of DAPA.

23)

All organizations and groups that act as trade agents, brokers, or consultants to assist a company in the processes of bidding, contract signing, and execution of a defense acquisition project.

24)

A system that waives the sanctions imposed on companies for so-called "sincere failures" that fail to achieve outcomes due to reasons such as technical limitations despite the fact that the officials worked sincerely on conducting R&D activities

25)

A program that relieves public officials of responsibility or reduces their liability for negative results when they have sincerely and voluntarily performed their duties for the public interest, unless there was any intentional act or gross negligence

Cultivating an Environment for the Active Pursuit of Defense Acquisition Programs

The MND and the DAPA are fostering an environment where workers in the defense industry can conduct business fairly in adherence to their own principles and in active manner. A "diligent performance recognition program"²⁴⁾ was introduced to provide additional opportunities for trials and errors made during the R&D phase.

The MND and the DAPA are also promoting an "exemption program for proactive administration"²⁵⁾ that ensures that public officials are not held responsible for the outcomes of the projects that they have carried out properly in accordance with laws and regulations without corruptive or irregular practices. To minimize the disadvantages that individuals may experience, the MND has bolstered the internal legal support system for those who have inevitably faced investigations, audits, or other kinds of investigations while executing programs.

A series of such working environment improvements will contribute to the acquisition of superior weapons by boosting the pride of workers in the defense industry and strengthening the sense of responsibility.

2. Improving the Efficiency of the Defense Acquisition System

Improving the Weapons System Acquisition Procedures Based on Speed and Efficiency

The MND and the DAPA are improving the defense acquisition procedure to respond to

the rapidly changing security environment in a flexible manner and promptly apply the Fourth Industrial Revolution technologies to weapons systems.

The MND and the DAPA have been pursuing the "rapid pilot acquisition program" since 2020. Under this program, the ROK Armed Forces purchases in minimum quantity a weapon system that incorporates leading civilian technologies, pilot the weapon system in the field, and if determined appropriate, promptly field the weapon system. The MND and the DAPA are exerting continuous efforts to improve the related laws and regulations to stabilize this program, and are also pursuing the introduction of a "rapid prototype development (provisional title)" system which incorporates the elements of R&D and upgrades. Furthermore, a "rapid acquisition system (provisional title)" will be developed by institutionalizing various acquisition models so that the relevant programs can be applied according to the characteristics of each weapons system.

In order to field weapons systems in a timely manner, the MND and the DAPA are planning to simplify the weapons system acquisition procedures by eliminating unnecessary administrative procedures during prerequisite procedures such as requirements verification, project feasibility study, and defense project inspector verification considering the characteristics of the programs, and integrating duplicate tasks.

Establishing a Rational and Efficient System for Decision-Making and Collaborations

As the defense acquisition environment is becoming more complex and advanced, the number of defense force enhancement projects is increasing.

Hence, the necessity for the establishment of a more rational and efficient system for decision-making and collaborations is also growing.

The MND and the DAPA launched the Defense Acquisition Program Council in April 2019 with an aim of promptly resolving increasing number of defense program issues and improving policies and systems in a reasonable manner through transparent communication and collaboration.

The Defense Acquisition Program Council is co-chaired by the Vice Minister of National Defense and the DAPA Minister, and is achieving tangible results in

actively resolving thorny issues. Furthermore, by establishing a defense acquisition information system, the MND and the DAPA plan to enhance the foundation for conducting collaborations that enables the management and sharing of information at all stages of acquisition of weapons systems.

The DAPA introduced a "program for public officials in technical service" to enhance the expertise of public officials in defense programs and reorganized the existing project/contract management headquarters into Current Capabilities Program Agency and Advanced Capabilities Program Agency considering the characteristics of each weapons system. The efficiency and responsibility of conducting program management were further improved by establishing a practical integrated project management system. Under the system the director of the program will carry out both program and contracts at the same time. With the simplification of the work procedure and transferring of the work related to general goods to the Public Procurement Service through the integration of programs and contracts, the capabilities of the DAPA are expected to be further improved, enabling the DAPA to focus on defense force improvement projects.

**Enhancing the Expertise of
Public Officials in Defense
Acquisition Programs**

To enhance the expertise of public officials in defense project-related institutions, the MND and the DAPA are seeking ways to resolve problems encountered by public officials during their frequent job rotations, and to improve field sense and expertise of servicemembers. To this end, in 2019, the positions of professional public officials were included in the program management field of the DAPA and the positions of professional servicemembers were designated in the MND, the JCS, each service, and the DAPA to enhance the job rotation between acquisition specialists and force specialists of each service. Such measures have also laid the foundation for improving defense project capabilities. The MND and the DAPA plan to establish a training institution specializing in defense acquisition and strengthen the professionalism of the acquisition workforce by integrating the defense acquisition education system—which is currently divided into the KDNU and the DAPA—and establishing a systematic education system from the perspective of the total life cycle of weapons systems.

3. Strengthening National Defense R&D Capabilities

Improving the National Defense R&D Execution System

The MND and the DAPA are innovating the national defense R&D system to effectively prepare for future wars, where advanced technologies will dictate the patterns of warfare.

The current characteristic of defense R&D can be defined as a "pursuit type" focused on developing technologies necessary for the weapons systems for which the requirements have already been determined. In the future, however, national defense R&D will be improved to a "leading type" that enables creative and challenging technology development where advanced technologies of the Fourth Industrial Revolution create the requirements for weapons systems. Pursuant to the "Act on the Promotion of Innovation in Defense Science and Technology", the MND and the DAPA plan to expand the "future challenge defense technology development" system and enhance the strategic technology planning through the principle of selection and concentration by selecting weapons systems subject to key planning in the future.

Moreover, through the allocation of roles for each institution, the ADD will focus on defense research capabilities required for the development of future core and new technologies including the implementation of the future challenging defense technology development project. The DTAQ, on the other hand, will strengthen the management of military supplies and defense technologies by exclusively conducting defense quality control and reliability evaluation, research and prediction of defense technologies, and planning, analysis, and evaluation of technologies.

Expanding the Utilization of National R&D Capabilities in the Domain of Defense

The MND and the DAPA will develop a more open and flexible defense R&D program to encourage civilian participation and expand the military use of outstanding civilian technologies. First, a method of agreement with the private sector will be adopted in the field of technology development, while the scope of the "diligent performance recognition program" will be extended. The MND and the DAPA will provide the means of actively bringing the capabilities of the private sector into the defense sector, including co-ownership of R&D outcomes, access to defense R&D infrastructure for civilian entities, and support for technologies of which there is a lack of through government-private joint R&D.

Furthermore, the MND and the DAPA plan to set up a cooperation system where national R&D capabilities can be utilized. First, national R&D capabilities are being

actively utilized in the basic research field for defense R&D within the framework of the "Strategy for Future Defense Development Based on Science and Technology" which was formulated in April 2018 by the MND, the MSIT, and the DAPA. Measures are also taken to devise a collaboration system under which the strengths of national R&D and defense R&D are mutually and actively utilized.

4. Building a Competitive Defense Industry and Vitalizing Defense Export

Bolstering Competitiveness by Establishing a Foundation for Vigorous Growth of the Defense Industry

The defense industry is the cornerstone of national security. By acquiring and supplying weapons systems with performance and quality that meet the standard of the ROK

Armed Forces on time, the defense industry has played a key role of laying a foundation for the buildup of military strength and the realization of steadfast defense. The defense industry is characterized by a monopoly on demand where the government is the only consumer and by the few number of defense companies compared to other private industries. These characteristics make the scale of production in the domestic defense industry closely linked to policy line changes. Thus, the government's role in fostering and developing the defense industry is crucial.

Since the launching of the DAPA in 2006, there has been a call for providing differentiated support foundation which is in line with the characteristics of the defense industry, where the government is the sole consumer. As a result, the "Act on the Development and Support of the Defense Industry" was enacted in 2020 which stipulates various systems, while separating the clauses related to the development of the defense industry from the "Defense Acquisition Program Act". Thus, full policy support measures were mapped out to strengthen the competitiveness of the defense industry and to take the leap from a domestic oriented-industry to an export-oriented industry.

Aside from these measures, the ROK government carries out the "Basic Plan for Defense Industry Promotion" every five years to present basic policies and mid- to long-term directions for supporting and fostering the defense industry in a reasonable manner. The "Basic Plan for Defense Industry Promotion for 2018-2022" aims to acquire advanced weapons system development capabilities and bolster global competitiveness. It covers the criteria of creating a developmental ecosystem

of the defense industry, strengthening defense R&D capabilities, fostering promising small and medium-sized enterprises (SMEs) and ventures, transforming into an export-oriented industrial structure, and creating quality jobs.

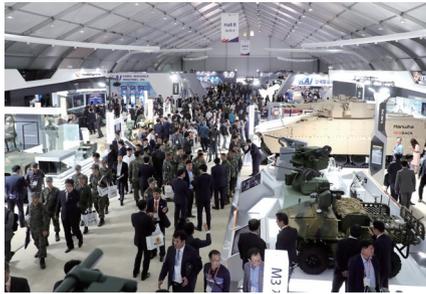
Furthermore, the ROK government is in the process of reinforcing its support for domestic development and production of weapons systems, improving defense cost structures, improving the designation system for defense products and companies, strengthening defense statistics research and analysis capabilities, and establishing effective communication and information exchange measures with the defense industry. Moreover, a defense venture support program and a global defense small giants promotion support program are underway to foster promising SMEs and ventures, and the "defense innovation cluster program" is being promoted so that these programs are carried out in an integrated manner. The defense innovation cluster program is a program that creates a cluster where the defense industry production system, science and technology system, enterprise support system, and the military system are combined in an efficient manner. This cluster not only carries out defense activities such as establishing a roadmap for region-tailored defense parts, organizing and operating a consultative body for localization, and operating a laboratory for the localization of defense parts but also serves as a support hub for fostering SMEs and ventures by promoting a conduit for providing comprehensive support for SMEs and regional job-specific programs.

In addition, the ROK government is implementing a preemptive quality control policy to improve the reliability of weapons systems through the stabilization of quality and safety control systems. The government is also expanding the management area and is establishing a precautionary system to reinforce the safety system.

Vitalizing Defense Exports

Export of defense articles not only strengthens the country's defense capabilities but also vitalizes the economy as it maintains the operation rate of the defense industry and creates high-quality jobs by addressing the shortage-of-demand issue through market expansion. Defense exports further contribute to the expansion of defense cooperation with partner countries.

The ROK government has established intergovernmental cooperation channels by creating a joint committee for defense industry and logistics and signing defense cooperation MOUs. It also has actively assisted the domestic defense industry in becoming globally competitive through efforts such as giving support for remodeling and development projects for export, reducing technical fees upon export, and



Seoul International Aerospace & Defense Exhibition (ADEX, October 2019)

supporting SMEs in entering overseas markets. ROK defense exhibitions such as the Seoul International Aerospace & Defense Exhibition (ADEX), the International Maritime Defense Industry Exhibition (MADEX), and the Defense & Security Expo Korea (DX-Korea), which are held every two years, play a major role in developing the country's defense industry into an export-oriented global industry. The 2019 Seoul ADEX, in particular, was a venue for successful international defense cooperation that accommodated around 290,000 visitors and 430 companies from 34 countries—the highest ever—and resulted in consultations and contracts being made worth more than USD 21 billion.

Thanks to such efforts, the scale of defense exports in recent years has grown significantly compared to the past. In addition, regions targeted for export are expanding from North America to Asia, Middle East, and Central and South Americas, while the defense articles are diversifying from ammunition and guns to advanced weapons systems such as mobile firepower, aviation, ships, and guided weapons.

However, with the competition in the global defense export market intensifying in recent years, the requirements set for by purchasing countries are becoming more diverse, hence requiring a policy change to find new routes for defense exports. Accordingly, to take the leap towards an export-oriented defense industry and create more jobs, the ROK government seeks to expand the exports of SMEs by converting the technology acquisition-oriented offset²⁶⁾ system into an industrial cooperation²⁷⁾ system. The government is also promoting various export methods such as exporting secondhand weapons systems, exchanges and counter purchasing, and leasing, and is continuously enhancing its government-level support including financial support, inter-government sales, and linkage with industrial cooperation in other fields. Organic cooperation among government ministries is expected to be vitalized by convening the "Defense Industry Development Council" for consultations on government-wide support for defense exports.



2019 ADEX

26)

A trade in which a buyer of foreign weapons and equipment receives certain reciprocal services, such as technology transfer and guaranteed export of domestic military supplies, from the foreign counterpart to the contract.

27)

A practice of a buyer of foreign weapons and equipment proposing a joint development and production of parts and technologies or a joint investment to the foreign counterpart to the contract, or mandating a certain cooperative relationship such as cooperation on exports of domestic parts and technologies.

In order to respond to the negative defense export conditions caused by the spread of COVID-19 in 2020, the ROK government will make efforts to enhance the fundamental competitiveness of export, such as competitive pricing and core parts technology development.

Securing the Appropriate Defense Budget and the Efficiency of Budget Operation for Steadfast Defense

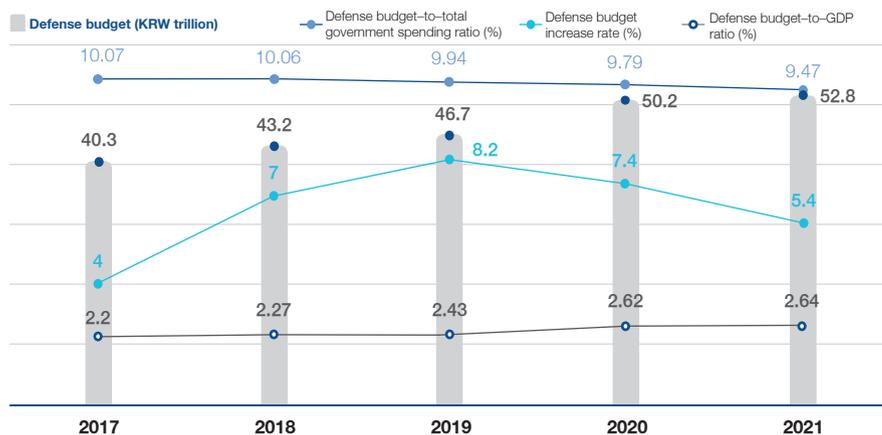
To maintain a firm defense posture against diverse security threats and stably implement defense reform, an adequate defense budget must be secured. In addition to securing an adequate defense budget, the MND is promoting highly efficient management across all areas of national defense to effectively utilize the budget.

1. Defense Budget Status

The national defense budget covers the costs of carrying out various projects related to defense policies to produce public goods called national defense. The appropriate size of a defense budget is generally determined by the ability of a nation to bear the financial burden as well as the costs of building, operating, and maintaining military strength that will counter security threats.

The proportion of the defense budget in the gross domestic product (GDP) and government spending has been maintained with little change over the past five years. In 2021, the defense budget accounted for 2.64% of the GDP and 9.47% of total government spending. The defense budget trend over the past five years is shown in [Chart 5-10].

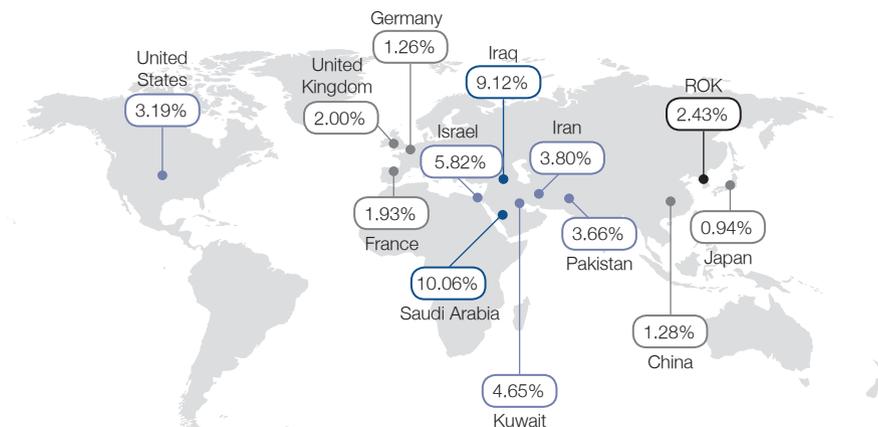
[Chart 5-10] Trend of Defense Budget Over the Past Five Years (Original Budget)



The defense budget-to-GDP ratio of each country tends to be proportionate to the severity of the security threats that it faces. As [Chart 5-11] shows, countries facing a relatively low level of security threats, such as France, United Kingdom, Japan, China, and Germany, spend about 1 to 2% of their GDP on defense spending. In comparison, countries involved in conflicts or military confrontations, such as Israel, Iran, Iraq, Kuwait, Saudi Arabia, and Pakistan, spend more than 3% of their GDP on defense spending.

In 2019, the ROK's defense budget-to-GDP ratio came to 2.43%, which is higher than the world average of 2.02%, but lower than those of nations involved in conflicts or military confrontations.

[Chart 5-11] Defense Budget-to-GDP Ratios of Key Nations (as of 2019)



* Source: The Military Balance 2020 (Center for Strategic and International Studies, February 2020)

2. The Importance of Securing an Adequate Defense Budget

The ROK's security environment is exposed to diverse threats such as North Korea's military threats as well as transnational and nonmilitary threats. To lay the foundation for the complete denuclearization and a permanent peace regime on the Korean Peninsula, superior defense capabilities must be obtained. Moreover, an adequate level of military force is necessary for the ROK to independently lead inter-Korean issues amid neighboring countries in Northeast Asia building their military forces.

In order to establish a strong defense posture against various security threats, it is essential to continuously invest in major defense requirements for force operations such as military supplies, installations, and education and training. At the same time,

securing an adequate level of defense budget is also required to seamlessly promote Defense Reform 2.0, which seeks to further transform the military into an elite force and acquire advanced weapons systems. Furthermore, in order to effectively respond to the changing security environment where transnational and nonmilitary threats including infectious diseases and terrorism are on the rise, it is necessary to secure an appropriate level of budget for discretionary spending in addition to the budget for fixed spending such as labor costs and meal expenses which account for a large part of the defense budget.

It is important to maintain a national defense capacity that corresponds to the size of the ROK economy in order to enable the people to live a peaceful and comfortable life amid various security variables, and this can be achieved when supported by an adequate defense budget.

3. Defense Budget and the Mid-Term Defense Plan

2021 Defense Budget

To ensure the right conditions for the implementation of Defense Reform 2.0 aimed at building a powerful defense capacity, the defense budget in 2021 was set at KRW 52.8 trillion, representing a 5.4% increase from the previous year. Costs required to operate and maintain troops and forces (force operation costs) totals KRW 35.8 trillion, accounting for 67.8% of the defense budget. The force enhancement budget for acquisition and development of weapons systems is set at KRW 17 trillion or 32.2% of the defense budget. The size and allocation of the defense budget in 2021 based on general accounting are shown in [Chart 5-12].

[Chart 5-12] Defense Budget in 2021 (General Account)

(Unit: KRW billion, %)

Category	2020 Budget (A)	2021 Budget(B)	Changes (B-A)	Increase Rate
Total Defense Budget	50,152.7	52,840.1	2,687.4	5.4
Subtotal	33,472.3	35,843.7	2,371.4	7.1
Force Operation Costs	19,860.0	20,587.2	7,272	3.7
Force Operation and Maintenance Costs	13,612.3	15,256.4	1,644.1	12.1
Force Enhancement Budget	16,680.4	16,996.4	3,160	1.9

Compared to the previous year, force operation costs increased by 7.1% to KRW 35.8 trillion. Along with the major criteria required to demonstrate the capabilities of the ROK Armed Forces in full scale, such as military supplies, installations, and education and training, the defense budget was used to enhance the ROK Armed Forces' comprehensive security capabilities to respond to transnational and nonmilitary threats, including infectious diseases and terrorism, and to reinforce the military base and coastal security operation posture. The budget was also formulated with an emphasis on transforming the defense manpower structure into an elite structure, conducting cutting-edge defense operations, and improving the service conditions for servicemembers.

For the efficient operation of advanced equipment during wartime and peacetime, the defense budget for equipment maintenance was increased by 7.7% compared to 2020 and installation maintenance spending was fully realized. Moreover, to maintain realistic combat power of servicemembers, defense spending was prioritized to invest in essential requirements for carrying out stable defense operations such as continuous establishment of scientific training systems.

In addition, to reinforce capabilities to respond to transnational and nonmilitary threats such as infectious diseases and terrorism, the MND allocated budgets for purchasing face masks for stockpiling, offering disease control and prevention services, and reinforcing medical equipment and supplies in military hospitals. Budget for the reinforcement of defense equipment and articles was also set up following the additional designation of counter-terrorism and counter-CBRN special mission units. Security installations were also reinforced to improve the ROK Armed Forces' military base and coastal security operation posture in an innovative manner, while the budget for the introduction of high-performance AI-based surveillance equipment was drastically increased.

As the number of standing troops is to be reduced by 2022, the budget for recruiting additional NCOs and civilian military employees required to operate advanced equipment and secure skilled combatants was reflected into the defense budget. The MND also drew up a budget to advance the overall force operation by applying core technologies of the Fourth Industrial Revolution to the defense domain, such as the launching of the ROK Army Smart Unit, the ROK Navy Smart Air Base, and the ROK Air Force Smart Wing.

As for the improvement of service conditions for servicemembers, their salary was raised in 2021 to 45% of the minimum wage in 2017 and the cost of meal per person was also raised by 3.5% to satisfy the preferences of the servicemembers. Furthermore, the budget for military group insurance and haircuts was newly

established, and the budget for self-development activities, such as learning foreign languages and obtaining certifications, was also increased.

The MND evenly drew up a budget for all elements of cyber-operations such as surveillance and defense in cyberspace and a budget to prime reserve forces into elite force such as adjusting the compensation fee for mobilization training to a realistic level, introducing science and technology in reserve military training, and supplying sufficient equipment and materials to mobilization units.

The force enhancement budget was increased by 1.9% to KRW 17 trillion compared to the previous year. The budget was formulated with a set of objectives including the establishment of a response system against omnidirectional threats, reinforcement of national defense R&D capabilities, and ensuring the conditions for stable production in the defense industry.

A total of KRW 6.2 trillion has been allocated to secure the capability to respond to nuclear and WMD threats and to establish a base force for surveillance, reconnaissance, and command and control, including KRW 2.3 trillion for the continuous reinforcement of the core capabilities of the ROK Armed Forces in leading combined defense. A budget of KRW 6.3 trillion has been allocated to guarantee the conditions for the reorganization of military structure following defense reform, and another KRW 4.3 trillion to enhance national defense R&D capabilities.

The MND allocated KRW 209.9 billion to respond to diverse threats including cyber and space threats and terrorism and to enhance the country's disaster support capabilities, KRW 1.47 trillion to increase the capability to develop advanced weapons such as future strategic technologies and manned and unmanned complex systems that will lead the era of the Fourth Industrial Revolution, and another KRW 96.8 billion to foster and build the defense industry base to support the transformation of the domestic defense industry into an export-oriented structure and to create high-quality jobs.

Mid-Term Defense Plan for 2021–2025

The Mid-Term Defense Plan is a blueprint for the formation and operation of military forces over the next five years in response to current and anticipated future threats and to the changes in the security environment.

The Mid-Term Defense Plan for 2021-2025 efficiently allocates financial resources to maintain the National Defense Policy for 2019-2033, the Basic Plan for Defense Reform 2.0, and the basis of policy tasks. The plan also aims to actively respond to changes in the security environment such as the recent COVID-19 outbreak and to promote policy tasks.

The total budget allocated to the Mid-Term Defense Plan for 2021–2025 is KRW 300.7 trillion, which is an annual average increase of 6.1%. The Size of the budget for the Mid-Term Defense Plan for 2021-2025 is shown in [Chart 5-13].

[Chart 5-13] Mid-Term Defense Budget Size

(Unit: KRW trillion)

Category	2020	Years Subject to the Mid-Term Plan					Total
		2021	2022	2023	2024	2025	
Defense Budget (Growth Rate)	50.2 (7.4%)	53.2 (6.0%)	56.5 (6.3%)	59.8 (5.9%)	63.6 (6.3%)	67.6 (6.3%)	300.7 (6.1%)
Force Operating Costs (Growth Rate)	33.5 (6.9%)	36.1 (7.8%)	38.3 (6.3%)	40.1 (4.7%)	42.0 (4.7%)	44.0 (4.8%)	200.6 (5.6%)
Force Enhancement Budget (Growth Rate)	16.7 (8.5%)	17.1 (2.5%)	18.2 (6.2%)	19.7 (8.4%)	21.6 (9.5%)	23.6 (9.3%)	100.1 (7.2%)

The major contents of the Mid-Term Defense Plan for 2021-2025 in the category of force operations are as follows.

First, the MND plans to establish a robust military readiness posture through the strengthening of force support and reinforcement of security capabilities required for maintaining warfighting capabilities. To maximize existing force operation capabilities, the MND will improve the PBL program and post- logistics support for the introduction and operation of advanced military forces such as the F-35A and HUAV. Moreover, the ROK Armed Forces’ security operational readiness will be enhanced by installing high-performance CCTVs at harbors, ports, and military bases, thereby reinforcing the functions of barbed wire fences, guard posts, light towers, etc. and eliminating blind spots in the border areas.

Second, the MND plans to establish an omnidirectional medical support system that will isolate and treat patients and provide support for the private sector in case of an outbreak of an infectious disease, and to reinforce equipment and supplies for quick response to terrorism and CBRN attacks or large-scale and emergency disasters. For the expansion of cyber-information and surveillance capabilities, the ability to respond to transnational and nonmilitary threats including cyber-threats, disasters, and terrorism will be further secured by strengthening the ROK Armed Forces’ counter-cyber-capabilities.

Third, to foster a smart military with stronger combat power despite the reduction of troops, the MND plans to refine the military structure and introduce Fourth Industrial Revolution technologies to the defense domain. For the maintenance of combat power despite troop reduction, combat units will be reinforced with officers and non-

commissioned officers, while noncombatant areas will be reinforced with civilian workforces to acquire and utilize the required expertise. In order to secure skilled combatant by improving the cadre acquisition and operation system, the cadre rank structure will be reorganized from the existing pyramid shape to a pot shape which enables "small-scale acquisition and long-term utilization of cadres". The MND also plans to promote the priming of reserve forces into an elite force and establish a realistic scientific training system to minimize the impact of troop reduction. By 2024, a total of 202 reserve military training camps nationwide will be merged into 40 scientific reserve army training units, thereby maximizing the effect of training. Compensation for mobilization of reserve forces will also be raised to the level of a sergeant's salary to boost the servicemembers' morale and guarantee better training conditions. In spite of the shortening of the military service period, the MND aims to establish a realistic scientific training system to conduct trainings in an environment similar to actual combat without having any restrictions in time and space, which will improve the ROK Armed Forces' proficiency within a short period.

Fourth, the MND plans to persistently improve servicemembers' human rights, welfare benefits, and working conditions to the level that meets the expectation of the people and social standards. For the reasonable compensation for military service, servicemembers' salary will be raised to KRW 676,000—which is 50% of the minimum wage of sergeants in 2017—by 2022, and of the sergeants to KRW 963,000 by 2025. Furthermore, the servicemembers' fatigue duty, such as weeding and cleaning, will be carried out by civilian workforces to ensure conditions for servicemembers to focus on combat missions and grant them opportunities for self-development, such as financial aids, thereby creating a productive military service environment. To improve the military medical system to the level that meets the people's standards, medical indemnity insurance for all servicemembers will be introduced throughout the military, which will lower the individual burden of medical expenses when using private hospitals. For stable service conditions and continuous improvements in the aging residential environment, the MND will acquire 197,000 houses and rooms for military cadres, and will increase the number of daycare centers within military premises from 155 to 187 by 2025 to create a balance between work and personal life.

Lastly, the MND will foster a safe, citizen-friendly defense environment to build trust between servicemembers and the people. Efforts will be made to protect servicemembers from particulate matter and infectious diseases by supplying protection masks and replacing military-purchased passenger vehicles with green vehicles, while aging facilities such as wastewater treatment stations and

pipelines will be renovated to prevent water pollution. Moreover, oil pipes will be established above ground to prevent soil pollution and improvements will be made in buildings containing asbestos. In line with demolition and environmental cleanup projects following the return of US military bases, removal of unused military installations, and payment of compensation to local residents living in areas requiring countermeasures against noise, the MND plans to build military installations considering the inconvenience of residents and shared growth with the local communities.

In the force enhancement area, to build an elite military force based on advanced science and technologies that is capable of taking the initiative in responding to omnidirectional security threats, the MND has secured independent surveillance and reconnaissance capabilities of the ROK Armed Forces and allocated financial resources with a primary focus on expanding strategic deterrence capabilities such as—responding to nuclear and WMD threats. Resources have also been allocated to other priorities including the bolstering of operational response capabilities through OPCON transition and military structure reorganization and counter-threat forces against transnational and nonmilitary threats such as cyber and space threats, terrorism, CBRN, and disasters, and the fostering of the defense science and technology and the domestic defense industry. Specific plans are as follows.

First, KRW 35.2 trillion is allocated to acquire core forces to implement strategic deterrence, such as surveillance and reconnaissance, and to respond to nuclear and WMD threats. In order to secure capabilities to carry out independent surveillance and reconnaissance activities and acquire capabilities for precision-strike against strategic targets for the ROK Armed Forces, the MND will expand the ROK Armed Forces' surveillance and long-range strike capabilities by procuring military reconnaissance satellites, MUAV, next-generation submarines as well as long-range air-to-ground missiles (AGMs) and new missiles. Furthermore, to establish the KAMD system, the MND will build overwhelming response capabilities through the reinforcement of missile forces and will continue to reinforce ballistic missile detection capabilities and capabilities to defend the key national facilities. The ballistic missile early-warning radar-II and L-SAMs will be deployed and the performance of Patriot missiles and Cheolmae-II will be further improved.

Second, KRW 50 trillion is allocated to the securing of forces necessary for military structure reorganization and OPCON transition. For the acquisition of key military capabilities related to OPCON transition, approximately KRW 11.6 trillion is allocated to reinforce counterfire warfighting capabilities, precision-guided weapons, and communication capabilities. With KRW 38.4 trillion allocated to the

essential forces of each battlefield function for military structure reorganization, 230 mm-class MRLs, wheeled armored vehicles, next-generation Aegis destroyers, KF-X, and amphibious helicopters will be procured to enhance the ROK Armed Forces' ground, naval, and air operations capabilities qualitatively and quantitatively.

Third, KRW 1.9 trillion is allocated to improve the ROK Armed Forces' capabilities in carrying out anti-terrorism operations, providing disaster relief, and protecting overseas nationals, and to respond to transnational and nonmilitary threats such as the COVID-19 pandemic. In the field of counter-terrorism, the MND will procure customized equipment and articles—such as folding guns, explosive detecting and eliminating robots, new CBRN reconnaissance vehicles, and dry decontamination apparatus—to reinforce the special strike and night surveillance capabilities of the ROK Armed Forces and guarantee the mission execution capabilities of anti-terrorism units and counter-CBRN units according to the designation of responsible units for each city and province. The MND will also strengthen the ability to carry out relief activities and to protect overseas nationals in the event of a disaster by deploying medevac helicopters and amphibious assault ships.

Lastly, KRW 24.8 trillion is allocated to carry out defense R&D and invigorate the defense industry. The MND plans to increase the share of defense R&D in the mid-term defense budget to 8.3%. Especially, the investment will mainly take place in the early stages of the mid-term to acquire new technologies of the Fourth Industrial Revolution in the defense domain. Heavy investment will be made in basic research and core technology development centered on 8 areas of defense strategic technology—such as autonomous technologies and AI—including restructuring of R&D institutions and reinforcement of infrastructure to ensure that creative R&D reinforcement projects are carried out.

4. Efficient Defense Management

Implementing Defense Fiscal Reform

Since 2013, the MND has been operating the "Defense Management Efficiency Inspection Committee" presided by the Vice Minister of National Defense and joined by civilian experts to increase the efficiency and effectiveness of defense operations. The committee is the first group to conduct preliminary feasibility studies and in-depth evaluations of force operation projects, and promoted tasks related to logistics innovation including procurement, replacement parts, and distribution utilizing civilian expert groups.

In 2015, the Defense Management Efficiency Inspection Committee was transformed into the "Defense Fiscal Reform Promotion Group" to go beyond the simple streamlining of defense management and focus on fundamental financial reforms. The Defense Fiscal Reform Promotion Group selects projects that have a significant impact on defense finance and require fundamental system improvement, and reviews and manages them.

In 2016, the MND implemented in phases measures for developing the defense planning and management program, including the optimization of the planning document system, to respond flexibly to changes in the defense environment and to reasonably allocate and manage limited defense financial resources. In 2017, the MND replaced troops serving in the field of combat service support, such as those responsible for sales at military supermarkets and administration at military welfare centers, with civilian workforce, thereby improving efficiency in troop operations and contributing to the ROK government's job creation policy.

In 2018, the MND improved the procurement support system such as commercialization of military supplies to procure superior munitions, coordinated and integrated installation projects at each military base, and entrusted the management and operation of military housing facilities to the private sector, which resulted in the efficient operation of troops and financial savings. In 2019, a defense operation system suitable for the Fourth Industrial Revolution was formulated with the use of future core technologies, such as expanding defense cloud services and providing solutions for pipe leaks in military premises using big data. The system has laid the foundation for budget reduction.

In 2020, an upgrade was made in the operation system after applying the core technologies of the Fourth Industrial Revolution—such as the use of IoT and smart logistics warehouses—to defense operations, thereby reducing costs. In addition, the MND enhanced the effectiveness of overall operations by improving the efficiency of defense resources utilizing private resources and by refining the defense system and operation method.

Along with such efforts, the MND will continue to implement intensive fiscal reforms for high-efficiency defense management by removing inefficient elements in overall defense.

Operation of the Military Executive Agency System

To increase the efficiency and expertise of defense operation and the quality of defense services, the MND has designated and is operating organizations, whose responsibilities are business-like and

execution-focused, as military executive agencies.

In the Military Executive Agency System, agency heads are hired through open recruitment procedures within and without the military; are given autonomy in organization, personnel affairs, and finance, and; are held responsible for the management and performance of their agencies. Pilot operation of several military executive agencies began in 2009, and the number has continuously grown. As of 2020, 16 military executive agencies are operated in the areas of maintenance, supply, medical care, printing, and intelligence. The status of military executive agencies is shown in [Chart 5-14].

[Chart 5-14] Military Executive Agencies (16 Agencies)

Year Designated	Total 16	Under the Control of the MND (6)	Army (2)	Navy (5)	Air Force (3)
2009	3	Korea Armed Forces Printing & Publishing Depot Armed Forces Capital Hospital		Naval Supply Depot	
2011	3	Armed Forces Daejeon Hospital		Naval Repair Depot One	83rd Information & Communication Maintenance Depot
2012	3	The Armed Forces Medical Research Institute		Naval Repair Depot Two	82nd Aero Maintenance Depot
2013	3		Army Consolidated Maintenance Depot	Naval Repair Depot Three	Air Force Consolidated Supply Depot
2014	3	Korea Joint Interoperability Test Center Defense Integrated Data Center		Naval Shipyard	
2017	1		Army Consolidated Supply Depot		

Organizations designated as military executive agencies are continuously generating tangible results including increased productivity and improved service quality. The error printing rate of the Korea Armed Forces Printing & Publishing Depot reached 2.03% before being designated as a military executive agency but dropped to 0.23% after the designation. The Army Consolidated Maintenance Depot strengthened its maintenance capacity by converting 545 outsourced items into self-maintenance items. In addition, the Armed Forces Capital Hospital was certified as a general hospital in 2015 after its efficiency in operation and securing excellent medical personnel was verified; the MND continues to exert efforts to improve

military medical services as it plans to open and operate the Armed Forces Trauma Center beginning in 2021.

The military executive agencies are doing their best to increase their competitiveness and gain trust in the quality of their products and services based on proactive and performance-oriented achievements²⁸⁾. As such, the MND plans to expand the operation of military executive agencies to various fields including welfare and military installations.

28)

Achievements include 226 patent applications, 261 publishing copyrights, 78 external certifications, and 611 research papers in the related fields of 6 institutions.

Chapter 6

Developing a Robust ROK–US Alliance that is Mutually Complementary and Promoting Defense Exchanges and Cooperation

- Section 1** Developing a Mutually Complementary and Robust ROK-US Alliance
- Section 2** Expeditious Wartime Operational Control Transition Based on a Robust ROK–US Alliance
- Section 3** Promoting Substantiality and Expansion of Defense Exchanges and Cooperation
- Section 4** Contributing to International Peacekeeping and Protecting Overseas Koreans





Developing a Mutually Complementary and Robust ROK-US Alliance

The ROK–US alliance is a key pillar of peace and prosperity on the Korean Peninsula and in the region, and continues to develop into a comprehensive strategic alliance based on common values and mutual trust. The ROK and the US have not only maintained a robust combined defense posture for complete denuclearization and establishment of permanent peace on the Korean Peninsula even during the process of exerting efforts to ease tensions and build military confidence between the two Koreas, but also continued to deepen and expand the scope and level of alliance cooperation. Through such combined defense posture and alliance cooperation, the two countries are committed to protecting the common national security interests and developing a robust ROK–US alliance in a mutually complementary and future-oriented manner.

1. Continued Development of the ROK–US Alliance as a Comprehensive Strategic Alliance

Over the past 67 years, the ROK–US alliance has not only defended the ROK from external threats but also contributed greatly to the country’s development in politics, economy, society, and culture.

Playing a key role in the defense of the Korean Peninsula, the ROK–US alliance is contributing to stability, peace, and prosperity in Northeast Asia as well. At the ROK–US summit in June 2019, the leaders of the two countries assessed the ROK–US alliance to be robust in all areas, not only in security but also in regional and global issues, and agreed to continue their close cooperation, considering their alliance as a key pillar of peace, stability, and prosperity in the region. In addition, the two leaders agreed to further strengthen their ROK–US alliance, keeping in mind the history and spirit of the great alliance.

Based on the agreement, the ROK MND and the US DoD discuss major policies, manage alliance issues, and discuss ways to further develop the alliance through various high-level security consultative meetings including the SCM¹⁾, the MCM²⁾, and the KIDD³⁾.

At the 52nd SCM held in October 2020, the defense authorities of the ROK and the US reaffirmed the need for close collaboration and cooperation to achieve

1) The highest level of the ROK–US bilateral security consultative meeting participated in by the ROK Minister of National Defense, the US Secretary of Defense, and senior (key) defense and foreign affairs officials.

2) The highest level of the ROK–US bilateral military consultative meeting between the JCS of the two countries.

3) First held in 2012, the KIDD is an integration of various ROK–US defense consultative meetings for better efficiency and effectiveness.

a permanent peace regime on the Korean Peninsula. The ROK Minister of National Defense and the US Secretary of Defense agreed that stability has been maintained and that the possibility of accidental clashes has been significantly reduced through the suspension of hostilities in all border areas on land, at sea, and in the air, which was achieved by the two Koreas implementing the CMA, and through continuous implementation and management of the Armistice Agreement by the United Nations Command (UNC).



52nd ROK–US SCM (October 2020)

The Minister of National Defense and the Secretary of Defense assessed the ROK–US alliance to be robust and reaffirmed their commitment to combined defense to defend the ROK as agreed upon under the Mutual Defense Treaty Between the ROK and the US.

In particular, the US reaffirmed its unwavering commitment to the combined defense with the ROK as specified in the Mutual Defense Treaty, including the provision of extended deterrence to the ROK by operating all categories of military capabilities including nuclear, conventional, and missile defense capabilities. In the same context, the Minister and the Secretary agreed to jointly seek ways to enhance the deterrence posture of the ROK–US alliance and to implement the tailored deterrence strategy (TDS).

Furthermore, following the pledge by the ROK and US heads-of-states to pursue harmonious cooperation between the ROK’s New Southern Policy and the US Indo-Pacific Strategy in accordance with the regional cooperation principles of openness, inclusiveness, and transparency, the MND and DoD carried out the Future Defense Vision of the ROK–US Alliance joint study considering the changes to the future security environment and, through the study, derived joint principles for the defense authorities of both nations and defense cooperation measures for each field to enable effective responses against new challenges and security threats in the future. Under the commitment of developing the ROK–US alliance’s defense cooperation in a complementary, future-oriented manner, the Minister and the Secretary agreed to close cooperation so that the alliance can protect common national security interests in the world—especially in Northeast Asia—even after the establishment of peace on the Korean Peninsula.

The ROK–US alliance continues to develop into a comprehensive strategic

alliance that contributes to peace and stability on the Korean Peninsula as well as the region and the world. The scope of alliance cooperation is broadening to cover new areas including cyber, space, the defense industry, science and technology, and maritime security; regionally, it is expanding its cooperation to Northeast Asia and global security issues. As seen through the activation of the ROK–US cooperative system in response to the global spread of COVID-19 in 2020, the two countries are continuously enhancing defense cooperation to respond to transnational and nonmilitary threats by conducting peacekeeping activities and anti-piracy operations, providing support for stabilization and reconstruction efforts, humanitarian assistance, and disaster relief, and suggesting regional security cooperation initiatives.

In particular, to ensure effective joint responses to the increasing threats in the space domain, the two sides are holding close cooperation in areas such as SSA information sharing, professional manpower exchanges, and combined exercises in the space domain. The ROK and the US are shaping such efforts through the ROK–US defense space cooperation consultative working-level meeting launched in 2013. At the 15th meeting in 2020, the two countries agreed to the continuous development of the current exchange areas and the deepening of their cooperation through initiatives such as conducting a study on establishing the ROK–US joint space policy direction.

Likewise in the field of defense science and technology and the defense industry, the ROK and the US are committed to strengthening their cooperation on the complementary use of comparative advantages between the two countries. To this end, several high-level regular consultative meetings, such as the Defense Technology and Industrial Cooperation Committee (DTICC), Defense Technology Security Consultative Meeting (DTSCM), Security Cooperation Committee (SCC), and Logistics Cooperation Committee (LCC), are operated by the two countries.

In the future, the ROK MND and the US DoD will continue their diplomatic efforts for the denuclearization of North Korea and the establishment of permanent peace on the Korean Peninsula. As global partners, the two countries will further develop the robustness of the ROK–US alliance in a mutually complementary and future-oriented manner to protect their security interests in Northeast Asia as well as the global realm.

2. Maintaining a Firm ROK–US Combined Defense Posture

Even during the process of exerting efforts to ease tensions and build confidence

in the military domain between the two Koreas, the ROK and the US continue to maintain a robust combined defense posture.

The two countries have continuously enhanced their combined operations plans to prepare for contingencies in both wartime and peacetime, and are verifying and supplementing the operation plans through ROK–US combined theater-level command post exercises. In particular, ROK–US combined field maneuver training exercises improve the execution capability and interoperability of combined operations under the principle of "guaranteeing a balanced combined readiness posture throughout the year".

The two countries are focusing on maintaining a combined defense posture for responding to the dynamic changes on the Korean Peninsula, and at the same time working closely to develop their comprehensive alliance capacity for responding to common security threats. In particular, the ROK and the US are communicating closely to make progress and achieve actual results in preparing for OPCON transition to a Future CFC led by the ROK Armed Forces, and are periodically assessing and evaluating the OPCON transition implementation status through the annual SCM and MCM So that the ironclad combined defense posture is maintained like it is today.

Meanwhile, the two countries agreed in 2018 to maintain the current ROK–US combined forces command system even after wartime OPCON transition and to firmly maintain the combined defense posture by maintaining the current level of combinedness, operational efficiency, and readiness posture.

The ROK and the US are committed to maintaining a powerful combined defense posture, and will be committed even after progress with the complete denuclearization and peace policy of the Korean peninsula is made or the wartime OPCON transition is completed. The two states will continue to maintain a cooperative system by persistently developing interoperability between the two states' armed forces at all levels including policy, strategy, and tactics.

3. Ensuring a Stable Stationing Environment for the United States Forces Korea (USFK)

United States Forces Korea Base Relocation

The USFK base relocation project is a project that consolidates and rearranges the USFK bases scattered across the country into two hub bases in Pyeongtaek and Daegu to ensure a stable stationing environment for the USFK and the

efficient use and balanced development of national land.

The USFK base relocation project consists of the Yongsan Relocation Plan (YRP) and the Land Partnership Plan (LPP). YRP moves units stationed in Seoul including the USFK Headquarters to Pyeongtaek, while LPP moves the US 2nd Infantry Division located north of the Han River in Dongducheon and Uijeongbu Camp Humphreys in Pyeongtaek. The project is being carried out in accordance with the Special Act on Support, Etc. for Pyeongtaek-si, Etc. Following the Relocation of US Military Bases in Korea ("Act on Supporting the USFK Base Relocation").

Since the relocation construction at Camp Humphreys began in November 2007, the MND is in the process of relocating the relevant USFK units as soon as the construction of the facilities inside the camp are completed. The construction of school facilities ended in August 2013. Major units including the USFK Headquarters, UNC Headquarters, and US 2nd Infantry Division Headquarters were relocated to Camp Humphreys in 2018, followed by hospitals and other support units in 2019. The relocation of the remaining units, including the CFC Headquarters, will be completed in the future. Once the relocation project is completed, the USFK, in a more stable stationing environment, is expected to continue to play an important role in preventing military conflict on the Korean Peninsula, promoting peace and stability in Northeast Asia, and contributing to global peace going forward.

MND is also in the process of construction of resident support facilities and amenities including roads, waterworks, sewerage facilities, and community centers for Pyeongtaek residents are underway in accordance with the Act on Supporting the USFK Base Relocation. In conjunction with the relocation project, the existing US base sites are being returned to the ROK. As of December 2020, a total of 68 US bases have been returned, and 12 additional bases will gradually be returned to the ROK in accordance with the Status of Forces Agreement (SOFA). The defense authorities of the ROK and the US are strengthening joint efforts for the active management of the environmental conditions and other matters for the timely return of the bases.

The MND recognizes the importance of the USFK's relocation and camp returns, and will continue to closely cooperate with the US to successfully complete the YRP and the LLP.

Defense Burden Sharing

Defense Cost sharing refers to the ROK government bearing a portion of the total costs required for the US military's maintenance in the ROK to ensure a stable stationing environment for the USFK and to maintain a robust ROK-US combined defense

posture. Defense cost sharing is an exception to Article 5⁴⁾ of the SOFA, which states that the US bears all expenditures incident to the maintenance of the USFK, and the ROK started its contribution⁵⁾ in 1991 based on a Special Measures Agreement (SMA)⁶⁾.

The defense cost sharing consists of three categories—labor cost, ROK-funded construction, and logistics cost. The ROK and the US divide and allocate the total amount of annual defense cost sharing to the three categories and spend the budget in accordance with the procedures agreed upon by both sides during the signing of the SMA. The total amount of the annual defense cost sharing is set to a reasonable and fair level via close consultations between the two countries with comprehensive considerations of the USFK’s contribution to the defense of the Korean Peninsula and the need to provide a stable stationing environment for the USFK, the ROK’s financial capacity, and the security situation on the Korean Peninsula.

Since August 2019, the ROK and the US have been negotiating to conclude a new SMA, and the ROK government is doing its best to derive reasonable, fair

4) Article 5 of the SOFA (Facilities and Areas-Cost and Maintenance) provides the following:

- 1: The United States will bear, without cost to the Republic of Korea, all expenditures incident to the maintenance of the United States armed forces in the Republic of Korea, without cost to the United States, all facilities and areas.
- 2: The ROK will furnish, without cost to the United States, all facilities and areas.

5) The US not only covered all expenditures for the maintenance of the USFK following Article 5 of the SOFA but also funded and constructed most of the facilities that the ROK was supposed to provide in consideration of the ROK government’s financial conditions. Due to the deterioration of the US financial situation and the ROK’s economic growth, the two countries signed the SMA in 1991. Since then, the ROK has shared a portion of the USFK’s stationing costs.

6) The official title of the SMA is the "Agreement Between the United States and the Republic of Korea Concerning Special Measures Related to Article V of the Agreement Under Article IV of the Mutual Defense Treaty Between the United States and the Republic of Korea, Regarding Facilities and Areas and the Status of the United States Armed Forces in the Republic of Korea."

[Chart 6-1] Annual Defense Burden Sharing Amount Agreed Upon by the ROK and the United States

(Unit: USD 100 million)

Round	1st, 2nd					3rd			4th			5th		
Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Amount	1.5	1.8	2.2	2.6	3.0	3.3	3.6	3.9	3.3	3.9	4.4	4.7	5.5	6.2

(Unit: KRW 100 million)

6th		7th		8th				9th				10th		
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
6,804	6,804	7,255	7,415	7,600	7,904	8,125	8,361	8,695	9,200	9,320	9,441	9,507	9,602	10,389

* Since the 6th SMA, the currency for payment has been switched to Korean won.

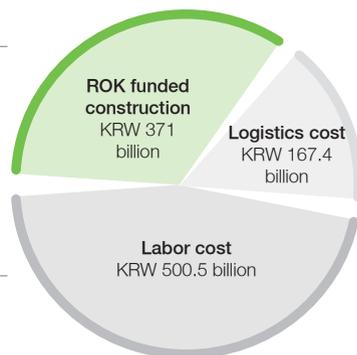
[Chart 6-2] Defense Burden Sharing Status (as of 2019)

36%

Construction support to the USFK facilities including barracks and surrounding facilities (All support, except 12% of design and construction oversight costs, paid in kind)

48%

Salaries support for the ROK employees to the USFK (All paid in cash)



16%

Munitions storage, aircraft maintenance, railroad and vehicle transportation support, as well as other types of provisions of materials and services (All paid in kind)

negotiation results accepted by the National Assembly and the people.

Most of the defense sharing cost has been redirected to the ROK economy, contributing to job creation, domestic consumption growth, and regional economic development. All of the labor cost has been paid to the ROK citizens working for the USFK, while 88% of ROK funded construction—with the remaining 12% being design and construction oversight costs—and 100% of the logistics cost are supported in kind (facilities, equipment, services, etc.) through domestic contractors.

The SMA has undergone numerous changes over the past three decades. The ROK and the US governments have made continuous efforts to improve rules and regulations in response to the development of democracy and the maturing civil society in the ROK. Transparency and accountability in the defense burden sharing program have been improved through the enhanced participation from the ROK government in the execution process, and various efforts are being made to protect the rights and interests of the ROK employees in the USFK and improve their job security.

In addition to the defense cost sharing provided in accordance with the SMA, the ROK government directly and indirectly⁷⁾ supports the USFK in various fields. The composition and scale of direct and indirect supports for the USFK have also changed in line with changes in the security environment. For instance, the ROK government has been providing direct support including maintenance support around USFK bases and support for US communication lines and combined C4I system, and indirect support including various tax exemptions and reductions. Considering such efforts, the ROK government will continue to carry out discussions with the US so that the defense burden sharing amount continues to be determined at a reasonable and fair level in the future, while making every effort to ensure that the various support provided by the ROK government contributes to reinforcing the development of a robust ROK–US alliance and the enhancement of the combined defense posture.

Enhancing ROK–US Mutual Understanding

The ROK and the US operate a variety of programs, including ROK–US friendship activities, to help enhance trust and build friendship between the two countries. The MND provides a Korean cultural experience program where USFK service members are invited to experience Korean culture, and since 1972, some 19,000 USFK service members have participated in this program. In 2019, around 240 USFK service members on five separate occasions participated in various programs, including Taekwondo camps, visits to historical

7)

Direct and indirect supports are classified as follows:

- Direct support: A form of support that involves government spending
- Indirect support: A form of support that does not involve government spending but supports the USFK in a way that helps save the forces' financial resources

8)

John H. Tilelli Jr., the 8th commander of the CFC, contributed to the maintenance of a robust ROK–US alliance, including the project for establishing the "Wall of Remembrance" within the Korean War Veterans Memorial in Washington, D.C. The General was awarded in 2019, appreciating him as a representative pro-Korean member.

9)

James N. Mattis, the 26th US Secretary of Defense, contributed to the defense of the Korean Peninsula during his tenure by emphasizing the unwavering security pledges in accordance with the ROK–US alliance. He also presented a blueprint for the buildup of a robust ROK–US combined defense system after the agreement on the Guiding Principles Following the Transition of Wartime Operational Control in 2018.

sites, cultural experience programs, and field trips to national defense facilities, broadening their understanding of Korean history and culture.

In November 2019, the MND organized the ROK–US Alliance Night dinner event in celebration of the 51st SCM and invited around 500 guests including ROK and US delegates to the SCM, key government officials, USFK and CFC servicemembers, and the Korean Augmentation to the United States Army (KATUSA) personnel. During the dinner, the Minister of National Defense presented the ROK–US Alliance Award to retired General John H. Tilelli Jr.⁸⁾, the recipient of the 7th General Paik Sun-Yup ROK–US Alliance Award.

Meanwhile, former US Secretary of Defense, James Mattis⁹⁾ was selected as the recipient of the 8th General Paik Sun-Yup ROK–US Alliance Award in 2020. The General Paik Sun-Yup ROK–US Alliance Award was created in 2013 in celebration of the 60th anniversary of the ROK–US alliance to strengthen the value and meaning of the alliance, and is awarded to US personnel who have dedicated themselves to the alliance and the defense of the ROK. The honored recipients of the award during the past seven years include the late General Walton Walker,¹⁰⁾ Colonel William Weber,¹¹⁾ the late General James Van Fleet,¹²⁾ Major General John Singlaub,¹³⁾ the late General John Vessey,¹⁴⁾ the late General Mark Clark,¹⁵⁾ and General John Tilelli.

The USFK also runs various programs to enhance mutual understanding between the ROK and the US. The USFK officially launched the Good Neighbor Program in 2003 for local communities, which involves open house events, local festivals, friendship dinners, visits to US military vessels, and English classes. The program has enabled cultural exchanges between the USFK and local communities, and helped enhance their understanding of each other. The USFK soldiers continue to work on building trust with local communities by supporting local residents and social welfare facilities with typhoon recovery aid and briquette delivery, among others.

Meanwhile, MND has been participating in activities carried out by the "70th Anniversary of the Korean War Commemoration Committee", a government-wide committee launched in 2020 to commemorate the 70th anniversary of the outbreak of the Korean War. During the ROK Defense Minister's visit to the US in February 2020, the Minister paid his respects to Korean War veterans by visiting and extending his gratitude to the veterans



The General Paik Sun-Yup ROK–US Alliance Award (November 2019)

10) Awarded in 2013, Walton Walker laid the groundwork for Incheon Landing by successfully defending the front line of Nakdonggang River during the early stage of the Korean War.

11) Awarded in 2014, William Weber is the chairman of the Korean War Veterans Memorial Foundation who has actively campaigned for better recognition of the Korean War in the US

12) Awarded in 2015, James Van Fleet served in the Korean War as the commander of the 8th US Army, also renovated the training system of the ROK Armed Forces and continued to contribute to the ROK's development after the end of the Korean War.

13) Awarded in 2016, John Singlaub made a significant contribution in overcoming the crisis on the Korean Peninsula caused by the "Panmunjom axe murder incident" and to the creation of the CFC.

14) Awarded in 2017, John Vessey served as the first Commander of the CFC and played a decisive role in the creation of the CFC as the commander of the USFK.

15) Awarded in 2018, Mark Clark, the former commander of the UNC, negotiated and concluded an armistice agreement as a representative of the UN forces in the ROK.

at VA Nursing Homes and those living near Washington, D.C. Also, by hosting various events for Korean War veterans such as visiting the 1st Marine Division, which was the US lead effort in the Incheon Landing Operation during the Korean War, to pay his respects to the Korean War veterans residing in the California area, the Defense Minister was able to not only uplift the spirit of the ROK–US alliance, which has continued for over 70 years amid the brutality of war, but also demonstrated the robustness of the alliance both at home and abroad.

In particular, the Minister's speech on the "Development of the ROK–US alliance and establishment of a peace regime on the Korean Peninsula" to an audience consisting of professors, students, and experts on the Korean Peninsula at the US National Defense University, which was a first for a ROK Minister of National Defense, contributed to broadening the audience's understanding of the security situation on the Korean Peninsula and the ROK's defense policies, as well as enhancing the value and meaning of the ROK–US alliance.

Expeditious Wartime Operational Control Transition Based on a Robust ROK–US Alliance

Based on the robust ROK–US alliance, the ROK Armed Forces is reinforcing its independent response capabilities to counter North Korean threats and is systematically and proactively preparing for wartime operational control (OPCON) transition according to the Conditions-based Wartime Operational Control Transition Plan (COTP) for a stable establishment of a new combined defense system led by the ROK Armed Forces. The ROK Armed Forces will make efforts for an expeditious reinforcement of their defense capabilities necessary for wartime OPCON transition and for the acceleration of the transition through periodic assessments.

1. Background and Progress

In order to meet a nationwide demand for "realizing steadfast national defense befitting the national and military strength of the ROK", the ROK Armed Forces is systematically and proactively pursuing a conditions-based wartime OPCON transition¹⁶⁾ based on the robust ROK–US alliance. At the ROK–US summit in June 2017, the two countries agreed to an expeditious pursuit of a conditions-based wartime OPCON transition, making it an opportunity to establish a new combined defense system led by the ROK Armed Forces. At the 50th SCM in October 2018, the defense authorities of the ROK and the US signed the "Alliance Guiding Principle Following the Transition of Wartime Operational Control", gaining a momentum for wartime OPCON transition.

The ROK Armed Forces is making a military-wide effort to build public trust and set the conditions for wartime OPCON transition through the creation of a ROK-led combined defense system in the future, and is striving to reinforce the defense capabilities necessary for wartime OPCON transition in conjunction with Defense Reform 2.0. In addition, the ROK and the US are closely assessing the status of meeting the transition conditions, including developing future command structures and strategic documents for a stable wartime OPCON transition, securing military capabilities necessary to lead the combined defense and the alliance's comprehensive

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A method of wartime OPCON transition when the transition conditions of capabilities and security environment are met.

response capabilities against North Korea's nuclear and missile threats, and the three-stage combined certification assessment¹⁷⁾ of the Future Combined Forces Command's (F-CFC) mission execution capabilities. In 2018, the two countries agreed on the basic framework of the combined defense system and future command structure that will be applied after wartime OPCON transition, and in 2019, the two sides primarily assessed the ROK critical military capabilities and conducted an initial operational capability (IOC) certification assessment for F-CFC.

In 2020, the ROK and US carried out key tasks for wartime OPCON transition, focusing primarily on evaluating the alliance's comprehensive response capabilities against North Korea's nuclear and missile threats, and conducted a rehearsal for FOC certification assessment of F-CFC through the 20-2 ROK-US combined exercise.

The ROK Armed Forces plans to thoroughly consider changes in the security situation on the Korean Peninsula and expeditiously expand their defense capabilities necessary for wartime OPCON transition, thereby expediting the consultation procedure to enable the transition when the conditions are met.

2. Systematic and Proactive Pursuit of Conditions-Based Wartime OPCON Transition

Development of Strategic Documents

For an expeditious transition of wartime OPCON on the basis of the robust ROK-US alliance, the ROK and US are in the process of developing strategic documents that define the F-CFC's command structure, missions, and roles.

At the 50th SCM in 2018, the ROK Minister of National Defense and the US Secretary of Defense agreed to maintain a structure similar to the current CFC structure after wartime OPCON transition and have a ROK four-star General/Admiral serve as the F-CFC commander. The defense authorities have been developing strategic documents that regulate the ROK-US combined defense system after wartime OPCON transition. At the ROK Minister of National Defense-US Secretary of Defense meeting in June 2019, the two sides agreed to have "a separate ROK four-star General/Admiral who is not the Chairman of ROK JCS" execute the duties of the F-CFC commander, determining the basic framework of the F-CFC command structure. In 2020, after developing the F-CFC commander's authorities, roles, and responsibilities in detail to ensure the F-CFC commander's mission execution capabilities, the ROK and US agreed on a single set of draft bilaterally-agreed upon Strategic Documents for the FOC certification assessment.

¹⁷⁾ Stage 1: Initial Operational Ability (IOC) certification assessment → Stage 2: Full Operational Capability (FOC) certification assessment → Stage 3: Full Mission Capability (FMC) certification assessment.

The two countries will continue to develop strategic documents in a way that further strengthens the ROK–US alliance and the combined defense system, while the strategic documents will continue to be refined through combined certification assessment until they are finalized at the time of wartime OPCON transition.

Acquiring Capabilities to Lead Combined Defense

In conjunction with Defense Reform 2.0, the ROK Armed Forces is making systematic efforts for the early acquisition of military capabilities needed to lead the combined defense and the alliance’s comprehensive response capabilities against North Korea’s nuclear and missile threats. In particular, the MND allocated approximately KRW 300 trillion for the 2021-2025 Defense Midterm Plan and endeavors to reflect all the requirements for the buildup of key military forces for wartime OPCON transition by continuously increasing the portion of the national budget earmarked for improving defense capabilities.

The ROK and the US meticulously review the assessment results of the conditions for the wartime OPCON transition by holding a special Permanent Military Committee (sPMC)¹⁸⁾ every year in order to improve the credibility of the assessment of conditions for wartime OPCON transition. In particular, the sPMC was convened five times in 2019 where the two countries affirmed the ROK critical military capabilities, and in 2020, the two sides mainly assessed the alliance’s comprehensive response capabilities against North Korea’s nuclear and missile threats. As such, the ROK and US will carry on with their efforts to pursue wartime OPCON transition in a stable manner and take the initiative in responding to omnidirectional security threats by acquiring, at an early stage, the military capabilities necessary for leading the combined defense and the response capabilities against North Korea’s nuclear and missile threats.

ROK–US Combined Certification Assessment

The ROK and the US have been assessing and refining F-CFC’s mission execution capabilities through the three-stage process of combined certification assessment. In order to enhance the objectivity and fairness of the results, the two countries formed a combined assessment group to conduct an evaluation based on the same criteria.

In 2019, the ROK and the US successfully implemented the IOC certification assessment (stage 1) through systematic preparations. To conduct a IOC certification assessment, the two countries enhanced the ROK–US Combined Certification Group’s capacity to assess by conducting a rehearsal during Dong Maeng exercise

¹⁸⁾ A four-star level military committee between the ROK JCS Chairman and the Senior US Military Officer Assigned To Korea (SUSMOAK) to evaluate the OPCON transition conditions

in March 2019, and continuously confirmed in advance the preparation status for the IOC certification assessment through the KIDD and the Permanent Military Committee (PMC)¹⁹⁾. In addition, the ROK Armed Forces had an opportunity to integrate the efforts of the entire military at the wartime OPCON Transition Assessment Conference hosted by the Minister of National Defense. As a result, the ROK Armed Forces successfully carried out the IOC certification assessment, which was conducted during the ROK–US CCPT in August 2019. The ROK Minister of National Defense and the US Secretary of Defense agreed at the 51st SCM to pursue the FOC certification assessment (stage 2) the following year, but the two nations focused on meeting the conditions to conduct the FOC certification assessment by simultaneously conducting a rehearsal that applied the F-CFC structure during the 20-2 CCPT, considering various conditions such as COVID-19.

While maintaining a robust combined defense posture, the ROK Armed Forces will continue to enhance F-CFC’s mission execution capabilities to ensure a stable wartime OPCON transition.

19)

A four-star level standing military committee between the ROK JCS Chairman and the Senior US Military Officer Assigned To Korea (SUSMOAK)

Promoting Substantiality and Expansion of Defense Exchanges and Cooperation

The ROK Armed Forces is strengthening strategic defense exchanges and cooperation with neighboring countries including China, Japan, and Russia to establish peace on the Korean Peninsula and in Northeast Asia. The ROK Armed Forces is also implementing the New Southern Policy and the New Northern Policy at the defense level, considering the increasing roles and responsibilities of ASEAN and India in the regional security domain and the potential of Eurasia. At the same time, the ROK Armed Forces has been continuously promoting exchanges and cooperation with traditional allies in Western Europe and Oceania while diversifying the targets of defense diplomacy to the Middle East and Central and South America.

1. Promoting Strategic Defense Exchanges and Cooperation with Neighboring Countries

Defense Exchanges and Cooperation with China

The ROK and China have made rapid progress in various areas, such as politics, economy, society, and culture for 28 years since the establishment of diplomatic relations in 1992. After the two countries established friendly cooperative relations in the course of diplomatic ties, their relationship was upgraded to a "strategic cooperative partnership" in 2008.

In December 2017, during the ROK-China Summit, the two leaders agreed to expand bilateral cooperation to areas such as politics, diplomacy, and security and to vitalize various high-level dialogues. In December 2018, the defense authorities of the ROK and China agreed on the full normalization of defense exchanges and cooperation. The two countries have been reinforcing their strategic communication through two defense ministerial meetings (Asia Security Summit in June and ADMM-Plus in November) and the 5th vice-ministerial strategic defense dialogue in October,



ROK-China Defense Ministerial Talks (June 2019)

which were all held in 2019.

By agreeing to senior military personnel exchanges, regular meetings such as strategic defense dialogues and defense policy talks, unit exchanges between military services, repatriation of Chinese soldiers' remains, academic conferences between military research agencies, mutual education programs between education institutions, and to promote the connection of additional hotlines through a revision of the Navy and Air Force Hotline MOU at the 18th defense policy working-level talks in January 2020, the defense authorities of the two countries are promoting national defense exchanges and cooperation in a more substantial manner.

To prevent accidental collisions from Chinese military aircraft's entry into the Korea Air Defense Identification Zone (KADIZ), the defense authorities of the ROK and China are having dialogue and sharing necessary information through hotlines established between the two countries' Navy and Air Force. As such, communication between the two sides is expected to be further strengthened.

Due to the outbreak of COVID-19 pandemic in 2020, defense exchanges and cooperation between the two countries are facing a new situation as well as challenges. Nonetheless, the defense authorities of the ROK and China will strengthen their strategic communication to enhance the "strategic cooperative partnership". Through continuous promotion of defense exchanges and cooperation at various levels and in diverse fields—such as the 7th Chinese soldiers' remains repatriation ceremony, a friendly cooperation project between the two countries, in September 2020—the two countries will continue to contribute to the stable development of bilateral relations and the establishment of peace and stability on the Korean Peninsula and in Northeast Asia.

Defense Exchanges and Cooperation with Japan

Japan is a neighboring country that the ROK should cooperate not only for bilateral relations but also for peace and prosperity in Northeast Asia and the world.

The ROK and Japan have regularly held bilateral Defense Ministerial Meetings since 1994, and established the foundation for defense exchanges and cooperation in 2009 by signing the Letter of Intent on Defense Exchanges between the ROK and Japan at the 14th Defense



ROK–Japan Defense Ministerial Talks
(November 2019)

Ministerial Meeting in 2009. Following the ROK–Japan Defense Ministerial Meeting in 2015, the two countries’ Defense Ministers have continuously convened bilateral talks during multilateral conferences such as the Asia Security Summit (ASS). The Defense Ministers held bilateral talks during the ADMM-Plus in November 2019 as well, and agreed to continue to enhance their defense exchanges and cooperation in a future-oriented manner.

However, the defense relationship between the two countries experienced difficulties due to the distorted perception of history and claims of sovereignty over Dokdo Island by some Japanese political leaders, as well as a Japanese patrol aircraft conducting a threatening flyby close to a ROK vessel that was carrying out rescue operations in December 2018 and the unilateral press release²⁰⁾ by Japan containing misleading facts about the situation. And the export control measures against the ROK in July 2019 under the pretext of security concerns is a barrier to the future-oriented development of the defense relationship between the two countries.

Following Japan’s action, on August 23, 2019, the ROK government decided to terminate the General Security of Military Information Agreement (GSOMIA), which was signed for the purpose of exchanging sensitive military information for security reasons, and notified Japan of the termination. On November 22, 2019, however, the ROK government, as a means to resolve the situation, suspended the termination under the premise that the effect of the GSOMIA could be suspended at any given time. With the suspension of termination still in place, the ROK is demanding Japan’s change of attitude.

The ROK will, when it comes to common security issues, continue to cooperate with Japan for peace and stability on the Korean Peninsula and in Northeast Asia while firmly and strictly responding to Japan’s distortion of history, unjust claims over Dokdo Island, and unilateral and arbitrary actions on pending issues.

Defense Exchanges and Cooperation with Russia

Russia is a key partner in the ROK government’s New Northern Policy²¹⁾. The ROK and Russia have continued to develop their strategic communication and mutual cooperation so that Russia will play a constructive role in the denuclearization and establishment of a peace regime on the Korean Peninsula, including the ROK President’s visit to Russia after 19 years in June 2018 and holding of five summits since 2017.

In the field of defense, communication between military authorities is being reinforced through various consultation channels such as the JCS chief director-level meeting, joint military committee, and consultative bodies for each service in 2019.

20)

Japan claimed that its patrol aircraft’s threatening low-altitude flying over the ROK rescue vessels was a normal and announced the completion of a unilateral investigation without fact-checking although the ROK made numerous accounts that the ROK destroyer did not illuminate the tracking radar.

21)

A policy to promote common prosperity and peace in Eurasia, including the Korean Peninsula, by strengthening the connection with the Eurasian region



Meeting between the ROK Chairman of JCS and the Russian Ground Forces Commander (October 2019)

In particular, the visit of Russian Ground Forces commander to the ROK in the same year resumed the exchanges between army generals after 16 years.

Meanwhile, the MND showed a firm response to the airspace intrusion of a Russian military aircraft over Dokdo Island in July 2019, in which the MND

strongly requested Russia for measures to prevent recurrence. The two countries are in the process of making agreements on the installation of a hotline to prevent accidental collisions caused by entry into the KADIZ.

Year 2020 marks the 30th anniversary of the establishment of diplomatic ties between the ROK and Russia. Various government-wide exchanges and cooperation measures were devised to carry out meaningful projects in the field of defense ; however, the countries are undergoing difficulties in holding exchanges and cooperation due to the pandemic. As soon as conditions are met in place in the future, the MND will continue to promote various defense exchanges and cooperation with Russia.

2. Expanding Defense Exchanges and Cooperation with Key Countries in Each Region

Southeast Asia and Oceania

The ROK has continued to make efforts to contribute to the strengthening of regional security by establishing multilateral cooperation with ASEAN on regional security threat factors. The ROK is also promoting mutually beneficial and tailored cooperation in the field of defense and defense industry that takes into consideration each country's characteristics in line with the ROK government's New Southern Policy (NSP) that aims to shore up cooperation with ASEAN.

President Moon Jae-in visited all 10 ASEAN member states within 2 years since his inauguration, which is a first for a ROK President, providing an opportunity to develop friendly and cooperative relations with all partner countries of the NSP. In particular, during the President's visit to Thailand—a traditional alliance and a major defense industry cooperation country since the deployment of Thai troops to the Korean War—the GSOMIA was signed and agreed with Thailand, thereby solidifying the institutional foundation for promoting cooperation in defense and

the defense industry between the two countries. In September 2018, President Moon signed an MOU on defense cooperation with Brunei, the ROK–ASEAN dialogue coordinating nation, to serve as the driving force for the development of defense cooperation between the two countries.

In line with the ROK government's NSP, the MND is strengthening its cooperation in defense and the defense industry with Southeast Asian countries by holding ministerial- and vice-ministerial-level meetings, various policy working-level meetings, and regular meetings between respective military services.

First, a ministerial meeting was convened with the Defense Ministers of Vietnam and Singapore during the 18th SLD in May 2019. The ministers of the three countries, exchanged opinions on the regional security situation including the Korean Peninsula and measures to promote their defense cooperation. In November 2019, the ROK Minister of National Defense participated in the ADMM-Plus held in Thailand to hold bilateral talks with the Defense Ministers of Vietnam and Indonesia and Deputy Prime Minister of Thailand. Along with their discussion on development plans for cooperation in defense and the defense industry, the ROK called for active support and cooperation for the complete denuclearization and establishment of permanent peace on the Korean Peninsula. In December 2019, during his visit to Indonesia, where active defense cooperation is taking place based on a special ROK-Indonesia strategic partnership, the ROK Defense Minister held a meeting with the Minister of Defense and the Coordinating Minister for Political, Legal, and Security Affairs of Thailand, and agreed to upgrade their cooperation in defense and the defense industry to a higher level based on the ROK–Indonesia Defense Cooperation Agreement.

In Singapore, the Vice Defense Ministers of the ROK and Singapore attended the Fullerton Forum²²⁾ in January 2019 to discuss defense issues and ways to enhance defense industry and technological cooperation between the two countries. At the 8th vice-ministerial-level ROK–Vietnam Strategic Defense Dialogue held in June 2019, the two countries discussed in depth pending defense issues, such as high-level military exchanges, cybersecurity cooperation, and defense industry and logistics cooperation. At the Seoul Defense Dialogue (SDD) in September 2019, the ROK Minister of National Defense held bilateral talks with the Philippines Undersecretary for Defense Policy to discuss the security situation on the Korean Peninsula and issues on defense exchanges and cooperation. During a meeting with the Laos Permanent Secretary of National Defence, the ROK Minister of National Defense acknowledged the establishment of the ROK Defense Attaché Office in Laos and agreed to further develop their defense cooperation based on the establishment

22)

A track 1.5 (government plus civilian participants) director general-level multilateral security consultative meeting known as the Shangri-La Dialogue Sherpa meeting established in 2002 by (under the supervision of) the United Kingdom's International Institute for Strategic Studies (IISS), the forum is participated by around 30 countries from the Asia-Pacific region, including the ROK, the US, China, Japan, and Russia, as well as the EU and NATO

of this office. At the 9th Beijing Xiangshan Forum in October 2019, a ROK–Malaysia defense vice-ministerial meeting was held to discuss ways to promote defense exchanges and cooperation, such as cybersecurity cooperation and defense industry cooperation, while a high-level defense talk with Cambodia at the Seoul International Aerospace & Defense Exhibition (Seoul ADEX) was also held during the same period. Based on the MOU on the ROK–Cambodia Defense Cooperation signed in 2018, the two countries agreed to promote defense cooperation.

The MND is expanding its cooperation with Southeast Asian countries through working-level policy meetings and regular meetings between military services. In October 2019, the national defense policy working-level meeting that was agreed to at the 7th ROK–Vietnam Strategic Defense Dialogue in October 2019 was held for the first time during which the two nations utilized the opportunity to institutionalize the basic framework of defense cooperation and to detail the cooperation plans for specific areas. With the Philippines, the ROK designated year 2019, which marks the 70th anniversary of the establishment of diplomatic ties between the two countries, as the year of mutual exchanges between the ROK and the Philippines, and actively promoted exchanges and cooperation in the defense domain. As for bilateral relations, the ROK Air Force Chief of Staff visited the Philippines in February, and the Chairman of the Philippines JCS visited Korea in May 2019, with a regular consultative body between the two armed forces being established as well. Defense industry and logistics cooperation between the two countries has also robustly progressed with the revision of the MOU on Defense and Logistics Cooperation in June and with the ROK providing the Philippines with retired naval vessels in August. The visit of the Secretary of National Defense of the Philippines to the ROK to attend the launching ceremony of a frigate also contributed to defense industry and logistics cooperation. In September 2017, the ROK signed an MOU on defense cooperation with Myanmar, laying the institutional foundation for defense exchanges and cooperation and seeking cooperation measures to promote cooperation in defense and the defense industry.

Meanwhile, the MND is actively promoting and diversifying defense cooperation through regular consultative meetings and combined exercises between the MND and each military service centering around Australia and New Zealand, the traditional allies in Oceania which deployed troops to the ROK during the Korean War.

The 4th ROK–Australia Foreign and Defense Ministers' (2+2) Meeting in December 2019 was held to discuss the security situation on the Korean Peninsula and the Asia-Pacific region as well as ways to strengthen security and defense

cooperation, including PKOs between the two countries, and signed an MOU Regarding Cooperation Related to Missing Korean War Personnel to promptly repatriate the remains of Australian Korean-War veterans. The Defense Ministers of both countries convened a defense ministerial meeting on the same day to conduct in-depth discussions on strengthening cooperation in science and technology and the defense industry based on the MOU on Cooperation in the Fields of Defense Research, Development, Testing and Evaluation signed in November 2019 and on invigorating combined exercises between the countries including the HAIDOLI-WALLABY exercise (ROK–Australian Navy combined exercise).

The ROK–New Zealand Defense Ministerial Meeting was held at the ADMM-Plus in November 2019. Both ministers evaluated the security situation on the Korean Peninsula and the progress of security and defense cooperation between the two countries, and agreed to make close efforts to promote defense cooperation in various fields such as combined exercises, defense industry cooperation, and personnel exchanges.

Southwest Asia including India

As the ROK government strengthens various forms of cooperation with India by promoting the NSP for peace and prosperity in the region, interest in defense cooperation with countries in Southwest Asia is increasing. Accordingly, the ROK government is actively promoting defense exchanges and cooperation through high-level personnel exchanges and by holding regular consultative meetings with major countries in Southwest Asia including India.

In particular, the ROK and India have developed their relations by extending the scope of exchanges and cooperation based on the increase in free trade and investments, common values of democracy and market economy, and common aspiration for peace and prosperity. In 2015, the relationship between the two countries was upgraded to a "special strategic partnership", and the two leaders made mutual state visit in 2018 and 2019, thereby forming a closer relationship. Such firm relationship between the ROK and India led to the development of national defense cooperation, in which exchanges between high-ranking military personnel including Defense Ministers were actively carried out. A Defense Ministerial Meeting was held with the Indian Minister of Defence at the Seoul Defense Dialogue (SDD) in September 2019, and the ROK Minister of National Defense officially visited India at the invitation of the Indian Minister of Defence. Highly evaluating the military exchanges between the two countries, the Defense Ministers held various regular consultative meetings including the ROK–India Vice Foreign and Defense Ministers’

(2+2) Meeting, and discussed in depth exchanges and cooperation in various fields including combined exercises, military education, PKOs, and military medicine and disaster relief cooperation. In particular, during the ROK Defense Minister's visit to India, the two sides exchanged the "roadmap for defense industry cooperation", which will serve as the basis for practical defense industry cooperation between the two countries, and established a practical cooperative relationship for joint production, development and export.

Central Asia

Central Asia is the key region of Eurasia that connects Asia, Europe, and Africa, and has high potential for future economic development based on its abundant resources. Considering Central Asia to be a major partner in the New Northern Policy (NNP), the ROK government launched the "Presidential Committee on Northern Economic Cooperation" in 2017 and signed a Free Trade Agreement (FTA) with the Eurasian Economic Union (EAEU).

The MND has been actively supporting the ROK's NNP in the defense domain by inviting Central Asian countries to the SDD, thereby strengthening communication and vitalizing educational exchanges and defense industry cooperation among the countries. In particular, since establishing the ROK-Central Asia Plus Defense Vice-Ministerial Talks, which is a defense vice-ministerial consultative meeting of the five Central Asian countries and Mongolia, on the occasion of SDD 2018, the MND has continued discussions on security cooperation with Central Asia. In the 2nd Talks held the following year, high-ranking officials, including the Deputy Minister of Defense of Uzbekistan, the Deputy Chief of the General Staff of Kazakhstan, the Deputy Chief of the General Staff of the Armed Forces of Kyrgyzstan, and the Kyrgyz Ambassador to Korea participated and discussed ways to strengthen cooperation through diplomatic, security, and economic channels and to share information on the regional security situation. The countries also agreed to continuously develop the platforms for defense exchanges and cooperation.

Uzbekistan is a key country in the NNP. With President Moon's visit to Uzbekistan in 2019, the relationship between the two countries was upgraded from "strategic partnership" to "special strategic partnership". And as seen through the participation of the Uzbekistan Deputy Minister of Defense at the SDD and hosting of defense policy talks, the ROK is continuously discussing ways to improve cooperation with Uzbekistan. Since 2017, active exchanges have taken place in the field of education such as dispatching instructors from the Joint Forces Military University (JFMU) to the Academy of the Armed Forces of Uzbekistan to share knowledge and experience in the field of military science including tactics, and training the Uzbekistan

officers at the Korea Military Academy, the ROK Army College, and the ROK Air University. As of 2020, the ROK and Uzbekistan are at the stage of expanding their fields of exchanges and cooperation such as holding video conferences between military medicine personnel of the two countries.

As for Kazakhstan, in 2019, President Moon visited the country on the 10th anniversary of establishment of a "strategic partnership" between the two countries. The ROK–Kazakhstan defense policy working-level meeting was resumed after 7 years, and it is expected to deepen and develop exchanges and cooperation between the two countries in the field of defense .

Middle East

The Middle East has significant value as a major supplier of energy resources in the world. The MND has strived to strengthen cooperation in defense and the defense industry with countries in the Middle East.

The ROK and the United Arab Emirates (UAE) have developed their relationship in various areas, including economy, society, and culture, since the establishment of diplomatic ties in 1980. The two countries have been continuing various forms of defense cooperation since the signing of the Agreement on Military Cooperation in 2006. With the approval of the National Assembly, the ROK has been deploying the Akh Unit to the UAE since January 2011. In March 2018, President Moon visited the UAE to hold a summit with Crown Prince of Abu Dhabi Mohammed bin Zayed Al Nahyan, agreeing to upgrade the bilateral relationship from "strategic partnership" to "special strategic partnership" and to strengthen their cooperation through the establishment of diplomatic and defense consultative meetings. The Crown Prince visited the ROK in February 2019. In the same month, the ROK Minister of National Defense visited the UAE to meet with the UAE Minister of State Defense. In October, the ROK Vice Minister of National Defense again visited the UAE to hold a diplomatic and defense vice-ministerial meeting as well as bilateral talks. The UAE Minister of State Defense made a visit to the ROK in December, held a meeting with the ROK Minister of National Defense and agreed to further expand and strengthen cooperation in defense and the defense industry between the two countries, continuing stable cooperation through active exchanges.

The ROK's cooperation with Saudi Arabia continues to develop as well. The ROK Vice Minister of National Defense visited Saudi Arabia in April 2019 for bilateral talks with Saudi Arabia's Defense Minister Assistant at the 1st ROK-Saudi Arabia Defense Cooperation Committee, and held bilateral talks with the Chairman of the General Staff who visited the ROK to attend the 8th SDD in September 2019. In

October 2019, the ROK Minister of National Defense made active efforts to vitalize defense exports through bilateral talks with Saudi Arabia's Chairman of the General Staff, who participated in the Seoul ADEX, requesting Saudi Arabia's support for the ROK's excellent defense products. In November 2019, the ROK Minister of National Defense visited Saudi Arabia to hold bilateral talks with Crown Prince of Saudi Arabia Mohammed bin Salman as well as their Defense Minister, and made efforts to institutionalize defense cooperation between the two countries.

The ROK Minister of National Defense attended the UAE International Defense Exhibition & Conference (IDEX) in February 2019 and the ROK Vice Minister of National Defense attended the Turkey International Defense Industry Fair (IDEF) in May 2019 to hold bilateral talks with delegations and military officials from major countries in the Middle East including Oman and Egypt, and discussed ways to promote cooperation in defense and the defense industry. The Egyptian Defense Minister Assistant who visited the ROK for the 8th SDD held in September 2019 held bilateral talks with the ROK Vice Minister of National Defense and agreed to make active efforts to strengthen cooperation in defense exchanges between the ROK and Egypt. In October 2019, the ROK Minister of National Defense visited Oman to sign an MOU on defense cooperation. The Defense Ministers of the two countries agreed to make mutual efforts to expand defense cooperation between the ROK and Oman and especially discussed in depth ways to further enhance defense industry cooperation.

While continuing to take interest to changes in the situation and dynamics in the Middle East, the MND will further develop cooperation in defense and the defense industry with major countries in the Middle East including UAE, Saudi Arabia, Oman, and Egypt through regular high-level military meetings and working-level meetings.

Europe and Canada

Europe is a major partner in the ROK's security and a major pillar of defense diplomacy centered on traditional allies, and has expressed its willingness to continue supporting the ROK in the process of establishing peace on the Korean Peninsula. The MND is invigorating cooperation in the defense and defense industry domain centered on bilateral and mini-multilateral consultative bodies with European nations, and at the same time, is deepening its relations with European countries in various ways by strengthening friendly cooperative relations with the EU and NATO.

In March 2019, the ROK Minister of National Defense, along with King Philippe and Queen Mathilde of Belgium, attended the memorial ceremony for Belgian

Korean War veterans to express gratitude for the dedication of Belgian veterans and to reaffirm the traditional friendly relationship formed based on Belgium's participation in the Korean War.

At the ROK–UK Defense Ministers' Meeting organized by the ROK Minister of National Defense in June 2019, the Defense Ministers of the ROK and the UK discussed ways to cooperate on realizing denuclearization and establishing a permanent peace regime on the Korean Peninsula. Meanwhile, the ROK Vice Minister of National Defense held talks with the UK Director-General of International Security in May 2019 and discussed current issues on defense and defense industry cooperation between the two countries and directions for future cooperation.

With France, the ROK is promoting a joint roadmap for strengthening cooperation in the defense and security areas between the ROK and France as part of a follow-up measure after President Moon's visit to France in October 2018. In May 2019, a telephone conference was held between the ROK Minister of National Defense and the French Minister of the Armed Forces on the occasion of the French military's rescue of Korean civilians during counter-terrorism activities, and during the telephone conference, the two ministers discussed in depth ways to detail the cooperation issues agreed upon during the ROK–France Summit in October 2018. In June 2019, the two ministers attended a ceremony in Paris to deliver French soldiers' identification tags which were excavated during remains recovery activities at Arrowhead Hill inside the Demilitarized Zone (DMZ).

The MND has been improving exchanges with Central European countries—which are regarded as a new growth engine in Europe—and deriving measures for cooperation in defense and the defense industry through high-level exchanges such as the defense vice-ministerial talks between the ROK and the Visegrád Group²⁴ since 2016. The 4th vice-ministerial talks was held in Seoul in September 2019 to exchange opinions on the regional security situation and discuss measures to enhance national cooperation in defense and the defense industry. Ministerial talks with Hungary and bilateral talks with the Czech Republic, Vice-Ministerial talks with Slovakia were also held to shape cooperation plans for each country.

In November 2019, the ROK Minister of National Defense held talks with the Hungarian Minister of Defense who



Signing of the MOU on ROK–Hungary Defense Cooperation (November 2019)

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A regional partnership of Central Europe that consists of the Czech Republic, Poland, Hungary, and Slovakia. The name is derived from the Hungarian town of Visegrád, where their first meeting took place in 1991.

visited the ROK to attend the 30th anniversary of diplomatic relations between the ROK and Hungary. By signing an MOU on defense cooperation—which sets forth the exchange of defense information and experiences between the two countries, consultations on defense policy issues, and military technical cooperation—the two countries laid the institutional foundation for strengthening cooperation in defense and the defense industry between the ROK and Hungary.

Bulgaria expressed its interest in defense industry cooperation with the ROK through discussions on defense industry cooperation at a summit and a prime ministerial meeting during the Bulgarian Prime Minister’s visit to the ROK in September 2019. The ROK Vice Minister of National Defense held talks with the Deputy Minister of Defense of Bulgaria in the same period to seek practical ways for exchanges and cooperation between the two countries in the field of defense and the defense industry.

The MND has been enhancing communication and exchanges with Greece, another traditional ally that deployed combat troops to the ROK during the Korean War, since the launching of the Greek Defense Attaché Office in the ROK in June 2018. A ROK–Greece defense ministerial talk was held in February 2019 and defense vice-ministerial talks were held in October 2019 and November 2020, where ways to expand bilateral defense, defense industry, and logistics cooperation were discussed.

In May 2019, the ROK Vice Minister of National Defense attended the IDEF and held talks with the Turkish Deputy Minister of Defense and the Vice President of Defense Industries to discuss ways to strengthen cooperation in defense and the defense industry. The MND also carried out veterans diplomacy by encouraging Turkish veterans of the Korean War.

During President Moon’s visit to northern Europe in June 2019, the ROK decided to deepen the comprehensive and overall cooperation relationship with Finland, Norway, and Sweden during summit meetings with each country. In particular,

the ROK solidified the foundation for cooperation in defense and the defense industry in various ways such as by offering flowers to the Norwegian Memorial, visiting logistics support ships, participating in the unveiling ceremony for the Swedish national veterans monument, and signing of MOU on defense logistics cooperation.

The ROK Minister of National De-



ROK–Greece Defense Vice-Ministerial Talks
(November 2020)

fense met with the Prime Minister of Sweden who visited the ROK in December 2019 and exchanged broad opinions on the regional security situation on the Korean Peninsula and Europe as well as ways for defense and defense industry exchanges and cooperation. In addition, defense vice-ministerial talks were held with the



Talks with the ROK Minister of National Defense and the Prime Minister of Sweden (December 2019)

Finnish Deputy Minister of Defense who visited the ROK to attend the 8th SDD. The two countries agreed to further strengthen cooperation in defense and in the defense industry including the K-9 Thunder. (self-propelled artillery of the ROK)

The ROK Minister of National Defense asked for NATO's cooperation in towards the ROK's efforts to establish peace on the Korean Peninsula in talks with the Chairman of the NATO Military Committee in May 2019. The two sides discussed ways to strengthen cooperation based on key interests such as cyber-cooperation and establishment of a military consultative meeting. In 2019 in particular, the MND dispatched ROK military officers to the International Military Staff (IMS) of NATO to strengthen cooperation between the ROK and NATO.

To enhance cooperation between the ROK and the EU, the Cheonghae Unit has participated in the EU's counter-piracy operations since 2017 in accordance with the ROK-EU basic agreement on crisis management that took effect in late 2016.

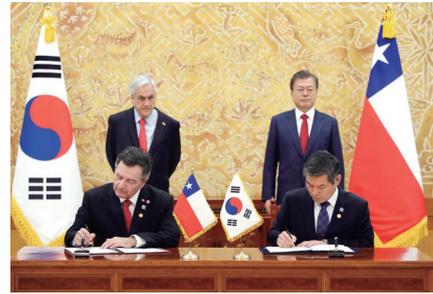
The ROK Minister of National Defense held talks with EU foreign affairs and security policy senior representatives in June 2019 and hosted the 3rd ROK-EU security and defense dialogue in November 2019 which are efforts to expand practical security cooperation with the EU.

Canada, another key member of NATO, is also a participating nation in the Korean War and a traditional ally of the ROK that has consistently expressed its support for the Korean Peninsula peace policy. The ROK Vice Minister of National Defense held talks with the Canadian Deputy Minister of National Defence during the SDD in September 2019 to discuss pending defense cooperation issues between the two countries.

Central and South America

The ROK has been actively engaging in economic cooperation with countries in Central and South America, and continues to seek defense cooperation measures in various fields to expand defense diplomacy in the field of defense and to garner support towards the ROK's defense policies.

The ROK and Chile signed a ROK-Chile Defense Cooperation Agreement during the Chilean President's visit to the ROK in April 2019, laying the foundation to promote cooperation in defense and the defense industry between the two countries. In May 2019, a joint government defense industry cooperation delegation for



Signing ceremony for the ROK-Chile defense cooperation agreement (April 2019)

Central and South America visited Colombia and Peru to create an opportunity to assess each country's defense industry status and the possibility for cooperation in the defense industry with the ROK. In October 2019, the ROK Vice Minister of National Defense held bilateral talks during the Paraguayan Vice Defense Minister's visit to the ROK and discussed the security situation on the Korean Peninsula and ways to strengthen cooperation in defense and the defense industry between the two countries. In October, the Chilean ship Esmeralda arrived at the Busan naval port for cruise training during which the ROK and Chile built a close cooperative relationship. The MND plans to actively promote cooperation in the defense industry with key countries in Central and South America while maintaining friendly relations with these nations by promoting regular high-ranking military personnel exchanges.

Africa

As Africa is gaining strategic importance as a new source of key resource and a new economic cooperation partner, the MND is invigorating defense exchanges and cooperation in various fields including high-level military exchanges, exchanges between each military service, and defense industry cooperation with the aim of shaping the conditions for defense industry exports and expanding national defense diplomacy.

The ROK Minister of National Defense signed an MOU on defense cooperation with Senegal during the Senegalese Defense Minister's visit to the ROK in October 2019, laying the institutional basis for bilateral cooperation in defense and the defense industry. The ROK Vice Minister of National Defense held bilateral talks with the Vice Defense Minister of



Signing of the MOU on ROK-Senegal Defense Cooperation (October 2019)

Ethiopia in September 2019 and with the Vice Defense Minister of Botswana in October 2019, and agreed to continue strengthening their cooperation in defense and the defense industry. In particular, in a situation where troop rotation of the Hanbit Unit deployed to South Sudan was limited due to the COVID-19 pandemic, troop rotation was smoothly carried out thanks to active cooperation from Ethiopia such as opening an airport to facilitate our troop rotation.

The MND will continue its efforts to establish a foundation for cooperation in defense with major African countries and to discover specific cooperation issues that can be promoted between the countries.

Non-face-to-face Defense Diplomacy

Every country in the world has reinforced their immigration regulations to prevent the spread of COVID-19, which resulted in many restrictions on mutual visits between countries for defense diplomacy. Under such circumstances, most major bilateral and multilateral face-to-face meetings scheduled in 2020 were either postponed or canceled.

As an alternative to the situation where face-to-face defense diplomacy is limited, the MND is actively implementing non-face-to-face defense diplomacy by means of telephone or video conference with major partner countries, and is further strengthening the activities of ROK defense attachés and foreign defense attachés stationed in the ROK. Since March 2020, the ROK Minister of National Defense has held telephone and video talks with the Defense Ministers of the US, China, India, UAE, Canada, and Estonia, while the ROK Vice Minister of National Defense with the Vice Defense Ministers of the UK, Vietnam, and New Zealand to share the experience and know-how gained through the ROK government's K-quarantine and the ROK Armed Forces' response to the pandemic, and to discuss plans for cooperation in defense and the defense industry.

Defense Diplomacy Marking the 70th Anniversary of the Korean War

Year 2020 marks the 70th anniversary of the outbreak of the Korean War, and the MND carried out and cooperated on various projects that expressed appreciation for the sacrifices and dedication of the UN sending states and their veterans.

In June 2020, the ROK Minister of National Defense sent a letter of appreciation to the Defense Ministers of the countries that sent troops during the Korean War. In the letter, the Minister expressed his appreciation for the veterans who sacrificed themselves to safeguard the ROK's liberal democracy and peace and asked for

their unwavering support towards the ROK's efforts to establish a peaceful Korean Peninsula. In addition, the ROK Minister of National Defense and the US Secretary of Defense made a joint announcement commemorating the 70th anniversary of the Korean War, expressing their appreciation for the sacrifices and courage of the soldiers and their firm determination to preserve peace on the Korean Peninsula.

In May 2020, the ROK government distributed 1 million masks to veterans of UN sending states as a small token of appreciation for their sacrifices and dedication during the Korean War 70 years ago. The MND provided transport aircraft for quick delivery of the masks to veterans, and the ROK military attachés delivered the masks directly to veterans.

3. Reinforcing Multilateral Security Cooperation

The importance of multilateral cooperation in response to traditional and non-traditional security threats is increasing; in particular, the need for international cooperation in the process of responding to the global spread of COVID-19 in 2020 is becoming more important. Despite such environment, the ROK government is striving to raise its stature in the international community through active international cooperation, such as sharing the K-quarantine experience.

To reinforce multilateral security cooperation, the MND has been actively participating in major multilateral security conferences in the region, including the ADMM-Plus and the ASS, to encourage the international community's support for the establishment of peace on the Korean Peninsula. The SDD is also held every year to strengthen the ROK-led multilateral security cooperation. In particular, the MND and the Ministry of Foreign Affairs (MOFA) will co-host the 2021 UN Peacekeeping Ministerial Conference in April 2021. The meeting, which will be held for the first time in Asia, will be the largest and highest-level conference on peacekeeping attended by defense and foreign affairs ministers from more than 150 countries around the world, where international cooperation on peacekeeping activities will be discussed led by the ROK.

The major multilateral security meetings in the region the MND participates are shown in [Chart 6-3]. In addition to the meetings stated below, starting in 2021, the MND will also be participating in the Munich Security Conference, an offshore multilateral security consultative meeting, to further expand multilateral cooperation.

[Chart 6-3] Multilateral Security Consultative Meetings Participated in by the MND

Track 1 ²⁵ Multilateral Security Meeting	Track 1.5 ²⁶ Multilateral Security Meeting
<ul style="list-style-type: none"> • ASEAN Defense Ministers' Meeting-Plus (ADMM-Plus) • ASEAN Regional Forum (ARF) • Tokyo Defense Forum (TDF) 	<ul style="list-style-type: none"> • Seoul Defense Dialogue (SDD) • Asia Security Summit (ASS) • Halifax International Security Forum (HISF) • Northeast Asia Cooperation Dialogue (NEACD) • Fullerton Forum

Seoul Defense Dialogue (SDD)

The MND has been hosting the SDD—a multilateral security dialogue joined by defense vice-ministerial-level officials and civilian security experts from all over the world—annually since 2012 to contribute to multilateral security cooperation in the Asia-Pacific region and the establishment of peace on the Korean Peninsula. The SDD contributes to building trust in the defense domain and promoting multilateral cooperation by providing a venue for dialogue and discussions on common international interests as well as the security situation on the Korean Peninsula and in the Asia-Pacific region. In addition, the MND holds various bilateral and small-scale multilateral conferences with the participating countries at the SDD and seeks ways to promote mutual defense exchanges and cooperation. In recent years, delegations from major countries around the world—including the Asia-Pacific, Americas, Europe, Middle East, and Africa—have attended, reinforcing the dialogue’s status as a major high-level multilateral security meeting in the region.

The 8th SDD in 2019, the largest in scale since its inception with 53 countries and 2 international organizations participating, was held under the theme "Building Peace Together: Challenges and Visions". At the dialogue, the ROK explained its efforts to ease military tensions since the signing of the CMA, and formed a consensus among the participating countries on the permanent settlement of peace on the Korean Peninsula. In addition, the ROK has sought ways to promote cooperation in defense and the defense industry by holding mini-multilateral meetings, including the defense vice-ministerial talks with Visegrad Group, ASEAN, and Central Asia, and bilateral talks with 25 participating countries including India, Canada, Singapore, and France.

The 9th SDD in 2020 was held in the form of a special seminar, i.e., video debate, considering the global spread



2020 Seoul Defense Dialogue video seminar (September 2020)



2020 Seoul Defense Dialogue

25) Multilateral security meetings held between governments to promote regional and world peace and stability, and to discuss participating countries' common security interests

26) Multilateral security meetings engaging participating nations' governments, civilian groups, and academics to promote regional and world peace and stability, and to discuss participating countries' common security interests

of COVID-19. The seminar was held by connecting domestic and foreign civilian security experts through video conferencing and was broadcast live for the officials in the security domain including national defense officials from around the world. Under the theme "Emerging Security Challenges: Overcoming through Solidarity and Cooperation", the participating countries, together with renowned security experts, discussed in depth the world order and international cooperation measures in the post-COVID era and the implications of non-traditional security threats to national defense.

The ROK government actively shared the achievements of K-quarantine and formed a consensus on the importance of the ROK government's efforts to establish peace on the Korean Peninsula with the international community. Despite the limitations brought about by the pandemic, during this year's SDD, the participating countries not only maintained the dialogue's driving force as an annual multilateral security consultative meeting but also contributed to continuing talks and communication in the field of defense.

ROK-ASEAN Special Summit

The 3rd ROK-ASEAN special summit in 2019 commemorated the 30th anniversary of the ROK-ASEAN dialogue relations, looking at the achievements of cooperation for the past 30 years and presenting a vision for future cooperation for the next 30 years. In the field of defense and defense industry, the MND operated a task force to support the successful hosting of the special summit. First, the MND actively promoted the ROK-ASEAN special summit at international multilateral meetings including the ADMM-Plus and policy briefing sessions for the defense attachés group in the ROK. In addition, the MND supported the export of defense articles by holding an export conference with the coast guards from 10 ASEAN countries and by promoting the excellence of the ROK's weapons system to ASEAN leaders who visited military units operating these weapons systems and defense companies.

Through these efforts, the 2019 ROK-ASEAN special summit contributed in achieving the diversification of diplomacy through the expansion of cooperation related to NSP and the reinforcement of ASEAN's support for the peace process on the Korean Peninsula.

ROK-ASEAN Defense Vice-Ministerial Talks

The ROK-ASEAN defense vice-ministerial talks, first held during the 2017 SDD, has been held every year until 2019. At the first iteration in 2017, the two parties shared the recognition on the need for defense cooperation

between the ROK and the ASEAN based on the direction of development of defense cooperation between the ROK and the ASEAN. In 2018, the ROK shared its experiences in developing the defense industry following the implementation of NSP and discussed ways to further expand the win-win defense cooperation between the ROK and the ASEAN. At the 2019 talks, marking the 30th anniversary of the ROK-ASEAN dialogue relations, the participants broadly discussed areas where defense cooperation between the ROK and the ASEAN can be enhanced in the future. They also formed a consensus on the importance of cooperating on and responding to cybersecurity threats, which is being emphasized recently by the world. The ROK-ASEAN defense vice-ministerial talks, which has been held three times, is becoming an annual consultative meeting of importance in the defense domain that is no longer just a sidebar meeting at the SDD.

ASEAN Defense Ministers' Meeting-Plus (ADMM-Plus)

The MND participates in ADMM-Plus, which was first launched in 2010, every year. The 7th meeting in 2020 was held in the form of video conference due to the outbreak of COVID-19. At the meeting, the ROK Minister of National Defense emphasized the importance of multilateral security cooperation to respond to the changed security environment and introduced cases of the ROK's response to the pandemic based on "solidarity and cooperation". To develop national defense cooperation with the ASEAN countries, the Minister agreed to expand commissioned education for PKO, strengthen cooperation in response to cyber-threats in the region, and participate in combined exercises organized by the ASEAN countries.

The Minister also explained that building trust on the Korean Peninsula contributes to the establishment of peace in the Asia-Pacific region, and asked for support and cooperation from member states for the peace process on the Korean Peninsula.

Meanwhile, from April 2017 to March 2020, the Minister, together with his



7th ADMM-Plus (December 2020)

Singaporean counterpart, successfully completed the mission of co-chairing the "marine security subcommittee", one of the seven subcommittees of the ADMM-Plus. In addition, the Minister is faithfully carrying out the task of co-chairing the "cybersecurity subcommittee" with Malaysia since April 2020.

Other Multilateral Security Cooperation Meetings

The MND has strengthened its multilateral security cooperation activities, discussing security issues with high-level defense officials and security experts in the Asia-Pacific region, through its participation in the Fullerton Forum, the ARF, the Tokyo Defense Forum (TDF)—an Asia-Pacific director general-level security consultative forum—and the Beijing Xiangshan Forum held in China. Furthermore, the MND participates in the Northeast Asia Cooperation Dialogue (NEACD)—whose key members are countries that participated in the six-party talks—every year, seeking ways to build military confidence between nations and advance cooperation in Northeast Asia. The MND will continue to exert its efforts to gain broader support for the ROK’s security policy by bolstering stronger multilateral security cooperation activities and sharing with partner countries the ROK government’s position on peace and stability on the Korean Peninsula and in Northeast Asia.

27)

Diplomatic efforts to prevent the proliferation of various types of weapons including WMDs as well as their delivery systems and conventional arms.

28)

See Appendix 20 "International Disarmament and Non-Proliferation Agreements and Organizations" (p. 416)

29)

After joining the IAEA in 1957 and signing out the Nuclear Non-proliferation Treaty (NPT) in 1975, the ROK joined the Zangger Committee (ZC) in 1995, the NSG in 1995, and the Comprehensive Nuclear Test-Ban Treaty (CTBT) in 1999.

30)

The IAEA is an international organization that provides technological support to promote the peaceful use and that seeks to prevent the military use of nuclear materials (established in 1957, holds 172 member states.)

31)

The NSG is an export control regime concerning nuclear materials as well as nuclear-related technologies, equipment, and dual-use items. Unlike the Zangger Committee, the NSG controls exports to all nonnuclear states regardless of their membership with the NPT (established in 1978, holds 48 member states.)

4. Strengthening International Non-proliferation²⁷⁾ and Counter-proliferation Activities

International Non-proliferation Efforts

Since the end of the Cold War, the international community has been strengthening global non-proliferation efforts to curb the spread of WMDs, WMD-related materials, technologies and delivery systems, as well as conventional arms. The global non-proliferation regime consists of international treaties, international organizations that oversee and inspect the implementation of treaties, and export control systems that restrict the transfer of related materials, equipment, and technologies. The international community has also enhanced the effectiveness of non-proliferation regimes by introducing sanctions against nonfulfillment of nonproliferation obligations based on UN Security Council Resolutions, and supplementing the issue of applying regulations against nonmember states and non-state actors.

Since joining the UN in 1991, the ROK participated in various international non-proliferation regimes and activities that regulate nuclear weapons, chemical and biological weapons, missiles, conventional arms, etc.²⁸⁾

The MND established legal and institutional foundations to execute non-proliferation responsibilities in accordance with non-proliferation treaties and international organizations, and the thorough and faithful execution of these



Conference of Parties to the Chemical Weapons Convention (November 2019)



Regular chemical inspection performed by the MND (2019)

responsibilities contributed greatly to the improvement in credibility and transparency of the ROK.

With regard to nuclear weapons, the ROK, as a member of major nuclear non-proliferation regimes²⁹⁾, has contributed to the international community's non-proliferation efforts by steadily implementing the comprehensive safeguard agreement with the International Atomic Energy Agency (IAEA)³⁰⁾ and by exchanging information with the member states of the Nuclear Suppliers Group (NSG)³¹⁾ to prevent transfers of nuclear materials and technologies that can be used for military purposes. The MND has been maintaining close cooperative relations with other relevant agencies to support the ROK government's nuclear non-proliferation policy.

In the area of chemical and biological weapons, the ROK joined the Biological Weapons Convention (BWC)³²⁾ in 1987 and the Chemical Weapons Convention (CWC)³³⁾ in 1997, and enacted relevant laws³⁴⁾ for the domestic implementation of these conventions. The MND is fulfilling its defense-related obligations through measures such as maintaining safety management systems by conducting regular inspections on military research institutes, and is sharing information on states of proliferation concerns and acquiring the latest information and technologies by dispatching defense specialists to relevant international conferences. Since joining the Australia Group (AG)³⁵⁾ in 1996, an export control regime for chemical and biological weapons non-proliferation, the MND and the DAPA have worked with the relevant agencies including the Ministry of Trade, Industry, and Energy (MOTIE) to improve local laws for a more systematic implementation of export control measures.³⁶⁾

Missile proliferation control is also important because WMD threats are directly related to missile capabilities that deliver them. Accordingly, the ROK has proactively participated in international efforts to prevent the proliferation of missiles by voluntarily joining export control regimes including the Missile

32)

The BWC bans the development, production, and stockpiling of biological weapons including biological agents and toxins (established in 1975, holds 183 state parties.)

33)

The CWC is a treaty that prohibits the development, production, stockpiling, use, and transfer of chemical weapons, and that requires state parties to destroy all their chemical weapons and related facilities within 10 years after the CWC enters into force (established in 1997, holds 193 state parties.)

34)

Including the "Act on the Control of the Manufacture, Export, and Import of Specific Chemical Substances and Biological Agents for the Prohibition of Chemical and Biological Weapons" (Chemical and Biological Weapons Prohibition Act).

35)

The Australia Group is an export control regime to prevent the spread of chemical and biological weapon-related materials, dual-use items, and technologies to states that may use and produce chemical and biological weapons (established in 1985, holds 43 countries.)

36)

Provisions related to chemical and biological agents as well as their production, equipment, and technologies specified in the Foreign Trade Act implement the AG's control requirements. The Public Notice on Trade of Strategic Items designates all the items specified in the AG control lists into control lists. The revised Chemical and Biological Weapons Prohibition Act implements the requirements of the CWC, the BWC, and the UN Security Council Resolution 1540.

Technology Control Regime (MTCR)³⁷⁾ in 2001 and the Hague Code of Conduct against Ballistic Missile Proliferation (HCOOC)³⁸⁾ in 2002. The MND has dispatched defense specialists to relevant international conferences to suggest views on policy issues, and has thoroughly implemented relevant obligations including pre-launch notifications and annual declaration submissions, thereby strengthening the transparency of ROK's missile programs.

The international community's non-proliferation activities have expanded to cover not only WMDs—including nuclear, chemical, and biological weapons—but also conventional arms. The member states of the Wassenaar Arrangement (WA)³⁹⁾ have agreed on guidelines and lists to control transfers of conventional arms as well as dual-use items⁴⁰⁾ and technologies, implemented them domestically, and voluntarily shared information regarding the implementation. Since the ROK joined the WA in 1996, the MND and the DAPA have reported weapons transfer semi-annually to the WA Secretariat while actively participating in discussions on the creation and revision of control lists to protect the ROK defense industry. The Arms Trade Treaty (ATT)⁴¹⁾, which took effect in 2014, is the first legally binding single treaty concerning conventional arms that control the transfers of seven categories of weapons systems⁴²⁾, small arms, light firearms, and munitions parts. The ROK, an original signatory to the ATT, ratified the treaty in 2017.⁴³⁾ The MND and the DAPA are faithfully implementing related treaties in accordance with reinforced international standards and domestic laws and regulations. As a country that has joined all four major international export control regimes⁴⁴⁾, the ROK designates and controls goods and technologies that require trade restrictions, such as export permission requirement, as strategic items⁴⁵⁾, in accordance with international export control principles. In the process of approving exports, the MND closely consults with relevant government agencies on export-related military matters and on determining whether the importing country complies with export control regulations.⁴⁶⁾

The ROK will actively participate in the international community's non-proliferation efforts to contribute to regional stability and global peace while bolstering the foundation for international cooperation for security on the Korean Peninsula.

International ⁴⁷⁾ **Counter-proliferation Efforts**

The emergence of WMD and terrorism-related threats in the wake of the September 11 attacks in 2001 formed a consensus that traditional methods, such as export controls, may have a limited effect in preventing the proliferation of WMDs. As a result, proactive counter-proliferation policies have

37)

MTCR is an export control regime where member states voluntarily control the spread of rockets and UAV capable of delivering WMDs as well as related equipment and technologies (established in 1987, holds 35 member states.)

38)

HCOOC is a political commitment, in which states voluntarily subscribe to, that sets a code of conduct to prevent the proliferation of ballistic missiles. It bans support for the missile development programs of countries that may develop or acquire WMDs (established in 2002, holds 143 member states.)

39)

An export control regime concerning conventional arms as well as dual-use items and technologies (established in 1996, holds 42 member states.)

40)

Items that have both industrial and military applications.

41)

A treaty that establishes common standards to regulate international trade in conventional arms to prevent their illegal trade and use (established in 2014, holds 110 parties.)

42)

Includes battle tanks, armored vehicles, large-caliber artillery systems, combat aircraft, attack helicopters, warships, missiles, and missile launchers.

43)

Major non-signatory to the ATT include North Korea, Russia, India, Pakistan, and Indonesia. The US signed the ATT but has not ratified it.

emerged. The MND has continuously cooperated with the international community to prevent the proliferation of WMDs and counter related threats.⁴⁸⁾

The MND has participated in eleven Proliferation Security Initiative (PSI)⁴⁹⁾ exercises since 2009, and is contributing to international cooperation by dispatching naval ships and search teams. Moreover, since 2017, the WMD search team of the ROK CBRN Defense Command has also participated in this exercise and is strengthening its search training against suspicious cargoes.

In particular, the ROK hosted PSI exercises in 2010 and 2012, and conducted tabletop exercises for proliferation prevention and WMD seizures as well as maritime interdiction and boarding and inspection training. The ROK held the PSI's annual Operation Expert Group (OEG)⁵⁰⁾ meeting in Seoul in September 2012.



PSI exercise

[Chart 6-4] PSI Exercise Hosting Countries

Year	2009	2010	2011	2012	2013	2014
Country	Singapore	ROK	No exercise held	ROK-Japan	UAE	US
Year	2015	2016	2017	2018	2019	2020
Country	New Zealand	Singapore	Australia	Japan	ROK	No exercise held

Since 2014, six countries—the ROK, the US, Japan, Singapore, Australia, and New Zealand—have hosted PSI exercises in the Asia-Pacific region annually in rotation. The ROK hosted the PSI "Eastern Endeavor 19" in 2019 and discussed measures to strengthen the member states' counter-proliferation capabilities, focusing on academic conferences and map exercises.

The MND will continue to enhance cooperation with the international community through active participation in counter-proliferation activities.

44) The four major international export control regimes are the NSG, the AG, the MTCR, and the WA. There are currently 30 "clean countries" that have joined all four regimes, including the ROK and Japan in Asia.

45) These are items that international export control regimes have designated as subject to export controls. They may include conventional arms, WMDs, and missiles, as well as materials, software, and technologies that can be used to develop and produce them.

46) The DAPA makes final approvals for military-use strategic items because the duty has been delegated by the MND.

47) All kinds of efforts to protect their territories and people by reducing or eliminating the actual threats posed by WMDs or by deterring enemies' desire to use them.

48) Non-proliferation focuses on preventing transfers of strategic items, while counter-proliferation involves physical interceptions of resources such as materials and funds already in the transferring process.

49) These are international cooperative activities launched in June 2003 under the leadership of the US to prevent the international proliferation of WMDs. Activities include information-sharing among member states, a ban on the trade of WMD as well as their delivery systems and illegal weapons, and joint operations.

50) The OEG consisting of 21 major member states is in charge of the operation of PSI.

5. Strengthening International Logistics Cooperation

International Logistics Cooperation

The MND is striving to secure stable logistics support capabilities in both wartime and peacetime through active international logistics cooperation and to respond flexibly to unforeseen threats.

In particular, the MND is cooperating with the US through bilateral conferences, such as the Logistics Cooperation Committee (LCC)⁵¹⁾ and the WHNS Combined Steering Committee (WCSC),⁵²⁾ and multilateral talks including the Pacific Area Senior Officer Logistics Seminar (PASOLS)⁵³⁾.

In July 2019, the ROK held the 51st LCC in Hawaii and agreed to improve some of the End User Monitoring (EUM)⁵⁴⁾ system procedures and cooperation in logistics.

In April 2019, the ROK and the US held the 26th WCSC to discuss ways to develop a wartime support plan in 12 areas including engineering, maintenance, and supply in order to ensure uninterrupted deployment of US reinforcements in wartime. At the meeting, the two countries discussed the revision of guidelines for the establishment of schedules and plans between the ROK and the US and agreed to stay active in developing the guidelines to further develop wartime support plans. Such efforts to strengthen logistics cooperation between the ROK and the US will contribute to improving the readiness and combat power of the ROK military in the future.

Based on regular consultative meetings with Australia, Israel, and Singapore, the ROK is continuing its efforts to develop logistics cooperation in various areas such as munitions support, logistics innovation, and logistics information system. The first working-level logistics cooperation meeting with New Zealand was held for the first time in November 2019 to increase cooperation in logistics innovation between the two countries. As such, the ROK is promoting the diversification of international logistics cooperation.

51)

As a subcommittee of the SCM, the LCC is a highest-level meeting in the logistics domain to discuss logistics cooperation issues. It is a regular consultative meeting held every year in rotation.

52)

WCSC is a regular meeting held in the ROK every year to discuss the wartime host nation support of the US reinforcement forces based on the Wartime Host Nation Support (WHNS) signed between ROK and US in 1991.

53)

PASOLS is a multilateral meeting that shares logistics information and operation experiences among nations in the Pacific Ocean and Indian Ocean. The member states hold the meeting every year in turns.

54)

A type of activity carried out to directly check whether munitions and equipment sold as FMS in the US are used in accordance with the purpose of the initial sale.



51st LCC (July 2019)



26th WCSC (April 2019)

Signing of Acquisition and Cross-Servicing Agreements (ACSAs)

Therefore, the ROK newly signs or revises ACSAs to enable efficient mutual logistics support.

International logistics cooperation is carried out in accordance with Acquisition and Cross-Servicing

[Chart 6-5] Status of ACSAs

Nations That have Concluded ACSAs with the ROK (Concluded Years)
United States (1988), Thailand (1991), New Zealand (2007), Turkey (2008), Philippines (2009), Israel/Australia/Canada (2010), Indonesia/Singapore (2011), Cambodia/Spain/UK (2012), Mongolia (2013), Germany (2016), Vietnam (2018), France (2019)

To date, the ROK has signed ACSAs with 17 countries. In March 2019, the ROK provided an opportunity to promote logistics cooperation with France by signing a letter of intent (LOI) to promote logistics exchanges and cooperation between the two countries. The ACSA with Australia was revised in June 2020.

The 48th PASOLS was held in Papua New Guinea in September 2019, where delegates from 28 countries and 2 organizations attended to share their experiences in various disasters and discuss ways to support mutual logistics.

In the meeting, the ROK received favorable feedback from the participating nations for presenting a new model for establishing a future disaster system with a disaster safety net.

Transfer of Military Supplies

To enhance defense cooperation and vitalize defense exports, the MND is actively transferring military supplies that the ROK Armed Forces no longer use to nations in need. At the same time, the MND is also extending the scope of free transfer to Southeast Asian countries as well as South America and Africa. Transfer items are also diversifying, including vessels, aircraft, maneuvering equipment, firepower equipment, and engineering equipment. An overview of transfers of military supplies is shown in [Chart 6-6].

The MND will continue to promote cooperation so that efficient, systematic logistics support can be provided in the right place at the right time, considering various changes in domestic and international security conditions. Furthermore, the MND will actively participate in bilateral and multilateral logistics meetings held internationally to promote the capabilities of the ROK Armed Forces and strengthen cooperation in mutual logistics support.

[Chart 6-6] Transfer of Military Supplies

Period	Regions	Transferred Items
1993 - 1999	Asia	Vessel, aircraft, vehicle, combat gear, and others
2000 - 2009	Asia, South America	Vessel, aircraft, engineering equipment, maneuvering equipment, and others
2010 - Present	Asia, South America, Africa, Oceania	Vessel, engineering equipment, maneuvering equipment, firepower equipment, landing equipment, munitions, and others

Contributing to International Peacekeeping and Protecting Overseas Koreans

The ROK overcame the tragedy of the Korean War with the support of the UN and the international community, and achieved remarkable economic growth and democratization. As a result of economic and political development, the ROK became a donor nation that has not forgotten the support that it has received and a country that actively participates in peacekeeping operations as a responsible member of the international community. As of November 2020, around 1,030 ROK personnel are deployed to contribute to the ROK's mission of elevating the country's international stature.⁵⁶⁾ In addition, the ROK is reinforcing its activities to preemptively protect overseas Koreans in case of overseas disasters by actively utilizing military assets.

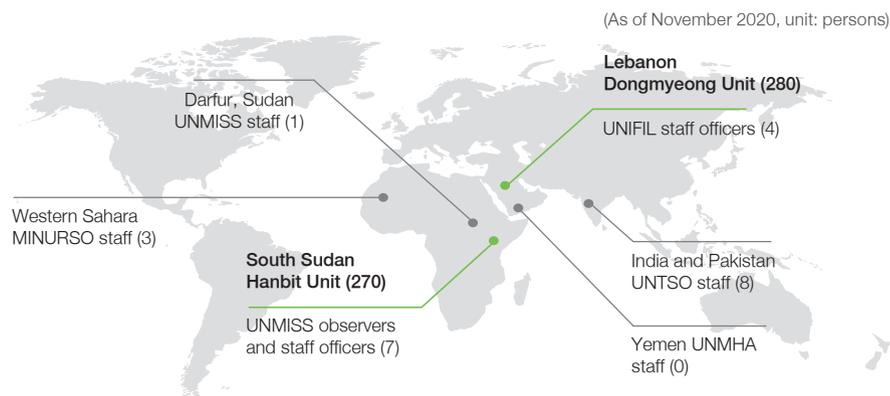
1. UN Peacekeeping Operations

Overview of UN Peacekeeping Operations

UN peacekeeping operations began with the establishment of the United Nations Truce Supervision Organization (UNTSO) in Palestine in 1948 to monitor armistice agreements. 13 PKO mission units⁵⁷⁾ are currently carrying out their duties, including armistice monitoring and reconstruction support, in conflict areas around the world.

Starting with the deployment of an engineering unit to Somalia in 1993, the ROK, which joined the UN in 1991, has deployed a ROK Armed Forces medical assistance

[Chart 6-7] ROK Participation in UN Peacekeeping Operations



56)

Comparison of various international peacekeeping activities

- UN PKO
 - Host: Led by the UN
 - Command and Control: Commander of peacekeeping forces (PKF) appointed by the UN secretary-general
 - Expenses: Borne by the UN
- Multinational Forces' Peace Operations
 - Host: Led by regional security organizations or particular countries
 - Command and Control: Commander of multinational forces (MNF)
 - Expenses: Borne by deploying countries
- Defense Exchanges and Cooperation Activities
 - Host: Led by deploying countries
 - Command and Control: Military commanders of deploying countries
 - Expenses: Borne by deploying countries

57)

Currently, there are seven missions in Africa (Western Sahara, Central African Republic, Mali, the Democratic Republic of the Congo, Sudan, Abyei, and South Sudan), three in the Middle East (Lebanon, Syria, and Palestine), two in Europe (Kosovo and Cyprus), and one in Asia (India and Pakistan). Nearly 120 countries have together deployed around 70,000 personnel to these missions.

team to Western Sahara, an engineering unit to Angola, the Sangnoksu Unit to East Timor, and the Danbi Unit to Haiti, and continued to engage in peacekeeping operations in conflict areas around the world. As of November 2020, a total of 573 ROK personnel are carrying out their missions in seven countries. They include 280 in the Dongmyeong Unit in Lebanon, 270 in the Hanbit Unit in South Sudan, and those deployed individually. An overview of the ROK's participation in peacekeeping operations is shown in [Chart 6-7].

Dongmyeong Unit in Lebanon ⁵⁸⁾

Following the adoption of UN Security Council Resolutions 425 and 427 in 1978, the UN established the United Nations Interim Force in Lebanon (UNIFIL) and began to monitor the armistice agreement between Lebanon and Israel. In 2006, when the conflict between Israel and Hezbollah intensified, the UN increased the number of peacekeepers from 2,000 to 15,000 and requested member states to participate.



Maneuvering patrol activity (July 2020)

In July 2007, with the National Assembly's approval, the ROK government deployed the Dongmyeong Unit, a peacekeeping unit of 350 personnel, to Tyre in southern Lebanon. Dongmyeong Unit conducts reconnaissance and surveillance activities to block the smuggling of illegal weapons and entry of militants into its area of operation in southern Lebanon. In addition to armistice monitoring, the unit has carried out multi-functional civil-military operations called Peace Wave and humanitarian assistance activities. The unit has helped improve the living conditions of local residents through various humanitarian assistance activities such as providing medical support for local residents, renovating public facilities and school facilities, and offering Taekwondo classes. The unit's successful civil-military operations have been well-received in Lebanon and significantly contributed to the stabilization of the southern Lebanon region.

In particular, during the Beirut explosion which resulted in huge number of casualties in August 2020, Dongmyeong Unit urgently provided the Lebanese Armed Forces with 6,000 sets of daily necessities including face masks stockpiled by the unit and 4,000 sets of locally-purchased medical supplies. Major activities of the Dongmyeong Unit are listed in [Chart 6-8].

⁵⁸⁾ "Dongmyeong" means bright light of the east from an eastern country, and signifies hope for a bright future and peace.

[Chart 6-8] Major Activities of Dongmyeong Unit

(As of November 2020)

<p>Operational Activities</p>	<ul style="list-style-type: none"> • Surveillance and reconnaissance in the operation area: 110,000 times • On-foot and vehicular reconnaissance, and explosive ordnance disposal (EOD) reconnaissance: 6,400 times • Combined reconnaissance with Lebanese forces: 110,000 times
<p>Civil-Military Operations and Humanitarian Assistance</p>	<ul style="list-style-type: none"> • Medical support for local residents: 150,000 times • Treatment of livestock: 35,000 heads • Taekwondo class: 2 towns (Abbassia and Burglia) / Soap art class: 5-town tour • Korean class: Distance education • Projects for local residents: 417 projects (public facilities, school facilities, sewage facilities, etc.) • Support for Lebanese forces: 105 cases • Support related to the Beirut explosion: 6,000 sets of daily necessities including face masks and 4,000 sets of medical supplies (delivered to the Lebanese Armed Forces)

Hanbit Unit in South Sudan ⁵⁹⁾

After Sudan gained independence from the joint colonial rule of the United Kingdom and Egypt, a civil war broke out in 1955 due to political and religious causes, and after two peace treaties, South Sudan became independent from Sudan in July 2011.

To assist the reconstruction of the newly independent nation, the UN established the United Nations Mission in the Republic of South Sudan (UNMISS) and requested its member states to deploy troops.

After receiving the National Assembly’s consent in September 2012, the ROK government created an engineering unit supporting reconstruction in South Sudan (Hanbit Unit) in January 2013 and deployed 300 troops to South Sudan on March 31, 2013. ⁶⁰⁾

In the Bor region that had been devastated by civil war, the Hanbit Unit has successfully carried out reconstruction support activities including embankment construction along the Nile as well as the construction and repairs of airport, roads, and bridges. The unit has also assumed humanitarian assistance missions such as refugee protection, provision of drinking water, and medical support. In addition, to help the local residents of South Sudan to get back on their feet, the unit operates seven courses in the Hanbit Vocational School, including agriculture, carpentry, and civil engineering. Major activities of the Hanbit Unit are listed in [Chart 6-9].



Bor-Pibor road repair completion



Hanbit Unit

59) The name “Hanbit” stems out of the desire to become “one bright light that leads the world” through support for the reconstruction of South Sudan and humanitarian activities.

60) The deployment to South Sudan is the ROK’s 7th UN peacekeeping forces deployment following deployments to Somalia (1993-1994, reconstruction assistance), Western Sahara (1994-2006, medical assistance), Angola (1995-1996, reconstruction assistance), East Timor (1999-2003, security and border control), Lebanon (2007-present, armistice monitoring), and Haiti (2010-2012, reconstruction assistance).

[Chart 6-9] Major Activities of Hanbit Unit

(As of November 2020)

<p>Reconstruction Support Operations</p>	<ul style="list-style-type: none"> • Bor Airport renovation, construction of a new helicopter garage, parking ramp and terminal • Maintenance and repairs of Bor–Pibor road and drainage renovation (drain system, installation of corrugated steel plate) • Maintenance and repairs of Bor–Mangella road and support for emergency repairs for swept-away areas • Road repairs, drainage renovation, and drainage and restoration equipment support for submerged areas in the Bor region • Installation of a photovoltaic power plant at Jonglei State Hospital (Obstetrics and Gynecology)
<p>Civil–Military Operations and Humanitarian Assistance</p>	<ul style="list-style-type: none"> • Establishment of the Jonglei State Peace Center, supply of medicine and other materials to Bor Hospital • Provision of flood relief aid to Jonglei State (3 tents for 14 persons) • Supply of educational materials to elementary schools in the Bor and Pibor regions, renovation of the lecture hall at the lifelong education center in John Garang Memorial University • Operation of Hanbit Farm: approx. 29,000m², planted 12 crops • Operation of Hanbit Vocational School (six programs including farming): 588 graduates, local instructors currently being trained • Training in the ROK: 79 persons visited the ROK over 7 sessions (before the spread of COVID-19) to complete the agricultural technology course • Taekwondo and Korean language classes • COVID-19 prevention: Supply of 20,000 face masks and 10,000 COVID-19 diagnostic kits to the South Sudan government
<p>Refugee Protection</p>	<ul style="list-style-type: none"> • Repairs of internal and external roads, assistance in drainage for submerged areas during the rainy season • Repairs of a refugee camp, reinforcement of protective walls, construction of 14 new guard posts
<p>UN Missions Facility Construction Support</p>	<ul style="list-style-type: none"> • Construction of 12 units of UN staff lodging in the Bor base, and guard posts, shelters, and sanitation and convenience facilities at the Bor Airport (septic tanks, sports facilities, oil storage, etc.) • Reinforcement of protective walls and internal roads (4.8km) of the Bor base • Reinforcement of protective walls, external moats, and parapet walk (1.8km) in the Pibor and Akobo independent operation bases • Facility renovation for the UN missions in the Bor base (5 units), and others

Through various types of reconstruction support activities, Hanbit Unit is contributing to the alleviation of tribal conflicts by increasing the number of infrastructure and promoting exchanges in South Sudan. The unit’s resident-friendly civil-military operation is regarded as a highly exemplary activity by the UN and local officials. In particular, in a situation where rotation of all units belonging to the UNMISS was temporarily suspended due to the spread of COVID-19 in 2020, only the Hanbit Unit (the 11th and 12th contingent) was able to carry out rotations after close consultation with the UN and the South Sudan government. The 12th contingent of the Hanbit Unit, after safely completing the rotation process by undergoing strict quarantine measures, provided face masks and COVID-19 diagnostic kits to the South Sudan government. Such aid led to the recognition of the importance of the Hanbit Unit’s mission and the reliability of the ROK’s quarantine capabilities by the international community.

Military Observers and Staff Officers in UN Missions

The ROK government currently has around 20 personnel dispatched to UN missions in major conflict regions including India, Pakistan, Lebanon, South Sudan, and Western Sahara. Some of them work as observers and armistice monitoring agents, and some as military staff officers in UN missions. In addition to UN peacekeeping operations, the ROK government increased its contribution to UN Special Political Missions by dispatching ROK military observers to the UN Mission to Support the Hudaydah Agreement (UNMHA)⁶¹⁾, which was established in January 2019. Observers monitor armistice violations and undertake tasks, such as patrols, investigations, reporting, and mediation, under the control of UN missions. Staff officers of UN missions carry out their duties in major staff offices of each command such as intelligence, operations, and logistics offices.

2. Multinational Forces' Peace Operations

Peace operations of multinational forces are activities undertaken by multinational forces under the leadership of select countries and regional organizations based on UN Security Council resolutions or other grounds. Together with UN peacekeeping operations, peace operations by multinational forces play an important role in the stabilization and reconstruction of conflict regions. Since 2001, the ROK government has been deploying Haesung, Cheongma, Dongeui, Dasan, and Ashena units to Afghanistan and Seohee, Jema, Zaytun, and Daiman units to Iraq.

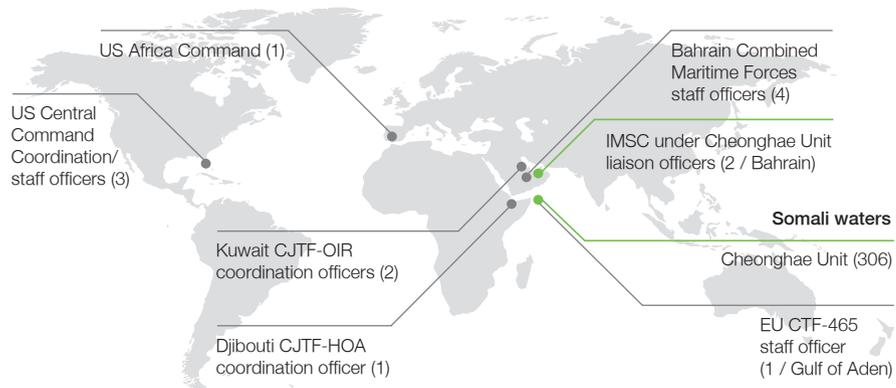
The Ashena Unit, in particular, was deployed to Afghanistan in 2010 to support the stabilization and reconstruction of the country. The unit protected the reconstruction activities of the Provincial Reconstruction Team during a span of more than 1,800 escort and surveillance operations between 2010 and June 2014, thereby contributing significantly to the stabilization and reconstruction of Afghanistan.

As of November 2020, the ROK deployed 318 personnel in five countries for multinational forces' peace operations including 306 in the Cheonghae Unit and 12 individually deployed personnel. An overview of the ROK's participation in multinational forces' peace operations is shown in [Chart 6-10].

61) One of the UN missions which was established in accordance with UN Security Council Resolution 2452 to support the execution of the Hudaydah Agreement (December 2018) signed between the Yemeni government and the Houthi rebels. The UNMHA monitors the implementation of the agreement to provide humanitarian assistance to Yemen, and does not fall under the 13 missions for UN peacekeeping operations.

[Chart 6-10] ROK's Participation in Multinational Forces' Peace Operations

(As of November 2020, unit: persons)



Temporary expansion of operation areas of Cheonghae Unit

Cheonghae Unit in Somali Waters

Due to the civil war in Somalia, there was a sharp increase in the amount of damages caused by piracy in the waters off the coast of Somalia since 2004. The UN

Security Council consequently adopted Resolution 1838⁶²⁾ with the UN requesting member states to dispatch military vessels and aircraft to the region. The ROK government deployed the Cheonghae Unit to the Gulf of Aden off the Somali coast in March 2009 after obtaining the National Assembly's consent.

As of November 2020, the unit is composed of one destroyer, one helicopter, three rigid-hull inflatable boats (RHIBs), and 306 troops. While acts of piracy in the Gulf of Aden have gradually declined, it remains crucial to secure the safety of the area. The Gulf of Aden is a major maritime route for transportation of strategic goods, including crude oil and liquefied natural gas (LNG), and about 30% of the total maritime cargo volume of the ROK passes through the area.⁶³⁾ Cheonghae Unit's major missions are to convoy domestic and foreign vessels, support safe navigation, and participate in maritime security operations of the Combined Maritime Forces (CMF) and the EU, and protect ROK citizens in contingencies.

In January 2011, the Cheonghae Unit successfully executed the "Operation Dawn of Gulf of Aden" to rescue a ROK ship and its crew from pirates. In March 2011 and August 2014, the unit also effectively carried out the "ROK nationals evacuation operation in Libya", where ROK nationals and foreigners were safely evacuated from Libya to nearby countries. In April 2015, the first "floating" ROK embassy was opened on ROKS Wang Geon destroyer to safely evacuate six ROK citizens who were caught in Yemen as well as to maintain contact with and protect any ROK citizen who remained in Yemen. This is a stellar example of organic

62) Cheonghae Unit is operating around north of latitude 11° south, west of longitude 68° east. The unit calls upon states to fight against piracy by deploying naval vessels and military aircraft. It is allowed to utilize naval vessels and military aircraft operating on the coast of Somalia as long as it conforms to the international law. It also urges the states to cooperate with Somalia's transitional federal government in the fight against piracy, and the states and regional organizations to protect the World Food Program (WFP) maritime convoys carrying food aid.

63) Two Chinese destroyers and one logistics support vessel, two Japanese vessels and two patrol aircraft, and one ROK vessel (Cheonghae Unit) are deployed for anti-piracy operations in the Gulf of Aden. The ROK served as the commander of the CTF-151 in 2019.

cooperation between the MND and the MOFA taking the lead in protecting overseas ROK nationals. In April 2018, the unit completed an operation to safely transport three ROK nationals, who had been rescued from pirates off Ghanaian territorial waters from Nigeria to Ghana. Since February 2017, the Cheonghae Unit has been conducting interdiction operations to block pirates entering the Gulf of Aden from the northern coasts of Somalia by participating in six EU counter-piracy operations⁶⁴ Major activities of the Cheonghae Unit are listed in [Chart 6-11].

[Chart 6-11] Major Activities of Cheonghae Unit

(As of November 2020)

Convoy		Safe Voyage Escort		Maritime Security Operations	Counter-piracy Operations
ROK Vessels	Foreign Vessels	ROK Vessels	Foreign Vessels		
510	1,875	19,570	2,968	703 times (1,731 days)	21 times / 31 vessels
ROK Nationals Rescue					
January 2011	Operation Dawn of Gulf of Aden (Rescued all 21 sailors of Samho Jewelry who were kidnapped by Somali pirates)				
March 2011	Evacuation operation of ROK nationals in Libya (37 ROK nationals evacuated to Malta and Greece from Libya)				
April 2011	Operation to rescue the Hanjin Tenjin sailors (All 14 ROK and 6 Indonesian sailors of Hanjin Tenjin were rescued after pirate attacks)				
December 2012	Operation to rescue the Gemini sailors (Escorted 4 ROK sailors who were released after being captured by pirates)				
August 2014	Evacuation operation of ROK nationals in Libya (Escorted the evacuation of 18 ROK nationals and 86 foreigners to Malta from Libya)				
April 2015	Evacuation operation of ROK nationals in Yemen (Escorted the evacuation of 6 ROK nationals and 6 foreigners to Oman from Yemen)				
April 2018	Operation to escort kidnapped ROK nationals off the coast of Ghana (Escorted 3 ROK nationals kidnapped by pirates to Ghana)				
August 2018	Escorted operation to rescue ROK nationals kidnapped by Libyan armed groups				
November 2019	Dispatched to offshore near Yemen where 2 ROK nationals were captured by Houthi rebels				

Meanwhile, tensions in the Middle East including the Strait of Hormuz have continued to grow since May 2019. To ensure the safety of ROK nationals and the freedom of navigation in such situation, the ROK government temporarily expanded the operation area of the Cheonghae Unit in January 2020 from the Gulf of Aden to the Gulf of Oman and the Persian Gulf (also known as Arabian Gulf), including the Strait of Hormuz. In February



Humanitarian assistance for an Iranian ship stranded in the temporarily expanded operation area

⁶⁴ Operation Atalanta is a counter-piracy operation conducted by the EU (CTF-465) to protect vessels that pass through the sea off the coast of Somalia. The operation began in 2008, and the Cheonghae Unit has participated in the EU operation since 2017.

2020, during operations in the expanded area, ROK's Wang Geon destroyer (the 31st contingent of the Cheonghae Unit) rescued 10 sailors from an Iranian vessel that had been stranded for about a week. The rescued sailors were provided with sufficient supplies including fuel and food. The Strait of Hormuz is a strategically important area as more than 70% of the ROK's crude oil imports pass through the area and ROK vessels navigate the strait around 900 times a year. The Cheonghae while carrying out its mission independently in the expanded operation area will conduct joint operations with the International Maritime Security Construct (IMSC)⁶⁵⁾ when necessary to protect ROK nationals and vessels.

In this regard, two liaison officers from the Cheonghae Unit were dispatched to the IMSC in February 2020 to conduct necessary cooperation activities including information sharing.

Staff Officers and Coordination Officers of Multinational Forces

The ROK Armed Forces has dispatched a total of 10 staff officers and coordination officers to the CMF in Bahrain, the Combined Joint Task Force-Horn of Africa (CJTF-HOA) in Djibouti, the Combined Joint Task Force-Operation Inherent Resolve (CJTF-OIR)⁶⁶⁾ in Kuwait, and the United States Central Command and Africa Command. Their major missions are performing staff duties for the CMF, establishing combined operations plans, supporting the rotation and combat service of the ROK Armed Forces overseas deployment units, and cooperating with local allied forces. The ROK Armed Forces continues to stay active in participating in multinational forces' peace operations. In December 2019 in particular, two coordination officers were dispatched to the CJTF-OIR to carry out ISIS suppression operations.

3. Defense Exchanges and Cooperation Activities

Upon request from a given country, the ROK Armed Forces dispatches their forces to areas where there is no risk of combat and servicemembers' safety is assured to conduct defense exchanges and cooperation activities in noncombatant fields such as education and training, humanitarian assistance, and disaster relief.

In November 2013, the ROK Armed Forces deployed the Araw Contingent to support recovery efforts in the Philippines, which suffered severe typhoon damage. The Araw Contingent successfully completed its mission of assisting with the recovery of damaged areas and withdrew in December 2014. In March 2014,

⁶⁵⁾ A consortium of countries tasked with escorting the Strait of Hormuz. Stationed in Bahrain, its member states are the United States, United Kingdom, Australia, Saudi Arabia, UAE, Albania, Bahrain, and Lithuania

⁶⁶⁾ CJTF-OIR carries out operations to defeat ISIS in Iraq and Syria

following the disappearance of a Malaysian passenger plane, the ROK Armed Forces conducted an overseas multinational coalition search operation. Furthermore, in an effort to prevent the spread of the Ebola virus, the ROK government dispatched the Korea Disaster Relief Team (KDRT), consisting of 6 medical officers, 9 nursing officers, and civilian medical personnel, to Sierra Leone, one of the major West African countries affected by the outbreak from December 2014 to March 2015.

Akh Unit in the United Arab Emirates ⁶⁷⁾

The UAE requested the deployment of the ROK Armed Forces in August 2010 to improve their education and training standards, and advance their defense system by benchmarking the ROK Armed Forces' education and training system. After obtaining the National Assembly's consent, the ROK government in January 2011 deployed the UAE Military Training Cooperation Group, known as the Akh Unit, to the Al Ain region in response to the request. The 1st contingent had around 130 troops, and the number increased to 150 starting with the 5th unit. The Akh Unit was relocated to Sweihan on September 28, 2016, at the UAE General Staff Department's request. The UAE government fully covered the construction and relocation cost of KRW 32 billion.

The Akh Unit provides education and training to the UAE special warfare units, and conducts combined exercises with the UAE forces while protecting ROK citizens during contingencies. The ROK Armed Forces is improving UAE forces' education and training system and contributing to the enhancement of the UAE forces' special warfare operations execution capabilities. Meanwhile, the ROK Armed Forces is also benefiting from the UAE by utilizing the deployment as an opportunity to improve their special operations capabilities through exercises in arid and high temperature desert environments that the ROK Armed forces cannot experience back home as well as realistic exercises utilizing the UAE forces' cutting edge facilities and equipment.

In particular, training activities such as high-altitude and nighttime parachuting training, which are limited in the ROK are carried out actively, and the ROK Armed Forces also saves on exercise costs by utilizing the advanced UAE facilities and equipment, which are provided free of charge.

As a symbol of trust and cooperation



High Altitude Low Opening of the Akh Unit

⁶⁷⁾ The name "Akh" means "brother" in Arabic and intends to express friendliness toward the people of the UAE.

between the ROK and the UAE, the Akh Unit has contributed in advancing the relationship between the two countries into a "special strategic partnership". In June 2020, the rotation between the 16th and 17th contingents of the Akh Unit took place in the midst of the global spread of COVID-19, by utilizing the KC-330 Cygnus, a Multi Role Tanker Transport (MRTT), which was introduced at the end of 2019 for the first time among overseas deployment troops. This made it possible to reduce rotational costs, and improve mission execution conditions through the transport of munitions and firearms. Since the deployment of the Akh Unit, the ROK and the UAE have strengthened military confidence between the two countries by engaging in active exchanges and cooperation such as special warfare exercises and mutual visits by delegations in the Army, Navy, and Air Force in the field of cyber and logistics. Major activities of the Akh Unit are listed in [Chart 6-12].

[Chart 6-12] Major Activities of Akh Unit

(As of November 2020)

Enhancement of UAE Forces' Capabilities	<ul style="list-style-type: none"> • Contribution to the development of the UAE Armed Forces by improving their special warfare operations execution capabilities • Improvement of the education and training system of the UAE Armed Forces
Enhancement of ROK's Military Capabilities	<ul style="list-style-type: none"> • Utilization of the cutting edge facilities and equipment of the UAE to enhance special operations capabilities • Exercises to enhance survivability under harsh conditions (high temperature above 50°C, desert) • Long-range firing exercise, High Altitude Low Opening (HALO) exercise, and mountain warfare exercise
Expansion of Defense Exchanges	<ul style="list-style-type: none"> • UAE observation of major ROK exercises and participation in ROK-UAE combined exercises • Exchange of officers for consignment education by each service of the ROK-UAE Armed Forces • Medical cooperation including the treatment of UAE military patients and families at ROK civilian hospitals • Establishment of a defense diplomacy hub in the Middle East that covers cooperation for defense exports

4. Expansion and Development of the Foundation for Peacekeeping Operations

Hosting the UN Peacekeeping Ministerial Conference

The "UN Peacekeeping Ministerial Conference", scheduled to be held in the ROK in 2021, is expected to serve as an important opportunity for the ROK, as a country that leads world peace, to strengthen its contribution to the international community. The proposal to hold the next conference in the ROK was made at the 3rd Peacekeeping Ministerial Conference which was held at the UN Headquarters in March 2019. Furthermore, during

President Moon's keynote speech at the 74th UN General Assembly in September 2019, the President declared that the ROK will be hosting the 2021 Peacekeeping Ministerial Conference, which will be the first time that this conference will be held in Asia. The UN Peacekeeping Ministerial Conference is the largest, highest-level regular conference in the field of peace and security to discuss current issues in international peacekeeping operations and promote the expansion of contributions from each country. Defense and foreign affairs ministers from more than 150 countries⁶⁸⁾ attend the conference. About 110 countries participated in the 1st and 2nd conferences held in the UK and Canada in 2016 and 2017, respectively, and the 3rd conference hosted by the United Nations in 2019. Three areas of peacekeeping operations were selected as core agendas⁶⁹⁾ upon consultation with 10 co-chairs⁷⁰⁾, which will be discussed at the 4th conference. Members from the private sector such as representatives of relative international organizations, academia, and press are also expected to participate.

By hosting the Peacekeeping Ministerial Conference, the ROK government intends to raise its stature in the international community by deriving new international norms and pledges for peacekeeping operations in fields where the ROK gains advantages such as new technologies and peace building. As year 2021 marks the ROK's 30th anniversary of joining the UN, the ROK government, through a top-level official's speech, will deliver a message of peace on the Korean peninsula and garner support from the international community concerning the policies on the Korean peninsula.

At the last conference, the MND made pledges such as the ROK hosting a UN peacekeeping training course, providing equipment including Mine-Resistant Ambush Protected (MRAP) vehicle, and increasing the proportion of female peacekeepers. The MND, at the next conference, plans to propose various contribution pledges utilizing the ROK's strengths as a technological powerhouse.

For systematic preparations for the 4th conference, the MND and the MOFA launched a Preparatory Committee for the 2021 UN Peacekeeping Ministerial Conference, cochaired by the Ministers of National Defense and Foreign Affairs, and a Preparatory Secretariat for working-level support. During two Preparatory committee meetings in May and November 2020, 10 relevant



Launching of the Preparatory Secretariat for the Peacekeeping Ministerial Conference (July 2020)

68) Member states of the Special Committee on Peacekeeping Operations (C34) under the UN General Assembly.

69)

- ① Strengthening the mission execution capabilities
- ② Sustainment of peace
- ③ Safety and protection of civilians

70) The ROK, the United States, the United Kingdom, Canada, Ethiopia, Rwanda, Bangladesh, Indonesia, Netherlands, Pakistan, and Uruguay

71) The group consists of general planning, internal cooperation (establishing pledges), conference management, and promotion.

72)

The UNMISS and the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO)

73)

The Experts' Working Groups (EWGs) of the ADMM-Plus have been established to facilitate cooperation in the following areas:

- ① peacekeeping operations
- ② counterterrorism
- ③ maritime security
- ④ military medicine
- ⑤ humanitarian aid and disaster relief (disaster relief and humanitarian assistance)
- ⑥ humanitarian mine action. One ASEAN country and one PLUS country assume co-chairmanship of each EWG. There are 10 ASEAN countries (Laos, Malaysia, Myanmar, Vietnam, Brunei, Singapore, Indonesia, Philippines, Cambodia, and Thailand) and 8 Plus countries (ROK, United States, China, Japan, Russia, Australia, New Zealand, and India).

74)

From September 14 to 23, 2019, a PKO exercise was conducted at the Bogor PKO Center in Indonesia, with a total of 370 personnel from the 18 countries that participate in the ADMM-Plus. From the ROK, 12 observers and training members of the ROK International Peace Support Standby Force, also known as Onnuri Unit, participated in training sessions in 6 areas (sexual exploitation and abuse, mine accidents, illegal search, child soldiers, security screening, and IED).

75)

Exercise conducted between April 30, 2019 and May 13, 2019 where 18 warships, 10 aircraft, and more than 3,500 troops participated.

ministries including the MND and the MOFA gathered to collaborate on hosting a successful conference by coming up with contribution pledges as the host nation that actually benefit the UN and agreeing to strengthen inter-agency cooperation to induce the participation of member states. In addition, the Preparatory Secretariat will consist of four teams⁷¹⁾ and will continue to make sound preparations for the successful hosting of the Peacekeeping Ministerial Conference.

Meanwhile, in July 2020, the MND and the MOFA sent 30,000 face masks printed with promotional phrases for the 2021 Peacekeeping Ministerial Conference to two UN missions⁷²⁾ in Africa, which are carrying out their duties despite harsh conditions such as the COVID-19 pandemic. The distribution fueled the international community's interest in the conference which will be held in 2021 and at the same time showed the ROK's willingness to contribute to peacekeeping operations.

Co-chairing ADMM-Plus Experts' Working Groups on PKOs and Maritime Security

From 2014 to 2017, the ROK served as the co-chair of the ADMM-Plus Experts' Working Group on Peacekeeping Operations (PKO EWG)⁷³⁾ along with Cambodia. In September 2014 and September 2015, the ROK hosted a meeting of the PKO EWG in Seoul to discuss practical ways to cooperate among the member states. In September 2019, the ROK participated in a PKO exercise conducted in Bogor, Indonesia⁷⁴⁾, sharing the ROK's outstanding capabilities in peacekeeping operations and gaining recognition as a leading country in peacekeeping operations in the international community. The ROK also served as the co-chair of the ADMM-Plus EWG on Maritime Security with Singapore from 2017 to 2020.

In May 2019, the two countries led the largest-ever⁷⁵⁾ live maneuver training exercise on maritime security in the ROK and Singaporean waters. Furthermore, through international conferences on maritime security, the ROK discussed maritime security and confidence-building measures in international waters as well as the maritime security capabilities of the ROK Armed Forces and multilateral cooperation activities with the international community. Participation in the conferences has reinforced the ROK's stature as a responsible member of the international community and a leader in maritime security.



ADMM-Plus EWG on Maritime Security

Signing of MOUs on Peacekeeping Operations and Promoting Cooperation

In August 2020, the MND signed an MOU on peacekeeping cooperation with the UK and Vietnam, and is planning to sign MOUs with Indonesia and Cambodia. After signing the MOU on peacekeeping cooperation with Vietnam, a strategic cooperative partner of the ROK, in September 2015, the MND dispatched combat engineers to the Vietnam Peacekeeping Center in December 2015 and in September 2018 to train participants on base protection and survival skills in specific crisis scenarios which may occur in the PKO regions. Moreover, since September 2016, a total of seven Vietnamese officers have been invited to attend the UN Staff Officers Course and Military Experts Course at the PKO Center of the Korea National Defense University (KNDU). This initiative contributed to strengthening the Vietnamese Armed Forces' PKO capabilities as the participating Vietnamese officers received education and learned know-hows on observation, surveillance, investigation, verification, negotiation, and mediation.

On the occasion of the UK deploying an engineering unit to South Sudan in March 2017, the ROK and the UK signed an MOU on peacekeeping cooperation in January 2018 to establish an institutional foundation for further cooperation. Currently, the ROK is continuing its cooperation with the UK on not only sharing information related to peacekeeping but also offering the UN Staff Officers Course at the ROK's PKO Center to three British officers through commissioned education as of 2020.

The ROK plans to pursue MOUs with Cambodia and Indonesia as well. Cambodia has years of experience in demining and if this experience is coupled with the ROK's advanced demining equipment, a synergy can be created and lead to a new deployment model. Cooperation with Indonesia, on the other hand, will be strengthened in areas of commissioned education, training, and information exchanges based on its extensive experience in peacekeeping operations. Accordingly, the ROK plans to strengthen cooperation with the ASEAN countries by signing MOUs on peacekeeping cooperation.

Reinforcing Functions of the PKO Center

The PKO Center was established as a dedicated educational institution for PKO preparation at the Joint Forces Staff College in August 1995. In 2015, the MND adjusted the PKO Center's affiliation to come under the KNDU based on the Enforcement Decree of the Act on the Establishment of the Korea National Defense University, in order to reinforce its education and research functions. This is also when the PKO Center was given its current official name. The

PKO Center is in charge of providing pre-deployment education to key cadres of deployed units and individually deployed personnel. It has been advancing the PKO education system through exchanges and cooperation with the UN's Department of Peace Operations (DPO), the UN Division at the Ministry of Foreign Affairs, the PKO centers of other countries, the Korea National Policy University UNPKO training programs, and other relevant organizations at home and abroad. When the deployed units or individually deployed personnel complete their missions, the PKO Center publishes and distributes the units' booklet on the outcomes of the deployment and the individual agents' mission reports to relevant offices. In November 2013, the PKO Center received an education certificate for its UN Staff Course from the UN DPO, and was re-certified in November 2018. The center is currently pursuing to have the UN Observer Course certified by the UN.

[Chart 6-13] Number of Personnel Trained in the PKO Center

(As of 2020)

Total	UN PKO	Multinational Forces' Peace Operations	Defense Exchanges and Cooperation Activities
1,657	1,066 in 8 courses	38 in 5 courses	553 in 2 courses

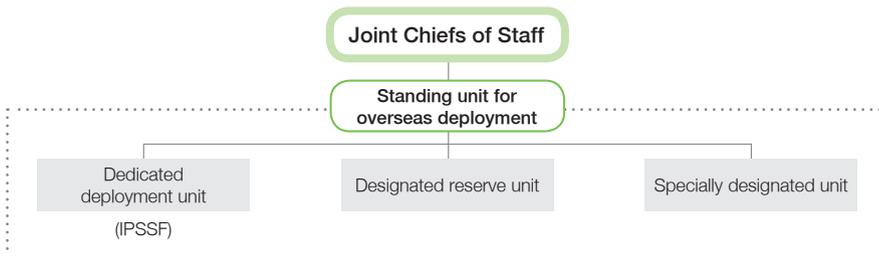
The PKO Center has been gradually expanding its functions and roles to systematically support research, education, and training for peacekeeping operations. In 2017, the PKO Center carried out training for instructors which was attended by the UN and 12 countries in collaboration with the UN's Integrated Training Service (ITS). In May 2018, the center hosted the annual conference of the Association of Asia-Pacific Peacekeeping Training Center (AAPTCT).⁷⁶⁾ In November 2019, the PKO Center supported the MND-hosted UN Senior Mission Leaders' Course and contributed to the success of the course. By offering the course—which is a core UN education program for cultivating candidates for high-ranking UN positions—for the first time, it is expected to diversify the ROK's contribution to peacekeeping operations and help ROK officers advance to high-ranking positions in the UN. Furthermore, in accordance with the ROK's pledge to hold UN's education programs in the ROK from 2020 to 2024 made at the 3rd Peacekeeping Ministerial Conference in 2019, the PKO Center plans to offer UN's PKO courses once a year and will be reviewing various factors caused by the COVID-19 pandemic to decide when and how the courses will be offered.

⁷⁶⁾ The annual conference of the AAPTCT was launched in 2010, and in the 9th conference held in the ROK in 2018, the chief of staff of the UN Department of Peacekeeping Operation and around 70 representatives from 20 member states participated and discussed the direction of PKO development.

Operation of a Standing Unit for Overseas Deployment

Since December 2009, the ROK Armed Forces has been operating a standing unit for overseas deployment consisting of some 4,000 troops that can be deployed in one or two months after a PKO mission order is given. The standing unit consists of a dedicated deployment unit of 1,000 troops, a designated reserve unit of 1,000 troops, and a specially designated unit of 2,000 troops. The dedicated deployment unit is the first to prepare for deployment when the need for deployment arises. In July 2010, the International Peace Support Standby Force (IPSSF), or "Onnuri Unit"⁷⁷⁾ was established as a unit devoted solely to overseas deployment. The designated reserve unit prepares for the rotation of deployed personnel or additional deployment, and the specially designated unit, a functional unit, prepares for various deployment requirements. When the UN requests deployments of engineering and medical units, the specially designated unit will receive the required personnel mainly from the existing designated parent units (engineering and medical) and will then be deployed. The structure of the standing unit for overseas deployment is shown in [Chart 6-14] and the number of deployed personnel is in [Chart 6-15].

[Chart 6-14] Structure of the Standing Unit for Overseas Deployment



* Specially designated unit: Engineering, medical, military police, UAV platoons (Marine Corps), transport units of Navy and Air Force, helicopter units, etc.

77) "Onnuri" is a Korean compound word consisting of "on", which means "whole" and "all", and "nuri", which means "the world inhabited by people". The name signifies a unit that performs its missions all over the world.

[Chart 6-15] Number of Personnel Deployed from the Standing Unit

(2010 - November 2020)

Dongmyeong Unit	Ashena Unit	Akh Unit	Hanbit Unit	Total
7,607 (24 contingents)	1,745 (8 contingents)	2,234 (17 contingents)	3,403 (12 contingents)	14,989

5. Establishing a Response System to Protect Overseas Koreans

Protecting Overseas Koreans

The ROK Armed Forces is reinforcing various activities to protect ROK nationals in an active and pre-emptive manner by utilizing military assets including vessels and transport aircraft in the event of a crisis such as major disaster or terrorism abroad. In the past, the ROK Armed Forces has focused on assisting the rescue and transfer of kidnapped ROK nationals as well as evacuation of ROK nationals when civil war broke out in Libya and Yemen, in which the tasks were mainly carried out by the Cheonghae Unit dispatched to the Gulf of Aden. Nowadays, however, the ROK Armed Forces is working more actively to protect ROK nationals, such as deploying military transport aircraft and rescue teams in response to various natural disasters and disaster situations. Recent major activities of the MND in protecting ROK nationals utilizing military assets are shown in [Chart 6-16].

[Chart 6-16] Major Activities of the MND in Protecting the ROK Nationals

(As of November 2020)

Period	Defense Exchanges and Cooperation Activities
October 2018	Supported military transport aircraft (C-130) for the evacuation of 799 ROK nationals isolated due to Typhoon Yutu in Saipan
May 2019	Dispatched a rescue team to support search-and-rescue after the Hungarian cruise ship sinking
February 2020	Transferred 6 ROK nationals and 1 Japanese spouse aboard a Japanese cruise ship to the ROK (Tokyo-Gimpo) (Code One, VCN-235 of the ROKAF)
May 2020	Supported 60 ROK nationals in Africa to return home (Addis Ababa-Incheon) (a returning air charter after transporting the 12th batch of Hanbit Unit)
July 2020	Deployed 2 KC-330 MRTTs to bring back home about 290 ROK workers in Iraq

First, when ROK nationals including local tourists were isolated in Saipan due to Typhoon Yutu in October 2018, the MND deployed a transport aircraft (C-130) for the first time to safely transport a total of 799 people to Guam.

In the Hungarian cruise ship sinking accident⁷⁸⁾ in May 2019, the MND, in cooperation with relevant organizations including the MOFA, dispatched seven Sea Salvage and Rescue Units (SSUs) as members of the ROK government's joint rapid response team and provided rescue equipment. In addition, a 24-hour situation support room was operated at the MND headquarters and the defense attaché in Hungary was appointed as the rescue captain, making all-out efforts to search for missing ROK nationals. This was the first case of dispatching a military rescue team to rescue ROK nationals from a major accident that occurred abroad.

In 2020, the MND actively supported the transfer of ROK nationals who had

⁷⁸⁾ An incident when the Hungarian cruise ship Hubbleani, which had 33 ROK nationals on board, collided with a local cruise ship in Danube River, Hungary (7 survivors, 25 deaths, 1 missing)



Search-and-rescue following the sinking of a Hungarian cruise ship (May 2019)



Successfully transferred ROK workers in Iraq to return home with KC-330 (July 2020)

difficulty returning to the homeland after restrictions in immigration were applied in each country due to the global spread of COVID-19. In February, the MND deployed an exclusive presidential aircraft (ROKAF aircraft #3, VCN-235) to transport 7 people, including 6 ROK nationals and 1 Japanese spouse aboard a Japanese cruise ship to the ROK. In May, the MND helped 60 overseas Koreans from various parts of the African continent return to their homes using an air charter which was to return to the ROK after transporting the 12th contingent of the Hanbit Unit deploying to South Sudan to carry out its mission. In the course of the rotation, the Hanbit Unit also provided face masks to the ROK nationals in South Sudan and supported the infection prevention activities.

In July, amid a situation where more than 2,000 confirmed cases occurred daily in Iraq, the MND deployed two KC-330 MRTTs to support the prompt return of around 290 ROK workers in Iraq. This was the first case where an MRTT was deployed to transport ROK nationals, and the ROK's government joint rapid response team composed of the MND, the MOFA, military medical personnel, and quarantine officers supported the safe entry of workers.

Establishing a Response System to Protect Overseas Koreans

The MND is establishing a response system related to the military's deployment of emergency relief personnel and resources to protect overseas Koreans. Accordingly, in September 2019, the MND completely revised the Working-level Manual on Responding to Crisis to Protect Overseas Koreans, which stipulates the response procedures and measures to be taken by the MND in the event of a crisis abroad. The revised manual includes an update on the types of crises that may occur and presents guidelines for military asset support for prompt measures in the future. Moreover, the MND's support for transferring ROK workers in Iraq in July 2020 provided an opportunity to prepare

The MND is establishing a response system related to the military's deployment of emergency relief personnel

detailed procedures on deploying KC-330 MRTTs and respond in a timely manner in the event of a related situation, such as the transfer of ROK nationals during the COVID-19 pandemic.

Meanwhile, considering the fact that government-wide cooperation is crucial in protecting ROK nationals, the MND, together with relevant agencies and organizations, is establishing an organic cooperation system through combined situational exercises and meetings in preparation for crisis situations of ROK nationals. The MND will continue to cooperate with relevant organizations including the MOFA as well as each military service to complement and develop the response system that will protect and rescue ROK nationals from various crisis situations occurring around the world.

Chapter 7

Embedding an Inclusive Culture in the Military: With the People, Trusted by the People

Section 1 Embedding a New Barracks Culture Trusted by the People

Section 2 Improving the Welfare and Working Environment for Servicemembers

Section 3 Reorganizing the Military Medical System

Section 4 Reinforcing Human Rights Protection for Servicemembers

Section 5 Reinforcing Support for Discharged and Retiring Servicemembers, and Privileges for War Veterans





Returning the remains of ROK soldiers home to mark the 70th anniversary of the Korean War (June 2020)

Embedding a New Barracks Culture Trusted by the People

By innovating the barracks culture, the ROK Armed Forces has made significant achievements, including reduced casualties and desertion from duty. Accordingly, the MND aims to embed a new barracks culture trusted by the people by ensuring a level of autonomy and human rights for servicemembers that match the expectation of the people while maintaining military readiness.

1. Fostering a Barracks Culture Driven by Autonomy and Responsibility

Harmony between Autonomy and Responsibility

Efforts to innovate the barracks culture, promoted since 2014, has made significant achievements such as reduction in casualties and abandonment of military duty or post without permission. As such, it is being well-received by the public for fostering a worry-free service environment. However, with the public's expectation on human rights and welfare of servicemembers increasing, calls for cultivating a barracks culture that harmonizes autonomy and responsibility while the ROK Armed Forces maintains a steadfast readiness posture are continued.

Therefore, the MND will continue to make efforts to foster a sound barracks life where creative thoughts and diversity of servicemembers are respected, and strive to cultivate a barracks culture of autonomy and responsibility to enable servicemembers to transform into "democratic citizens in uniforms" who can take responsibility for their behavior.

Use of Personal Mobile Phones

As an effort to relieve the sense of isolation among servicemembers, receive-only mobile phones for common use and public video telephones have been provided since 2015. Moreover, to guarantee servicemembers' basic rights in a wider scope, the MND collected opinions from all members and conducted a trial operation before fully allowing the "use of mobile phones after work" in July 2020. The use of mobile



Use of mobile phones at barracks after work



Use of mobile phones by servicemembers (for self-development and communication with outside)

phones not only alleviated the sense of disconnection from society for servicemembers but also contributed to the improvement of combat capabilities and unity of military units by facilitating communication among unit members. In addition, by allowing servicemembers to use their mobile phones to engage in self-development activities such as attending online courses, acquiring certificates, and obtaining employment and business establishment information, it laid the foundation for a sound, productive barracks life.

Meanwhile, to prevent security violations resulting from mobile phone use by servicemembers, pertinent regulations have been enacted and a "defense mobile security app" that controls the photo function on mobile phones has been developed and is in use.

In order to eradicate side effects such as illegal gambling and digital sex offenses in advance, the MND strives to reinforce preventive measures to minimize adverse effects by coming up related contents with outside expert agencies and nurture professional military instructors.

Off-post Activities after Working Hours on Weekdays

To help servicemembers prepare for their missions by providing sufficient rest and autonomy as much as possible, off-post

activities by servicemembers after working hours on weekdays have been allowed in earnest since February 2019 while considering the special characteristics of each unit and the need to maintain military readiness.

Each individual is allowed to take advantage of off-post activities up to twice a month under the approval of the commander, and can carry out small group solidarity activities, hospital visits, and meetings with family members, as long as they do not interfere with the military readiness posture.

Off-post activities after working



Servicemembers enjoying off-post activities after working hours on a weekday

[Chart 7-1] Survey on the Perception of Servicemembers Toward Off-Post Activities after Working Hours on Weekdays



* Source: Korea Institute for Defense Analyses (KIDA, 2019)

hours on weekdays have a positive impact not only inside the military but also outside the military. Off-post activities relieve the sense of isolation and stress as well as promote unity among unit members and strengthen mutual prosperity with the local community. The MND plans to steadfastly allow off-post activities after working hours on weekdays to ensure sufficient rest and autonomy of servicemembers.

Fostering a Barracks Culture that Respects Cultural Diversity

The ROK society is undergoing rapid transformation into a multicultural society as the number of registered foreign nationals has increased from 850,000 in 2008 to 1.27 million in 2019; hence it is necessary for the military to recognize diversity as well. The MND has continued to make efforts to create a barracks culture where social minorities, including servicemembers from multicultural families, can live together as fellow members with others without being subject to discrimination.

The MND will further reinforce education to enhance servicemembers' awareness of the multicultural society and establish related systems so as to improve the level of understanding of cultural diversity among service-members and prevent any dispute between members arising from discriminatory treatment. Through these efforts, the MND will facilitate cultural diversity in barracks to contribute to fostering of a creative barracks culture.



An event inviting children from multicultural families on Children's Day

2. Spreading a Barracks Culture wherein Basic Rights and Lives are Respected

Reinforcing Activities to Eradicate Irrationalities

The ROK Armed Forces has made a wide variety of efforts to eradicate irrationalities within the military to "embed a high-morale military culture of being with the people and trusted by the people" and resolve the hardships of servicemembers.

In order to eradicate unreasonable practices and irregularities, the MND is conducting on-site inspections and providing education for key personnel related to unit operation, and is reviewing the introduction of a self-governing system for enlisted servicemembers to observe the rules voluntarily and plan and implement self-correction activities. Furthermore, the MND will continue to make efforts to select and reward excellent units for eradicating irrational practices.



Self-governing committee of servicemembers (top-notch servicemember system of the Air Force)

Prohibition of Giving Orders or Using Servicemembers for Personal Purposes

Due to the nature of the mission, the military needs to maintain a strict top-down relationship. Still, servicemembers should also be able to refuse any illegal orders or instructions given for personal purposes. The Framework Act on Military Status and Service stipulates that even a superior officer may not issue any order unrelated to his or her duties or beyond his or her authority. In line with this provision, the MND has prepared provisions prohibiting superior officers from giving instructions to or using servicemembers for personal purposes in the Unit Management Directive, regulations of each service, and guidelines for violators.

In addition, to eradicate personal orders, the MND issued the "guidelines for eradicating abuse of power in the defense domain" in May 2019 and presented specific cases in the guidelines and introduced strict punishment standards by revising the "Directive for Disciplinary Actions against Military Personnel and Civilians".

Use of Proper Language

In keeping with the growing importance of human rights and as verbal violence such as abusive language and swear words causes various accidents and incidents in the military, the ROK Armed Forces is making efforts to create a culture based on communi-

cation, consideration toward others, and mutual respect among servicemembers by promoting the use of proper language in barracks.

To promote the use of proper language among servicemembers, the MND has published a guideline on language use in barracks and a comic book on the use of appropriate language in barracks, and updated a special digital comic series on The Korea Defense Daily. The MND also selects the "Barracks Language Leading Unit". In addition, in collaboration with the National Institute of Korean Language, the MND encourages servicemembers to take "Korean Language Culture Outreach School" courses.

In the future, guided by the belief that "a positive barracks culture begins with language that shows respect and consideration for others", the MND will continue to develop effective ways to ensure the use of proper language among servicemembers.



A course from the Korean Language Culture Outreach School

Identifying and Resolving Difficulties

To ensure that servicemembers complete their military service in a healthy manner, the MND operates a variety of systems to identify difficulties that they might face during their service period and to resolve them in a timely manner. Servicemembers who are accustomed to living in free environments could receive more stress or face more difficulties due to the controlled environment and group living. As a proactive measure to control the factors that may interfere with adjustment to military service, the MND conducts periodic personality tests in four stages and offers various programs including assigning professional counselors in battalions and lower units and the Green Camp to provide psychological



On-the-spot counseling

counseling and therapy for servicemembers who are experiencing difficulties. In addition, the MND continues to extend the scope of counseling through the National Defense Help Call Center, which provides counseling and receives reports 24/7 and operates various complaint reporting and management programs to identify and deal with difficulties in a rapid, precise manner.

The MND, together with the Korea Institute for Defense Analyses (KIDA), plans to take a more preventive approach to the issue by improving the reliability of the personality test, supplement the education system for enhanced expertise of professional counselors in barracks, and scientifically analyze the counseling details of the National Defense Help Call Center to use them as data for preventing accidents.

[Chart 7-2] Average Number of Daily Counseling Sessions at National Defense Help Call Center

(As of November 2020, unit: cases)

Year	2014	2015	2016	2017	2018	2019	2020
No. of Sessions	47	111	159	176	170	134	159

* As of September 1, 2018, public cyber counseling sessions are no longer available for the protection of servicemembers' privacy.

[Chart 7-3] Increase in Number of Professional Counselors by Year

(As of 2020, unit: persons)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No. of Counselors	95	148	207	246	297	346	383	383	522	633

Reinforcing the Suicide Prevention Capabilities of Servicemembers

In order to prevent noncombat casualties and protect precious lives, the MND strives to ensure that all servicemembers serve as "Gate-Keepers"¹⁾ in charge of preventing suicides. To this end, the MND produces tailored educational content of "see-listen-talk"²⁾ certified by the Ministry of Health and Welfare (MOHW) and offers suicide prevention education at least semiannually with suicide prevention instructors. The MND also operates an integrated suicide prevention system that consists of three phases—identification, management, and separation—to help servicemembers adapt to the military service and prevent suicide. In cooperation with the Military Manpower Administration (MMA) and MOHW, the MND provides continuous treatment to servicemembers who had been discharged early due to maladjustment to military service as a result

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1) A person who discovers those at risk of suicide early and enables them to receive counseling and treatment from a professional agency (professional counselor in barracks) and provides management and support to prevent any suicide attempts by those at risk of suicide in an emergency.

2) Educational content to "see" signs of suicide for those at risk of suicide, to "listen" to their thoughts and to "talk" to give them advice.

of psychiatric issues, among others, through social security services for psychology, welfare, and employment even after their discharge.

The MND is enhancing the expertise of suicide prevention instructors by providing them with commissioned training at professional institutions, and these instructors are carrying out itinerant education at each region for key personnel related to unit management such as commanders.

In addition, to ensure the early stabilization of the unit where suicide incident has occurred and the psychological stability of those involved, the MND will continue to endeavor to embed a culture of respect for life by requiring commanders to participate in suicide prevention education and establishing a healing program model for post-management.



(Army) Cultivating suicide prevention instructors

[Chart 7-4] Number of Suicide Prevention Instructors Trained by Year

(As of 2020, unit: persons)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No. of Instructors	540	434	550	534	653	664	668	822	650	808	377

Improving the Welfare and Working Environment for Servicemembers

Military welfare is a critical factor in determining the level of performance of combat power as well as improving the quality of life and morale of servicemembers. Accordingly, the MND is creating a sound environment for servicemembers to focus solely on their duties through drastic improvements in military welfare, such as raising the salaries and allowances of servicemembers, enhancing the military barracks, increasing support for self-development, improving clothing and meals, and advancing residential support programs for career servicemembers.

1. Drastic Improvement of Service Conditions

Reasonable Remuneration for Military Service

To provide reasonable remuneration for those fulfilling their military duty and enhance the nation's responsibility to this matter, the MND promotes annual increase in the salary of servicemembers, and by 2022, it will amount to 50% of the 2017 minimum wage. As of 2020, the salary³⁾ has been raised to 40% of the 2017 minimum wage, and will be raised up to KRW 676,000 by 2022 based on the salary of sergeants.

In association with the raise, the MND signed MOUs with 14 commercial banks in August 2018 and launched the Soldiers Preparing for Tomorrow Installment Savings⁴⁾ to provide lump sum money for servicemembers to propel themselves into the civilian society following discharge. Since then, the number of subscribers and accumulated money have continued to increase, surpassing 325,000 cumulative subscribers as of November 2020 with each individual saving an average of KRW 288,000 a month.

Moreover, the remuneration and allowances for military personnel—which serve as important factors in the acquisition and preservation of outstanding personnel—are being improved to a reasonable, objective level in consideration of the characteristics of military service and the operations and working environment. In 2019, salaried volunteer servicemembers were paid the same amount of remuneration as regular sergeants, and encouragement allowances for short-term NCOs were increased from

3)

Servicemembers' salary increase in 2020 (compared to 2017)

- Sergeant: KRW 216,000 → KRW 540,900
- Corporal: KRW 195,000 → KRW 488,200
- Private first class: KRW 176,400 → KRW 441,700
- Private: KRW 163,000 → KRW 408,100

4)

The Soldiers Preparing for Tomorrow Installment Savings offers high-interest rates of 5% and tax exemptions, with individuals allowed to save up to KRW 400,000 per month.

KRW 2.5 million to KRW 5 million; thus partially mitigating the difficulty in hiring NCOs. The MND also plans to gradually expand the current military service credit of National Pension⁵⁾, which recognizes only six months of military service, to cover the entire period of military service for servicemembers on active duty and others who suffer from delayed entry into civilian society due to military service.

Improvement of Military Barracks

Since 2003, the MND has been pursuing programs to modernize crowded and deteriorated military barracks to improve the living conditions of servicemembers and provide them with comfortable living environments. In order to transform military barracks from a simple accommodation space to a residential and living space, the MND has replaced floor-type barracks shared by a platoon (30-50 members) with bed-type quarters shared by a squad (8-10 members). In addition, the living area per person has been expanded from 2.3m² to 6.3m², and all sanitary facilities and amenities (washrooms, toilets, libraries, and gyms) have been integrated into the barracks area and are being modernized. The modernization project is expected to be completed in line with the finalization of unit reorganization in 2026, under the yearly improvement plan linked to Defense Reform 2.0.

On the other hand, for units excluded from the modernization program pending

[Chart 7-5] Comparison between Before and After Modernization of Barracks

Category	Before Modernization	After Modernization (Integrated Barracks)
Space allocation within barracks	<ul style="list-style-type: none"> • (Enlisted) Barracks • (Cadre) Company commander's room, company administration section 	<ul style="list-style-type: none"> • (Enlisted) Barracks, sanitary facilities, amenities, etc. • (Cadre) Company commander's room, company administration section, office of battalion staff, etc.
Barracks	<ul style="list-style-type: none"> • Platoon-sized (30-50 members) floor-type structure 2.3m² per person 	<ul style="list-style-type: none"> • Squad-sized (8-10 members) bed-type structure • 6.3m² per person
Space for enlisted	<ul style="list-style-type: none"> • Located in separate buildings outside barracks No shower room or facilities for washing combat boots 	<ul style="list-style-type: none"> • Modernized washrooms, toilets, and baths inside barracks • Shower room, facilities for washing combat boots newly installed
Amenities	<ul style="list-style-type: none"> • Located in separate buildings outside barracks No cyber knowledge information facilities, fitness centers, table tennis facilities, etc. 	<ul style="list-style-type: none"> • Libraries, cyber information facilities, fitness centers, and other amenities newly installed or expanded inside barracks • Kiosks inside barracks
Space for cadre	<ul style="list-style-type: none"> • Only the company commander's room and company administration section are located inside barracks • Battalion administration facilities are in separate buildings outside barracks 	<ul style="list-style-type: none"> • Commander's room, office of staff section, command and control room, communications office, meeting rooms inside integrated barracks

⁵⁾ Military service credit is a system that recognizes a six-month subscription period for a person who has joined the military after January 1, 2008 and served for at least six months, with all expenses incurred paid by the state.

disestablishment or relocation, the MND is striving to address the residential inconvenience of servicemembers by providing priority support for repairing aged facilities in consideration of the period during which the facilities have been in use and the conditions of each unit.

Improving the Quality of Clothing and Other Personal Gears

The MND continues to improve clothing and personal gears to maintain the combat mission execution capabilities of servicemembers and increase their satisfaction with their barracks life.

First, regarding combat clothing, the MND distributed 22,000 uniforms that have been upgraded to a flame-resistant two piece uniform in order to ensure the survivability of crew members and improve the wearing comfort for all tracked vehicle crew members in 2019. To guarantee the conditions for combat missions during hot season, a new patrol cap with a visor (Army) will be provided to replace combat shirts and berets starting 2020 while combat goggles will be supplied to all servicemembers.

In connection with clothing that servicemembers use and wear most frequently

<Improved and Newly Distributed Combat Uniforms>



Tracked vehicle crew uniform



Flame-resistant navy working uniform



Combat shirt



Combat goggles

<Quality Improvement for Clothes / Gears Suitable for Ordinary Life>



Track shoes



Padded jumper



Sports cap



Water bottle

during their military life, padded jumpers were supplied to front-line soldiers in 2019 and were further distributed to all enlisted servicemembers in the following year. The MND also improved the quality of running shoes and sports caps, and expanded the distribution of running shirts and underwear, considering the preference of servicemembers. In addition, the MND plans to provide a variety of supplies which

are used most frequently during military life, such as easy-wash water bottles with enhanced thermal cooling functions and sleeping bags with improved filling materials.

As for personal gears, in order to ensure that servicemembers in each battalion can exercise their combat power to the fullest extent, the MND distributed a set of gears including bulletproof vests and helmets, personal tents, and tactical backpacks and vests across all GOP divisions (combat units) by 2015. It plans to supply the set to all servicemembers by 2020. The MND is minimizing the overlapping of functions between items caused by the practice of developing and improving items based on single units, and is in the process of developing a clothing layering system⁶⁾ to enhance both thermal and convenience functions even if clothing and gears are worn in layers.

The MND will continue its efforts to develop and improve clothing and personal gears in a manner that reflects the future battlefield environment and improves the welfare of servicemembers, and will enhance the combat power of the military by distributing improved clothing and personal gears early on.

Healthy and Safe Diet

The ROK Armed Forces provides safe, nutritious, and balanced meals designed to maintain the health and combat power of servicemembers. Considering the amount of daily activities and energy consumption of servicemembers due to education and training, meals are planned and provided based on a 3,000 kcal standard⁷⁾, which is higher than the regular adult standard of 2,600 kcal. In addition, the MND continues to raise the basic meal expenses⁸⁾ for servicemembers to provide them with high-quality meals preferred by the new generation of servicemembers.

[Chart 7-6] Increase of Daily Basic Meal Expenses per Servicemember

(As of December 2019, unit: KRW, %)

Year	2015	2016	2017	2018	2019	2020
Unit price	7,190	7,334	7,481	7,855	8,012	8,493
Rate of increase	5.0	2.0	2.0	5.0	2.0	6.0

Meals are planned based on servicemembers' preferences as identified through annual satisfaction surveys. In 2020, the MND increased the amount of food preferred by servicemembers, such as pork, ginseng chicken soup, duck meat, and beef ribs. In addition, more than 20 items, including sea eel, blueberry, and Shine Muscat grapes, have been selected as new food items⁹⁾ through tasting events or test



Military Meal Upgrade Project



Meals and clothing monitoring group comprised of mothers

6) Clothing layering system, as the word "layering" suggests, is a functional clothing system that prevents heat loss in humans due to weather (temperature, wind, and rain) and physical conditions (sweat, breathing), among others.

7) After referring to a research conducted by KIDA, the nutrition standards for servicemembers were reset from 3,100 kcal to 3,000 kcal after considering the changes in the physical conditions and military living conditions of servicemembers.

8) Expenses purely incurred by food including main menus, side dishes, and desserts.

9) Seasoned and stewed beef ribs, frozen fried rice (japchae, whole shrimp), beef bulgogi rice with sauce, sweet and sour pork, chicken tenders, 6 types of ramen with rice (snacks), peeled chestnut, shine muscat, blueberry, honey, milk (side dish), sea eel, freshwater snail, cockle, scallops, trout, Korean sand lance, dried pollack head, sand lance extract, wild seafood pack, etc.

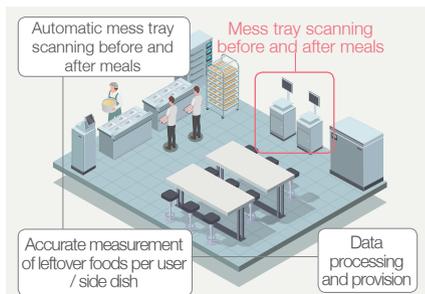
meals, thus providing a wide variety of food to servicemembers.

In 2019, the scope of the Meal Innovation Project¹⁰⁾—which recorded high satisfaction among servicemembers—has been further expanded to provide brunch services from two units to all units; the number of meals other than those provided at military food halls (food trucks, dining out, etc.) has also been increased from twice a year to four times a year. In 2020, units with reduced amount of food waste were allowed to carry out additional Meal Innovation Projects. Civilian cooks are stationed in all kitchens regardless of the size of the kitchen to improve the taste of meals for servicemembers. This is expected to open up positions in the combat service support field for the private sector thereby creating more jobs.

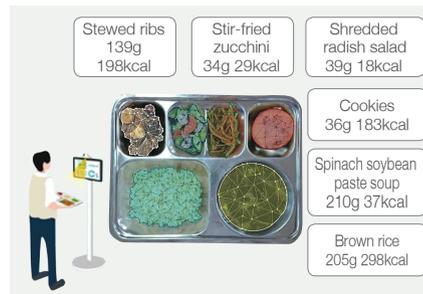
[Chart 7-7] Civilian Cooks in the ROK Armed Forces

(Unit: persons)

Year	2013	2014	2015	2016	2017	2018	2019	2020
Total	1,547	1,586	1,721	1,767	1,841	1,903	1,982	1,987
Increase	74	39	135	46	74	62	79	5
Operating standards (No. of users)	140 or more	130 or more	120 or more	110 or more	100 or more	90 or more	80 or more	



Automatic meal measuring system



Automatic meal measuring scanner

From 2019 to 2020, the MND operated a pilot "automatic meal measuring system", capitalizing on artificial intelligence (AI) and 3D scanners, for the first time at a single unit. The actual amount of consumption and the amount of leftover for nine items, including rice, kimchi, and squid, were measured, and the standard amount for each item was reset based on the data. This initiative contributed to the efficient use of ingredients and improvement of meal satisfaction, and it is planned to be expanded to more units in the future.

Furthermore, the MND has been implementing "allergy-inducing food labeling system"¹¹⁾ since 2015 for the safety of servicemembers allergic to certain foods, with

10)

The project is autonomously implemented according to the conditions of each unit by means such as providing brunches, meals other than those provided at military food halls (food trucks, dining out, etc.), and multiple and personally selected menu items.

11)

Labeling required for: eggs, milk, buckwheat, peanuts, soybeans, wheat, mackerel, crab, shrimp, pork, peaches, tomato, sulfuric acid, walnut, chicken, beef, squid, and shellfish

alternative foods provided¹²⁾ since 2020 to servicemembers with limited choice of food due to various factors such as vegetarian diet and religion.

In 2014, the MND launched the "Mothers' Monitoring Group", through which mothers of servicemembers participate in joint hygiene inspections at plants that manufacture food supplied to the military and review the quality of meals provided to their children; thus contributing to raising the standard of military meals.



Mothers' Monitoring Group visits the cafeteria and military meal supplier

As military meals are consumed by a large group of people at the same time, they require safety and hygiene control at each stage—from supplier contracts to actual servings. Therefore, companies certified with a Hazard Analysis Critical Control Point (HACCP) are preferred, and military suppliers are subject to biannual hygiene inspections and nonscheduled inspections in the summer, which are conducted in collaboration with the Ministry of Food and Drug Safety. If any violation is found during an inspection, punishment under the pertinent statutes such as corrective action, fines, and suspension of business and reduction of points in the contract bidding for the following year are enforced.



The MND also operates military food distribution centers furnished with modern equipment to maintain the freshness of food ingredients and plans to continue expanding the facilities so as to further reinforce food safety and hygiene management.

Moreover, in 2019, the MND entered into a business agreement for the development of military meals with the Ministry of Agriculture, Food, and Rural Affairs and the Ministry of Oceans and Fisheries with an aim to expand consumption

¹²⁾ 2020 meal policy: For servicemembers who prefer vegetarian food and those who are restricted from eating certain foods due factors such as religion or food allergies, alternative edible items among available items such as rice, seaweed, vegetables, fruits, and (silken) tofu may be provided during meals in consideration of the unit's meal conditions; soya milk may be provided to vegetarian servicemembers instead of milk.

of quality agricultural, livestock, and fisheries products and reinforce the cooking capabilities within the military through cooking classes for military cooks and culinary competition for servicemembers. The MND will steadfastly strengthen its cooperation in various fields to improve the quality and taste of military meals.

2. Expanded Self-Development Opportunities During Military Service

Education Tailored to Each Educational Attainment and Acquisition of Certificate

To encourage the self-development of each servicemember, the MND offers a variety of opportunities such as providing education tailored to each educational attainment and supporting servicemembers' acquisition of certificates. With tailored learning, the MND provides "Distance Learning Course" and "credit recognition for military service" for those who join the military while attending university. Distance Learning Course allows servicemembers to take and earn credits from official online courses of the universities that they attended before they began their service. As of 2020, 161 universities, including Seoul National University, are participating in this initiative and 50% of the tuition has been subsidized since 2019 to increase the attendance rate. The credit system for military service, on the other hand, recognizes the educational experience of servicemembers obtained through education and training during their military service as academic credits. Starting with 11 universities, including Kyungin National University of Education, in 2019, a total of 35 universities including Seoul National University are now participating in the system. High school graduates are provided support to obtain a (professional) bachelor's degree associated with the self-study system and e-MU¹³⁾ universities, and

13)

- Self-study system: In order to offer self-taught students an opportunity to earn a bachelor's degree, the state awards a bachelor's degree to those who pass the four-stage qualification exam (general education → basic core → advanced core → comprehensive exam).
- Electronic-Military University (e-MU): A system for graduates of military specialized high schools to earn a (professional) bachelor's degree from universities that entered into an agreement with the military (6 universities) from corporals to salaried volunteer servicemembers for a limited term.

[Chart 7-8] Tailored Learning and National Technical Qualification Year-On-Year Report

(As of December 2020, unit: courses and persons)

Category	2016	2017	2018	2019	2020
No. of universities offering distance learning courses	134	141	145	154	161
No. of universities offering recognized credits for military service	-	-	-	17	35
No. of personnel with recognized educational attainments equal to those of high school graduates	1,838	492	258	117	89
Servicemembers who acquired a national technical qualification	20,653	19,436	19,530	17,920	5,690

* No practical test held to acquire national technical qualification in the second half of 2020 due to COVID-19.

those with no high school diploma are provided with support for purchasing learning materials and one-on-one learning instructors to obtain academic qualifications (a pass in the GED test).

To help servicemembers acquire state-certified technical qualifications, the MND offers biannual tests for 81 national technical qualification tests including the test for industrial engineer information processing, and all-year-round tests for heavy equipment (forklift and excavator) operator. Through these tests, around 18,000 servicemembers acquire national technical qualifications every year.

Financial Support for Self-Development

Since 2018, the MND has been implementing the self-development cost support system¹⁴⁾ for enlisted servicemembers to finance part of the cost required for self-development so as to guarantee the self-development conditions for servicemembers. Each servicemember receives up to KRW 100,000 a year to cover language and qualification examination fees and costs for purchasing learning materials. As such, the MND will continue to expand related budgets to guarantee the self-development conditions.

3. Advancing Residential Support Programs for Career Servicemembers

Guaranteeing a stable residential environment is a crucial element that affects the mission execution capabilities and morale of career servicemembers. To this end, under the Framework Act on Military Welfare, the MND supports career servicemembers by providing official residences and officer's quarters and lease support for civilian houses, and is implementing various residential support policies such as preferential supply of civilian houses to servicemembers to raise the percentage of homeowners among career servicemembers. In April 2020 in particular, the military residential policy division was established under the MND's Military Installations Planning Bureau; thus laying the foundation for integrated and systematic development of military housing. To increase servicemembers' satisfaction with housing and to create conditions that allow them to focus on their duties, the MND plans to implement a wide variety of policies to minimize the burden on the national defense budget while reasonably improving the poor living conditions of career servicemembers.

¹⁴⁾ The self-development support system for servicemembers began in 2018 as a pilot project (KRW 100 million budget, annual support of KRW 50,000 per individual, 50% co-payment), and its budget was expanded to KRW 2 billion in 2019 (annual support of KRW 50,000 per individual, 50% co-payment) and KRW 8 billion in 2020 (annual support of KRW 100,000 per year, 20% co-payment).

Tailored Residential Support

In December 2018, the MND established a tailored residential support plan in consideration of the regional characteristics of users and units in order to provide residential support considering the demand of career servicemembers. As a result, the MND is improving old official residences while undergoing intensive renovation on accommodations to ensure stable service conditions for officers. Moreover, in March 2020, the demand standards of official residences and accommodations for cadres—which had been uniformly applied across the country—were improved to match reality; based on this, the MND plans to provide housing suitable for each regional characteristic. The MND is currently under consultation with relevant agencies regarding matters on residential support such as improvements in subscription system for long-term servicemembers to raise the percentage of homeowners among career servicemembers and increasing the supply of land for non-home-owning servicemembers, as well as improving the special supply system for servicemembers to ensure that the actual demand and the housing supply are more efficiently associated with each other.

Diversification of Housing Supply

The MND plans to provide high-quality residential support by diversifying the supply method of civilian houses. In the past, houses for servicemembers were supplied directly through construction, purchases, and Build-Transfer-Lease (BTL) arrangements. However, these arrangements require massive financial resources, and rapid deterioration of these houses may occur without proper maintenance. In order to address these issues, the MND expanded the housing options of officers through the supply of residential facilities based on civilian housing by means such as covering the amount of deposit-based (jeonse) lease¹⁵⁾ and establishing a monthly rent-based lease support system in November 2019. The MND also seeks to capitalize on public rental housing to address the inconveniences experienced by servicemembers, as consumers, in using deposit-based and monthly rent-based lease support systems such as securing leased properties, paying for the real estate agent commission, and uncertainty in collecting deposit.

Ensuring Professional Management and Operation of Residential Facilities

The MND is taking measures to ensure professional management and operation of residential facilities to maintain their quality and ensure their long-term use. Military residential facilities deteriorate faster than civilian houses mainly because the facilities

¹⁵⁾ 20% increase in the amount of support for deposit-based lease: KRW 138 million (2018) → 164 million (2019) on average.

are managed by servicemembers and civilian military employees in each unit, who are rather unprofessional, which results in inefficient management. Cognizant of the need for efficient and professional facility management to maintain the quality and ensure the long-term use of the residential facilities, the MND is currently seeking to promote integrated management for each region through outsourcing to the private sector. To this end, the MND launched a pilot program for the consigned management of residential facilities in the 1st Corps region in January 2018, and converted approximately 30,000 households to consigned management by 2019. Also, the MND is gradually expanding consigned management of residential facilities. In October 2018, to ensure the proper maintenance and repair of facilities, the MND established the "standards of responsibilities for repairing military residential facilities" to clarify the distribution of repair responsibilities between the state and individuals. By maintaining residential facilities in good condition through acceptable budget and responsibility distribution, the MND will continue to make efforts to help servicemembers and their family members live in a more pleasant environment.

Reorganizing the Military Medical System

The ROK Armed Forces is strengthening their military medical capabilities in essential areas to build a military medical system trusted by both servicemembers and the public, while actively capitalizing on civilian medical resources when providing medical services.

1. Improving the Military Medical System Geared Toward Servicemembers

Modernizing Military Medical Facilities

The MND plans to improve deteriorated medical corps at division-level units and below as well as hospitals supporting forward corps to ensure that servicemembers can receive treatment in a comfortable environment.

Of the total 75 division-level medical corps buildings, 24 buildings that are old will be improved one after another by the end of 2025, while the renovation of 7 old medical facilities in units scheduled to be disbanded or relocated were completed in 2020. Among the hospitals supporting forward corps, the Armed Forces Hospitals in Hongcheon, Gangneung, Yangju, and Chuncheon will be modernized sequentially by 2024 in connection with the Army's unit reorganization plan.

Functional Adjustments and Specialization of Military Medical Institutions

In order to ensure higher levels of medical services for servicemembers by efficiently utilizing limited military medical capabilities, the MND is making adjustments towards specializing the functions of each military medical institution through "selection and concentration".

16 military hospitals were specialized by area such as surgery, mental health, outpatient, nursing, and medical checkup, and the equipment and personnel have been reassigned in phases according to the level of treatment and available care provided by each military hospital by end of 2020. The Armed Forces Busan

Hospital was disbanded in October 2020, and the Armed Forces Capital Hospital will open a trauma center to secure its own ability to provide complete medical treatment for patients with military trauma such as gunshot wounds and blast injuries.

With regard to division-level medical corps, pilot projects to adjust functions with the goal of reinforcing primary care functions of division-level and below medical corps are being carried out at two divisions in 2019 and four divisions in 2020. In addition, it plans to pursue the opening of division medical corps as clinic-level medical institutions by strengthening the outpatient care function such as replacing and upgrading old video and inspection equipment and assigning additional 3-5 short-term medical officers by 2022.

**Improving the Use of
Military Hospitals**

As most servicemembers visit military hospitals using outpatient buses, a high concentration of patients gather at a certain period of time, and the procedures for servicemembers' families to enter military hospitals for visits are complicated. To resolve these issues, the MND is making efforts to improve the convenience of using military hospitals.

First, the MND is increasing the number of outpatient buses, adjusting the work hours of medical staff to match the visiting hours of servicemembers and opening additional consultation rooms for departments in high demand to ensure that servicemembers can receive satisfactory treatment through outpatient services. With regard to medical access of servicemembers in the front line in particular, the outpatient system for each region has been reorganized by more than doubling the number of buses for hospitals supporting front corps. In 2021, the MND plans to improve the conditions for utilizing military medical institutions by consigning to the private sector the operation of outpatient buses which had been run by servicemembers at division-level medical corps in some of the frontline areas with poor traffic environment.

At the same time, for the Armed Forces Capital Hospital facilities located outside the military installations protection zones that require access control, full entry of family members of servicemembers has been allowed without any restrictions as in civilian hospitals, and guide personnel has been assigned. Furthermore, the MND plans to conduct further review to determine whether to apply the same scheme to all other military hospitals.

**Improving the Emergency
Evacuation Capabilities**

If an emergency patient occurs in units in the forward and remote areas without any medical

personnel for first aid, rapid emergency evacuation is required. Accordingly, the MND seeks to build an emergency evacuation system for all the entire ROK Armed Forces so as to meet the golden hour for patient evacuation.

In order to provide on-site first aid at the earliest opportunity, the MND continues to increase the number of "emergency medical technicians" primarily in the company units in standing divisions. In addition, the MND is reinforcing the emergency care function of hospitals supporting front corps and actively utilizing aeromedical evacuation so that evacuation of critically ill patients to the Armed Forces Capital Hospital can be completed within an hour and a half. In 2020, the MND field deployed eight medevac helicopters capable of flying at night and in bad weather and at the same time reinforced the functions and personnel of the General Medical Situation Center¹⁶⁾ of the Armed Force Medical Command (AFMC) to provide systematic emergency care ranging from patient assistance to evacuation to hospitals. Going forward, the MND plans to develop a "General Medical Situation Center integrated control program" that is capable of integrating and controlling the entire military emergency evacuation system encompassing both aviation and land routes.

Enhancing the Capability to Deal with Infectious Diseases and Prevent Diseases

Due to the group life characteristics of the military, an outbreak of an infectious disease in the military has the potential to generate a large number of patients, which could have a fatal impact on combat readiness posture. As infectious diseases are nonmilitary threats that impact national security, the military needs to take the initiative in preparing for and countering infectious diseases.

The MND is expanding the scope of those who are vaccinated against diseases that continue to occur inside and outside the military and cause death if complications occur (such as hemorrhagic fever with renal syndrome), and has reinforced the preventive medical organizations and functions of the AFMC to enhance monitoring and response capabilities against infectious diseases that occur throughout the military. The MND assigned military personnel and resources when dealing with COVID-19 at the national level and played key roles in various fields such as COVID-19 testing, sample collection,



New nursing officers providing medical support at the Armed Forces Daegu Hospital (March 2020)

16) As a department under the Armed Forces Medical Command, it plays a role as a control tower similar to the 119 Situation Center in the event of a military emergency patient and provides one-stop support for first aid, and evacuation and treatment of emergency patients round the clock all year round.

and treatment of confirmed patients. Moreover, the MND transformed the Armed Forces hospitals in Daegu, Daejeon, and Goyang into national hospitals for infectious diseases, and provided mobile medical clinics and mobile remote treatment equipment.

To reinforce the ROK Armed Forces' ability to deal with infectious diseases, the MND plans to improve military hospital facilities for infectious disease treatment and establish a medical response system centered around the AFMC, along with other means such as obtaining supplies and equipment against epidemics and enhancing medical training against disasters.

2. Enhancing Medical Accessibility and Expertise through Public-Private Cooperation

Enhancing Access to Civilian Hospitals

Previously, servicemembers had to obtain a medical officer's opinion and permission from the head of the unit to use civilian hospitals. However, considering the increase in preference for advanced technology used in civilian hospitals, the approval process has been simplified for easier access.

After carrying out a series of two pilot projects from 2018 to June 2019, the "Directive on Medical Treatment under the Health Insurance for Servicemembers in Active Duty" was revised in December 2019, which allowed all servicemembers to go off post and receive treatment from a civilian hospital with an approval of the unit commander alone.

The MND also plans to introduce a military group insurance scheme, depending on individual preferences, to finance the medical expenses previously paid by servicemembers when using civilian hospitals instead of military hospitals. To implement new scheme, the MND established pertinent statutory provisions by revising the Military Service Act and the Enforcement Decree of the Military Healthcare Act in 2020, and secured the relevant budget to implement the project from 2021.

The MND will strive to increase the servicemembers' civilian hospital accessibility and improve their treatment options of servicemembers, and ensure that the state remains fully responsible for any servicemember who sustains any illness or injury during his or her military service and provide appropriate medical services.

Acquiring Civilian Medical Workforce and Enhancing the Expertise of Military Medical Workforce

To resolve the problem of medical assistance being provided by unqualified medics within military medical institutions, the MND has hired 886 civilian medical personnel, including pharmacists, radiologists, and clinical pathologists in military hospitals and division-level medical corps with civilian workforce. Moreover, to prevent the deterioration of expertise and proficiency of medical personnel due to the practice of primarily assigning short-term medical officers and rotation of nursing personnel, the "Defense Personnel Management Directive" has been revised to ensure that long-term medical officers in clinical positions and nursing officers with specialization serve for a long period of time at the Armed Forces Capital Hospital and surgery-intensive hospitals.

In association with public medical university, the MND plans to devise measures for acquiring long-term medical officers, and secure budgets and improve the system to expand the application of medical officers for long-term services. The MND also seeks to provide night allowances so as to secure nursing personnel, which is in manpower shortage.

Establishing and Operating the Armed Forces Trauma Center

The ROK Armed Forces is gearing up to open the "Armed Forces Trauma Center" to secure their own treatment capacity for traumas, such as gunshot wounds and blast injuries that usually occur only in the military, according to choice and concentration.

Currently, the MND has acquired the facilities and equipment to meet MOHW standards for designation of regional trauma centers, and, is preparing to allow patients to receive high-quality trauma treatment in cooperation with the Seoul National University Bundang Hospital.

To enhance the capabilities of the Korea Armed Forces Capital Hospital, the MND has conducted consulting on development strategies for trauma centers and relevant hospitals through external experts, and plans to continue its cooperation with the private sector.

Joint Operation of Government-Wide Air Ambulances and Reinforcement of Cooperation with Firefighters

In order to respond to emergency patients in the military, the MND is enhancing government-wide cooperation in relation to utilizing assets for emergency patients medical evacuation and nurturing professional workforce.

First, the MND has improved the air transport conditions of emergency military and civilian patients by participating in the government-wide joint utilization system of air ambulances. Furthermore, the MND revised the "Defense Security Service Directive" to allow 119 paramedics to quickly enter military compounds and devised a system for military medical personnel to participate in professional first aid education provided by the National Fire Service Academy. The MND plans to enhance the clinical experience of military emergency medical technicians by introducing a duty exchange program between military emergency medical technicians and 119 paramedics, and advance its cooperation with firefighters by establishing a cooperative system between emergency operations centers and the AFMC General Medical Situation Center.

Reinforcing Human Rights Protection for Servicemembers

The MND implements various policies aimed at seeking fundamental solutions for accidents and human rights violations in barracks in order to reestablish the ROK Armed Forces as a military that is aligned with the people and trusted by the people. In 2019, it has introduced the alternative service program for conscientious objectors to military service based on religion and other reasons to ensure the protection of the constitutional and human rights of servicemembers. Moreover, to guarantee servicemembers' right to stand trial, the MND has transferred the jurisdiction over appellate trials to civilian courts and improved the punishment system for servicemembers; thus implementing military justice reforms.

1. Improving Human Rights Protection for Servicemembers

Establishing a Comprehensive Plan for Human Rights Policies in the Defense Domain

The MND has established the 2019-2023 Comprehensive Plan for Human Rights Policies in the Defense Domain with an aim of fostering a human rights -friendly military culture and amplifying intangible combat power as a result. This comprehensive plan is a guideline for the mid- to long-term direction for human rights policies in the military, consisting of 35 detailed tasks for promotion including 5 major tasks, establishment of the military human rights protection office (military ombudsman), expansion of public defender service for servicemembers, and use of mobile phones for servicemembers after working hours.

Establishing the Military Human Rights Protection Office

As part of the effort to improve human rights situations in the military aimed at preventing violations of human rights of servicemembers and improving human rights in the military for damage relief, the MND will offer its full cooperation with the establishment of the military human rights protection office within the National Human Rights Commission of Korea and provide full support for the activities carried out by the office. For a prompt revision of the National Human Rights Commission of Korea Act, which stipulates the

establishment of the military human rights protection office, the MND will actively work together with the relevant authorities in the legislative process. A mutual cooperation system will be established with the military human rights protection office to guarantee its authority such as visits to military units and investigation rights, thereby strengthening the human rights protection function for servicemembers.

Reinforcing Human Rights Education for Military Personnel

The goal of human rights education in the military is to raise awareness of servicemembers regarding their rights and responsibilities as "citizens in uniform" and spread a barracks culture driven by respect for human rights. To this end, the MND as well as each military service and the National Human Rights Commission of Korea have been implementing systematic education policies based on close cooperation. Specific policies include: human rights education tailored to individual service cycles and individual units; invitational lectures by human rights experts for commanding officers; on the job training for human rights workers and instructors in the healthcare, investigation, correction, judge advocate, and discipline sectors; promotion of online human rights education; and development and distribution of human rights education contents that involve the participation of servicemembers. In particular, the MND plans to develop and distribute tailored teaching plans in cooperation with the National Human Rights Commission of Korea to use them for human rights education of servicemembers in each unit. Through these efforts, the MND plans to foster a barracks culture that respects the dignity and rights of military personnel.

Improving Human Rights Protection Systems for Servicemembers

In keeping with the changes in how servicemembers regard human rights, the MND, while pursuing cooperation with civil society, strives to revise relevant statutes and improve the human rights protection system that is currently in place. A human rights impact assessment, which had been conducted only when statutes and administrative rules related to human rights were revised, has been further expanded to cover policies and systems. As such, the Military Human Rights Guardian¹⁷⁾ system was launched to allow servicemembers to easily request human rights counseling and file a petition for investigation. To eliminate blind spots, the MND runs the National Defense Human Rights Monitoring Group and conducts surveys on the human rights status of servicemembers, and promotes the improvement of human rights policies in line

17)

It is an integrated national defense human rights system where servicemembers can apply for human rights counseling and file a petition for investigations. Servicemembers are allowed to request counseling or investigation with regard to any human rights violation or discrimination and confirm the progress and results thereof.

- * How to apply for counseling and investigation: Use the "Military Human Rights Guardian" linked through the MND website on the Internet or Intranet
- Internet (currently available in Korean only): MND website → Go straight to Key Information → Military Human Rights Guardian → Click "Apply for Human Rights Counseling and Investigation"
- Intranet: National Defense Hub → Counseling/ Proposal → Military Human Rights Guardian → Click "Human Rights Counseling and Investigation"

with public standards through consultation with external experts such as the military advisory committee of the MND and the headquarters of each service and through the military human rights advisory lawyer system for division-level units. Henceforward, the MND will unwaveringly lay the foundation for promoting and protecting human rights for servicemembers in keeping with the development in the human rights situation in the ROK.

Institutional Reforms for Probes into and Fundamental Resolution of Unsolved Deaths in the Military

By providing fundamental solutions for deaths that occur during military service and where bereaved family members raise doubts on the cause

of death, the MND is striving to resolve the bereaved family members' suspicions and regain the trust of the people. Especially on April 11, 2019, the MND began operation of a government appointed attorney system for bereaved families of deaths in the military, allowing them to receive legal support in the process of dealing with the death, and revised the Framework Act on Military Status and Service on May 2020 so as to clarify the legal grounds thereof.

In accordance with the Special Act on Ascertaining the Truth of Military Accidents Resulting in Death, the MND launched the Presidential Truth Commission on Deaths in the Military in September 2018 to allow independent committee to carry out objective investigations on the allegations raised by the bereaved family members with regard to deaths in the military, thus making efforts to recover damages sustained by the relevant parties and repair its impaired reputation.

Henceforward, the MND will continue to exert efforts to expand the responsibilities of the nation toward, and ensure the best treatment for, servicemembers who sacrificed their lives in the course of their service, thereby regaining the trust of the public in the military and contributing to promotion and protection of human rights for servicemembers.

2. Introduction of Alternative Service Program for Conscientious Objectors to Military Service Based on Religious Beliefs, Etc.

In accordance with a Constitutional Court decision on June 28, 2018 that Article 5 of the Military Service Act runs counter to the Constitution¹⁸⁾, three agencies—MND, MMA, and Ministry of Justice—promoted on July 9, 2018 the introduction of an alternative service program for conscientious objectors to military service based on

18) "As all types of the current military service infringe upon the conscience of military service objectors based on religious beliefs, etc., as they presuppose military training, Article 5 (1) of the Military Service Act, which does not stipulate an alternative service program for military service objectors under the freedom of conscience pursuant to Article 19 of the Constitution of the Republic of Korea, runs counter to the Constitution; thus, it shall be temporarily applicable until December 31, 2019."

religious beliefs, etc.

On December 28, 2018, to develop a reasonable alternative service program that strikes a balance between the "obligation to serve in the military" and the "freedom of conscience", the MND prepared an alternative service legislative bill that includes 36 months joint training at correction facilities and submitted the bill to the National Assembly on April 2019. Subsequently, on December 31 of the same year, the Act on the Assignment and Performance of Alternative Service ("Alternative Service Act") was promulgated, taking effect on January 1, 2020.

In June of the same year, after completing the enactment and revision of statutes at the lower hierarchical levels such as the Enforcement Decree of the Alternative Service Act and the organization of a review committee for alternative service, the committee began its review on July 15 and determined 730 people for assignment to alternative service by November. In 2020, a total of 106 people have been assigned to alternative service, and they are currently serving in corrective facilities such as Daejeon Prison.

3. Military Justice System Reform

Building a Military Justice System that Guarantees Independence and Fairness

The MND is pursuing military justice system reform to protect servicemembers' human rights and right to a fair trial, and to improve the independence and fairness of military courts and prosecutors. As such, it announced the tasks for military judicial reform on February 12, 2018.

To substantially guarantee servicemembers' right to a trial, the MND decided to transfer the jurisdiction over appellate trials to civilian courts. The first-instance military courts will be located in five areas, and they will report directly to the MND; the local military courts will be helmed by civilian legal practitioners. In addition, a decision was made to abolish the convening authorities' right to confirmation of judgments¹⁹⁾ and the appointment of field officers as lay judges²⁰⁾. To ensure the independence of military judges, the MND plans to establish a personnel management committee dedicated to military judges for the handling of promotion recommendations and reappointment reviews and prohibition of military judges from taking other legal positions such as judge advocate or military prosecutor. As such, the MND is promoting the revision of the Military Court Act so as to legislate such measures for military judicial reform.

¹⁹⁾ Convening authorities are commanders of the units where military courts are set up (Article 7 of the Military Court Act). They are given the right to confirm the decisions of military courts and reduce stipulated sentences by up to one-third in cases wherein the accused committed crimes in the course of actively performing their duties, such as operations, education, and training, with due diligence (Article 379 of the Military Court Act).

²⁰⁾ A unique feature of a military trial wherein field officers who are not qualified as judges get appointed as lay judges and try cases along with military judges.

[Chart 7-9] Goals and Key Tasks of Military Judicial Reform

**Ensuring Fair Trial and Protecting Human Rights through
Military Judicial Reform**



Improvement of Military Courts		Improvement of Investigation Systems	
Organization	Trial	Prosecution	Judicial Police and Others
<ul style="list-style-type: none"> • Transfer jurisdiction over appellate trials to civilian courts. • Set up military courts that directly report to the MND. • Appoint civil legal practitioners as heads of local military courts. 	<ul style="list-style-type: none"> • Abolish convening authorities' rights to confirm decisions and reduce sentences. • Prohibit military judges from taking other legal positions. • Protect the status of military judges. • Abolish the appointment of field officers as lay judges. • Conduct circuit courts. • Implement participatory trial with servicemembers. 	<ul style="list-style-type: none"> • Set up a military prosecutor's office in each service. • Abolish the commander's right to approve detention warrant requests. • Provide military prosecutors with the right to object. • Introduce restrictions on the supervision of military prosecutors. 	<ul style="list-style-type: none"> • Separate military police in charge of investigations and those in charge of military operations. • Implement measures to enhance the human rights practices by civilian police. • Provide legal basis for the power of the military judicial police. • Prohibit the appointment of servicemember as assistant military judicial police officers. • Introduce public defenders for victims of military crimes.

Developing Transparent, Reasonable Investigation Practices

investigative agencies. First, to enhance the independence of military prosecutors, the MND decided to set up a prosecutor's office in the headquarters of each service—in lieu of the common prosecutor's division at division-level units or higher—and to abolish the commanders' right to approve requests for detention warrants²¹. As for expertise reinforcement of the military judicial police, the MND is seeking to separate the organizations and functions of the military police in charge of investigations and those in charge of military operations, and prohibit the appointment of servicemembers as assistant military judicial police officers²². The MND also reflected such improvements to the investigation system in the revised bill for the Military Court Act. Meanwhile, with the legislative bill for the Act on the Duty Performance of Military Police passing the plenary session of the National Assembly as the legal basis for administrative police activities of the military police, the MND laid the foundation for legal control over authority actions such as police administration.

The MND is developing a transparent, reasonable investigation system by reinforcing the independence of inves-

21) A military prosecutor needs the approval of the head of the affiliated unit when requesting a detention warrant (Article 238 of the Military Court Act).

22) The military judicial police is an auxiliary investigative body that aids investigations under orders of the military prosecution or military judicial police (Article 46 of the Military Court Act). Currently, enlisted members serving in the military judicial police serve as military police officers or handle security works at the Military Security Support Command (Article 46 of the Military Court Act).

Enhancing Human Rights Protection in Investigative Procedures

Since 2009, the MND has enacted and implemented the "Directive on the Protection of Human Rights in

the Military Investigation Procedures" in order to strengthen the level of ensuring human rights in military investigation procedures.

Starting in July 2018, the MND reinforced the rights of suspects, even during interviews without any report written, to defend themselves by allowing them to seek legal counsel and to minimize the shock experienced by families and friends of suspects during arrests, detentions, seizures, and searches. In addition, the MND clarified the standard for rests provided to suspects, requiring investigators to let suspects rest for at least 10 minutes every two hours, and also introduced the legal basis for allowing victims of military crimes to select and request public defenders as legal counsel.

In 2020, the MND revised all directives to ban pretext investigations²³⁾ and unnecessary delays in investigations aimed at putting pressure on suspects, and restricted investigations exceeding 12 hours or late-night investigations starting at 9:00 p.m. or later. Meanwhile, the MND allowed not only suspects but also other parties subject to investigation, victims, and witnesses to request the participation of legal counselors and to record the investigation without any particular restriction.

Improving the Servicemember Disciplinary System

In response to the argument regarding the constitutionality of confinement facilities²⁴⁾ in the military and its possible violation of

the constitutional requirement of warrants, the MND has improved the servicemember disciplinary system to protect the human rights of servicemembers. The Military Personnel Management Act and the Military Service Act were revised to replace confinement facilities, among the types of disciplinary actions, with disciplinary training, and newly established the system of wage cuts and reprimand. For discipline training in particular, the days of disposal will no longer be included in the service period to maintain the punitive effect of the confinement facilities.

Unlike confinement facilities, discipline training is a human rights-friendly training oriented toward compliance and human rights education based on understanding of the characteristics of military communities. The training is expected to be provided at units above divisions or brigades to promote servicemembers' human rights while firmly establishing discipline within.

23) A method of investigation wherein, during the process of clarifying the charges for a certain crime, an investigative agency investigates a case unrelated thereof to clarify the criminal charges of its original purpose.

24) Warrants issued by a judge through due procedures should be presented when imposing compulsory procedures during criminal procedures (arrest, detention, seizure or search) (Constitution, Article 12 (3).)

[Chart 7-10] Improved Disciplinary System for Servicemembers

Before		After	Note
Demotion		Demotion	Same as before
Confinement facility		Disciplinary training	Confinement facility abolished / Newly inserted
		Pay cut	Newly inserted
Leave restriction		Leave cut	Same as before (terminology changed)
Probation		Probation	Same as before
		Reprimand	Newly inserted

Reinforcing Support for Discharged and Retiring Servicemembers, and Privileges for War Veterans

In order to support all servicemembers leaving the ROK Armed Forces in their efforts to find a place in the civilian society, the ROK Armed Forces is making improvements in providing various kinds of employment support, including setting career paths and cultivating job skills during military service, preparing a system for military service to lead to quality jobs, and increasing the number of suitable jobs internally and externally. The MND exerts various efforts to honor the sacrifices and endeavors of war veterans.

1. Reinforcing Employment Support for Servicemembers Preparing for Discharge

Enhancing Career Paths and Employment Support for Servicemembers

As part of the Plan for Employment and Business Startup of Young Servicemembers, the MND has been implementing the Young Servicemember SOS Project²⁵⁾ since 2018 to

provide step-by-step support during the entire cycle of military service from enlistment and service to discharge.

The first phase of the plan supports young servicemembers in setting their career paths through education and counseling and runs the "Career Assistance Education" and "One-on-One Employment Counseling" to assist servicemembers with job competencies in getting a job immediately after discharge. Career Assistance Education is offered by civilian professional counselors who pay personal visits to each unit for the convenience of servicemembers, in which servicemembers can then select either the Career Instruction Course or the Employment Support Course based on their preference. The courses consist of joint education on career exploration and designing as well as the government's youth employment policies, followed by tailored education specific to each course. The One-on-One Employment Counseling, also offered by civilian professional counselors who pay personal visits to each unit, provides professional counseling to address the concerns of servicemembers with regard to their career paths and employment after



A job fair for servicemembers nearing discharge held in 2019

25)

As part of the plan aimed at facilitating the employment and business startup of young servicemembers, and as a joint project with the Ministry of SMEs and Startups and the Ministry of Employment and Labor, it enhances the employment and business capabilities of servicemembers until they are matched with SMEs and venture companies. SOS here means "Soldiers on SMEs and Startups".

they are discharged from the military. The counseling is aimed at matching servicemembers with job competencies and the desire for employment with jobs suitable for their desired occupational category.

The second phase of the plan involves professional education on each desired field in collaboration with the Ministry

of Employment and Labor and Ministry of SMEs and Startups, among others, so as to enhance the capabilities of servicemembers who lack employment and startup capabilities. The education is provided at training centers located outside each unit for more than 5,000 servicemembers per annum, and the number of trainees is expected to increase. In addition, the MND is implementing "field visits to small and medium-sized enterprises (SMEs)" to improve the servicemembers' perception toward SMEs which offer many quality jobs and allow servicemembers to experience the actual workplace of their desired occupational category in advance.

The third phase involves the operation of the "Startup Academy", which is a tailored employment course for young servicemembers who have completed the first and second phases in collaboration with associated government agencies and enterprises that give preference to military veterans. The MND also operates the "Business-Tailored Employment Course" and the "Visiting Recruitment Fair", which allow companies to directly train servicemembers with the practical skills required by the companies before hiring them; thus providing support for more servicemembers to get a job.

The MND also provides a variety of support in phases which include the establishment of a support system to foster young servicemembers as entrepreneurs in association with government policies.

In the first phase, servicemembers who are interested in starting their own business organize a "startup club" in their respective unit to study the startup items they are interested in and exchange opinions during weekends and public holidays. In the second phase, professional counselors related to startups pay a visit to each unit and provide professional counseling for the items studied by each startup club. In the third phase, startup competitions are held by each military and the MND, as well as a government-wide competition to create a startup boom and enhance further the startup capabilities of the teams with outstanding startup items. As the last phase, in collaboration with the Ministry of SMEs and Startups, the MND provides additional



Grand Prize in the 2019 Government-wide Startup Competition

counseling, technology, and funds to teams with excellent items to help them achieve actual commercialization. This policy of fostering startup talents continues to contribute to developing potential startup capabilities of young servicemembers and making military service more productive.

**Employment Support for
Medium-and Long-Term
Servicemembers**

The MND is improving its tailored support for mid-to long-term servicemembers who have served for five years or more. Improvements are made in the education system for career change and the duration of support for career change is being expanded. Starting in 2019, the scope of personnel entitled to receive education on military service planning education was extended beyond captains and sergeants first class to cover second lieutenants and staff sergeants to help servicemembers understand the overall lives of military personnel and design their own initiative-driven military careers.

Since 2020, the MND has operated the "tailored basic education for career change" course for each future career goal of cadres preparing for discharge to help them prepare for their career change systematically and reliably, and has opened and operated additional intensive courses for applicants who have completed basic education.

On the other hand, since 2017, to help medium-term servicemembers find employment opportunities, the MND has granted transition periods of one to three months depending on each servicemember's number of years in service and has allowed all medium-term servicemembers to prepare for career change early through mandatory career education 2 years prior to their discharge.

Long-term servicemembers who have served for 10 years or more are provided with career planning education during service and career education two years prior to discharge. They are also offered with basic education and a variety of tailored professional education during a 10- to 12-month period of support for career change, thus giving them sufficient opportunities to get a job based on enhanced employment competencies.

**Securing Jobs for Retiring
Servicemembers**

In conjunction with the government's job policy, the MND is seeking to increase jobs in the defense domain by finding employment positions in and out of the military and developing jobs for servicemembers nearing their discharge to utilize their occupational capabilities and military career.

First, under Defense Reform 2.0, the MND continues to find and secure positions

in the military, such as noncombatant positions replaced by civilian workforce, including administration and education. Meanwhile, in conjunction with the government's job creation policy for the public sector, the MND, in cooperation with police, fire, and coast guard agencies, continues to secure non-military jobs in the fields of police, aviation maintenance, and special force (tactics) as well as fire and rescue fields by easing employment requirements and improving the relevant system.

The MND increased the number of "job fairs for servicemembers nearing their discharge", which supports employment by connecting the servicemembers nearing their discharge with companies seeking to hire at the job fair, from once a year to twice a year considering the demand of servicemembers since 2019. Going forward, the MND will steadfastly expand its non-face-to-face (online) employment matching program in line with changes in the job market. In addition, to encourage more companies to employ soldiers upon discharge, the MND awards commendations and certificates of appreciation signed by the Minister of National Defense to excellent companies that hire discharged servicemembers. To foster such culture in the job market, the MND plans to keep holding meetings with corporate CEOs and HR personnel.

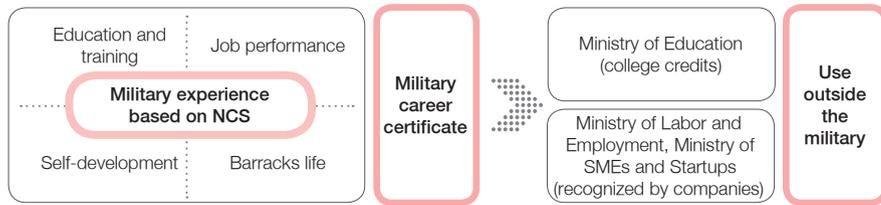
Job Standardization
Based on NCS

Job competency-oriented recruitment based on the National Competency Standards (NCS)²⁶⁾ is taking root in public institutions and private companies. Even though most of the jobs performed in the military are similar or identical to those covered by NCS, the former has yet to be standardized, thus making it difficult for servicemembers to have their military experience recognized as work experience outside the military after their discharge.

Therefore, the MND will systematize the jobs performed in the military according to NCS to ensure that servicemembers have their military experience and expertise recognized in the same field outside the military after their discharge and reflect the job experience associated with NCS on the military career certificate, in order to allow the corresponding career to be recognized in academic institutions and corporations as college credits and work experience, respectively. Starting with two units in the Army in 2018, the duties of each service have been standardized in line with NCS, and the project is expected to be completed by 2022, including the revision of pertinent laws and regulations to improve military career certificates.

26) NCS refers to the national standards that systematize and standardize the knowledge, skills, qualities, and other elements required for various jobs performed at industrial sites in different sectors at different levels.

[Chart 7-11] Plans on the Use of Military Career Certificate Outside the Military



2. Pension System That Reflects the Characteristics of Military Service

Meaning and Characteristics of the Military Pension System

The military pension system is aimed at fostering stable living conditions and improving the welfare benefits for servicemembers and their families by providing proper remuneration to servicemembers in retirement after years of faithful service or to their family members in case of the servicemember's death. Servicemembers perform duties that pose risks to their lives such as taking part in battles and dangerous exercises, and most live and work in remote or forward areas under harsh working conditions that involve military operations and long periods of standby duty. As they have to retire at the age set for each rank, however, most retire between the ages of 45 and 56 when the level of living expenses tends to be highest due to the expenditure on education for their children, etc.

The military pension system, which reflects such unique circumstances of military service, not only serves the basic purpose of a pension system as a social insurance that ensures income for one's later years but also works as a national program that guarantees stable livelihood for servicemembers retiring early and compensates those who sacrifice themselves for the country.

Military pension plays an important role in helping career servicemembers focus on their duties without having to worry about their life after retirement. Other developed countries also provide more preferential benefits to military pension compared to other public pension programs in consideration of the unique characteristics of military pension.

Improving the Military Pension System

In December 2019, the Military Pension Act was revised to introduce the "Pension Split" provision that—to protect the livelihood of divorced spouses in their twilight years—grants a divorced spouse a pro-rata part of his or her spouse's

pension corresponding to the actual marriage period. In addition, in consideration of national financial burdens and equity with other occupational pensions, the revision includes a provision that discontinues payment of the retirement pension or the pension for wounds when the beneficiary is elected as a public official or employed at an organization entirely funded or financed by the nation or a local government.

In September 2019, the Enforcement Decree of the Military Pension Act was revised to reinforce the personal information management of military pension beneficiaries residing in a foreign country and prevent pensions from being used as escape funds for criminal suspects. The MND has also made it mandatory for a military pension beneficiary residing in a foreign country for more than a year to submit new personal information notification every year commensurate with those who have foreign citizenship or permanent residency, and to withhold payment of half of the retirement pension for anyone who is undergoing investigation or trial due to a criminal offense committed while serving in the military and is on the wanted list or received a criminal designation decision because his or her whereabouts are unknown.

In July 2019, in order to protect the right to receive military pension and guarantee the beneficiary's basic right to livelihood, a bank account dedicated to preventing seizure was introduced to prevent seizure of pensions within the minimum cost of living (KRW 1.85 million) from being garnished.

3. Reinforcing Privileges and Social Compensation for Military Service

Recovering Korean War Remains²⁷⁾

The MND recovers the remains of the fallen soldiers during the Korean War to pay tribute to those who sacrificed their lives for the nation, and to also address the long-held wishes of the families as well as honoring them and cultivating their pride. Launched in 2000 as part of the 50th anniversary of the Korean War, the recovery project has been expanded by establishing the MND Agency for Killed in Action Recovery and Identification (MAKRI) in 2007.

By 2019, a total of 12,181 sets of remains have been recovered, with DNA samples received from 53,341 family members. Particularly in 2019, the MND began recovery operations in DMZ in compliance with the CMA and 630 remains were recovered, which includes 261 inside the DMZ. This is the largest recovery in the past 5 years, providing an opportunity to gain public support and trust, as no remains were ever recovered for over 70 years after the armistice and 8 remains were identified and returned to their families.

²⁷⁾

A national project to search for the unfound remains of about 130,000 soldiers who died during the Korean War and return them to their bereaved families.



Recovering the remains at Arrowhead Hill



Prime Minister visiting the excavation site in DMZ

Furthermore in 2019, recovery and family outreach personnel considerably increased²⁸⁾. The Enforcement Decree of the Act on the Korean War KIA Remains Recovery was also revised to include provisions to pay prescribed rewards²⁹⁾ to those participating in DNA samples collection and also to the families when the remains have been identified. Consequently, DNA sampling more than doubled since 2018.

In December 2020, the MND completed the construction of the Identification Center which will improve remains management and the systematic and scientific process of identification.

[Chart 7-12] Remains Recovered by Year

(As of December 2019, unit: sets)

Category	Total	2000-2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Remains recovered	12,181	5,599	1,387	1,041	736	913	622	429	448	376	630
ROK military personnel and police officers	10,607	4,705	1,300	989	671	809	561	387	420	362	403

* Cumulative total of recovered remains: 12,181 sets in total / including 261 sets of remains found in DMZ (Arrowhead Hill).

** The recovery results for 2019 are subject to change depending on the final identification results.

28) Excavation personnel was increased from 8 teams to 12 teams, and personnel inquiring with bereaved families was increased from 1 team to 4 teams.

29) A reward of KRW 10,000 is given to each sample provider, KRW 100,000 is awarded to a person who is found to be a bereaved family member, and KRW 10 million is given for those who have provided samples and once the identity of the excavated remains is verified. (Article 12 of the Act on the Excavation of the Remains of Soldiers Killed in the Korean War and attached Table 3 of its Enforcement Decree)

[Chart 7-13] DNA Sampling of Bereaved Families and Identification of KIAs during Korean War

(As of December 2019, unit: cases, persons)

Category	Total	2000-2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
DNA sampling	53,364	13,572	4,252	4,765	4,005	2,645	2,921	4,041	4,072	4,155	8,936
Identity verification	139	61	7	11	5	17	8	9	9	4	8

The MND is also redoubling efforts on remains recovery international cooperation. Annual meetings and joint remains recovery is conducted in cooperation with the

US and the MND briefs the progress of remains recovery to the families at these meetings which facilitates the alliance between the two nations. In particular, as agreed at the 2019 annual meeting, a repatriation ceremony was held in June 2020 for the believed to be ROK remains to commemorate the 70th anniversary of the Korean War at custody of the Defense POW/MIA Accounting Agency (DPAA).³⁰⁾



Repatriation of the remains of ROK soldiers from the US DPAA (June 2020)



Return of remains of Chinese soldiers (September 2020)



Council of Organizations Related to the Remains Recovery Project (October 2019)



MOU signed between the MND and the National Agricultural Cooperative Federation (December 2019)

Since 2014, the MND also cooperates with China on remains recovery. Based on international law and humanitarian spirit, the two nations agreed to repatriate the recovered remains, starting with 437 remains until 117 in 2020, a total of 716 Chinese remains were repatriated up to date.

Remains recovery becomes more difficult by the day as the terrains of the battlefields continue to change due to land development and also because family members pass away. Moreover, despite the large number of the recovered remains, only 1.3% have been identified due to lacking DNA samples and difficulties in collecting samples.

Public interest and participation is desperate, so the MND redoubles its best endeavors to raise awareness by cooperating with associated agencies through the annual Council of Organizations Related to the Remains Recovery Project.³¹⁾ In



DNA sampling of bereaved families of KIAs during Korean War

30)

As a US agency specializing in identifying military personnel killed in action, it is engaged in activities around the world in search of missing/unrecovered fallen in past wars involving the US

31)

Under the Prime Minister's Directive No. 647, it is a consultative body launched since 2009 participated in by high officials from 12 government agencies each year such as the Ministry of Interior and Safety.

2019 especially, six veterans hospitals nationwide under the Korean Veterans Health Service agreed to collect DNA samples from families to expand the channels for the public to participate, and the MND signed an MOU with the National Agricultural Cooperative Federation to establish the foundation to promote remains recovery to the public through NongHyup Bank and Hanaro Mart branches nationwide.

Enactment of Military Accident Compensation Act and Enhanced Military Death Benefits

In December 2019, Military Accident Compensation Act was enacted to place more responsibility on the nation for injuries, diseases, disabilities, and deaths

of military personnel, and to rationalize the level of accident compensation through means such as raising compensation for disabilities, pensions for bereaved families of those who have been killed on duty, and compensation for death. Furthermore, the MND has newly established special provisions in connection with the expiration of the right to claim for compensation in order to honor those who have been killed on duty and to protect the rights of bereaved families. Details are as follows:

First, the MND has raised the level of compensation for general disabilities for servicemembers as well as compensation for war wounds of cadres and servicemembers, and disabilities caused by injuries arising from special duties. As of 2019, compensation for general disabilities of servicemembers ranged from KRW 5.77 million to KRW 17.32 million, but has been raised to a minimum of KRW 15.9 million up to KRW 47.7 million. In addition, in the case of war wounds where cadres and servicemembers have been injured due to engagement with the enemy, the MND has made a revision to pay 2.5 times the compensation of general disabilities. As for an injury caused by special duty while performing a dangerous duty such as search and reconnaissance of contact areas and counterterrorism operations, it is mandatory to pay 1.88 times the compensation of general disabilities, thus differentiating these disabilities from general disabilities.

Second, the compensation for death has been made consistent with the Public Officials' Accident Compensation Act. The total amount of compensation for death in war has been adjusted from 57.7 times to 60 times the average monthly income for all public officials, and 44.2 times to 45 times the average monthly income for death caused by special duty. The compensation for general death on duty has also been adjusted from 23.4 times the monthly income of the corresponding military personnel to 24 times the average monthly income for all public officials.

Third, in order to better ensure the livelihood of bereaved families of military personnel who died on duty, the payment rate of the pension for bereaved families

has been merged to 43%, with the additional point system for bereaved families newly established. Before, if a soldier dies after serving for less than 20 years, 35.75% of the standard monthly income of the soldier and 42.25% of the monthly standard income after 20 years of service were differentially paid. With the enactment of Military Accident Compensation Act, however, the payment rate was increased to 43% regardless of the period of service. Furthermore, the MND has strengthened the nature of supporting the livelihood of bereaved families by establishing an additional point system for bereaved families, thus adding 5% and up to 20% to the payment rate per bereaved family.

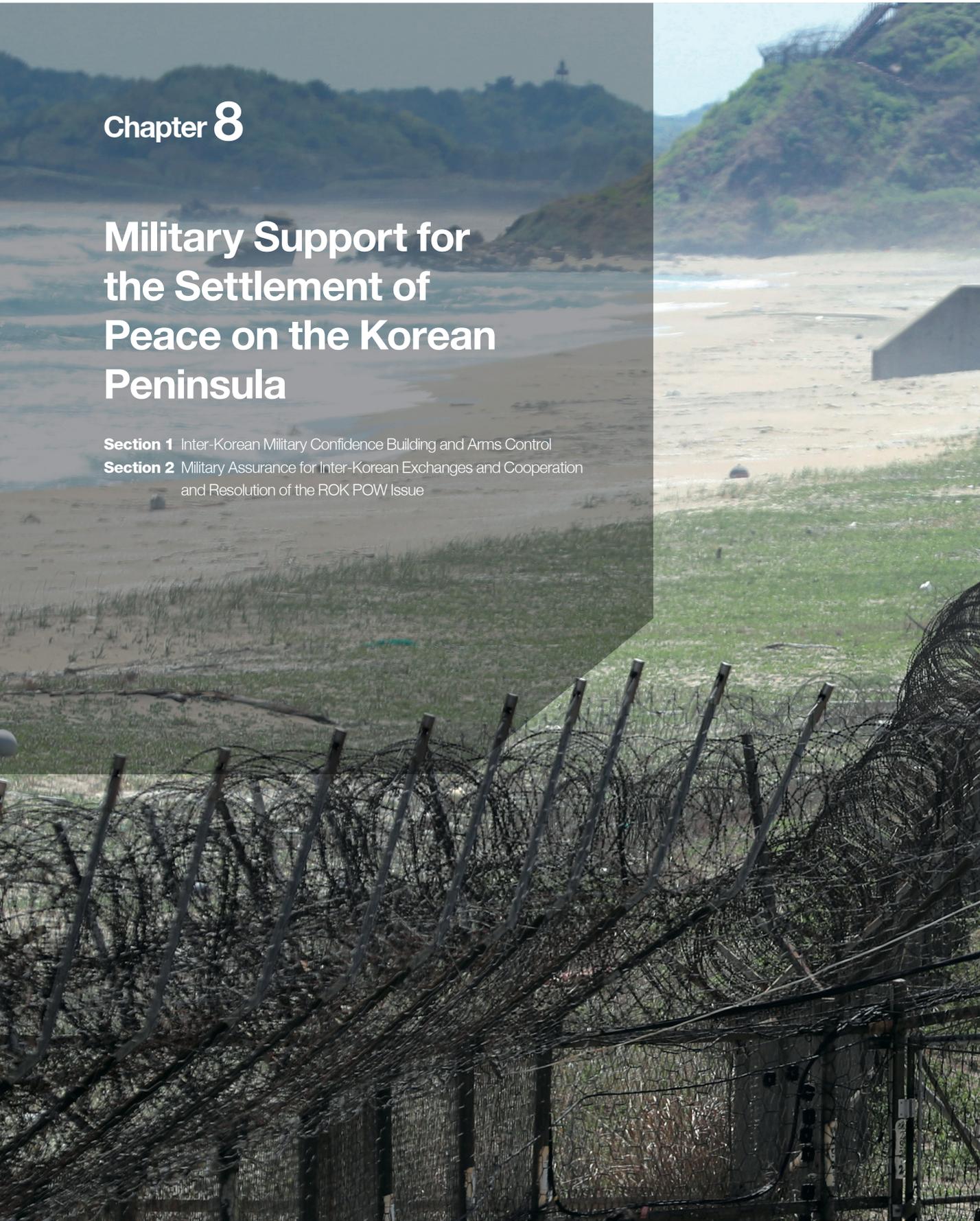
Fourth, in April 2019, the Military Pension Act was revised to protect the rights of bereaved families who are unable to receive related benefits due to the expiration of the right to claim benefits even though death on duty has been recognized through an reexamination by the Committee for the Examination of Killed or Wounded in Action and Death or Injury in the Line of Duty (Review Committee), thus modifying the date when the computation of the duration to file a claim for benefits begins for those who have been reclassified as having died on duty. Since the prescribed duration to file a claim for benefits is five years from "the day the cause of benefits arose", if five years pass from the date of death, even if death on duty is determined through a reexamination by the Review Committee, the bereaved families were unable to file a claim for benefits, such as pension for the bereaved families of those who have died on duty, compensation for death, and retirement allowances due to the expiration of the duration to file the claim. In order to address such issues, a special provision of prescription was newly established to make the request effective, through reexamination by the Review Committee, from the "decision date on death" rather than the "death date" of the soldier who died on duty.

Chapter 8

Military Support for the Settlement of Peace on the Korean Peninsula

Section 1 Inter-Korean Military Confidence Building and Arms Control

Section 2 Military Assurance for Inter-Korean Exchanges and Cooperation and Resolution of the ROK POW Issue





Inter-Korean Military Confidence Building and Arms Control

At the summit in Pyongyang held subsequent to the inter-Korean summit in Panmunjom in April 2018, the ROK and North Korea signed the "Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain" (also referred to as Comprehensive Military Agreement (CMA)) as an annex to the Pyongyang Joint Declaration in September. Military authorities of the ROK and North Korea effectively developed conditions to ease military tensions and build trust between the two Koreas through the conclusion and implementation of the CMA. Going forward, while sincerely implementing the CMA, the ROK will further expand inter-Korean military confidence-building and arms control measures to achieve a permanent peace on the Korean Peninsula.

1. Easing Military Tensions and Building Confidence between the Two Koreas

Promoting the Korean Peninsula Peace Process

The ROK government is consistently promoting the "Korean Peninsula peace process" to eliminate the risk of war at its source and to achieve

complete denuclearization and permanent peace on the Korean Peninsula. To this end, the government is making a wide variety of efforts, including holding three inter-Korean summits in 2018 and paving the way to two US-North Korea summits.

At the Panmunjom inter-Korean summit on April 27, 2018, the leaders of the two Koreas declared the beginning of a "new era of peace" through the "Panmunjom Declaration for Peace, Prosperity and Reunification of the Korean Peninsula ("Panmunjom Declaration")"¹⁾ and vowed to promote an all-out and dramatic improvement in inter-Korean relations, an easing of military tensions and compliance with mutual non-aggression agreements, and the complete denuclearization of the Korean Peninsula and establishment of a peace regime. The third inter-Korean summit was held in Pyongyang on September 18-20, 2018 and the two leaders agreed to the Pyongyang Joint Declaration, which contains practical measures to develop and improve inter-Korean relations based on the trust built during the implementation of the Panmunjom Declaration. In addition, as an annex

¹⁾ President Moon Jae-in and Kim Jong-un, Chairman of the State Affairs Commission, announced the agreement at the inter-Korean summit at the Peace House in Panmunjom on April 27, 2018 to realize a nuclear-free Korean Peninsula, declare the end of the war within the year, establish a joint inter-Korean liaison office in Kaesong, and hold the reunion of separated families and relatives.

to the Pyongyang Joint Declaration, the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain (Comprehensive Military Agreement ("CMA")) was adopted, thereby agreeing on the practical measures to ease military tensions and reduce the risk of war between the two Koreas.



Signing of the CMA (September 2018)

Such development in inter-Korean relations led to the improvement of US-North Korea relations and progress in the denuclearization issue, resulting in two US-North Korea summits.

The US and North Korea held their first summit in Singapore on June 12, 2018, agreeing to the establishment of a new US-North Korea relationship, complete denuclearization of the Korean Peninsula, and establishment of a peace regime. Nonetheless, the failure to reach an agreement between the two countries at the second summit held in Hanoi, Vietnam (February 27-28, 2019) caused a deadlock in relations not only between the US and North Korea but also between the two Koreas. Despite this stalemate, the ROK government, as a party directly involved in the issue, continues to communicate and cooperate closely with the international community, including the US, to maintain the promotion of the "Korean Peninsula peace process" with the support of the international community. In particular, "the meeting among the leaders of the two Koreas and the US" was held for the first time in history in Panmunjom on June 30, 2019 as a result of the ROK government's dedicated efforts to break the deadlock in dialogue between the US and North Korea. As seen through such efforts, the ROK government continues to make various efforts to improve both "inter-Korean relations" and "US-North Korea relations and the denuclearization issue" in a manner tantamount to a virtuous cycle.

Signing and Implementing the CMA

Article 2 of the Panmunjom Declaration agreed upon by the leaders of the two Koreas stipulates "ceasing all hostile acts", "transforming the DMZ into a peace zone", and "turning the area of the Northern Limit Line (NLL) in the West Sea into a maritime peace zone" as effective measures to reduce military tensions and eliminate the risk of war.

In order to implement Article 2 of the Panmunjom Declaration, the military authorities of the ROK and North Korea coordinated on a draft for a comprehensive

military agreement to implement the Panmunjom Declaration through the 8th inter-Korean general officer-level talks on June 14, 2018, 9th inter-Korean general officer-level talks on July 31, and 40th inter-Korean working-level talks from September 13-14. Finally, on September 19, 2018, the Defense Ministers of the two Koreas signed and concluded the CMA as an annex to the Pyongyang Joint Declaration before the leaders of the ROK and North Korea.



8th inter-Korean major general-level talks (June 2018)

With the conclusion of the CMA, the military authorities of the two Koreas are faithfully implementing the cessation of all hostile acts, demilitarization of the Joint Security Area (JSA), pilot withdrawal of guard posts (GP) by both parties in the DMZ, joint recovery of remains, and joint use of the Han River estuary. The CMA effectively contributes to putting an end to the military confrontation between the two Koreas, which has lasted over 70 years, and eliminating the risk of war and accidental armed conflict on the Korean Peninsula.

In particular, the military situation around the border area between the two Koreas has been stable due to the cessation of mutual hostility in maritime, ground, and air buffer zones, which has been in force since November 1, 2018.

On the ground, both the ROK and North Korea ceased artillery fire and outdoor military maneuvers (regiment level and above) in buffer zones, each of which is an area that spans 5 kilometers north and south from the Military Demarcation Line (MDL). At sea, both the ROK and North Korea placed covers over the muzzles and gun barrels of naval and coastal artillery, shut down gunports, and ceased live-fire exercises and maritime maneuver training. In the air, no-fly zones were established for each type of aircraft around the MDL, and flights not announced in advance are not carried out between the two Koreas. However, the ROK Armed Forces has dispatched a total of 180 helicopters in no-fly zones to extinguish forest fires and transport emergency patients in a normal manner, and continues to share the pertinent details with the North Korean military authorities pursuant to the CMA.

The military authorities of the two Koreas have organized a "three-way consultative body of the two Koreas and the United Nations Command (UNC)" under the CMA and completed the demilitarization of the JSA as of October 27, 2018. For the first time since the signing of the Armistice Agreement in 1953, the two Koreas and the UNC jointly inspected and confirmed the completion of demilitarization



Meeting of the leaders of the ROK, North Korea and the US in Panmunjom (June 2019)

measures by fully opening all posts and facilities, including underground facilities in the JSA. In addition, measures were enforced to ensure mutual transparency, such as adjusting and rearranging the surveillance equipment of both parties in the JSA and establishing a video information sharing system. The ROK Armed Forces resumed

tours on the southern side on May 1, 2019 in preparation for the freedom of movement inside the JSA; as of September 30, 2019, a total of 24,000 visitors has toured Panmunjom, which has been transformed into a place of "peace and harmony". In particular, the demilitarization of the JSA immediately led to the meeting among the leaders of the two Koreas and the US in Panmunjom on June 30, 2019.

As a pilot project on December 12, 2018, the military authorities of the ROK and North Korea withdrew 22 GPs that are within 1km of each other inside the DMZ. Since then, active duty military personnel from both sides have visited the others side's GPs and conducted joint field inspections. The withdrawal of GPs from the DMZ has been cited by the United Nations as a prime example of military confidence building and conventional arms control. In association with the pilot project, the ROK government gradually opened DMZ Peace Trail in Goseong, Cheorwon, and Paju from April 2019, allowing around 15,000 people to visit and experience the peace created in the border area.

On December 7, 2018, the military authorities of the ROK and North Korea completed their conditions shaping initiative by removing mines and explosives from Arrowhead Hill inside DMZ to conduct joint inter-Korean remains recovery operations and opening an inter-Korean road



Recovery of remains on Arrowhead Hill in DMZ



Conveyance of the nautical chart of the Han River estuary (January 2019)

passing through the MDL. However, as inter-Korean relations stalled following the US–North Korea summit in Hanoi, joint inter-Korean remains recovery operations were first carried out in the southern side of Arrowhead Hill from April to the end of November 2019. As a result, the ROK Armed Forces was able to recover 260 remains (approximate) and 67,000 artifacts. In addition, from April to November 2020, in preparation for joint inter-Korean remains recovery operations, the ROK Armed Forces removed landmines and conducted recovery on the southern side of Arrowhead Hill to recover additional 140 sets of remains (approximate) and 17,000 artifacts.

In relation to the joint use of the Han River estuary, an inter-Korean joint waterway survey was conducted in the estuary from November 5 to December 9, 2018. Through the survey, the two Koreas found more than 20 reefs and confirmed various kinds of information on the section spanning 600 kilometers where the survey was conducted. Taking into account the results of the inter-Korean joint waterway survey, the ROK Armed Forces laid the foundation for the freedom of navigation of civilian ships in the Han River estuary by making a nautical chart of the estuary and providing this chart directly to North Korea on January 30, 2019.

At the 10th inter-Korean general officer-level talks held on October 26, 2018, the military authorities of the ROK and North Korea agreed to draw up a "plan to organize and operate the Inter-Korean Joint Military Committee" under the "Agreement on the Composition and Operation of the Inter-Korean Military Committee" agreed upon by both parties in May 1992. As a high-level military consultative body, the Inter-Korean Joint Military Committee will be headed by a vice ministerial-level official or higher, and the agenda subject to discussion will include various pending military issues that require discussion between the military authorities of the two Koreas, including those specified in the CMA.

While maintaining a robust military readiness posture, the ROK Armed Forces will shape the conditions for the CMA to be effectively implemented in order to reduce military tensions and build confidence between the two Koreas, thereby continuing to contribute to the momentum behind the "Korean Peninsula peace process".

2. Establishment of a Peace Regime on the Korean Peninsula and Arms Control

Establishment of a Peace Regime ²⁾

Since the conclusion of the Armistice Agreement in 1953, many confrontations and tensions have caused instability on the Korean Peninsula. Without peace, neither security nor the economy is guaranteed. Therefore, "peaceful coexistence" is a vision and task that needs to be achieved as a top priority.

President Moon Jae-in, through the "Berlin Initiative" in July 2017, declared the pursuit of a complete denuclearization and the conclusion of a peace treaty as a comprehensive approach towards the North Korea nuclear issue and a peace regime. With North Korea responding to the ROK government's willingness to establish a peace regime, the leaders of the two Koreas agreed in the Panmunjom Declaration on April 27, 2018 to "cooperate actively in building a permanent and stable peace regime on the Korean peninsula". Afterwards, while the leaders of the two Koreas and the US continued their discussions on establishing a peace regime and achieving denuclearization of the Korean Peninsula through a series of talks, President Moon proposed the "transformation of the DMZ into an international peace zone"³⁾ through a keynote speech delivered before the UN General Assembly on September 24, 2019. At the UN General Assembly Plenary, President Moon emphasized that the ROK government will cooperate closely with the international community to pave the way for complete denuclearization and a permanent peace regime on the Korean Peninsula by ceasing hostile activities in the border areas and transforming the DMZ into a symbol of peace. This signifies the commitment to transform the DMZ, a symbol of cold war confrontation, into a zone of true peace and reconciliation together with the international community through efforts to build trust between the two Koreas and participation and support of the international community.

Amid these efforts towards a transformation to a peace regime on the Korean Peninsula, the MND is managing the military situation on the Korean Peninsula in a stable manner by complying with the Armistice Agreement in good faith, maintaining a robust ROK-US military alliance, and implementing the CMA. The establishment of military trust between the two Koreas through the faithful



President Moon's keynote speech at the UN General Assembly (September 2019)

²⁾ The state wherein the armistice agreement is replaced by a peace treaty and sufficient mutual trust is built to ensure solid peace legally, institutionally, and realistically

³⁾ In connection with the "transformation of DMZ into an international peace zone" set forth in the CMA, the ROK proposed that the international community make efforts and provide assurance for building confidence between the ROK and North Korea through the participation of specialized international organizations, in addition to the two Koreas, for mine removal.

implementation of CMA will greatly contribute to the ROK government's efforts to establish lasting peace on the Korean Peninsula.

Arms Control ⁴⁾

In the Panmunjom Declaration, the ROK and North Korea agreed to a disarmament in stages as military tensions are eased and effective measures for building military confidence are enforced. This was a reaffirmation by the leaders of the two Koreas of the resolve to implement the agreed measures related to existing inter-Korean military confidence building that are included in the July 4th North-South Korea Joint Statement, the Agreement on Reconciliation, Nonaggression and Exchanges and Cooperation, the June 15th North-South Joint Declaration, and the 2007 North-South Summit Declaration.

In order to thoroughly implement the Panmunjom Declaration in from a military perspective, the military authorities of the two Koreas adopted the CMA and reached an agreement to enforce various measures for mutual confidence building. Therefore, both parties agreed to actively promote measures to prevent accidental clashes and build military confidence, creating a new momentum for easing tensions on the Korean Peninsula.

The MND continues to make efforts for arms control so as to create conditions for the complete denuclearization of the Korean Peninsula and establish a lasting peace regime and enhance military stability on the Korean Peninsula. First, while continuing consultations with North Korea to ensure an early launch of the Inter-Korean Joint Military Committee, which was agreed upon by both parties to discuss various military issues, the MND is seeking to enforce realizable measures to implement effective arms control considering the changes in the security environment and progress in the measures for building military confidence between the two Koreas. In addition, the MND is striving to steadfastly promote measures to prevent accidental clashes and build military confidence by genuinely transforming the DMZ into a peace zone, turning the area of the NLL in the West Sea into a maritime peace zone, building a consultative regime available at all times for the military authorities of the two Koreas, and installing hotlines. Based on the progress on easing military tensions and building confidence as a result of a favorable response from North Korea, the MND will promote operational arms control⁵⁾ by stages such as limiting and controlling major military activities and limiting and adjusting the deployment of military forces. Furthermore, based on the progress made on the denuclearization of the Korean Peninsula and establishment of a peace regime, the MND will gradually promote structural arms control⁶⁾ in stages to substantially guarantee peace.

4) Stabilization of the arms race between two potential enemy states; in other words, all efforts toward increasing security by eliminating or minimizing the risks and burdens of war through operational and structural arms control (military forces, weapons) of military force and imposition of sanctions against any violation of the agreed-upon terms.

5) Operational arms control reduces and prevents the risk of surprise attacks and war by constraining the operations and deployment of military forces without changing the structure or scale of military forces.

6) Any measures adopted to maintain the stability and balance of the military by structurally constraining or reducing military forces and weapons systems as practical elements of forces including their scale and organization.

In addition, the MND has continued to publish the "Arms Control Policy" since 1991 to develop its arms control policies and provide the basic direction and guidelines for the implementation of arms control. The Arms Control Policy is an objective plan for realizing the national defense policy direction presented in the "National Defense

Strategy Guidelines" and the "National Defense Policy" in terms of arms control. The policy was revised and published on January 2020 after reflecting the changes in the security situation on the Korean Peninsula and surrounding areas. Meanwhile, the MND is also striving to reinforce its capabilities to develop arms control policies by holding seminars to gather opinions from security experts at home and abroad and publish a collection of data related to arms control.

While establishing a robust defense readiness posture and stably managing the military situation, the MND will continue to pursue arms control policies thoroughly based on the principle of reciprocity.



Arms control session at the 2020 SDD (September 2020)

Military Assurance for Inter-Korean Exchanges and Cooperation and Resolution of the ROK POW Issue

To invigorate inter-Korean exchanges and cooperation as agreed upon by the two leaders in the Panmunjom Declaration and the Pyongyang Joint Declaration, the ROK Armed Forces has been supporting the government's efforts to guarantee security on inter-Korean traffic on the ground, at sea, and in the air, and carry out military assurance measures by utilizing military communication lines. Furthermore, with regard to humanitarian assistance, the ROK Armed Forces is striving to solve the ROK POW issue and support their settlement in the ROK.

1. Military Assurance for Inter-Korean Exchanges

Overview

Through the Panmunjom Declaration and the Pyongyang Joint Declaration, the two Koreas agreed to devise substantive measures and military assurance measures to invigorate inter-Korean exchanges and cooperation in a variety of fields and to encourage visits and contacts. To this end, the two Koreas opened a joint liaison office in Kaesong and promoted inter-Korean railway and road connections and modernization projects. However, North Korea has refused to accept any inter-Korean talks since the collapse of the US–North Korea summit in February 2019, unilaterally shutting down military communication lines in June 2020 under the pretext that ROK civilian groups launched balloons filled with propaganda leaflets over the DMZ to North Korea. The ROK Armed Forces will continue to make preparations to provide immediate military support in the event inter-Korean exchanges and cooperation resume in the future.

Military Assurance for Inter-Korean Traffic

Direct traffic between the two Koreas occurs mostly by ground, with sea and air routes used only occasionally. Ground traffic has been carried out on roads and railways in the Joint Administrative Areas in Transportation Corridors East and West, but rail traffic has been suspended since December 2008. Most of the ground traffic was carried out through Transportation Corridor West to enter the

Kaesong Industrial Complex, only to be suspended in February 2016 following the closure of the complex. Thanks to the progress in relations between the two Koreas, however, ground traffic resumed with North Korean delegations consisting of officials, athletes, and cheering squads traveling to the ROK via roads to participate in the



Ground vehicles escorted across the joint administrative area (West Transportation Corridor)

PyeongChang Olympics and Paralympic Winter Games in February 2018. As a result, ground traffic through the Donghae and Gyeongui lines has been active due to a separated families reunion event in Mt. Kumgang in August 2018, joint survey on the roads of the Gyeongui and Donghae lines conducted in August and December 2018, and joint survey on the railways of the Gyeongui and Donghae lines conducted between November and December 2018. Regular daily traffic was resumed in the Joint Administrative Area in Transportation Corridor West as the two Koreas opened the "Inter-Korean Liaison Office" in the Kaesong Industrial Complex on September 14, 2018 according to the Panmunjom Declaration. In late January 2020, however, as the operation of the Joint Liaison Office was temporarily suspended due to COVID-19, ground traffic on the Gyeongui line was also suspended. If inter-Korean ground traffic begins in earnest through improved inter-Korean relations and invigorated exchanges and cooperation, the ROK Armed Forces will provide military assurance in consultation with the UNC and the military authorities of North Korea and continue to guard and escort inter-Korean traffic within the DMZ.

Maritime traffic was suspended in 2010 when North Korean vessels were banned from operation in ROK waters as a result of the May 24 measures⁷⁾. However, maritime traffic was temporarily resumed in February 2018 when the Man Gyong Bong 92 ferry that departed from Wonsan Harbor, carrying a North Korean art troupe sent to participate in the PyeongChang Olympics, was allowed to enter the port of Mukho. Once maritime traffic is fully resumed, the ROK Armed Forces will take the necessary military actions to guarantee the safety of vessels.

Air traffic has been mainly carried out via a direct route opened on a temporary basis over the West Sea. A North Korean high-level delegation visiting the ROK in February 2018 and a ROK delegation and an art troupe visiting North Korea in March 2018 as well as the delegation visiting North Korea for the inter-Korean summit in Pyongyang in September used the temporary direct route over the West Sea. A direct route opened on a temporary basis over the East Sea, on the other hand,

7) Sanctions imposed by the ROK government against North Korea in response to the sinking of the ROKS Cheonan, announced on May 24, 2010, which included prohibiting North Korean ships from sailing in ROK waters, halting inter-Korean trade (excluding the Kaesong Industrial Complex), banning visits by the ROK citizens to North Korea, suspending new ROK investments in North Korea, and all aid projects.

was used by ROK athletes participating in joint training activities at the Masikryong Ski Resort in North Korea in January 2018 and by a press corps visiting North Korea to cover the decommissioning of a nuclear test site in Punggye-ri in May 2018. In situations where it is necessary for a flight to be carried out via a temporary direct route over the East Sea or West Sea, the ROK Armed Forces provides military assurance for a safe flight through aerial surveillance and military readiness posture.

Operation of Inter-Korean Military Communication Lines

The ROK Armed Forces operates military communication lines inside the Joint Administrative Areas of Transportation Co-

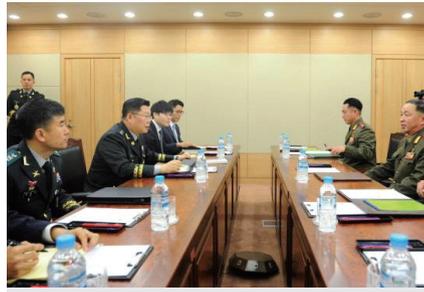
rridors East and West as a direct communication channel between the military authorities of the ROK and North Korea in order to reduce military tensions and provide military assurance for exchanges and cooperation. Following the agreement to install hotlines linking military situation rooms at the 8th inter-Korean military working-level talks in September 2002, a communication line was set up in Transportation Corridor West on September 24, 2002 and in Transportation Corridor East on December 5, 2003. However, as the military communication line in Transportation Corridor East was destroyed in a forest fire in November 2010, and North Korea severed the communication line in Transportation Corridor West subsequent to the closure of the Kaesong Industrial Complex in February 2016, the military communication lines between the ROK and North Korea remained cut off for two years. In this situation, on January 9, 2018, the two sides held inter-Korean senior-level talks and agreed to resume communications through the communication line in Transportation Corridor West and thus the Transportation Corridor West communication line was temporarily reconnected the next day. Subsequently, on June 14, 2018, during the 8th inter-Korean general officer-level talks, the two sides agreed to normalize the military communication lines in Transportation Corridors East and West. And on 25 June, the two sides agreed on the detailed measures for the restoration of military communication lines at an inter-Korean communication working-level contact. The military authorities of the two Koreas completed the restoration of the military communication lines in Transportation Corridors West and East on July 16, 2018 and August 15, 2018⁸⁾, respectively, thereby normalizing all functions. Since then, the military authorities on both sides have made regular calls twice a day as well as unscheduled calls whenever necessary through the restored military communication lines in Transportation Corridors East and West. In addition, for the restoration and implementation of the June 4 agreement⁹⁾ aimed at preventing accidental disputes in the West Sea, the two Koreas resumed regular

8) As part of the steps toward the normalization of military communication lines, the ROK government provided North Korea with the necessary equipment and supplies, which was exceptionally approved by the UN Security Council (UNSC) Sanctions Committee on North Korea on July 14, 2018 to restore the military communication lines between the two Koreas

9) The "agreement on the prevention of accidental naval clashes in the West Sea, the cessation of propaganda activities at the Military Demarcation Line, and the elimination of propaganda tools" was adopted on June 4, 2004 during the 2nd inter-Korean major general-level talks. Provisions to prevent accidental naval clashes as contained in this agreement include:

- ① utilizing the international vessel communication network,
- ② establishing and using rules on marine signal flags and lights,
- ③ exchanging information on illegal third country fishing boats, and
- ④ setting up a communication liaison office in the West Sea.

communication between ROK and North Korean patrol ships using the "international vessel communication network" on July 1, 2018 as well as through "exchanges of information on illegal fishing boats of third countries" on November 2. Although North Korea unilaterally severed the military communication lines on June 9, 2020, the



Inter-Korean working-level talks on communication (June 2018)

ROK Armed Forces remains ready to resume contact at any time upon any improvement in inter-Korean relations. By utilizing the military communication lines, the ROK Armed Forces has provided seamless support for various exchange and cooperation projects which include the establishment and operation of the Joint Liaison Office, separated families reunion events, and inter-Korean railways and roads connection and modernization projects. Accordingly, the MND, making the most of the military communication lines, will continue to play a pivotal role in not only facilitating military assurance for inter-Korean exchanges and cooperation but also effectively contributing to easing military tensions and building confidence.

2. Resolution of the ROK POW Issues

ROK POWs: Whereabouts, Family Reunions, and Repatriation

Following the return of the late First Lieutenant Cho Chang-ho in 1994, the ROK government enacted a new law on the ROK POWs detained in North Korea titled the "Act on the Repatriation, Treatment of the Republic of Korea Armed Forces Prisoners of War" while preparing government-wide measures to repatriate and support the POWs. Through inter-Korean dialogue, the ROK government has continuously urged North Korea to assist in its effort to determine the number of POWs who are still alive and repatriate them, stressing that this is the foremost issue that needs to be addressed for the reconciliation of the two sides and humanitarian concerns. As North Korea has consistently denied the existence of POWs since the conclusion of the Armistice Agreement, however, it is not easy to fundamentally resolve this issue.

Against this backdrop, 80 ROK POWs escaped North Korea on their own from 1994 to 2010. After 2011, however, there has been no return of ROK POWs due to the old age of POWs and enhanced surveillance of North Korean authorities to

[Chart 8-1] Repatriated POWs

(As of November 2020, unit: persons)

Year	Total	1994	1997	1998	1999	2000	2001	2002	2003
POWs	80	1	1	4	2	9	6	6	5
Year	2004	2005	2006	2007	2008	2009	2010	2011 - 2020	
POWs	14	11	7	4	6	3	1	-	

prevent their escape. As of the end of November 2020, it has been confirmed that 21 repatriated POWs are still alive.

The ROK government is making every effort to ensure the safe repatriation of POWs and their families who escape from North Korea to a third country. When a POW and his family members are known to have escaped from North Korea, a government-wide POW task force is formed to guarantee their personal safety as part of the protection extended to citizens abroad and to carry out tasks for their speedy repatriation. In 2015, the "Act on the Repatriation, Treatment of the Republic of Korea Armed Forces Prisoners of War" was revised to enable the ROK government to assist in the repatriation of the remains of fallen POWs.

During the inter-Korean ministerial talks and Red Cross talks held following the inter-Korean summit in June 2000, the two sides agreed to start discussing and seeking solutions for the POW issue along with the separated family issue. In February 2006, during the 7th inter-Korean Red Cross talks, the two sides agreed to negotiate on and solve the issue of verifying whether those who went missing in action and after the war are still alive in connection with the separated family issue. This principle was reaffirmed during the 20th inter-Korean ministerial talks held in February 2007 and the 8th inter-Korean Red Cross talks in April. So far, information on 56 POWs (whether they are alive or have passed away) have been confirmed, and 18 of them have been reunited with their families. The ROK government continues to make efforts to address the issue of POWs by including them in the scope of separated families via the "3rd Master Plan for the Promotion of Exchanges Among Separated Families in the Two Koreas" formulated in December 2019.

Going forward, the MND will continue to reinforce its cooperation with third countries and relevant agencies to ensure the safe repatriation of POWs and their families if they defect from North Korea, while resolving fundamental issues such as verifying whether the POWs are alive and their repatriation through various inter-Korean talks.

Supporting the Resettlement of the Repatriated ROK POWs

The MND supports repatriated POWs to settle down and spend their lives in their homeland in an early and stable manner pursuant to the Act on the Repatriation, Treatment of the Republic of Korea Armed Forces Prison-

ers of War. The MND has also made it possible for repatriated family members of a POW who died in North Korea to register as family members of a prisoner of war from the place of detention and to receive separate benefits for each generation in addition to treatment and support as North Korean defectors.

Since 2012, the MND has selected private sector firms with the appropriate specializations to assist in the settlement process of repatriated POWs in the form of house visits, psychological and legal counseling, etc., thereby actively carrying out the project to provide support for their settlement in the ROK. In 2013, the ROK government revised the relevant law to help repatriated POWs settle down in a more stable manner by providing compensation in the form of pension and rental housing unit. In addition, the MND invites POWs to a wide variety of events, including Armed Forces Day events, and provides support for burial if a POW dies.

The MND will continue to lead government-wide efforts to improve policies for the stable resettlement of repatriated POWs and cooperate with associated agencies.



A special event organized for repatriated POWs (June 2019)



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