

Chapter 1

Changes and Challenges in the Security Environment



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G20 Summit in Buenos Aires (November 2018)

Section 1 Global Security Environment

Amid persistent security threats fueled by traditional conflict factors, such as territorial, religious and ethnic disputes, transnational and nonmilitary threats have been gaining ground worldwide. By jointly responding to various security threats, such as terrorism, cyberattacks, and infectious diseases, countries around the globe are strengthening international cooperative efforts to contribute to regional stability and world peace.

1. Persisting Security Threats from Traditional Causes of Conflict

Traditional causes of conflict such as territorial, religious and ethnic disputes continue to present threats to security worldwide.

In East Asia, the United States is building a cooperative system with its allies and partners to counter the expanding influence of China and Russia, and respond to security threats. In response to China's pursuit of the Belt and Road Initiative, the United States is in the process of developing a concrete version of the Indo-Pacific Strategy¹⁾, centered on cooperation with Japan, Australia, and India.

Europe faces various internal and external challenges including a massive influx of refugees from Syria and North Africa, terrorist threats, and the United Kingdom's decision to exit the European Union (EU). The EU has been seeking to resolve the refugee problem through the introduction of the refugee quota system, but discord among EU member states persists amid the rise of far-right parties supported by the proliferation of anti-EU, anti-Islam, and anti-refugee sentiments. Anti-Islam and anti-immigration sentiments in the region continue to grow

¹⁾ Since US President Donald Trump presented a "free and open Indo-Pacific initiative" during his tour to Asia in November 2017, the United States has been developing it into a more concrete "Indo-Pacific Strategy."

as the Islamic State of Iraq and Syria (ISIS) carried out multiple terrorist attacks against civilians and public locations in Belgium, the United Kingdom, Spain and other European countries.

Meanwhile, in December 2017, 25 EU member states, with the exception of Denmark, Malta, and the United Kingdom, agreed to establish the Permanent Structured Cooperation (PESCO) for joint investment into the development of new weapons and military equipment, and the enhancement of military operational capabilities. They agreed on 17 projects to be adopted under PESCO with the intent to strengthen the cooperation in the military field.

In the Middle East, violent extremist groups such as the ISIS have waned, but instability persists, as previously dormant regional tension exploded into conflict. Syria remains unstable due to the conflict between the Assad regime and rebel forces as well as the Turkish forces' military operations. The civil war in Yemen, which has lasted for many years, is unlikely to end in the near future despite various efforts for peace. Uncertainties in the Middle East region have been growing even further with the withdrawal of the United States from the Joint Comprehensive Plan of Action (JCPOA²⁾) with Iran and the restoration of sanctions against Iran as well as Palestine's fierce opposition against the relocation of the U.S. Embassy to Jerusalem.

Political and economic unrest also remain unabated in Africa, where countries are rocked by political struggles between political factions, ethnic conflicts, and acts of terrorism by violent extremist groups due to persisting problems such as underdevelopment, lack of national capabilities, and vulnerable governance. In Somalia, a suicide truck bomb attack launched by Al-Shabaab killed and injured around 500 people in October 2017. Acts of terrorism by violent extremist groups, such as Boko Haram and Al-Shabaab, are continuing in Nigeria, Somalia, Mali, and other African nations.

2. Diversification and Widening Scope of Transnational, Nonmilitary Threats

The ISIS, which has lost its strongholds in Iraq and Syria, is expanding its presence to North

²⁾ The Joint Comprehensive Plan of Action is an agreement on the Iranian nuclear program signed in July 2015 by five permanent members of the United Nations Security Council plus Germany (P5+1).

Africa, Southwest Asia, Southeast Asia, and Europe, triggering concerns that it is evolving into the borderless ISIS 2.0.³⁾

Rising cyberattacks constitute another serious type of transnational threat. There have been various cases wherein the computing systems of not only private-sector firms but also government institutions were infiltrated, causing serious system failure and collapse. Cyber-threats persist globally, with major attacks including, the WannaCry ransomware attack in May 2017, the NotPetya ransomware attack in June 2017, and the attack on the Turkish cryptocurrency exchange in March 2018. Many countries around the world are accelerating efforts to develop a strategy for responding to cyber-threats.

The spread of new types of infectious diseases has emerged as a cause of heightening concern to the global community. The Ebola epidemic in 2013 was followed by the outbreak of the Middle East Respiratory Syndrome (MERS) in 2015, which rapidly spread to 26 countries. In recent years, patients infected by the Zika virus have been identified in 73 countries. The United Nations Security Council and the wider international community have recognized infectious diseases as a major security threat⁴⁾ and are working towards revamping response capabilities against this new threat.

Natural and man-made disasters are taking place all around the globe. They include the Mexico earthquake and the Bali volcano eruption in 2017; the earthquakes in Indonesia and Taiwan, and the volcanic eruption in Japan, the Philippines, and Hawaii in 2018. Such large-scale natural and man-made disasters are difficult to forecast, and the economic damages that they cause are growing. There is a limitation in the capabilities of an afflicted nation to carry out quick and effective relief and recovery alone.

3) The major features of ISIS 2.0 include the global spread of terrorism; an increase in acts of terrorism, where no one claims responsibility; and nomad terror.

4) In UN Security Council Resolution 2177 adopted on September 18, 2014, it is stated that "the unprecedented extent of the Ebola outbreak in Africa constitutes a threat to international peace and security."

3. Bolstering Cooperation with the International Community to Respond to Security Threats

In order to respond to security threats that go beyond national efforts for resolution, closely coordinated international cooperation is more necessary than ever.

As cyber-threats are further advancing and posing serious harm to national security beyond all borders, cooperation on the level of international community is strongly recommended. To build a reliable cyberspace and effective response measures against the threats, the international community is actively cooperating through various platforms including the UN, the Association of Southeast Asian Nations (ASEAN) Regional Forum (ARF), and Conference on Cyberspace, as well as the ASEAN Defense Ministers' Meeting-Plus (ADMM-Plus), a regional multilateral security forum.

In September 2015, during the second Global Health Security Agenda (GHSA) Senior Officials meeting, representatives of member states reaffirmed the shared perception that the spread of infectious diseases, such as MERS and the Zika virus, presents political, economic, social, and security threats to the global community, and agreed to carry out state-level cooperation.

Efforts to expand international cooperation to ensure quick relief and recovery operations in the aftermath of large-scale natural and man-made disasters are also intensifying. Through the UN Global Disaster Alert and Coordination System (GDACS), real-time information on disasters that occur around the globe as well as the status of relief operations and relief plans are made available worldwide. Regional multilateral security consultative bodies, such as the ARF and the ADMM-Plus, are also exploring innovative disaster relief methods and conducting drills.

Section 2 Security Environment of Northeast Asia

In Northeast Asia, the strategic competition between the United States and China is intensifying, while Japan and Russia are competitively building their military strength, mainly their naval and air forces, to expand their influence. Such security situation, combined with the denuclearization of the Korean Peninsula, is creating further uncertainties and volatility in the regional security of Northeast Asia.

1. Growing Volatility in the Regional Security Landscape

Under the philosophy of “peace through strength,” the United States classified China and Russia as revisionist powers in its National Security Strategy (NSS)⁵⁾ and National Defense Strategy (NDS)⁶⁾, and officially declared the intent to commit to a long-term, strategic competition with them. Meanwhile, through the pursuit of the Indo-Pacific Strategy, the United States is strengthening bilateral and multilateral cooperation with countries in the region, mainly the four-way cooperation with Japan, Australia, and India. With the increased defense budget, the United States continues to boost its investment to modernize the military forces and enhance its readiness posture by reinforcing its forces deployed to the Asia-Pacific region, strengthening conventional forces, modernizing nuclear deterrence capabilities, and bolstering missile defense capabilities on the U.S. mainland.

China set the goal to build a world-class military by 2050 in a blueprint for President Xi Jinping’s second term unveiled at the 19th National Congress of the Communist Party of China in October 2017. It sets out China’s plan to modernize socialism based on a moderately prosperous

5) Top-level document prepared by the executive branch of the US government for Congress

6) The NDS is a report issued by the US Department of Defense based on the NSS. It provides guidance for developing the National Military Strategy (NMS) of the US Joint Chiefs of Staff and other related documents.

society (xiaokang shehui)⁷⁾ between 2020 and 2035 and to establish a strong, prosperous, and culturally advanced socialist country by 2050. China is expected to pursue foreign policies that promote the nation as a global power.

Japan is adhering to the principles of the ‘exclusively defense-oriented policy’⁸⁾ based on its pacifist Constitution. However, it is also pursuing a transition to a more proactive defense policy under the reasoning of “proactive pacifism based on the principles of international cooperation”⁹⁾ to provide safety for Japan and establish peace, stability, and prosperity in the international community. In 2018, Japan began to transform the existing “Dynamic Joint Defense Force” vision of the Self-Defense Force into the concept of “multidimensional defense capabilities,” reflecting the changes in the security environment including North Korea’s nuclear and missile development, and China’s buildup of military strength.

Russia is expected to implement increasingly active and firm foreign policies in the international stage, especially toward Northeast Asia, Europe, and the Middle East, to accomplish the “rebirth of Russia as a great superpower.” Russia will likely pursue the New East Policy¹⁰⁾ to develop the Russian Far East and overcome the economic sanctions imposed by the international community after Russia annexed Crimea. Russia is also expected to continue expanding its military influence in the Asia-Pacific region in close coordination with China.

7) ‘Xiaokangshehui’ 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, ‘xiaokangsheshui’ refers to a middle-class society in which its members are able to enjoy culture and leisure.

8) It is a passive defense strategy where a defensive force is used only in the event of an attack, the extent of use of a defensive force is kept to the minimum necessary for self-defense, and the defense capabilities to be possessed and maintained by Japan are limited to the minimum necessary for self-defense.

9) A fundamental national security concept written in Japan’s National Security Strategy. The idea is that Japan should contribute to the peace, security, and prosperity of the international community more proactively than ever before to the extent that matches Japan’s national power.

10) In pursuit of the New East Policy, Russia created the Ministry for the Development of the Russian Far East in 2012 to develop the Russian Far East; promote a balanced development of its regions through cooperation with the Asia-Pacific region; and, eventually, help achieve the revival of Russia as a superpower. A full implementation of the policy began with the hosting of the first Eastern Economic Forum in 2015.

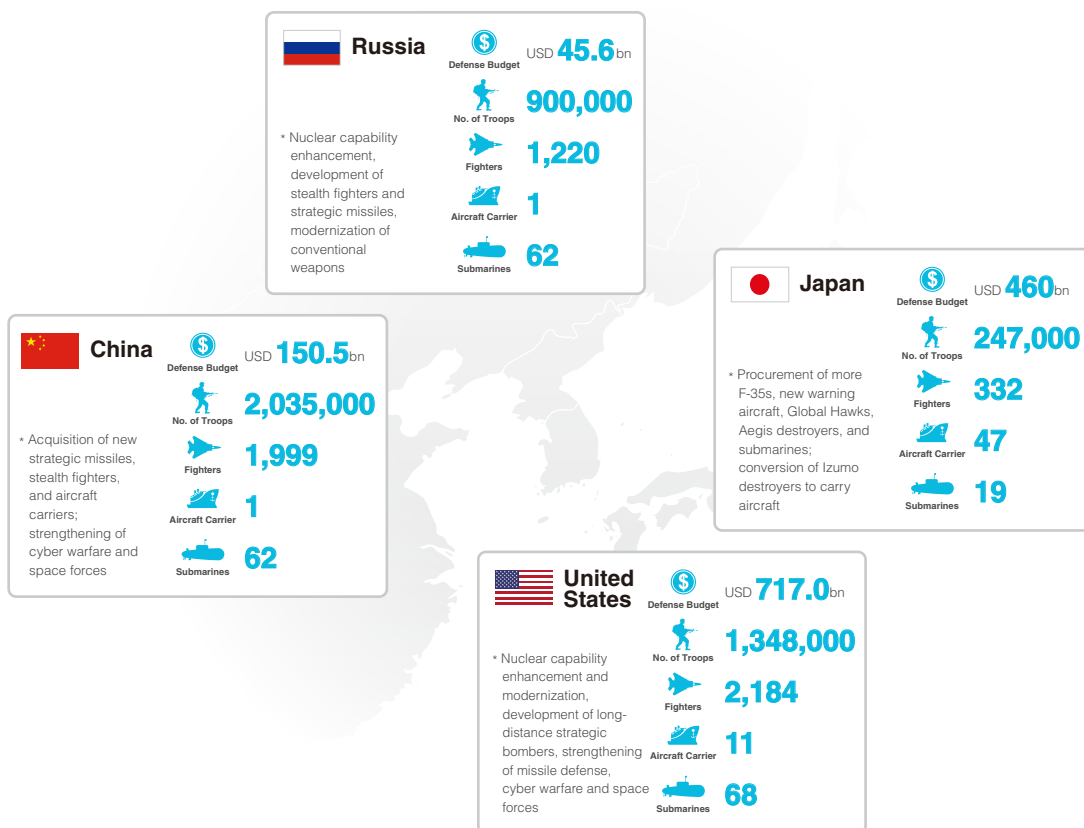
2. Defense Policies and Military Developments of Neighboring Countries

While the United States maintains its military superiority in Northeast Asia, China, Japan, and Russia are vying to build up their military strength, mainly their naval and air forces. [Chart 1-1] below summarizes the military strength of the four countries that surround the Korean Peninsula.

| United States | In the 2017 National Security Strategy (NSS) and the 2018 National Defense Strategy (NDS), the United States set its core strategic goals as protecting the homeland, promoting national prosperity, preserving peace through strength, and advancing American influence. It underscored the need to maintain its military superiority to use strength to support its efforts to meet the objectives. Meanwhile, having classified China and Russia as revisionist powers, the United States is in long-term competition with the two countries in all areas including politics, economy, and military.

Under the Indo-Pacific Strategy, the United States is bolstering cooperation with existing allies and partners, and seeking opportunities for new partnerships and multilateral cooperation that respect the sovereignty of the countries in the region and promote the prosperity of all parties. As part of such efforts, the United States is building an expanded security network by strengthening bilateral ties in the region and cooperation with the ASEAN as well as boosting smaller-scale multilateral cooperation, as seen in the Korea – United States – Japan, United States – Japan – Australia, and United States – Japan – Australia – India relationships. The United States has also emphasized the need to defend freedom of navigation in accordance with international laws, resolve conflicts peacefully, denuclearize the Korean Peninsula, and preserve the nonproliferation regime in Northeast Asia. In line with these policies, it renamed the Pacific Command as the Indo-Pacific Command in May 2018, and expanded the U.S. military presence in the region and stepped up military drills and security cooperation.

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



* Sources: *The Military Balance 2018* (International Institute for Strategic Studies, February 2018) and the National Defense Authorization Act for Fiscal Year 2019.

On the military front, the United States is establishing an optimized Joint Forces Support System by incorporating new operational requirements into the Joint Concept for Access and Maneuver in the Global Commons (JAM-GC). It is also building multilayered missile defenses and modernizing the nuclear triad consisting of Intercontinental Ballistic Missiles (ICBMs), Submarine-Launched Ballistic Missiles (SLBMs), and strategic bombers. The United States has deployed advanced naval and air forces 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 undersea vehicles, and strategic bombers.

In August 2018, President Trump signed into law the National Defense Authorization Act (NDAA) for Fiscal Year 2019, which passed Congress with bipartisan support at both the House of Representatives and the Senate. This allows an increase in the defense budget, which has grown every year since 2016, and enables stable funding for the U.S. pursuit of “peace

through strength.” The 2019 NDAA authorizes a comprehensive range of military increases—the USD 17 billion year-on-year increase in defense budget, which reaches USD 717 billion and represents about 3.1% of the U.S. Gross Domestic Product (GDP); the addition of 24,100 active-duty personnel; the strengthening of readiness posture; measures against new threats; modernization plans for each military department; and support for allies and partners.

The U.S. Army plans to increase the current personnel end strength of 476,000 by 11,500 and bolster its force by procuring approximately 3,000 tactical vehicles and 200 multipurpose armored vehicles. Moreover, the Army Future Command (AFC) was established in June 2018 under the U.S. Department of the Army to lead the modernization of the military. The U.S. Navy will expand its end strength by 8,600 from the current 512,000, and has approved force buildup projects to procure 2 nuclear submarines, 1 aircraft carrier, and 3 destroyers. The U.S. Air Force will add 4,000 to the current 325,000 active-duty end strength and focus on force buildup using the existing acquisition and performance improvement budget for fighters, aerial refueling tankers, and transport aircraft. In addition, it is in the process of reinforcing the ground attack and electronic warfare capabilities of the F-22, and developing a Long-Range Strike Bomber (LRS-B) to replace the B-2 and the B-52.

Meanwhile, the 2019 NDAA limits the drastic reduction of the United States Forces Korea (USFK) by requiring the U.S. Secretary of Defense to certify to Congress the reason for reduction when he intends to cut the number below 22,000. At the ROK–U.S. Defense Ministerial Meeting in June 2018, U.S. Secretary of Defense Jim Mattis emphasized that the current size of the USFK, will remain unchanged and that the United States will maintain its commitment to defend the Republic of Korea (ROK) using all ranges of diplomatic and military capabilities.

The United States has continued efforts to strengthen its security posture in space and cyberspace. In August 2017, the U.S. Cyber Command was elevated to an integrated command with an independent command system. In August 2018, the United States made an official announcement to create a Space Force to effectively respond to challenges in the domain of space. The United States strives to maintain its relative superiority in newly emerging security domains.

| China | China has been modernizing its military and building a highly efficient joint operations command system. In his work report at the 19th Party Congress, President Xi Jinping proposed a road map for achieving mechanization and making major progress toward

informatization by 2020, to modernize China's national defense and armed forces by 2035, and to build a globally competitive military by the mid-21st century.

China has accelerated its reform of the armed forces. The 2018 plenary sessions of the National People's Congress and the Chinese People's Political Consultative Conference approved a defense budget of CNY 1,106.9 billion, which is an 8.1% increase from the previous year. China also fulfilled the objective to reduce troops by 300,000 personnel in 2.5 years since the plan was announced in 2015.

The People's Liberation Army Ground Force (PLAGF) is transforming its regional defensive concept to a full-spectrum combat concept to meet the strategic requirements of maneuvering operations and multidimensional attack and defense. To achieve the transformation, the PLAGF has been reducing the size of the units while further mechanizing the forces and enhancing sustainment capabilities.

The PLA Navy (PLAN) has been developing an open sea protection strategy, which follows the coastal defense strategy and the offshore waters defense strategy. The PLAN has also been improving long-range power projection capabilities by deploying the Liaoning aircraft carrier in 2012 as well as continuing efforts to commission the first domestically manufactured aircraft carrier.

The PLA Air Force (PLAAF) has shifted the focus of its strategy from the protection of the mainland to offensive and defensive operations, motivated by modern wars such as the Gulf War and the Kosovo War. As a result, the number of its interceptor fighters dedicated to the protection of the mainland has been reduced, while that of bombers and strategic bombers for offensive missions has seen a steep increase. The PLAAF has obtained more aircraft that support long-range operational capabilities, including airborne early warning and control aircraft, transport aircraft, and aerial refueling tankers, and is accelerating its modernization by procuring next-generation fighters.

In order to improve second-strike capability and intermediate-range precision strike capability, the PLA Rocket Force (PLARF) deployed the DF-26 next-generation intermediate-range ballistic missile along with the new DF-41 ICBM. The PLARF is reportedly developing a new weapons system to counter the U.S. missile defense systems; it recently flight-tested a DF-17, a new medium-range ballistic missile capable of carrying a Hypersonic Glide Vehicle (HGV) warhead.

The Strategic Support Force (SSF), a new branch of the PLA established on December 31,

2015, reportedly carries out missions to enhance the quality of the PLA's operational capabilities including information, electronic, cyber, space, and psychological warfare operations.

Recently, there have been many cases where Chinese military aircraft entered the Korea Air Defense Identification Zone (KADIZ) without prior notice and flew close to ROK territorial waters. Such incidents raise regional tension and may lead to collisions with ROK military or civil aircraft. In response, the Ministry of National Defense (MND) called in the military attachés of the Chinese Embassy in Seoul over seven occasions¹¹⁾ and made strong complaints on the incidents, demanding China's measures to prevent their recurrence.

| 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 U.S.–Japan Defense Cooperation” in April 2015, and amending national security laws and regulations¹²⁾ in September of the same year, Japan created legal basis to exercise 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 U.S. 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, the protection of U.S. and other foreign troops in action with the JSDF, and security assistance and escort missions in the context of peacekeeping operations.

In late 2018, Japan began transforming the vision of its forces called “Dynamic Joint Defense Force” to the concept of “multidimensional Joint Defense Force,” reflecting the changes in the security environment including North Korea's nuclear and missile development and China's military strength buildup. To support the conversion, Japan revised the National Defense Program Guidelines and the Mid-Term Defense Plan, and confirmed the 2018 defense budget

¹¹⁾ On February 27, April 28, July 27, August 29, October 29, November 26, and December 27 in 2018

¹²⁾ 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.

of JPY 5,298.6 billion, which increased by 1.3% compared to the previous year.

The Japan Ground Self-Defense Force (JGSDF) has been pursuing the acquisition of 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 Command¹³⁾ for the rapid and flexible employment of its divisions and brigades; deployed a coastal observation unit near Senkaku/Diaoyudao Islands; and launched the Amphibious Rapid Deployment Brigade, tasked with amphibious operations. The JGSDF plans to reorganize some of its divisions and brigades into Rapid Deployment divisions and brigades to quickly respond to future situations in territorial islands.

The Japan Maritime Self-Defense Force (JMSDF) has been upgrading the response capabilities of its escort force and carrying out force buildup¹⁴⁾ for its submarine and fixed-wing patrol aircraft units in order to defend surrounding seas and secure Sea Lines of Communications.

The Japan Air Self-Defense Force (JASDF) is maintaining air alert and warning units for the 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 flight units to strengthen the defense posture in the southwestern region. By 2023, the JASDF plans to deploy 42 new F-35A fighters, new airborne early warning aircrafts, long-endurance Unmanned Aerial Vehicles (UAVs), new air refueling tankers, and cargo aircraft.

In preparation for cyber warfare, the JSDF is improving its mission capabilities by augmenting the SDF C4 (Command Control Communication Computers) Systems Command and the Cyber Defense Unit which was created in March 2014, by integrating the cyber warfare functions of the JGSDF, JMSDF, and JASDF. The long-term plan of the JSDF is to integrate the two units and create a space and cyber command in 2020. The JSDF is also planning to establish a surveillance system to monitor other countries' satellites in space as well as a unit dedicated to the surveillance of space by 2022.

In addition to the aforementioned force buildup, Japan created an additional “unified

¹³⁾ 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.

¹⁴⁾ 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. It will maintain the number of fixed-wing patrol aircraft at 65, a major share of which are the new P-1 patrol aircraft. A plan to convert the Izumo-class destroyers to carry the F-35B is under review.

command”¹⁵⁾ and reorganized its military command structure to jointly command its ground, maritime, and air self-defense forces. The intent is to allow the Chief of the Joint Staff to focus on unit employment and his advisory role to the Prime Minister in case of contingency.

| Russia | Russia has strived to build defense capabilities that enable active response to internal and external threats. To do so, it has implemented bold defense reforms including structure and organization reform of the Russian Armed Forces, salary increases for servicemembers, and the improvement of military housing. Russia had modernized 59% of its combat equipment by 2017 as per its force buildup efforts and strengthened its nuclear deterrence capabilities by creating and expanding strategic units including the Yars ICBM regiment. Russia is planning to invest about USD 34 billion over the course of 8 years from 2018 for the modernization of its weapons system. The Russian Armed Forces is actively responding to existing regional threats by conducting exercises tailored to each military district in vast and diverse operational environments.

The Russian Ground Forces has enhanced its joint operations capabilities through realistic exercises that vary by military district. In 2017, the Western Military District conducted the Zapad-2017 exercise to prepare for threats from North Atlantic Treaty Organization (NATO) in the border area. Some 13,000 troops participated in the military exercise, which also involved Russia’s major strategic weapon systems including the Sarmat ICBM and Armata tanks.

In 2018, the Russian Navy built three Borei-class strategic nuclear submarines and is continuing to strengthen its nuclear deterrence capabilities. The Russian Navy enhanced its combined maritime operations capabilities through a routine combined training with China in 2017 and continues to bolster its military capabilities to respond to regional strategic competition.

The Russian Aerospace Forces has been developing the MiG-35 multi-role fighter and the SU-57 stealth fighter under the goal to deploy them by 2018. Meanwhile, the TU-160 long-range strategic bomber upgrade project is expected to bolster the forces’ nuclear deterrence capabilities.

The Strategic Missile Troops successfully fired the Topol-M strategic nuclear missile in 2017, and three nuclear powered Yars ICBM regiments have been fielded.

¹⁵⁾ The creation of the unified command that controls the JGSDF, JMSDF, and JASDF is written in the National Defense Program Guidelines and the Mid-Term Defense Plan, the basic guidelines for the reorganization of Japan's defense capabilities that were revised in December 2018.

The Eastern Military District created Tu-95 and Tu-22 strategic bomber divisions and is strengthening the readiness posture in the Russian Far East region through large-scale air mobility exercises, amphibious training of its special units, and active counterterrorism training. The Russian Pacific Fleet, in particular, enhanced its air defense force by replacing the S-300 air defense batteries with the S-400 air defense batteries.

President Vladimir Putin will likely maintain the current foreign policies and military strategy during his fourth term while developing the underdeveloped Far East under the New East Policy and attempting to expand Russia's military influence in the Asia Pacific region.

Section 3 North Korean Situation and Military Threats

Since the succession of power in 2011, North Korea has strived to gain the upper hand in inter-Korean relations and engaged in diplomacy in an attempt to end sanctions and isolation caused by its nuclear development. North Korea had continued its provocations in the forms of Weapons of Mass Destruction (WMD) including nuclear weapons and ballistic missiles, expanding its conventional forces, carrying out armed provocations in border areas, conducting cyberattacks, infiltrating small-sized drones. From 2018, however, Pyongyang has endeavored to re-establish its standing in the international community by advocating denuclearization of the Korean Peninsula and projecting a peaceful image through improved inter-Korean and foreign relations.

1. North Korean Situation

| Internal Situation | Since the succession of power in 2011, North Korea has maintained the stability of the regime through reorganization and reshuffling. The regime is seeking a strategic change by adopting a new strategic line in 2018 by focusing all efforts on building a socialist economy, replacing the 2013 “byungjin” policy of simultaneously developing its economy and nuclear weapons.

At North Korea’s 3rd Conference of Party Representatives on September 28, 2010, the succession of power was made official. The succession occurred rapidly in accordance to the supreme leader’s final testament on December 17, 2011, and the regime sought stability by reshuffling of the party, state, and military leadership. In May 2016, at the 7th Party Congress, the top decision-making organ of the Korean Workers’ Party was held, followed by the 4th session of the 13th Supreme People’s Assembly in June. During this period, the State Affairs Commission was newly established to replace the National Defense Commission, and the Chairman of the State Affairs Commission was announced as the official head of the regime, completing the institutional and legal governing framework for the regime change.

The new regime focused on the enhancement of nuclear and missile capabilities, and declared

the completion of the so-called “state nuclear capability” after launching various types of ballistic missiles, and conducting the sixth nuclear test on September 3, 2017. In the 2018 New Year’s address, Pyongyang argued for the justification of its “byungjin” policy of simultaneously developing its economy and nuclear weapons, highlighting the plan to mass-produce and deploy nuclear warheads and underscoring the necessity to bolster economic independence and improve the people’s living conditions.

Since the new strategic line of focusing all efforts on building a socialist economy was announced at the 3rd Plenary Meeting of the 7th Party Central Committee on April 20, the regime has urged the people to make economic achievements with the leadership undertaking more visits to industrial sites and media outlets intensively covering subjects like self-reliance, science and technology, and the drive for an increased production.

North Korea is also attempting to end its isolation from the international community while seeking to strengthen the solidarity of the regime. On September 9, in celebration of the 70th anniversary of its foundation, North Korea granted amnesty to prisoners for the first time in three years and held a large-scale military parade and the Mass Games performance and invited foreign high-ranking officials while attracting tourists through active international marketing. Meanwhile, concerned about the influx of foreign culture and the potential loosening of people’s ideological commitments due to strategic and policy change, Pyongyang is strengthening its propaganda campaign on the superiority of the socialist system.

North Korea is expected to continue its efforts to maintain the stability of the regime, improve its economy through institutional and legal reforms, and create a favorable external environment for itself. In pursuit of its goal to improve the living standards of its people, Pyongyang will likely use all available workforce and resources to generate economic achievements by 2020 when the implementation of the five-year strategy for national economic development comes to an end. Moreover, to lay the groundwork for mid- and long-term economic growth based on development in science education, North Korea will likely strive to expand its science infrastructure and improve science education both qualitatively and quantitatively.

| Inter-Korean Policy | North Korea has been attempting to induce changes in the ROK government’s North Korea policy by continuously professing the need to improve inter-Korean relations while simultaneously creating military tensions tailored for situational change and political objectives.

In January 2016, North Korea conducted its fourth nuclear test. While these measures were ongoing, North Korea escalated the crisis by launching a long range missile on February 7. On February 10, the ROK government announced the suspension of all operations at the Gaesong Industrial Complex. North Korea responded by closing the entire complex, and Inter-Korean relations further exacerbated with North Korea's fifth nuclear test on September 9.

In the 2017 New Year's address, North Korea professed the need to improve inter-Korean relations and proposed to hold a "pan-Korean, grand meeting for reunification." At the same time, North Korea shifted the blame for the deteriorated inter-Korean relations onto the ROK government, designated 2017 as the "year of perfecting combat preparedness," and declared its plan to pursue additional nuclear development and field delivery systems.

North Korea continued to focus on upgrading its nuclear and missile capabilities by pursuing its sixth nuclear test and acquiring diverse missile delivery systems including Inter-Continental Ballistic Missiles (ICBM) beginning with the Pukguksong-2 in February that year. On May 14, only four days after the inauguration of the 19th ROK president, Pyongyang increased tension by test-launching a ballistic missile. The adverse relations continued as North Korea argued that sanctions and dialogue could not go together in reaction to the ROK government's presentation of the "Berlin Initiative" on July 6 and the proposals for inter-Korean military and Red Cross talks on July 17. North Korea, instead, conducted another nuclear test and more missile launches.

The ROK government, however, continued its efforts to improve inter-Korean relations and finally, North Korea responded. In the 2018 New Year's address, Pyongyang displayed its intent to improve Inter-Korean relations through the 2018 Winter Olympics in Pyeongchang. North Korea later sent special envoys and a delegation to participate in the event, paving the way to enhance inter-Korean relations. On April 27, an inter-Korean summit took place for the first time in 11 years since 2007, and the "Panmunjom Declaration," aimed at improving inter-Korean relations and establishing a peace regime on the Korean Peninsula, was adopted and laid the groundwork for inter-Korean cooperation to expand.

Since then, North Korea has maintaining both state and civilian contact with the ROK and has been faithfully implementing the agreements. Following the fourth inter-Korean Summit on May 26, the fifth summit took place from September 18 to 20 in Pyongyang, during which the "Pyongyang Joint Declaration" and the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain were adopted. On the one hand, Pyongyang

has made positive responses to a series of measures to improve inter-Korean relations and ease military tensions including the demilitarization of the Joint Security Area (JSA). On the other hand, Pyongyang has been selectively critical of issues related to security situations such as force buildup.

In general, North Korea is expected to maintain inter-Korean cooperation and exchanges to create an external environment favorable to its economic development. The Inter-Korea Liaison Office will establish a full-time state-level contact for matters in diverse areas including Red Cross, military, and road infrastructure. North Korea will likely create an atmosphere for the active implementation of the agreements made between the two sides by highlighting the “Panmunjom Declaration” and the “Pyongyang Joint Declaration.” Pyongyang is also expected to seek stronger cooperation in civilian sectors to build stable inter-Korean relations on both the state and civilian levels.

| Foreign Policy | Despite the tough sanctions imposed by the international community, North Korea maintained that it does not intend to give up its nuclear development. Since 2018, however, the regime has expressed its commitment to the denuclearization of the Korean Peninsula and has continued its efforts, such as the U.S.–DPRK Summit, to escape international isolation through improved foreign relations.

Since all official channels of dialogue with the United States were cut off in 2012 due to the breach of the U.S.–DPRK Leap Day Deal¹⁶⁾, Pyongyang has focused on advancing its nuclear capabilities despite the U.S. government’s constant demand for denuclearization. Pyongyang continued its nuclear development program even after the inauguration of the new U.S. administration in January, 2017. In August, the regime unveiled a plan to strike the U.S. Pacific territory of Guam and, in November, conducted a flight test of a Hwasong-15 ICBM-class ballistic missile as part of the program to develop long-range missiles capable of reaching the U.S. mainland. However, in March 2018, Pyongyang expressed interest in denuclearization of the Korean Peninsula and dialogue with the United States. Following this, Pyongyang declared a moratorium on nuclear and ICBM development on April 20, and dismantled the Punggye-ri

¹⁶⁾ On February 29, 2012, North Korea agreed to suspend long-range missile development and uranium enrichment in exchange for assistance from the United States.

nuclear test site in presence of invited international journalists on May 24.

On June 12, 2018, the first-ever U.S.–DPRK Summit took place, and North Korea agreed to build new relations with the United States, fully denuclearize, and repatriate the remains of U.S. soldiers killed in the Korean War. On July 27, Pyongyang returned the remains of U.S. soldiers and dismantled part of the Dongchang-ri missile engine test site. Follow-up negotiations are underway with U.S. Secretary of State Mike Pompeo visiting North Korea over several occasions.

North Korea's relationship with Japan has seen no concrete progress despite the bilateral Stockholm Agreement¹⁷⁾ signed in May 2015. Since the situation on the Korean Peninsula shifted to an atmosphere for dialogue in 2018, Japan has been seeking diplomatic efforts to resume dialogue with Pyongyang, including the issue of Japanese abductees, and has hinted the possibility of holding a Japan–DPRK summit. In response, North Korea has demanded for settlement of unresolved issues from the Japanese colonial era and for a break from Japan's pressure policy against North Korea. As a result, dialogue between North Korea and Japan is yet to gain any drive.

North Korea's relations with China have fluctuated due to North Korea's nuclear development program. Bilateral relations were strained after China joined international sanctions against North Korea in 2016, but in 2018, both countries began making efforts to restore relations. North Korea attempted to restore friendly relations with China through three summits, the first of which took place in March. North Korea has also been garnering China's diplomatic support in the denuclearization phase through active exchanges between senior officials, and has been making efforts to expand bilateral economic cooperation, including a North Korean economic delegation visit to China.

North Korea has maintained an amicable relationship with Russia since the two countries strengthened economic cooperation through the 2011 Russia–DPRK summit. As a permanent member of the UN Security Council, Russia participated in international sanctions against North Korea, including the implementation of the UN Security Council resolutions. However, Russia has been increasing exchanges with North Korea since 2018, in celebration of the 70th anniversary of Russia–DPRK diplomatic ties. North Korea has been managing its friendly ties

¹⁷⁾ 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.

with Russia through Kim Yong-nam, the President of the Presidium of the Supreme People's Assembly, visiting Russia twice during the 2014 Sochi Winter Olympics and the 2018 Russia World Cup. Pyongyang also agreed to a Russia–DPRK summit during the Russian foreign minister's visit in May 2018.

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

| Military Strategy | In 1962, in accordance with the principle of “self-reliance in defense”¹⁸⁾ embedded in the Juche ideology, North Korea adopted four military guidelines and has since continued to bolster its military strength.

While maintaining a military strategy centered on guerrilla warfare, hybrid warfare, and blitzkrieg, North Korea is also exploring a variety of strategies and tactics. Since the succession of power, North Korea has continued to attempt to gain the upper hand through military actions in areas near the borders including the Military Demarcation Line (MDL) and the Northern Limit Line (NLL). It has also selectively enhanced the performance of its conventional weapons and built up asymmetrical capabilities such as nuclear weapons, WMD, missiles, long-range artilleries, submarines, Special Operation Force, and cyber units. North Korea operates a 6,800-strong unit of trained cyber-warfare specialists and appears to continue its efforts to enhance cyber capabilities by fostering specialists and continuing R&D in latest technologies.

During contingency, North Korean forces are likely to resort to guerilla attacks that mainly employ asymmetric capabilities to set favorable conditions and end the war as soon as possible. Meanwhile, as Pyongyang has changed its military strategies in the past in line with the changes in the strategic environment, there is a possibility of a strategic shift depending on the progress of denuclearization negotiations in the process of denuclearization and establishment of a peace regime on the Korean Peninsula.

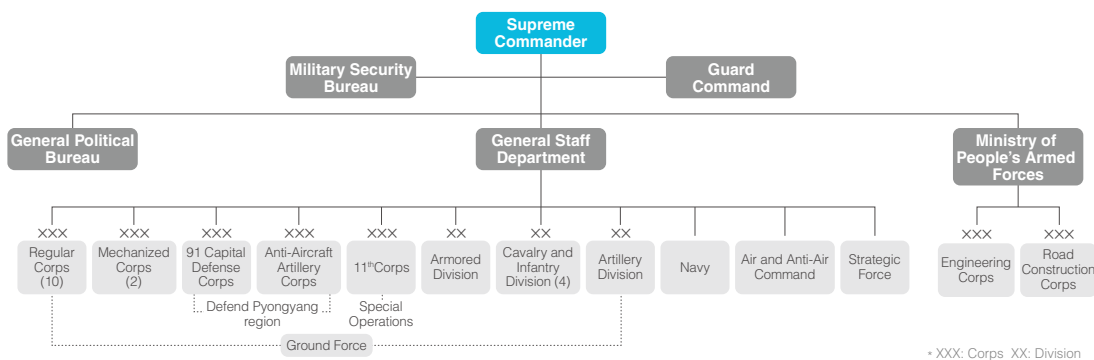
¹⁸⁾ Article 60 of North Korea's Constitution provides, “The State shall implement the line of self-reliant defense, the import of which is to arm the entire people, fortify the country, train the army into a cadre army and modernize the army on the basis of equipping the army and the people politically and ideologically.”

| Military Command Structure | State Affairs Commission Chairman Kim Jong-un is concurrently serving as the Supreme Commander of the Korean People's Army and the Chairman of the party's Central Military Commission, realistically maintaining command and control over North Korean forces.

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 Korean People's Army has, under his command, the General Political Bureau, the General Staff Department, and the Ministry of People's Armed Forces. 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, while the Ministry of People's Armed Forces, which externally represents the North Korean military, is responsible for military diplomacy and the administration of military logistics, procurement, and finance.

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.

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



3. Military Capabilities

| Ground Force | The Ground Force is composed of 10 regular forward- and rear-deployed

corps, 2 mechanized corps, 91st Capital Defense Corps¹⁹, Anti-Aircraft Artillery Corps, 11th Corps²⁰, 1 armored division, 4 mechanized infantry divisions, and 1 artillery division under the control of the General Staff Department.

The General Staff Department was recently restructured by adding the Command Intelligence Bureau, among others, and established an integrated tactical command and control system²¹ to strengthen C4I²² capabilities while building up cyber-warfare capabilities.

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 170mm self-propelled guns and 240mm 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. The recently developed 300mm MRLs²³ are capable of reaching the central region of the ROK. North Korea has also produced additional 122mm and 200mm towed-MRLs²⁴, and deployed them mainly in coastal and frontline areas. Moreover, it has lately developed and operates various special munitions²⁵, including extended-range munitions and precision-guided munitions. The operational capabilities of armored and mechanized units have been upgraded through additional production or partial performance enhancement of new equipment such as Songun-ho and Chunma-ho.

The manpower of North Korean special operations force is currently estimated to be 200,000. Special operations forces are organized into various units at the strategic, operational, and tactical echelons including the 11th Corps; light infantry divisions and brigades, and sniper brigades of the forward located corps; sniper brigades under the Navy, and the Air and Anti-Air Force; and the light infantry regiment of the forward divisions. North Korea continues to strengthen its

¹⁹) Formerly Pyongyang Defense Command

²⁰) A strategic special operations unit known as Storm Corps

²¹) A system that assists the decision-making and strike orders by the commander (GS-2000)

²²) Command, Control, Communication, Computer and Intelligence

²³) North Korea tested its 300mm MRL multiple times and unveiled it at the military parade held to commemorate the 70th anniversary of the foundation of the Workers' Party of Korea.

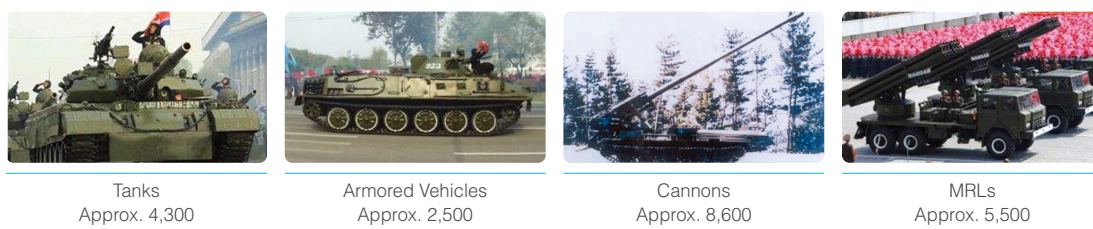
²⁴) It is a type of an MLR remodeled to tow vehicles and tractors in emergencies. Only the artillery of the rocket launcher installed in the vehicle is in operation at normal times.

²⁵) North Korean forces has developed and used various special ammunitions including precision-guided munitions that have evolved from the munitions of MLRs, extended range-guided munitions, Dual Purpose Improved Conventional Munitions (DPICM), flame munitions, and anti-aircraft airborne grenades.

special operations capabilities—it recently created a special operations battalion²⁶⁾ specializing in individual assassination and classified the Special Operation Force into a separate branch of the military to elevate its status.

In wartime, special operations units are likely to infiltrate forward and rear areas through underground tunnels, submarines, landing craft air cushions, AN-2 aircraft, and helicopters, to conduct hybrid operations such as striking vital units, facilities, and installations; assassinating key figures; and disrupting rear areas. Key assets of the North Korean Ground Force are as shown in [Chart 1-3] below.

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



| Navy | The Navy is composed of 2 fleet commands for the East Sea and the West Sea, respectively; 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 Navy 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 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 Navy has added new mid- to large-sized vessels and various types of Very Slender Vessels (VSVs) to enhance its surface 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 operations units’

²⁶⁾ The special operations battalion's combat missions were reported by Rodong Sinmun and Korean Central Television on November 4, 2016.

infiltration. The North Korean Navy is building up its forces by constructing a Gorae(Sinpo)-class submarine, capable of launching Submarine-Launched Ballistic Missiles (SLBMs).

Landing forces consists of 250 crafts, including air-cushioned hovercraft and high-speed landing craft, which are mostly small craft. They will likely help special operations units to infiltrate the ROK's rear areas, strike major military and strategic facilities and installations, and secure important landing shores. Key vessels of the North Korean Navy are as shown in [Chart 1-4] below.

[Chart 1-4] Key Assets of the North Korean Navy

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Surface Combatants Approx. 430 | Amphibious Vessels Approx. 250 | Mine Warfare Vessels (Mine Sweepers) Approx. 20 | Auxiliary Vessels Approx. 40 | Submarines Approx. 70 |

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 Command.²⁷⁾

The North Korean Air Force, with around 1,640 aircraft, has positioned its forces in four different zones. Close to 40% of fighter jets, around 810 in total are forward-positioned south of the Pyongyang–Wonsan line with a posture capable of delivering quick strikes with minimum preparations. The Air Force also has the capability to carry out large-scale special operation through infiltration using AN-2 aircraft and helicopters. The Air Force has also been producing and deploying UAVs for reconnaissance and strike as well as light-weight aircraft.

The North Korean air defense system, built around the Air and Anti-Air Force Command, integrates aircraft, surface-to-air missiles, anti-aircraft artilleries, and radar air defense units. SA-2²⁸⁾ and SA-5²⁹⁾ surface-to-air missiles are deployed in forward areas in eastern and

²⁷⁾ The Air Force Command has been renamed the Air and Anti-Air Force Command in May 2012.

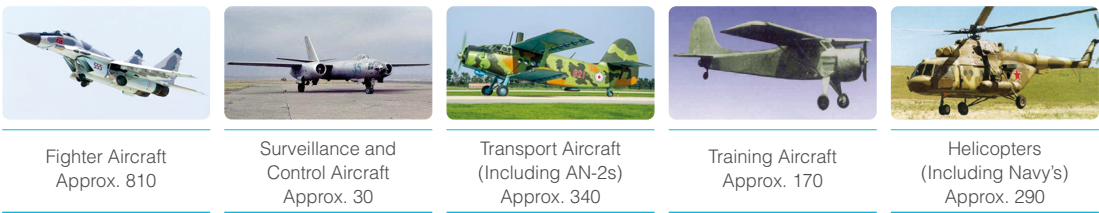
²⁸⁾ A guided missile system for striking mid- to high-altitude targets, with a maximum range of 56km

²⁹⁾ A guided missile system for striking high-altitude targets, with a maximum range of 250km and that was developed to complement the SA-2

western regions, while SA-2 and SA-3³⁰⁾ 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 an 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, allowing them to scan 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 of the North Korean Air Force are shown in [Chart 1-5] below.

[Chart 1-5] Key Aircraft of the North Korean Air Force



Strategic Force | North Korea has expanded and reorganized the Strategic Rocket Command into the Strategic Force, and elevated it to a command of its own military branch. The Strategic Force is believed to consist of nine missile brigades. 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, biological, and radiological weapons. North Korea first gained access to nuclear materials in the 1980s after operating the 5MWe reactor located in the Yongbyon Nuclear Complex by reprocessing spent fuel rods. Since then, North Korea conducted six nuclear tests in October 2006, May 2009, February 2013, January and September 2016, and September 2017. It is estimated to possess around 50kg of weapon-grade plutonium obtained from several rounds of reprocessing spent fuel rods. North Korea is also believed to possess a substantial amount of Highly Enriched Uranium (HEU), and its ability to miniaturize

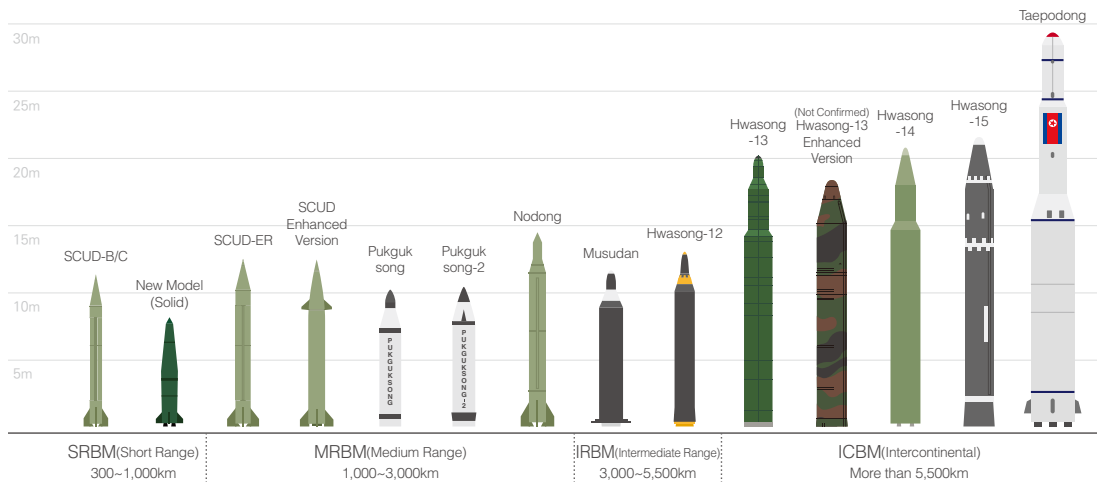
³⁰⁾ A guided missile system for striking medium-range, low- to mid-altitude targets, with a maximum range of 25km

nuclear weapons seems to have reached a considerable level.

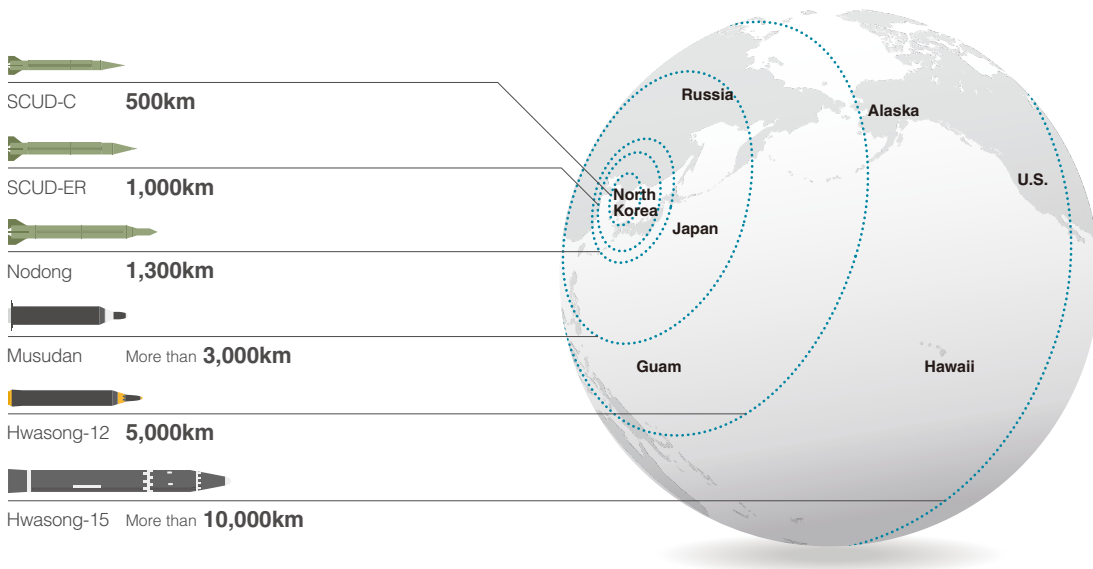
After beginning ballistic missile developments in the 1970s, North Korea produced and fielded Scud-B and Scud-C with ranges of 300km and 500km, respectively, in the mid-1980s. In the late 1990s, North Korea fielded the Nodong missile with a range of 1,300km and, later, the Scud-ER, which are scud missiles with extended range. In 2007, North Korea fielded the Musudan missile with a minimum range of 3,000km without a test launch. 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. The types of ballistic missiles currently in North Korea's inventory or under development are shown in [Chart 1-6].

Starting in 2012, North Korea has conducted test launches of missiles that have been deployed or are under development. In 2017, Hwasong-12, Hwasong-14, and Hwasong-15, as well as Pukguksong-2, were tested. Pyongyang fired Hwasong-12 missiles into the North Pacific Ocean in May, August, and September, and Hwasong-14 and Hwasong-15, which are capable of posing threats to the U.S. mainland, in July and November, respectively. However further confirmation is required to verify whether North Korea has acquired the atmosphere reentry technology, as it is yet to conduct tests for actual range of the missiles. The ranges of North Korea's ballistic missiles are shown in [Chart 1-7].

[Chart 1-6] Types of North Korean Ballistic Missiles in Inventory or Under Development



[Chart 1-7] Ranges of North Korean Missiles



North Korea began producing chemical weapons in the 1980s and currently holds a stockpile of an estimated 2,500–5,000T of chemical weapons. Sources indicate that North Korea is capable of cultivating and producing various types of biological agents, such as anthrax, smallpox, and pests.

| Sustainability | The Reserve Forces of North Korea are 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 1-8].

[Chart 1-8] 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, women aged 17–30 years) |
| Worker-Peasant Red Guards | Approx. 5.7 million | Equivalent to the ROK's homeland 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 | Bodyguard Command, Logistics Mobilization Guidance Bureau, etc. |

North Korea has a stockpile of war supplies, including food, oil, and ammunition, that can last one to three months during wartime. More than 300 munitions factories are expected to operate during wartime because civilian factories designated for transformation into armament factories are capable of switching to a wartime mobilization mode in a short period. These armament factories are believed to be capable of producing most types of ammunition and equipment except combat aircraft. However, without external assistance, North Korea's ability to sustain a prolonged war is likely to be limited.

Chapter 2

National Security Strategy and Defense Policy



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ROK Armed Forces Senior Leaders Seminar (December 2018)

Section 1 National Security Strategy

The Moon Jae-in administration formulated its national vision as “a nation of the people, a just Republic of Korea” and is implementing its National Security Strategy (NSS) which chose “a peaceful and prosperous Korean Peninsula” as the policy goal for security. The government strives to resolve the North Korean nuclear issue and realize 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 formulated its national vision as “a nation of the people, a just Republic of Korea” and set five goals of governance: a government committed to serving its citizens; an economy centered on the coprosperity of all; a nation that ensures the wellbeing of its citizens; balanced development across the nation; and a



peaceful and prosperous Korean Peninsula. Regarding the policy goal 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 |

Through concerted efforts with the international community, the ROK government will achieve a peaceful resolution of the North Korean nuclear issue by comprehensively pursuing complete denuclearization of the Korean Peninsula, establishment of a peace regime, establishment of trust between the two Koreas, and implementation of arms control. At the same time, the ROK government will enhance our national defense capacity based on the ironclad ROK–U.S. Alliance, thereby supporting the establishment of permanent peace on the peninsula.

| Contribution to Peace and Prosperity in Northeast Asia and the World |

The ROK government will promote our national interest by fostering an environment that brings peace and prosperity to Northeast Asia and the world while elevating the status of the ROK as a nation that is in the forefront of achieving peace and cooperation. First, upon the basis of ROK–U.S. coordination, the ROK will lead the resolution of the Korean Peninsula issue via regional cooperation. 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. Further, the ROK government will actively involve itself in the resolution of security issues across the world such as climate change, international terrorism, infectious diseases, and refugee crises.

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

The ROK government will protect the properties and rights of individual citizens from the standpoint of the people, and protect their safety and lives from cyber threats, terrorism, disasters, safety accidents, and other threats and risks.

2. Tenets of the National Security Strategy

To achieve its security policy goal, “a peaceful and prosperous Korean Peninsula,” the ROK government adopted strategies to be implemented in the fields of national defense, unification, and diplomacy. These strategies include taking the initiative in the pursuit for 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 ROK government will continue its efforts for peace and prosperity on the Korean Peninsula. Once progress is made in the North Korean nuclear issue and favorable conditions are set, the ROK government will create a virtuous cycle of peace and prosperity by fully implementing the “Korean Peninsula New Economic Initiative”¹⁾. Furthermore, the ROK government 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.

| Ensuring Strong National Security through Steadfast Defense | The ROK government will establish a robust security posture by realizing a “steadfast national defense” under the motto, “our defense is our responsibility.” It will maintain a firm defense posture against transitional security situations and, upon the foundation of an ironclad ROK–U.S. Alliance, build a new ROK-led combined defense system by completing an early transition of wartime operational control. By robustly pursuing “Defense Reform 2.0” in a future-oriented manner, the ROK government will reinforce our national defense capacity and improve the transparency and efficiency of our defense programs so that the people do not grow anxious during transitions in the external environment. In addition, the ROK government will cultivate a military that walks

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.

hand-in-hand with the public by ensuring the human rights of servicemembers, improving the conditions for service, and creating a new barracks culture.

| Pursuing Well-Balanced and Cooperative Diplomacy | The ROK government will pursue well-balanced and cooperative diplomacy by consolidating its cooperation with the four countries surrounding the Korean Peninsula and by expanding the scope of cooperation to ASEAN, Europe, the Middle East, and Africa. Primarily, the ROK government plans to advance and develop the ROK–U.S. Alliance into a relationship that comprehensively encompasses security, economic cooperation, personnel exchanges and global leadership. All the while, it 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 ROK government will widen the horizon of our diplomacy and expand the foundation for peace and prosperity on the Korean Peninsula by pursuing the New Northern Policy and the New Southern Policy²⁾. Furthermore, it will work together with the international community to address transnational threats such as: natural disasters, infectious diseases, drugs, and refugee issues. Moreover, the ROK government will actively pursue international cooperation and contributive diplomacy to a degree that befits our national standing in areas such as: public diplomacy, global economy, climate change and development cooperation.

| Ensuring Public Safety and Protecting Their Rights | The ROK government will establish an integrated disaster management system and reinforce its on-site response capability in order to respond to large-scale accidents and disasters at all times. It will enhance our national-level capacity against cyber threats, terrorism and other nonmilitary security threats, and strengthen our protection system for overseas citizens in order to ensure their safety.

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.

Section 2 National Defense Policy and Military Strategy

The ROK Armed Forces is pursuing six tenets of our national defense policy to realize the vision of, “Competent Security and Robust National Defense.” The ROK Armed Forces will continue to carry out the fundamental mission of maintaining a robust military readiness posture and gain the public’s faith in the military by instilling a barracks culture that is attractive to both potential servicemembers as well as their family. Further, the ROK Armed Forces will strengthen our national defense capacity upon a solid ROK–U.S. Alliance in order to support the establishment of permanent peace on the Korean Peninsula through robust strength.

1. National Defense Objectives

The National Defense Objectives are “protecting the nation from external military threats and attack;” “supporting a peaceful unification of the Korean Peninsula;” and “contributing to regional stability and world peace.”

| Protecting the Nation from External Military Threats and Attack | The ROK Armed Forces considers any force that threatens and violates the sovereignty, territory, people, and properties of the Republic of Korea as an enemy. The relationship between South and North Korea has alternated between military confrontation, reconciliation, and cooperation. However, an unprecedented security environment has been set in 2018 to realize complete denuclearization and peace establishment on the Korean Peninsula through three successful inter-Korean summits as well as the first-ever U.S.–DPRK summit. In particular, in September 2018, the military authorities of South and North Korea 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.

However, North Korea’s WMDs still pose a threat to peace and stability on the Korean Peninsula. And so, the ROK Armed Forces will provide military support towards complete

denuclearization and establishment of permanent peace on the Korean Peninsula and will continue to be prepared for all possible situations. In addition, the ROK Armed Forces will continue to advance their ability to respond to potential transnational and nonmilitary threats such as terrorism, cyberattacks, and large-scale disasters.

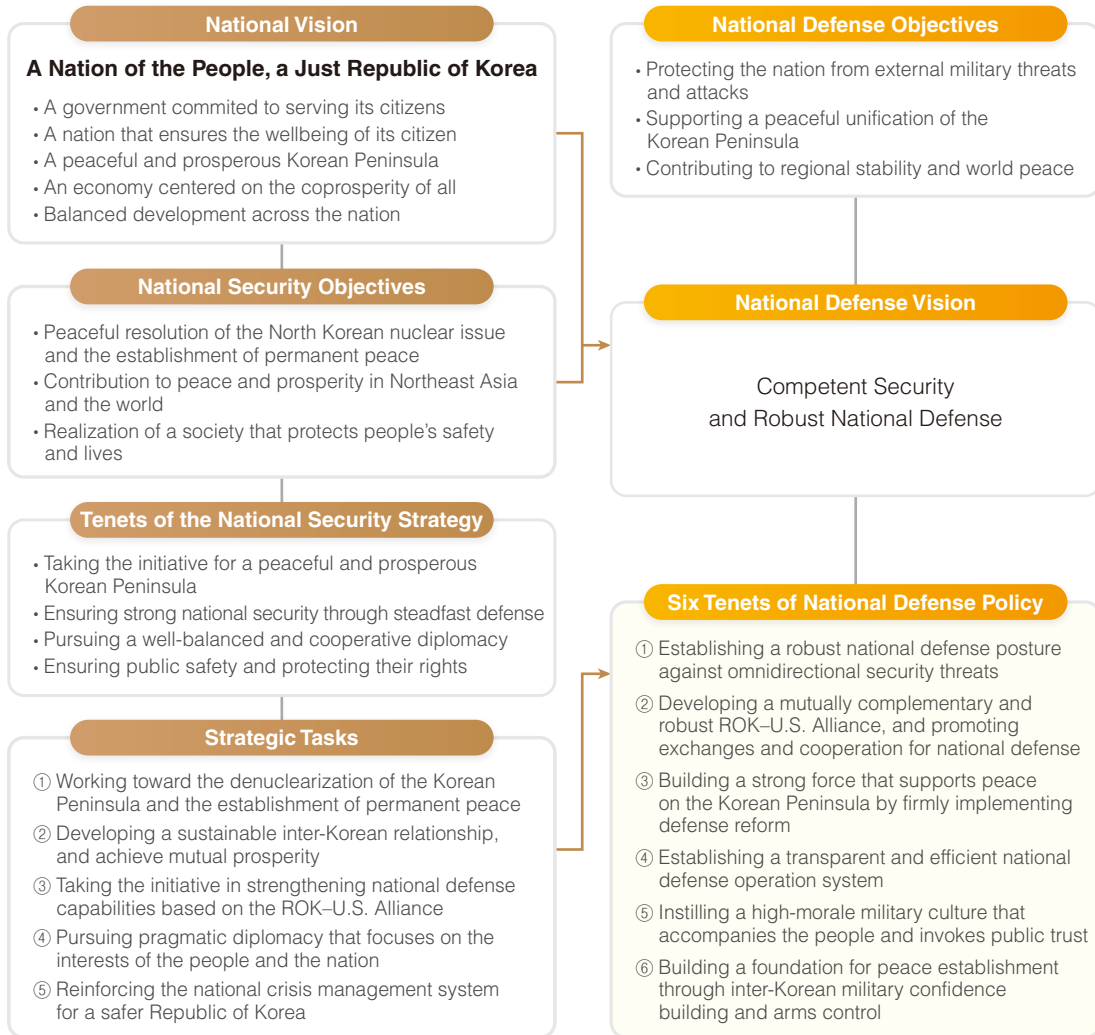
| Supporting a Peaceful Unification of the Korean Peninsula | Peace is an issue of our survival and a national interest of the highest level. Peace is also the foundation for achieving peaceful unification. Without robust security, peace can neither be maintained nor built. For this reason, the ROK Armed Forces will support peace on the Korean Peninsula through strength by establishing an ROK-led national defense.

| Contributing to Regional Stability and World Peace | Upon the foundation of a solid ROK–U.S. 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 exchange.

2. National Defense Vision and Tenets of National Defense Policy

| National Defense Vision | The ROK Armed Forces has set “Competent Security and Robust National Defense” as the vision for national defense. “Competent Security” signifies safeguarding the territory and sovereignty of the Republic of Korea from internal as well as external threats and invasions, and protecting the safety and lives of the people “through strength” by acquiring an 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 every battle by deterring and actively countering enemy provocations through ROK-led defense capabilities, based on an ironclad ROK–U.S. Alliance.

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



Tenets of the National Defense Policy | The ROK Armed Forces laid out and implements six tenets for its national defense policy, which serve as consistent policy directions guiding the realization of its national defense vision: establishing a robust national defense posture against omnidirectional security threats; developing a mutually complementary and robust ROK-U.S. Alliance, as well as promoting exchanges and cooperation for national defense; building a strong military that supports peace on the Korean Peninsula by thoroughly implementing national defense reforms; establishing a transparent and efficient national defense management system; instilling a high-morale military culture with public companionship and confidence; and inter-

Korean military confidence building and arms control. The National Security Strategy and National Defense Policies are listed in [Chart 2-1].

| Establishing a Robust National Defense Posture against Omnidirectional Security

Threats | Based on the robust ROK–U.S. combined defense posture, the ROK Armed Forces maintain omnidirectional military readiness posture against not just North Korea’s provocation but also any threat from any direction to deter provocations and react to and, in the event of a provocation, respond with prompt and firm action. At the same time, the ROK Armed Forces will enhance their ability to respond to cyberattacks, terrorisms, and disasters, as well as develop an integrated civilian-government-military-police defense posture to protect the safety and lives of the people.

| Developing a Mutually Complementary and Robust ROK–U.S. Alliance, and Promoting Exchanges and Cooperation for National Defense |

To build a combined defense system led by the ROK Armed Forces based on the robust ROK–U.S. Alliance, the ROK Armed Forces will pursue a stable and early transition of wartime operational control. In addition, the ROK Armed Forces will develop the ROK–U.S. Alliance into a mutually complementary relationship, promote exchanges and cooperation for national defense, and expand the overseas dispatch of Korean 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 with strong force. To this end, the ROK Armed Forces will work toward “dependable national defense” in which Korea assumes full responsibility for its national defense by building an efficient elite military powered by advanced technology capable of flexible response to omnidirectional security threats.

| Establishing a Transparent and Efficient National Defense Operation System |

To keep up with changes in social conditions and public standard, the ROK Armed Forces will enhance the efficiency, openness, and transparency of the overall system of national defense.

To this end, the ROK Armed Forces plans to lay the legal foundation for maintaining political neutrality and to continue to expand the involvement of the public voice in the policy making process. In addition, the ROK Armed Forces will establish and implement active measures to eradicate corruption in defense acquisition program and take strong measures to reduce the defense budget by raising the efficiency of national defense operation.

| Instilling a High-Morale Military Culture that Accompanies the People and Invokes Public Trust | To help servicemembers focus on their combat missions, the ROK Armed Forces will protect the human rights of the servicemembers, radically improve their working conditions, and reform the culture of servicemembers that keeps up with changing times. In addition, by promoting the benefits for the people and providing active support during the emergencies, the ROK Armed Forces will build a military with public confidence, as well as invokes their trust and support.

| Building a Foundation for Peace Establishment through Inter-Korean Military Confidence Building and Arms Control | To resolve the North Korean nuclear issue and shape the conditions to establish permanent peace on the Korean Peninsula, the ROK Armed Forces will work towards military de-escalation and inter-Korean confidence building. The ROK Armed Forces will establish military assurance to the evolving inter-Korean exchanges and cooperation and will seek substantial measures for arms control as denuclearization and the establishment of the peace regime progresses.

3. Military Strategy

Military strategy seeks the military strategic objectives aimed to materialize the national security strategy and national defense policy as well as the concept of operation and the direction of military force development to meet the objective.

| Objective | In consideration of rapid changes in the security environment, the ROK Armed Forces is preparing for North Korean threats, other potential threats, and nonmilitary threats simultaneously. The objective of the military strategy is to deter provocations and invasions

from external forces and, if deterrence fails, achieve an early victory “with the least damage possible, within the shortest time possible.”

| Concept | The concept of the ROK Armed Forces’ military strategy is to flexibly respond to changes in the security environment and omnidirectional security threats, as well as develop the ability to take the initiative in deterring and responding to omnidirectional threats upon the robust foothold of ROK-U.S. Alliance. When it comes to the North Korean threats, the ROK Armed Forces will establish and implement arms control strategies capable of reducing threats, and thus the likelihood of war, and building a peace regime in the long term. In addition, the ROK Armed Forces will secure the ability and posture capable of deterring threats based on the robust ROK-U.S. Alliance, as well as to attain complete victory in wars. It will allow them to deter provocation and invasion from North Korea, prevent an accidental military collision, and control the situation with both rapid response and de-escalation measures executed concurrently. In case that deterrence fails, the ROK Armed Forces will end the war “with the least damage possible, within the shortest time possible.”

The ROK Armed Forces will work closely with the regional partners during peacetime to shape a favorable strategic environment and prevent conflict by enhancing the deterrence capabilities. The ROK Armed Forces will also preemptively prepare and actively respond against cyber threats by establishing comprehensive strategies. When it comes to nonmilitary threats, the ROK Armed Forces will ensure military readiness to keep the people safe both the inside and outside of the country; prevent threats by sharing information and building a joint response system with related agencies; and, in case of an actual threat, restore stability early on with rapid response.

| Direction of Military Force Development | The ROK Armed Forces aims to build a military power capable of flexible response to omnidirectional security threats including those from North Korea and other potential threats. The ROK Armed Forces will build the ability to lead and carry out combined operations by reforming the military structure (command, unit, troop, and force) to be prepared for wartime operational control (OPCON) transition. The ROK Armed Forces will also build the capabilities and systems for effective response to cyber and space threats, as well as reinforce its support system for active response to nonmilitary threats such as terrorism, international crimes, and disasters.

Section 3 Defense Reform 2.0

Defense reform, an imperative from the people and the duty of our time, has been long overdue. The ROK Armed Forces will be dedicated to implementing Defense Reform 2.0 to build a strong military that supports the peace and prosperity of the Republic of Korea with force.

1. Background

| Necessity | The security environment that the ROK Armed Forces is facing is comprised of multiple aspects. When it comes to the security threat, there are various security threats coming from all directions and the resulting increase of uncertainties. While recent efforts for denuclearization and the improvement of inter-Korean relationship de-escalated the inter-Korean military tension, uncertainties are expected to increase until a complete denuclearization of North Korea and perpetual peace on the Korean Peninsula is achieved. At the same time, potential threats are expected to increase as the regional powers vie for wider influence in the region and engage in an escalating arms race, while transnational nonmilitary threats increase with the spread of extremism, accelerating propagation of information technology, and frequent natural disasters caused by climate change.

The conditions surrounding Korea's national defense only add to the difficulty of implementing the policies. The "population cliff" will worsen the shortage of military human resources in 2022 and the coming years. Considering the economic conditions, Korea is expected to face difficulties in providing sufficient support for national defense. In addition, while people demand human



National Defense Reform 2.0

rights and welfare fit for a developed country, the public confidence towards the government has diminished due to the ROK Armed Forces' previous involvement in politics and the cases of corruption in the defense industry. Another challenge is an active response to the changes of future battlefields set off by scientific and technological advancements in the era of the Fourth Industrial Revolution.

To initiate the actions and respond to these security threats while overcoming the factors restricting policy implementation, Korea urgently needs to develop special measures that distinguish themselves from the efforts for national defense development in the past.

The need for aforementioned changes has been pointed out multiple times in the past. The ROK Armed Forces has been pursuing national defense reform since establishing the National Defense Reform 2020 and the National Defense Reform Act in 2006 and later revising the plan under every new administration. However, the plan lost its momentum due to repeated delay and obstacles.

Based on the consensus that the defense reform is an imperative of the people and the duty of our times, the ROK Armed Forces sets out to establish a new, executable plan through in-depth deliberation on the past and the lessons learned from previous efforts.

| Distinguishing Features | With the consensus on its urgency in our mind, Defense Reform 2.0 was drafted to distinguish itself from the previous plans in its emphasis on the actual execution.

First, the plan was established in the early stage of the new administration to secure the momentum for implementation. The National Defense Reform 2020 of 2006 was completed in less than one and a half year until the end of the incumbent administration's term, which created difficulties for creating the momentum for the plan's execution. Learning from this, the ROK Armed Forces established the Defense Reform 2.0 plan in less than a year after the launch of the current administration to maintain the momentum of the implementation.

Second, as previously mentioned, the financial support for national defense is expected to be limited in the future. For this reason, the ROK Armed Forces accounted for the budget requirement for the force buildup, which constitutes a core part of the national defense reform in the 2019–2023 Midterm National Defense Plan to maintain the drive for the reform. In addition, the Defense Reform 2.0 was designed to minimize the budget requirement by enhancing the efficiency of defense operation and innovating human resource management.

Third, the ROK Armed Forces is working on enacting and revising laws related to defense reform. In recognition of the fact that a consistent and continuous reform should be supported by the law, the ROK Armed Forces identified 60 acts and regulations that require enactment or revision. From the 17 acts identified, the ROK Armed Forces are currently pursuing the enactment and revision of 14. The ROK Armed Forces plans to launch the enactment or revision process for all the other acts and regulations by the end of 2019. To prepare for possible delays in the legislation, the ROK Armed Forces will take the measures they can before the enactment or revision, for example, by announcing directives and improving its operation.

Lastly, the ROK Armed Forces realized that public support is most necessary in implementing defense reform. We will enhance the efforts to retain public support and form a government-wide consensus on the need for defense reform.

2. Goal and Tenets

| Goal | The goal of Defense Reform 2.0 is to “build a strong military that supports the peace and prosperity of the Republic of Korea with force.” “Strong military” means a military capable of taking the initiative in responding to omnidirectional security threats, an elite military powered by advanced technologies, and a military managed in a way that befits a developed country.

| Tenets | The first tenet of Defense Reform 2.0 is to enhance the strength and foundation for retaining self-reliant national defense capabilities. For an efficient response to changes in future battlefields, the ROK Armed Forces will promote a balanced growth between branches and specialties. In addition, while steadfastly working toward the civilian control of the MND to reinforce the expertise of civilian personnel, the ROK Armed Forces will make systematic efforts to secure the core capabilities required for wartime operational control (OPCON) transition.

The second tenet is to use the scientific and technological advancements of the Fourth Industrial Revolution to overcome resource shortage and adapt to future battlefields. The ROK Armed Forces will develop manned/unmanned combined systems, smart surveillance/strike systems, technology-powered training systems, and smart barracks management systems driven by data analysis, artificial intelligence, network technology, and other advancements of the



Fourth Industrial Revolution; create elite units and force structures; and markedly improve the efficiency of national defense across all areas including defense management and the barracks culture.

The third tenet is to gain public support by pursuing a reform that goes in line with the needs of the nation and the society. The ROK Armed Forces will contribute to securing the working age population and strengthening the national economy by leading technological advancements and promoting defense industry. In addition, the ROK Armed Forces plans to mitigate the limitations of the national defense budget by fully utilizing the national capability with civilian–military partnership and other measures, and restore the public confidence by protecting human rights and providing better welfare to servicemembers to meet the public expectations and improve the openness in all aspects of national defense.

Chapter 3

Establishing a Robust Defense Posture against Omnidirectional Security Threats



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Major forces of the three branches of the ROK Armed Forces

Section 1 Establishing a Robust Military Readiness Posture

The ROK Armed Forces maintains a combined defense posture based on the robust ROK–U.S. Alliance that is capable of countering various local provocations and aggressions from North Korea. For effective crisis management, the ROK Armed Forces established an early warning posture, enhanced its crisis management system, and maintained a readiness posture against infiltration and provocations in the land, sea, and air of border areas. In preparation against a potential North Korean aggression, the ROK Armed Forces is maintaining a military readiness posture by developing wartime plans and enhancing its joint and combined operational capabilities to the maximum level. In addition, to bolster its war sustainment capabilities, the ROK Armed Forces maintains and acquires the necessary forces, equipment, and supplies.

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 the civilian–government–military–police integrated defense operations and tasks associated with martial law.

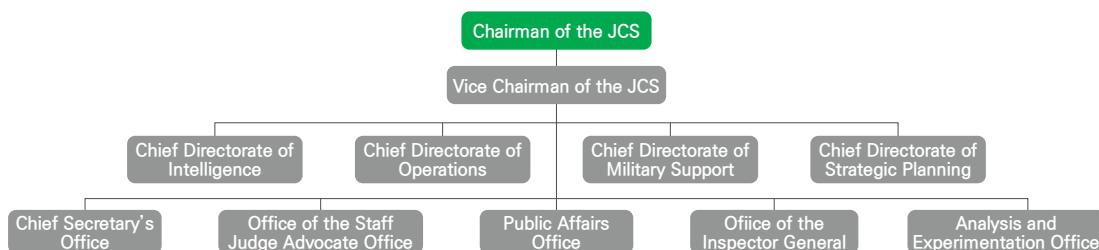
The JCS was set up and operated within the MND¹⁾ as a nonpermanent organization until it was officially established in 1963 under its current name. The JCS is operated through one Vice Chairman, four chief directorates and five offices under the Chairman of the JCS. The organization of the JCS is shown in [Chart 3-1].

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



ROK Armed Forces
Public service
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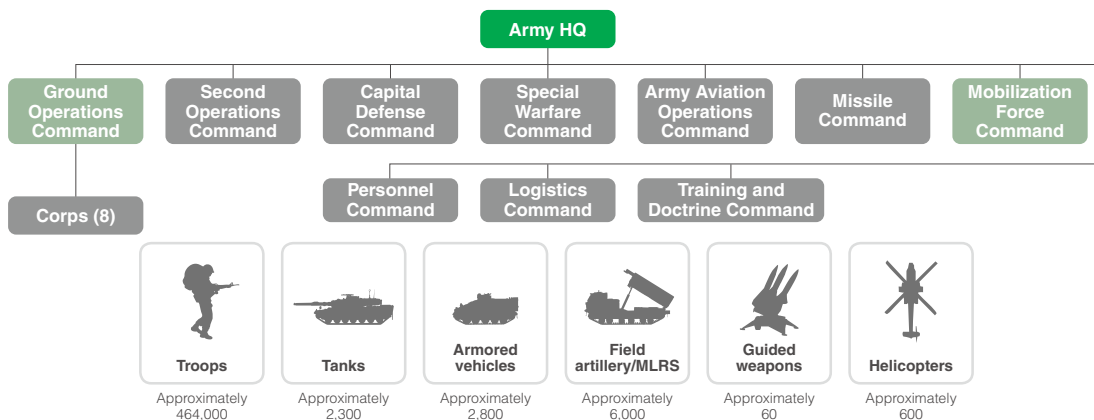
[Chart 3-1] Key Organization of the Joint Chiefs of Staff



The JCS has been developing its task performance system through a reorganization that intends to strengthen jointness based on a close mutual support and integration among the Army, Navy, and Air Force, and to build the ability to perform future missions and functions. To bolster the warfighting capabilities led by the ROK Armed Forces in preparation for wartime operational control (OPCON) transition, the JCS will systematically enhance the ROK Armed Forces' organizational structure, functions, and military capabilities so that they are optimized for future combined operations.

| 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. The 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, field artillery/MLRS include the forces of the Marine Corps

* The Ground Operations Command will be established in January 1, 2019, and the Mobilization Force Command was launched in April 6, 2018

Ground Operations Command integrates all operation elements within an operation area and conducts various ground operations. The mission of Second Operations Command is to maintain the stability of joint rear areas and war sustainment capabilities via civilian–government–military operations. Capital Defense Command protects the key facilities and urban infrastructure of Seoul to help the city maintain its functions as the capital. Special Warfare Command is responsible for special operations in wartime and for helping sustain peace in peacetime, while Army Aviation Operations Command is in charge of aviation operations. Mobilization Force Command makes sure that the peacetime combat readiness posture of mobilization divisions and the mobilization support groups are complete so that in the event of a war, it can provide the corps with mobilization divisions and supplement battalions capable of exerting combat power equal to that of standing troops. Other commands are responsible for personnel and logistics support as well as education and training.

While most effectively utilizing the existing forces, the Army is restructuring its units to carry out rapid decisive operations and thereby realize the concepts of future joint operations. To achieve this objective, the Army is also continuously reinforcing 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, multiple launch rocket systems,³⁾ and Korea Utility Helicopters.

| Navy | The Navy, organized under the Navy Headquarters, is composed of Commander Republic of Korea Fleet (COMROKFLT), Marine Corps Headquarters, Northwest Islands Defense Command, and support units. The key organizations and assets of the Navy are shown in [Chart 3-3].

-
- 2) Dronebot is a compound word consisting of drone and robot. It is a manned and unmanned combat system to supplement or replace the capability of a manned combat system.
- 3) It is 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.

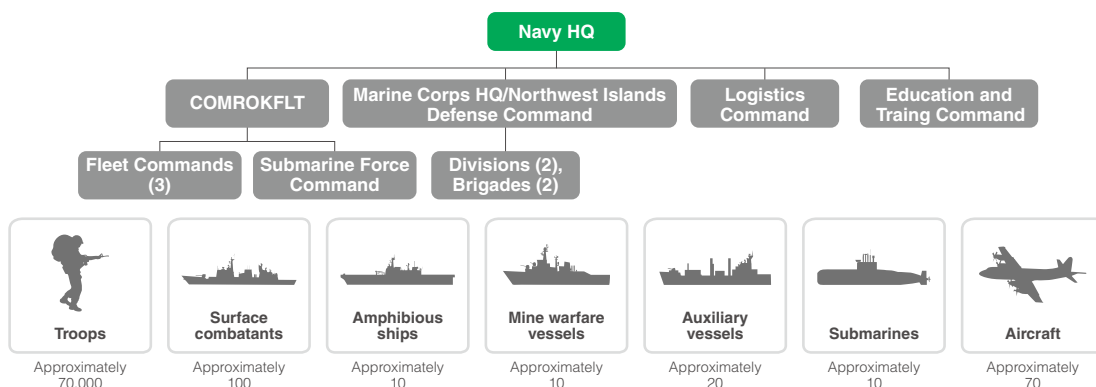


Army
promotional
video



Army dronebot
battle group
established

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



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

Commander Republic of Korea Fleet has command authority over naval operations as a whole and conducts anti-surface,⁴⁾ anti-submarine,⁵⁾ mine and countermine,⁶⁾ and amphibious operations. Fleet Commands defend their assigned areas by deploying surface combatants such as destroyers, frigates, patrol vessels, and patrol killer mediums. Submarine Force Command executes submarine operations. Marine Corps Headquarters is in charge of amphibious operations and the operation of the rapid response unit as well as the defense of its assigned areas and strategic islands. 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 education and training.

To effectively respond to various types of surface, underwater, and airborne threats, the Navy has acquired next-generation submarines, Aegis-class destroyers, next-generation destroyers, next-generation frigates, next-generation patrol killer mediums, maritime patrol aircraft, and maritime operations helicopters, and operates the multidimensional forces in an integrated

- 4) Its operations are aimed at securing or maintaining maritime control and destroying or neutralizing the enemy's maritime surface 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 consisting of interdicting or neutralizing the enemy's naval forces with the help of mines, or repulsing the enemy's attempts at using mines.



Navy
promotional
video



Commissioning ceremony for
Navy submarines Jangbogo-III
and Dosan Ahn Changho

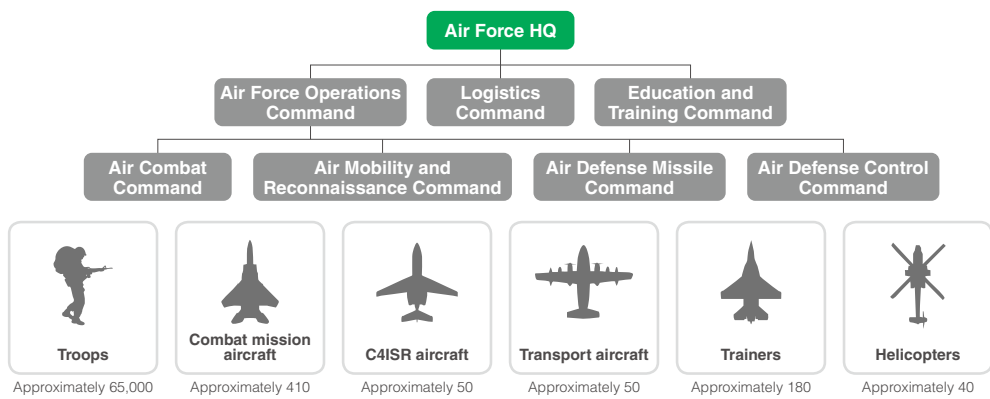


Marine Corps
promotional
video

manner. The Marine Corps will further develop its capabilities to carry out a diverse range of missions including multidimensional and high-speed amphibious operations, rapid response 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 operations and support units. The 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 Operations Command holds the command authority in the overall air operations, and conducts operations to effectively counter nuclear, missile, and long-range artillery threats including counter-air (CA) operations,⁷⁾ air interdiction (AI) operations,⁸⁾ and close air support (CAS) operations.⁹⁾ Air Combat Command executes the assigned combat missions under the control of Air Force Operations Command and ensures that the tactical mission aircraft exert their combat power. Air Mobility and Reconnaissance Command is responsible for air mobility,

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



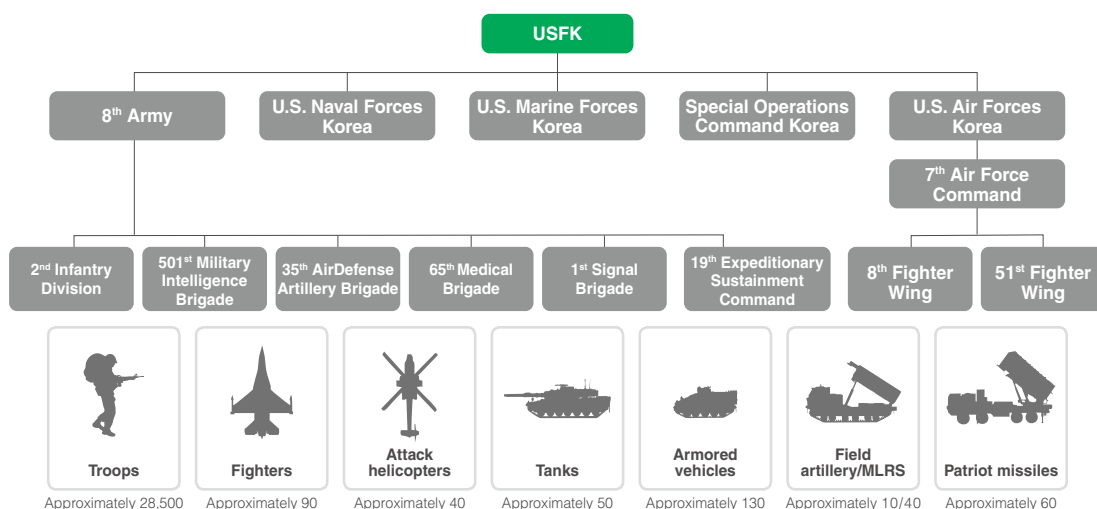
Air Force promotional video

surveillance and reconnaissance, special missions, and search-and-rescue missions, and ensures that the air mobility forces exert their combat power. Air Defense Missile Command is in charge of defense against a variety of airborne threats, such as ballistic missiles and aircraft, while Air Defense Control Command is responsible for air control within the Korean Peninsula theater, air surveillance, aircraft identification, and air operation support.

The Air Force will acquire the latest and highly advanced fighters, including the F-35, to gain decisive air superiority while fielding aerial refueling tankers to bolster its long-range operational capabilities. In addition, they will obtain air surveillance and reconnaissance capabilities by acquiring medium- to high-altitude reconnaissance unmanned aerial vehicles (UAVs).

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

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



The U.S. augmentation forces that are deployed to the Korean Peninsula in contingencies to support the defense of the ROK consist of 690,000 troops, 160 vessels, and 2,000 aircraft

from the Army, Navy and Marine Corps, and Air Force. 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 United States. When a crisis builds up on the Korean Peninsula, FDO that 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 TPFDD to ensure the execution of the ROK–U.S. combined operation plans.

The ROK Armed Forces will closely consult with the United States on developing augmentation forces deployment plans to make sure, for the defense of the Korean Peninsula, that the total combat power of the ROK and the United States does not weaken.

2. Maintaining a Readiness Posture against Local Provocations

| Establishing a Surveillance and Early Warning Posture | The ROK Armed Forces always maintains a watch condition for the early detection and warning of signs of North Korean provocations. To do so, the ROK Armed Forces operates the ROK–U.S. combined intelligence assets in an integrated manner through bilateral cooperation based on the alliance defense system. Intelligence gathered from the ROK–U.S. combined information assets and from domestic and international agencies gets consolidated and analyzed and then shared with operational units for timely utilization.

Moreover, to detect the earliest signs of North Korean provocations, the ROK Armed Forces plans to continuously expand its independent surveillance capabilities by acquiring medium- to high-altitude reconnaissance UAVs, multipurpose satellites, and military reconnaissance satellites.

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 U.S. augmentation forces for the execution of the ROK–U.S. combined operational plans

| Developing a Crisis Management System | To effectively respond to various threats of provocations from North Korea, the ROK Armed Forces is firmly establishing the ROK forces–led crisis management system and the ROK–U.S. bilateral crisis management system. The crisis management manuals for the security field were enhanced based on the 2018 edition of the “National Crisis Management Fundamental Guidelines.” The ROK Armed Forces maintains an around-the-clock crisis management posture by regularly holding crisis management exercises to improve its mission execution capabilities and monitoring the level of crisis management at each unit.

| Establishing a Readiness Posture against Land, Sea, and Airspace Infiltration and Provocations in Border Areas | For a long time since the Armistice Agreement was concluded in 1953, North Korea has carried out provocations in border areas on land, at sea, and in the air of border areas in violation of the Armistice Agreement and the inter-Korean nonaggression agreement. The ROK Armed Forces maintains a robust military readiness posture including a close coordination between the ROK and the United States to deter provocations from North Korea as well as strongly and sternly retaliate in the event of a provocation.

The GOP scientific security systems in border areas were fully established in 2016 and were enhanced to an optimal shape, upgrading the quality of the ROK Armed Forces’ security posture. Its readiness posture has been strengthened with proactive DMZ operations.¹²⁾ To bolster response capabilities against North Korean fire provocations, shelters and other protective facilities have been reinforced, and additional multiple-launch rockets have been fielded.

In spite of agreeing to the issues related to the Northern Limit Line (NLL) through the Agreement on Reconciliation, Nonaggression and Exchanges and Cooperation (1991), and the Protocol on the Implementation and Observance of Chapter 2, Nonaggression (1992), North Korea has continued to violate NLL and carry out armed provocations to nullify NLL. The two Koreas are currently halting hostilities against each other and designating a pilot joint fishing zone stage by stage to turn the areas around NLL in the West Sea into a maritime peace zone as agreed upon in the Panmunjom Declaration (April 27). The designation of the maritime

¹²⁾ Include irregular search and reconnaissance activities as well as a tougher management of the barbed wire fence of the Southern Limit Line

peace zone in the West Sea will be carried out based on the recognition and respect for NLL in conjunction with the setting of the joint fishing zone to ensure safe fishing activities and mutual gains by the people of both Koreas. NLL is the practical maritime boundary line that the ROK Armed Forces has firmly defended through the years. The ROK Armed Forces will continue to firmly adhere to the principle of observing NLL and will sternly respond to any type of provocations against this demarcation line (NLL).

To prepare for North Korean provocations toward the northwest islands, the ROK Armed Forces maintains its readiness posture through the continuous reinforcement of its surveillance, reconnaissance, and strike forces including UAVs, maritime operation helicopters, and short-range surface-to-surface guided weapons.

The ROK Armed Forces maintains a full readiness posture to firmly defend the ROK's entire territorial land, waters, and airspace in the East Sea, West Sea, and South Sea, including the five northwest islands, as well as Marado Island, Ulleung-do Island, and Dokdo Island. Its resolute commitment and readiness posture to defend Dokdo—the ROK's territory historically and geographically, and according to international laws as well—remain particularly strong.

The ROK Armed Forces is maintaining its air surveillance and immediate response posture across the Korean Peninsula while reinforcing the air defense execution system, including detection, identification, tracking, and strike procedures, in preparation against infiltrations of North Korean small UAVs.

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

| Maintaining a Readiness Posture against Other Types of Provocations | The ROK Armed Forces has been enhancing the integrated defense system involving relevant government organizations in preparation for potential terrorist and cyberattacks against critical national infrastructure in the capital area and rear areas. To complete the posture for executing integrated



Dokdo promotional video
(Dokdo, beautiful island of Korea)

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



* Map source: National Geographic Information Institute

defense operations led by the heads of the local government, the civilian–government–military–police information-sharing system has been built and operated while the readiness posture is being reinforced through the development of operation plans and response manuals for various types of provocations as well as periodical integrated defense exercises and training. In addition, to swiftly counter diverse threats of terrorism, the military special forces for counterterrorism and different types of counterterrorism operation units have been designated, and the posture to jointly execute and support counterterrorism operations with relevant government organizations is being established.

The ROK Armed Forces has also set up a collaboration system with the Ministry of Science and ICT (MSIT) and updated the crisis response manual for GPS signal disturbance to counter North Korea’s global positioning system (GPS) jamming attempts. The ROK Armed Forces will continuously improve its preparedness and response capabilities against cyberattack attempts.

2. Maintaining a Readiness Posture against Aggression

| Enhancing Wartime Operational Capabilities | North Korea continues to maintain and build up its large conventional force as well as deploy most of its forces south of the Pyongyang–Wonsan line, maintaining a posture capable of launching surprise attacks and engaging in lightning warfare without needing to redeploy or adjust additional forces in emergencies.

In preparation for North Korea’s threats of a full-scale war, the ROK Armed Forces is continuously enhancing ROK–U.S. bilateral operation plans; verifying and supplementing them through the annual ROK–U.S. theater-level combined command post exercises (CPX),¹³⁾ including the Key Resolve (KR) and Ulchi-Freedom Guardian (UFG) exercise¹⁴⁾; and improving wartime operational capabilities through joint and combined field training exercises (FTX), including the Foal Eagle (FE) training and Hoguk training. In 2018, certain combined exercises

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 standard operating procedures (SOPs).

¹⁴⁾ It is a combined exercise conducted for the review and reinforcement of plans for wartime actions. It takes place in parallel with the government's Ulchi Exercise.

and training, including the UFG exercise, were suspended following close consultations between the ROK and U.S. defense authorities to create conditions for North Korea's denuclearization.

The ROK Armed Forces is developing concepts of operation to achieve a complete victory "within the shortest period with minimum damages." The ROK Armed Forces will use combined and joint forces to conduct simultaneous and integrated operations in all domains, including ground, sea, airspace, and cyber, and thus seize the initiative at the earliest stages of war and achieve a decisive victory in a short period.

| Strengthening the ROK–U.S. Combined Defense Posture | The ROK Armed Forces is maintaining and enhancing the combined defense posture based on a robust ROK–U.S. Alliance capable of firmly responding to North Korea's provocation of war. The Armed Forces of the ROK and the United States are closely cooperating and striving to maintain an even stronger combined defense posture after wartime OPCON transition. The two countries will continue to strengthen their combined defense posture by stably managing alliance issues through various defense consultative bodies.

| Reinforcing War Sustainment Capabilities | War sustainment capability means the ability of a country to maintain fighting capabilities such as troops, equipment, and supplies that are necessary to conduct a war. To reinforce its war sustainment capabilities, the ROK Armed Forces acquires and maintains forces, equipment, and supplies necessary to conduct a war in accordance with wartime requirements and current capabilities while innovatively improving the procurement, maintenance support, and logistics systems. Moreover, available domestic and international resources of the civilian, government, and military sectors are utilized in an integrated manner, and international logistics cooperation is being expanded.

Section 2 Reinforcing Response Capabilities against Nuclear and WMD Threats

The ROK Armed Forces has been strengthening the ROK–U.S. combined capabilities and posture as well as its own to effectively deter and counter nuclear and missile threats from North Korea. The ROK Armed Forces will maintain the military readiness postures as well as continue to strengthen the response capabilities and posture to counter nuclear and WMD threats from North Korea until the complete denuclearization and establishment of a peace regime on the Korean Peninsula. In particular, key forces will be set up as early as possible to acquire autonomous deterrence and response capabilities.

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

| Development of a Tailored Deterrence Strategy and the Enhancement of Capability to Implement U.S. Extended Deterrence | The ROK and the United States have enhanced their combined deterrence and response capabilities based on the bilateral “tailored deterrence strategy¹⁵⁾” to effectively counter North Korean nuclear and missile threats.

The tailored deterrence strategy is the two countries’ joint deterrence and response strategy optimized for the situations on the Korean Peninsula with the consideration of the characteristics of the North Korean leadership as well as nuclear and missile threats. It is a more advanced

¹⁵⁾ The ROK Minister of National Defense and the U.S. 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 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.

deterrence and response strategy than the concept of general extended deterrence¹⁶⁾ provided by the United States. The strategy 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. The tailored deterrence strategy is significant insofar as it provides a joint response framework that makes most of the deterrence methods and means available to the two allies in a manner to maximize deterrence and response effects against North Korean nuclear and missile threats.



Korea-U.S. Integrated Defense Dialogue
(July 2018)

To advance the tailored deterrence strategy and facilitate the practical implementation of the U.S. extended deterrence commitment, the ROK and the United States operate various policy consultative bodies including the Deterrence Strategy Committee (DSC), and the Extended Deterrence Strategy and Consultation Group (EDSCG). The DSC—a deputy minister-level regular consultative body that meets every six months during the Korea-U.S. Integrated Defense Dialogue (KIDD)—holds intensive discussions on various measures to deter and counter North Korean nuclear and missile threats.

The DSC annually conducts a tabletop exercise¹⁷⁾ regarding the use of extended deterrence means. To improve the capability for implementing the tailored deterrence strategy, the two countries are seeking enhancements in six areas including planning, threat evaluation, regional security cooperation, capability enhancement, strategic communications, and combined exercises. Meanwhile, the EDSCG is a regular consultative mechanism jointly run by the two countries' defense and foreign affairs authorities. 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. The EDSCG ensures that the means of extended deterrence is not limited to military (M) elements but that their ranges are expanded to include

¹⁶⁾ The U.S. commitment to provide deterrence to protect its allies from the enemies' nuclear and missile threats using a full range of military capabilities including nuclear umbrella, conventional force, and missile defense capabilities

¹⁷⁾ A discussion-based exercise to discuss ways for deploying means of U.S. extended deterrence in a particular imaginary scenario (tabletop exercise)

diplomatic, informational, and economic (DIE) elements, thereby amplifying their deterrence and response effects. At the second senior-level meeting of the EDSCG in January 2018, the two sides discussed various policies and military measures to improve the capabilities to implement the U.S. commitment to provide extended deterrence such as the effective rotational deployment of U.S. strategic assets around the Korean Peninsula and the enhancement of the cooperation system for extended deterrence. The two countries also agreed to continue strengthening bilateral senior-level discussions on strategic and policy issues going forward.

The latest major example of the close policy coordination between the ROK and the United States is the 2018 Nuclear Posture Review (NPR)¹⁸⁾ published in early February 2018. From an early stage of drafting the NPR, the MND communicated the ROK's opinions and discussed the direction of the writing in multiple consultations with the United States. As a result, the United States laid out clear objectives for North Korea's denuclearization in the 2018 NPR and clearly stated that any nuclear attacks by North Korea will not be tolerated.

Going forward, the ROK Armed Forces will improve the capability to implement the U.S. extended deterrence commitment based on the tailored deterrence strategy as well as bolster the ROK–U.S. combined deterrence and response capabilities.

| Developing the Alliance's Counter-Missile Operations Concepts | The “Concepts of the ROK–U.S. Alliance Comprehensive Counter-Missile Operations,” also known as the “4D Operational Concept”¹⁹⁾ specified in the “tailored deterrence strategy,” is a set of concepts regarding preparation against North Korea's ballistic missile threats with the alliance's counter-missile capabilities. The word “comprehensive” means improvement in all areas of capabilities to counter ballistic missiles including detecting, disrupting, destroying, and defending (4D).

The ROK and the United States reached an agreement on the “4D Operational Concept”

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

19) Detect: Support efforts to disrupt, destroy, and defend using intelligence, surveillance, and reconnaissance (ISR) assets.

Disrupt: Strike North Korea's fixed infrastructures that support missile operations.

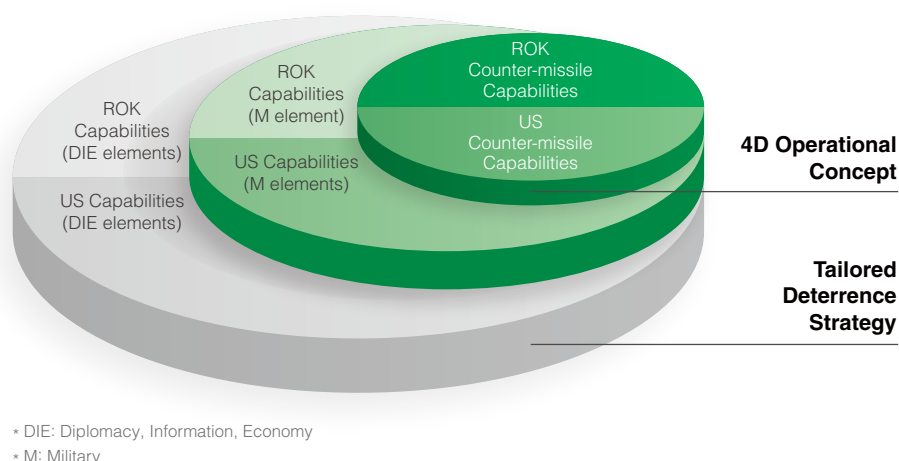
Destroy: Directly strike North Korean ballistic missiles as well as transporter–erector–launchers (TELs).

Defend: Intercept North Korean ballistic missiles launched toward the ROK.

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 on the execution of the alliance’s comprehensive counter-missile operations based on the 4D operational concept and the enhancement of related capabilities.

Since 2016, the ROK and the United States has been continuously seeking 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. The two countries will focus their capability on the continuous enhancement of the alliance’s comprehensive counter-missile capabilities and posture to achieve the complete denuclearization and establishment of lasting peace on the Korean Peninsula.

[Chart 3-7] Tailored Deterrence Strategy and 4D Operational Concept



Building Key Forces to Deter and Counter Nuclear and Missile Threats | The ROK triad system—an important component in the implementation of the concepts of the alliance’s comprehensive counter-missile operations (4D Operational Concept)—is being expanded and enhanced from the existing one focused on North Korean threats to the “Korea Air and Missile Defense (KAMD)” and the “strategic strike system” to counter omnidirectional security threats. The ROK Armed Forces is striving to build core forces necessary for this development as early as possible.

The “strategic strike system”²⁰⁾ realizes deterrence by both denial²¹⁾ and punishment²²⁾ 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—a multilayered defense system for intercepting missiles launched toward the ROK—consists of a detection system, a command and control system, and an interception system.

In preparation against omnidirectional missile threats, the ROK Armed Forces will expand the defensible areas and improve its strike capability to have multilayered defense²³⁾ capabilities optimized for the battlefield environment of the Korean Peninsula. The ROK Armed Forces currently has defense capabilities for key facilities in the capital area and major air bases with the fielding of the ballistic missile early warning radar, Aegis ship, and patriot missile batteries. To counter diverse future missile threats, the ROK Armed Forces will continuously enhance the KAMD system and bolster its interoperability with the U.S. missile defense systems to improve its capacity for deploying counter-missile capabilities and the reliability of its counter-missile capabilities.

| Supporting the Denuclearization of the Korean Peninsula | In parallel with the strengthening of capabilities to deter and counter North Korea’s nuclear and missile threats, the ROK Armed Forces is striving to support the government’s efforts for the fundamental and peaceful resolution of the North Korean nuclear issues on the military front.

The MND is supporting the government’s efforts to denuclearize and establish a peace regime on the Korean Peninsula by utilizing various defense–diplomacy channels and defense consultative mechanisms and exploring ways to effectively utilize the ROK Armed Forces’ support capabilities such as intelligence and logistics support, language interpretation, and

20) The concept that covers the existing Kill Chain system and the Korea Massive Punishment and Retaliation (KMPR) system

21) 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

22) 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

23) A defense system, composed of multiple intercept systems, is capable of counterattacking the enemy’s missiles in more than one engagement.

verification. The MND is also continuing its efforts to manage military specialists that can be utilized for the verification of denuclearization and devise concrete support requirements.

However, until North Korean threats are substantively reduced, the MND will maintain the military readiness posture to counter nuclear and missile threats from North Korea and will continue the force buildup as planned. If denuclearization is completed, threats from North Korea are diminished substantively, and a peace regime is established on the Korean Peninsula, the MND will readjust the readiness posture and force requirements to proactively respond to various nuclear and missile threats arising at that point of time.

2. Development of Preparedness Capabilities against Chemical and Biological Threats

| Development of Readiness Posture against CBRN Threats | The ROK Armed Forces has established various measures to proactively counter threats of chemical and biological attacks, as well as chemical, biological, and radiological threats, in forms of accidents, terrorism, and diseases.

Using the ROK–U.S. combined intelligence assets, the ROK Armed Forces continuously monitors North Korea’s chemical and biological weapon–related facilities and maintains a readiness posture to detect early signs of an attack and neutralize it. The chemical, biological, radiological, and nuclear (CBRN) units at each echelon were organized to respond to North Korea’s use of chemical and biological weapons and conduct reconnaissance and decontamination missions in contaminated areas. Meanwhile, the CBRN Rapid Response Team (CRRT) and the CBRN special mission battalion under ROK CBRN Defense Command are fully in charge and exclusively responsible for operations against CBRN-related terrorism. Moreover, the ROK Armed Forces has acquired protective equipment and materials, such as gas masks, protective clothing, decontaminants, and related medicine, and has built CBRN defense facilities to further improve its defense capabilities.

| Development of Civilian–Government–Military Integrated Exercises and Intra-governmental Cooperation System | To facilitate agile response to acts of terrorism and attacks involving chemical and biological weapons, civilian–government–military integrated

exercises, as well as the system for cooperation among relevant government agencies, are being enhanced. The civilian–government–military integrated exercise aimed at the thorough learning of procedures to respond to attacks and acts of terrorism, involving chemical and biological weapons, takes place annually in connection with the Safe Korea Exercise,²⁴ UFG Exercise, and Hwarang Training,²⁵ helping improve the national-level response capabilities against such threats. Moreover, capabilities for joint response among relevant organizations have been enhanced, and the system for their close cooperation has been strengthened through the national radiological disaster prevention joint training²⁶ hosted by the Nuclear Safety and Security Commission as well as the bioterrorism simulation drills²⁷ and bioterrorism evaluation meeting hosted by the Korea Centers for Disease Control and Prevention.

For early detection of and swift response to attacks and acts of terrorism involving chemical and biological weapons, the nationwide preparedness and response posture against CBRN threats will continue to improve with the development of warning transmission systems; systems for surveillance, detection, identification, and information sharing; and decontamination and medical treatment systems.

| Development of International Cooperation | The ROK Armed Forces is enhancing response capabilities against threats of chemical and biological weapons through cooperation and coordination with U.S. and international organizations.

Since 1997, ROK MND and U.S. Department of Defense (DoD) have operated the Counter-Proliferation Working Group (CPWG)—a director general-level consultative body—and involved both countries’ relevant organizations in the CPWG’s annual meetings to block the spread of WMD and enhance joint response capabilities to counter threats in contingencies. The

²⁴) It is an exercise aimed at strengthening the nationwide disaster preparedness posture, hosted by the Ministry of the Interior and Safety, and participated in by other ministries, local governments, public organizations, and citizens.

²⁵) It is a comprehensive exercise for an integrated rear-area defense that is held on a biennial basis. The government, military, police, and civilian sectors participate in the exercise to prepare against potential enemy infiltrations and provocations in both peacetime and wartime.

²⁶) It is an exercise conducted at each nuclear power plant by the Nuclear Safety and Security Commission and local governments. It was launched in 2003 and is held every two years.

²⁷) It is conducted in two different scales—a large-scale training conducted in the respective public health centers of 17 metropolitan governments and a small-scale training carried out in 110 public health centers in the country.

group was renamed as the Countering Weapons of Mass Destruction Committee (CWMD) in 2017, and their policy consultations have been strengthened since.

Moreover, the ROK and the United States conducted a bilateral bio-defense exercise known as the Able Response (AR) exercise on an annual basis between 2011 and 2017 to test the national-level integrated response system to counter bio-threats in the two countries. In 2017, the Adaptive Shield exercise—a bilateral counter-CBRN exercise—replaced the AR exercise, expanding the scope of the exercise to all areas of CBRN. The Adaptive Shield exercise is a military tabletop exercise conducted under the supervision of the ROK–U.S. Combined Forces Command (CFC) to test the crisis response system regarding potential CBRN crises taking place on the Korean Peninsula and to enhance the national-level response capabilities. Through this exercise, the two countries have been developing concrete measures to jointly counter CBRN threats and improving the response system for cooperation among relevant organizations in the event of large-scale damage.

Furthermore, to improve bilateral response capabilities against WMD, the ROK and the United States are pursuing cooperation and exchanges between the two countries' CBRN defense commands and relevant organizations in various fields.

Meanwhile, as the ROK is a state party to both the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC), The ROK Armed Forces is carrying out diverse activities to implement the treaties. The MND's arms control verification group, in particular, worked as the national escort body during the periodical inspection of military institutions by the Organization for the Prohibition of Chemical Weapons (OPCW) that verifies the implementation of the CWC by its state parties. Such activities helped enhance the credibility and transparency of the ROK's compliance with and implementation of international treaties.

In addition, since 2005, ROK CBRN Defense Command has annually conducted the OPCW's international anti-chemical weapons training course for Asian state parties including the Philippines, India, and Bangladesh. The regional assistance and protection course is designed to prepare participating nations against chemical terrorism and accidents involving chemical weapons.



A field practice in the OPCW international anti-chemical weapons training (September 2018)

The ROK Armed Forces will continue to expand the coordination between the ROK and the United States while enhancing cooperation with international organizations including the UN and OPCW.

3. Development of Space Defense Capabilities

| Strengthening the Foundation for the Development of Space Defense Capabilities |

The MND has been building and enhancing the environment for the development of space defense capabilities through the overhaul of the space-related legal and institutional framework to effectively support military operations in the space in the medium term and has acquired space defense capabilities to carry out space operations in the long term. The MND has established the foundation for the development of space defense capabilities, having overhauled the related legal and institutional framework, installed a space organization within the MND, and operated the ROK–U.S. space defense cooperation channel. To support effective joint military operations in the space, the MND plans to reinforce military space organizations and workforce as well as build up the space force including an electro-optical satellite surveillance system and a military reconnaissance satellite.

In February 2018, the MND participated in the revision of the “Basic Plan for the Promotion of Space Development,” which establishes the medium-term theme and plans for national space development policies. The revised Basic Plan provides the basis for the acquisition of a reconnaissance satellite and the enhancement of space surveillance organizations’ capabilities. In addition, the MND is pursuing the revision of the “Basic Plan for the Development of Space Defense Power,” which reflects the changing space security environment and the current state of the ROK’s space defense capabilities. Through the revision of the Basic Plan, the MND will analyze the changed space security environment, including the rapid expansion of neighboring countries’ space development, and reestablish the objectives for the future development of space defense capabilities in the medium and long terms. The MND will also propose tasks to pursue the development of space defense capabilities mainly in four areas including the establishment of a policy framework, development of an operating system, the buildup of a space force, and expansion of external and internal cooperation.

The MND will continue to build the foundation for the development of space defense

capabilities through the overhaul of the space-related legal and institutional framework, including the establishment of the “space development execution plans” in the security field with the consideration of changes in the space security environment, and the revision of the “Space Development Promotion Act,” for which it will consult and cooperate with relevant government agencies.

Development of an Alliance-Based Space Defense Cooperation | The MND has been strengthening its cooperation with the civilian sector and the government, as well as the ROK’s allies, to build effective space defense capabilities. The MND has strengthened its cooperation with the United States, a space powerhouse, in particular, based on the ROK–U.S. Alliance, seeking the enhancement of space defense capabilities in various fields. In 2012, the MND and the U.S. DoD signed the “Terms of Reference for the ROK–U.S. Space Cooperation Working Group.” The Space Cooperation Working Group met 11 times, starting in 2013, and achieved outcomes, including from the sharing of information related to space defense policies as well as the training, fostering, and exchanges of space workforce to cooperation in space situational awareness²⁸⁾ and participation in international space situational exercises.

In 2014, the two countries signed the Memorandum of Understanding (MOU) on Space Situational Awareness Service and Information Sharing, which enables the ROK to frequently receive various space object-related information and services from the U.S. Strategic Command. After the signing of the MOU, the Air Force set up a space intelligence center in 2015 to secure fundamental capabilities



The Air Force Space Intelligence Center

for space control, and has carried out various missions including analyzing space data, transmitting warnings of predicted satellite collision to relevant agencies, and taking measures on the situation, and conducted the space situational exercise during combined exercises. In April 2018, the

²⁸⁾ It is the ability to collect and analyze data from ground and space systems, and provide it to users (prediction or warning) to avoid space hazards including falling and colliding space objects.

space intelligence center received information about the fall of the Tiangong-1 Chinese space station from the U.S. Strategic Command and shared it with relevant government organizations, managing a timely response to the crash of the space object.

In 2017, ROK MND and U.S. DoD conducted the first senior-level tabletop exercise for space cooperation. The two sides devised measures to identify risky space situations over the Korean Peninsula, such as the jamming of navigation and communications satellite, and strengthened cooperation against such threats while continuously developing cooperation in space situational awareness field. At the 2018 meeting of the Space Cooperation Working Group, the two countries discussed ways to expand the sharing of space situational awareness data as well as cooperation to foster space specialists.

The two countries will continue to hold meetings of the Space Cooperation Working Group and high-level tabletop exercises on space cooperation; vitalize space data sharing, specialist training, and technology exchanges; and enhance capabilities to execute space operations through combined exercises in the domain of space.

Section 3 Strengthening National Defense Cybersecurity Capabilities and Establishing a Firm Counterterrorism Posture

Safeguarding cyberspace is a sovereign state's core task—a task equivalent to maintaining the exclusive control over territorial land, waters, and airspace. Many countries are heavily investing their manpower and financial resources in strengthening their cyber capabilities, and the ROK Armed Forces plans to push forward the "strengthening of national defense cybersecurity capabilities" initiative to secure safety in cyberspace, which is directly linked to national security and the accomplishment of military objectives. Moreover, to effectively respond to the growing threats of terrorism, The MND will continue to strengthen its counterterrorism systems and capabilities by overhauling the relevant legal and institutional framework and reinforcing equipment and supplies of counterterrorism units.

1. Bolstering Response Capabilities against Cyber Threats

| Devising Measures to Strengthen National Defense CyberSecurity Capabilities | In 2010, the ROK Armed Forces established ROK Cyber Command to form the institutional and organizational basis to conduct cyber warfare. Since then, the ROK Armed Forces has actively responded to the growing cyber threats. However, concerns over the national defense cybersecurity were raised following defense network hacking incident and the controversy over the Cyber Command's unlawful political interference in 2016. The necessity to bolster response capabilities against increasingly intelligent and sophisticated cyber threats has also increased.



National defense
cybersecurity policy

Many countries have recognized the severity of cyber threats and are making much effort to counter them, including the establishment of cyber command and the creation of a separate cyber force that is not part of Army, Navy, or Air Force. The MND has chosen and implemented the “national defense cybersecurity capability enhancement plan” as a task of “Defense Reform 2.0” to restore the people’s trust in the ROK Armed Forces and drastically strengthen the cyber capabilities of the ROK Armed Forces.

Under the audacious vision to “attain absolute superiority in national defense cyberspace,” the MND established the strategic objective to accurately, securely and effectively generate, maintain, and protect the cyberspace, and to ensure a superior utilization of the cyberspace in the cyber battlefield in comparison to adversaries’. To achieve this objective, the MND identified strategic tasks in the fields of organization, manpower, force, and institutional structure as well as 10 pragmatic tasks.

| Clarifying Each Organization’s Missions and Establishing a Work Structure | The MND plans to classify military response against a violation of the defense cyberspace as a domain of “cyber operations” and establish a cyber operation execution system led by the JCS. The missions and the work structure under this broader plan have been set as follows. The MND serves as the control tower of cyber policies, while the JCS commands the cyber operations of the entire military. The Cyber Command plays the role of the unit responsible for the final implementation and execution of the entire armed forces’ cybersecurity and operations. The headquarters of each branch and the units of each echelon are responsible for cybersecurity and defensive operations regarding the area and assets under their control.

| Full-Scale Reform of the Cyber Command’s Organization and Functions | The MND plans to rename the Cyber Command as the “Cyber Operations Command” and designate it as a joint unit that can carry out cyber operations under the command of the Chairman of the JCS. The possibility of the Cyber Command’s unlawful political interference has been fundamentally blocked with the abolishment of its politically controversial psychological warfare function. The Cyber Command underwent a full-scale reform of its organization and functions so that it can instead fully focus on its original mission—cyber operations. To ensure real-time cyberspace situational awareness, preemptive preventions, and proactive responses, the MND plans to bolster the Cyber Command’s intelligence operation function, reinforce its operation support

function with the acquisition of core technologies, and gradually expand the size of the unit.

| Acquiring and Cultivating Outstanding Cyber Specialists | The MND will enhance the system to acquire, manage, educate, and train cyber specialists under the recognition that elite cyber warfare specialists of the military determine the outcome of a cyber war.

The MND will design and establish the personnel management systems tailored for each status such as officers, noncommissioned officers (NCO), civilian employees of the military, and enlisted. For officers and NCOs, cyber military occupation will be newly created, and their career path will be designed to help improve their expertise. For civilian employees of the military, the MND plans to expand the hiring of outstanding civilian workforce as civilian employees of the military by creating an occupational category for the cyber field. Moreover, qualified enlisted will be chosen as cyber specialist to strengthen the military's cyber capabilities and contribute to the strengthening of the national cybersecurity capability.

To cultivate elite cyber warriors, the MND plans to enhance the education and training system by building a cyber warfare training center that resembles the actual defense cyber environment and conducting realistic training under various cyberattack scenarios.

| Advancing the Cyber Threat Response System | The cyber weapons necessary to successfully conduct cyber warfare will be advanced in sync with the pace of technological changes. The response system incorporating the multilayered defense concept will be built based on the analyses of tactics, techniques, and procedures of cyberattacks, while another plan is to build a cyber operation system to carry out effective cyber operations.

| Active Participation in International Cyber Cooperation | The ROK Armed Forces plans to actively participate in efforts to establish international rules and standards that strongly prohibit illegal acts of violations in cyberspace.

To this end, the ROK Armed Forces strives to build confidence in the cyber field with various countries and international organizations while developing bilateral and multilateral channels for international cooperation. The ROK Armed Forces plans to continue holding practical discussions through the Seoul Defense Dialogue Cyber Working Group, a multilateral working-level consultative body for the cyber field that has been meeting annually since 2014.

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

The patterns of recent terrorist attacks are diversifying in terms of perpetrators, means, and targets, as seen in the vehicle rampage attacks in London, United Kingdom, and in Nice, France; the serial bombings in Indonesia; and the mosque attack in Egypt. The number of countries targeted by terrorism is also growing. In the ROK, the mass shooting with an improvised firearm in 2016 and the “tumbler bomb” incident in Yonsei University in 2017 showed that homegrown terrorism by those dissatisfied with the society can take place domestically.

To effectively counter the growing threats of terrorism, the ROK Armed Forces is striving to enhance its counterterrorism system and the operational capabilities of counterterrorism operation units. Through the revision of the “MND Directive on Counterterrorism Activities,” the ROK Armed Forces has established and enhanced the system that enables real-time interagency exchange of terrorism-related information, and developed concrete roles and missions of each dedicated organization. In addition, the “working-level crisis response manual for terrorism” has been refined, enhancing the counterterrorism operation execution system. Since 2017, a budget of KRW 53.3 billion has been used to supply the military counterterrorism operation units with the latest equipment and supplies to enhance their operational capabilities and survivability. Moreover, the ROK Armed Forces has integrated the special mission units for counterterrorism that have been designated for their respective local areas and the counterterrorism units formed for different types of terrorism into “packages” to effectively counter various types of terrorism.

During the 2018 Olympic and Paralympic Winter Games in PyeongChang, the ROK Armed Forces seamlessly supported counterterrorism and security activities. As a result, the PyeongChang Olympics was lauded by the world as the safest and most peaceful Olympics.

Meanwhile, to effectively respond to international threats of terrorism, the ROK endeavors to promote counterterrorism cooperation and coordination with the international community, including participating in the ASEAN Defense Ministers’ Meeting Plus (ADMM-Plus) Experts’ Working Group on Counter-Terrorism and the ADMM-Plus combined exercise on counterterrorism.



Counter-terrorism training conducted for the Pyeongchang Winter Olympics (January 2018)

In response to threats of terrorism in the ROK and abroad, the ROK Armed Forces will strive to enhance the civilian–government–military–policy integrated operation execution system and related capabilities while continuously bolstering international counterterrorism coordination and cooperation by vitalizing combined counterterrorism exercises and commissioned education with allies and members of the international community.



Fully prepared against
"new types of terrorism" during PyeongChang
Olympic Winter Games

Section 4 **Building a Proactive and Comprehensive Support System to Overcome National Disasters**

To protect the lives and safety of servicemembers, the MND has established a field-oriented preemptive disaster preparedness posture for potential disasters within the military. The MND has also established a support system to swiftly and proactively provide troops and equipment in the event of a national disaster to protect the lives and properties of the people. At the same time, the ROK Armed Forces actively participates in international cooperation activities for humanitarian assistance and disaster relief in the event of an overseas disaster, and strengthens its overseas emergency relief system and related international cooperation.

1. Establishing a Disaster Prevention and Response System

| Strengthening Disaster Prevention Activities in the Military | To protect the lives and safety of servicemembers and ensure their safe return to their families in healthy shape, disaster prevention activities in the military, such as those concerning facilities, have been strengthened. Military units are vulnerable to national disasters, in particular, because many military units are located in mountainous areas and installed with aging facilities. In preparation for potential disasters, the ROK Armed Forces has established a field-oriented preemptive disaster preparedness posture.

The MND has been reinforcing daily safety inspections and periodic safety tests²⁹⁾ on aging military facilities and vulnerable areas exposed to risks of accidents while conducting safety

²⁹⁾ In 2018, safety inspections were carried out on approximately 94,000 military facilities over 68 days between February 5 and April 13. The facilities identified as lacking in safety are divided into three groups depending on the time required to fix them—immediate, short-term, and mid- and long-terms—and are managed separately.



Civilian–government–military joint exercise to respond to large-scale fire (May 2018)



Exercise to respond to large-scale fire in densely concentrated multiuse facilities (May 2018)

education and training mainly for commanding officers to thoroughly learn disaster and safety management activities and procedures of conduct in contingencies.

In addition, the ROK Armed Forces has been bolstering its 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 from disaster prevention to preparation and recovery. The “working-level crisis response manual for different types of disasters” has been updated, and the MND continues to use it in actual safety exercises and then refines it by actively participating in the “Safe Korea Exercise” conducted annually under the supervision of the Ministry of the Interior and Safety (MOIS).³⁰⁾ In May 2018, the MND hosted large-scale fire response exercise in densely populated multi-use facilities at a military dormitory located in Songpa-gu. The Songpa-gu district office and community centers, fire department, and police in the district participated in the exercise, which helped strengthen the civilian–government–military joint disaster response system.

The Army, Navy, and Air Force operate a disaster control center in each unit at every level—approximately 400 centers in total—and maintain emergency response systems and organic cooperation with relevant agencies, including municipal governments and local fire stations, so that they provide prompt support not only in disasters within the military but also in situations requiring military assistance.

Furthermore, the MND organizes annual military-wide conference for disaster management

³⁰⁾ In 2018, a total of 15,800 troops participated in 296 sessions of civilian–government–military integrated training to develop their situation-handling capability.

officers and specialized training which help improving the systematic and preemptive disaster response capabilities of disaster management officers at all units of every echelon.

| Establishing a National Disaster Support System | The scale of disasters, such as earthquakes, forest fires, droughts, and heavy rainfall, as well as the size of damages caused by them, has grown. Protecting the people's lives and properties from large-scale disasters and providing disaster recovery support for civilians have become key missions of the ROK Armed Forces. Over the past five years, the ROK Armed Forces provided around 912,000 troops and 28,000 pieces of equipment for disaster reliefs and damage restoration activities.

The ROK Armed Forces actively carried out recovery support activities in forest fires in Gangneung, Samcheok, and Sangju regions in May 2017 as well as in torrential rains in the Cheongju, Goesan, and Cheonan regions in July 2017. These activities greatly contributed to the residents' safe return to their homes at an earlier date and helped save the municipal governments' recovery costs. In November 2017 when the earthquake hit Pohang, some 5,800 troops were promptly deployed into the area, and they actively assisted in civilian damage recovery efforts including the removal of debris from damaged walls and support for the restoration of roof tiles. In addition, during the 2018 PyeongChang Winter Olympics and Paralympics, the ROK Armed Forces' efforts to assist the flawless hosting of the Olympic Games, including snow removal works and support at individual events, received much encouragement from both inside and outside the military. In a recent example, in October 2018, around 6,000 troops were deployed to the recovery efforts on the damages caused by Typhoon Kong-rey, and they removed floating materials from the beach and cleaned flooded houses. In July and August during the heat wave, 2,000 troops and 867 pieces of equipment were dispatched for sprinkling activities to reduce the temperature as well as supply drinking and agricultural water.

The ROK Armed Forces' support activities for civilians not only help the people in difficulties return



Cleaning fire residue of the Gangneung-Samcheok-Sangju forest fire (May 2017)



Snow removal support at the opening ceremony venue of the Pyeongchang Winter Paralympics (March 2018)

to their normal lives as early as possible but also have a positive impact of strengthening public confidence in the military. The MND will continue to endeavor to protect the lives and properties of the people by promptly and proactively providing troops and equipment in the event of a national disaster.

[Chart 3-8] The Military's Aid to Civilians in the Past Five Years

As of November 30, 2018

| Year | Activities | Number of Support Personnel | Number of Equipment Pieces |
|--------------|---|-----------------------------|----------------------------|
| Total | | 912,266 | 28,115 |
| 2014 | Heavy rainfall, Typhoon Nakri, and heavy snowfall damage restoration | 146,733 | 2,532 |
| | Avian influenza (AI) and pine with disease control | 70,907 | 204 |
| | Sewol Ferry disaster support (searching for missing persons, rescuing, carrying caskets, and providing medical support) | 370,710 | 11,387 |
| | Forest fire extinguishment support, marine pollution control, and building collapse aid | 6,682 | 135 |
| 2015 | Forest fire extinguishment support | 15,654 | 443 |
| | Missing civilians' search and rescue | 8,419 | 185 |
| | Foot-and-mouth disease, AI, and pine wit disease control; Middle East respiratory syndrome (MERS) outbreak medical control | 12,339 | 480 |
| | Drought, heavy rainfall, Typhoon Goni, and heavy snowfall damage restoration; building collapse aid; and marine pollution control | 11,973 | 2,278 |
| 2016 | Forest fire extinguishment support | 5,180 | 180 |
| | Foot-and-mouth disease, AI, and pine wit 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 |
| 2017 | Forest fire extinguishment support | 23,707 | 169 |
| | 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 |
| 2018 | Forest fire extinguishment support | 8,636 | 186 |
| | Drought, heavy rainfall, and typhoon damage support | 16,125 | 1,049 |
| | Missing civilians' search and rescue in the sea and marine pollution damages restoration | 1,249 | 199 |
| | Foot-and-mouth disease and AI control | 10,133 | 1,136 |
| | Heavy snowfall and earthquake damage support | 7,848 | 13 |

2. Overseas Disaster Relief Support System and International Cooperation

| Broadening Overseas Disaster Relief Support and Cooperation | In a series of large disasters that have recently struck several countries, the damage recovery and relief efforts by the affected countries alone have proven to be insufficient. They require a joint humanitarian response by the international community.

In response to such needs, the ROK government enacted the “Overseas Emergency Relief Act” in 2007, and deployed the “Korea Disaster Relief Team” to countries and regions hit by major disasters to put humanitarian values and love for humanity into concrete actions as a responsible member of the international community. The overseas disaster relief assistance provided by the ROK Armed Forces in the past 10 years is summarized in [Chart 3-9].

[Chart 3-9] Overseas Disaster Relief Support in the Past 10 Years

| Date | Region (Type of Disaster) | Details of Support |
|---------------|---|--|
| May 2008 | China (earthquake) | • 3 transport aircraft (C-130), 26.6t of relief supplies including military tents |
| November 2009 | Cambodia (typhoon) | • 1 transport aircraft (C-130), 7t of relief supplies including daily necessities |
| January 2010 | Haiti (earthquake) | • 1 Air Force rescuer (medical support) |
| March 2010 | Chile (earthquake) | • 136 military tents |
| March 2011 | Eastern Japan (earthquake and tsunami) | • 10 transport aircraft (C-130) (4 sorties), 58.8t of relief supplies; transported 102 rescue personnel |
| October 2011 | Turkey (earthquake) | • 100 military tents |
| November 2013 | Philippines (typhoon) | • 9 transport aircraft (C-130) (4 sorties), 329t 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 sorties), 23t of relief supplies; transported 20 medical personnel |
| October 2018 | Indonesia (earthquake) | • 3 transport aircraft (C-130) (between October 8 and November 30), 170 tents; transported 456t of international relief supplies |
| October 2018 | Saipan (typhoon) | • 1 transport aircraft (C-130); provided transportation to 799 ROK citizens marooned in disaster-struck areas |

The ROK Armed Forces has also been strengthening its emergency relief system and international cooperation concerning overseas disasters while actively participating in international coordination on humanitarian assistance and disaster relief.

In 2016, the ROK participated in five international conferences and exercises including the ASEAN civil-military coordination meeting and the ASEAN military medicine and disaster relief combined exercises. In 2017, the ROK participated in six international conferences and exercises including the multinational-combined exercise for humanitarian assistance and disaster relief and the ASEAN Regional Forum (ARF) Inter-Sessional Meeting on Disaster Relief. Through these international conferences and exercises, the MND is seeking ways to cooperate with international organizations for systematic disaster relief response and develop related capabilities.

In August 2017, a disaster relief delegation from Thailand's Ministry of Defense visited the ROK. The representatives undertook field trips to observe the ROK's weather forecast as well as natural and man-made disaster control systems, and discussed issues of mutual interests on disaster relief. Those trips helped strengthen the two countries' cooperation in the field of disaster relief. In 2018, the ROK attended six international conferences and exercises including the ADMM-Plus Experts' Working Group on Humanitarian Assistance and Disaster Relief and the Tabletop Exercise. The participation helped solidify the ROK's international cooperation system for swift and effective humanitarian assistance and disaster relief in various types of disasters.



Thailand's disaster relief delegation visiting the MND (August 2017)



ADMM-Plus Experts' Working Group on Humanitarian Assistance and Disaster Relief (February 2018)

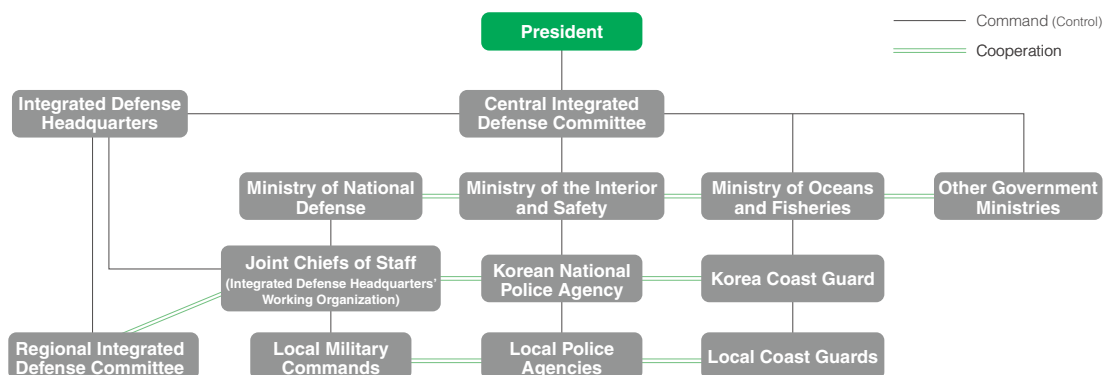
Section 5 Establishing an Integrated Civilian–Government–Military–Police Defense Posture

To effectively respond to a variety of security threats that are continuing to grow, the ROK Armed Forces continues to enhance an 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

To firmly establish an integrated defense posture, the ROK government operates integrated defense organizations including the Central Integrated Defense Committee, Integrated Defense Headquarters, Regional Integrated Defense Committees, and Integrated Defense Support Headquarters. The integrated defense command and cooperation structure is shown in [Chart 3-10].

[Chart 3-10] Integrated Defense Command and Cooperation System



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 national-level integrated defense policies, integrated defense operations and training guidelines, and the declaration or lifting of an integrated defense situation.³¹⁾

Integrated Defense Headquarters is responsible for integrated defense operations. With the chairman of the Joint Chiefs of Staff 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.

Regional Integrated Defense Committees are set up in 17 metropolitan cities and provinces including the Seoul Metropolitan City and 226 cities, counties, and districts. They are chaired by metropolitan city mayors, provincial governors, city mayors, county governors, and district office heads, respectively. Each Regional Integrated Defense Committee deliberates and decides upon matters including declaring or lifting an integrated defense situation at a local level,³²⁾ establishing support measures for integrated defense operations, and designating vulnerable areas or repealing the designation thereof.

Integrated Defense Support Headquarters, established at the level of a Metropolitan City, province (do), city (si), county (gun), district (gu), 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 integrated defense all-source situation room while fostering and supporting national defense elements. In addition, they establish resident report systems in vulnerable areas in integrated defense.

³¹⁾ 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 others specified by the presidential decree.

³²⁾ According to Article 5 of the United Defense Act, among the regional integrated defense committees, only the committees of cities and provinces can declare and lift an integrated defense situation.

2. Improvement and Development of an Integrated Defense Execution System

As the scope of security has expanded to all elements posing threats to the safety of the people, efforts to revamp and enhance the integrated defense execution system are underway to respond to various security threats. In 2017, during the 50th anniversary of the Central Integrated Defense Meeting, various national-level measures against various threats, such as nuclear, terrorism, and biological and chemical threats, were devised. At the 51st Central Integrated Defense Meeting in 2018, parties held intensive discussions on plans to prepare against potential terrorist threats at the 2018 Olympic Winter Games in Pyeongchang, measures against nuclear and cyber threats, and measures to strengthen the protection of the people's safety in the event of a natural or man-made disaster.

At the 50th and 51st Central Integrated Defense Meetings, a total of 17 follow-up measures in five themes, including the enhancement of the central and local governments' capabilities to respond to a crisis, were devised. Relevant government organizations, affiliated public agencies, and local governments are collaborating to implement those measures, and the integrated defense working-level committee quarterly analyzes the outcomes from their implementation.

In addition, the Integrated Defense Headquarters divides the country into 11 zones and conducts the Hwarang Training—a comprehensive rear-area training—in the respective zones. In 2017, the Hwarang Training took place in four zones that cover seven cities and provinces including Daejeon – South Chungcheong – Sejong, Jeju, Seoul, and South Jeolla – Gwangju. In 2018, it was held in five zones that cover seven cities and provinces including Busan–Ulsan, South Gyeongsang, North Chungcheong, Incheon–Gyeonggi, and North Jeolla. Through these exercises, the Integrated Defense Headquarters tested, refined and further developed the integrated defense operation execution system. In particular, by drastically improving the Hwarang Training evaluation method starting in 2018, the Integrated Defense Headquarters saw success in strengthening its training control capabilities and enhancing its evaluation standards by carrying out evaluations on the relevant agencies through an integrated government

evaluation team³³⁾ led by the Integrated Defense Headquarters.

Furthermore, the ROK government seeks to ensure appropriate conditions to carry out integrated defense operations by comprehensively reflecting changes in the security environment as well as issues raised during various exercises and training. To do so, the ROK government has been amending the United Defense Act and the enforcement ordinance of the ACT, directives on integrated defense, and detailed implementation guidelines.

³³⁾ Consists of 30 officials from the Ministry of the Interior and Safety, the Korean National Policy Agency, the National Intelligence Service, the Korea Coast Guard, the National Fire Agency, and agencies responsible for key facilities.

Section 6 Strengthening Education and Training Focused on Combat Missions

The MND is actively pursuing and realizing its objective to foster “strong combatants and combat troops that fight and defeat enemies” by reinforcing realistic unit training and enhancing servicemembers’ spritual force. It is also enhancing the school education system to foster competent officers fit for patterns and the battlefield environment of future warfare. Moreover, to secure a superior workforce, the ROK Armed Forces is incrementally expanding the retainment of long-term service officers and improving the benefits and compensations for short-term service officers.

1. Acquiring Superior Workforce and Fostering Military Professionals

| Acquiring Superior Workforce | “Defense Reform 2.0” involves the reorganization of the troop structure to develop elite forces focused on officers as well as the adoption of advanced weapons systems that create a greater need for competent officers to operate them. Meanwhile, it is estimated that acquiring able cadre candidates will become increasingly challenging as the pool of people wanting to serve as officers or noncommissioned officers (NCOs) would likely decline if the population capable of military service continues to decrease and the youth employment rate increases.

To acquire talents, the ROK Armed Forces is expanding the recruitment and retainment of long-term service officers, promoting military service as a career. The overall quota of officers will be adjusted in a way that reduces the recruitment of junior officers by cutting down the number of staff sergeants as well as first and second lieutenants while increasing the number of officers serving a long-term career as soldiers. By doing so, the ROK Armed Forces will gradually enhance its workforce management system into the “small-scale acquisition and long-term

utilization” system. The acquisition of superior workforce and the utilization of experienced workforce will help boost the military officers’ morale and contribute to the enhancement of their combat power.

Additional efforts to acquire outstanding workforce include the short-term service grant to better compensate officers and NCOs intending to serve a short term. The MND also seeks to increase the number of recipients of the grant for additional military service.³⁴ The grant is given in the form of tuitions to outstanding 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 an officer. With these measures, the ROK Armed Forces is preparing for the situation where the conditions of workforce acquisition are increasingly tough and, therefore, expect to gain stable access to outstanding medium- and long-term service officers.

For the utilization of outstanding female workforce in the military, the hiring of female servicemembers has been expanding. The MND plans to raise the level of female servicemembers in the military from 5.5% in 2016 to 8.8% in 2022, and the level of female second lieutenants and staff sergeants in the junior officer recruitment from 6.5% in 2016 to 13.3% in 2022. As the number of women in uniform increases, substitute workforce for parental leave will be secured, and the personnel management and working conditions of female servicemembers will be improved so that they can fully perform their capabilities and the military can better utilize them.

| Fostering Creative Military Specialists | The MND is flexibly fostering a creative military specialist capable of responding to drastic changes in future battlefield environments, such as changes brought by the Fourth Industrial Revolution, and leading innovations in the defense field. The development of military specialists is systematically managed in two separate programs—specialized degree education and overseas military education.

Specialized degree education is aimed at fostering military professors, researchers, and experts in special technology fields. Outstanding domestic and international educational institutions

³⁴) 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.

offer master's and doctoral degree programs, and around 300 candidates are selected every year for programs mainly in advanced science and technology fields, including robotics and artificial intelligence, for the ROK Armed Forces' leadership in future battlefields.

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 300 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 broaden the geographic reach of military diplomacy and enhance defense cooperation with other nations, overseas military education destinations are diversifying to include countries in the Middle East, South America, Eastern Europe, and Africa.

2. Improvement of the Development and Refresher Training System

Objectives | To foster elite servicemembers demanded in the battlefield, the MND is improving the school education system in an effect-based manner. The school education system has two components—development training to convert civilians into soldiers, and refresher training to help soldiers acquire the basic knowledge and skills necessary to carry out missions specific to their military occupations, ranks, and positions. The lecture-centered education led by instructors is being transformed into a student-led participation-based education involving discussions and practices, and problem-solving education. Meanwhile, the curriculum is being improved considering the changes in the defense environment such as the adoption of cutting edge weapons systems, and advancements in science and technology. To foster superior officers, the MND has been enhancing the education systems of military academies, pilot-operating the Reserve Noncommissioned Officers' Training Corps, and vitalizing defense online education programs. It also plans to improve the training system for newly enlisted soldiers, and restructure the Korea National Defense University and the Joint Forces Military University in connection with Defense Reform 2.0. The overview of courses run by educational institutions belonging to each service branch and joint units, as well as units directly controlled by the MND, is shown in [Chart 3-11].

[Chart 3-11] An Overview of Courses Offered by the Educational Institutions of the Three Branches and Units Directly Controlled by the MND and Joint Units

As of December 2018, Unit: Number of courses

| Category | Total | Army | Navy | Air Force | Marine Corps | Units Directly Controlled by the MND and Joint Units |
|-----------------------|-------|------|------|-----------|--------------|--|
| Development Education | 40 | 20 | 9 | 6 | 4 | 1 |
| Refresher Education | 1,922 | 704 | 690 | 335 | 18 | 175 |

| Improving Education Systems at Military Academies | To foster creative and proactive elite officers, the education 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 discussion and presentation 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.

Since 2012, the MND has conducted an integrated military academy education program through which cadets can learn about other service branches aside from their own and recognize the importance of joint operations. In 2018, in particular, the MND enhanced the program by intensively incorporating field trips and experiential learning activities considering the characteristics of each branch. 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 for the first time and visited Russia, Japan, and major domestic islands. During the trips, they experienced various kinds of maritime training and life aboard naval vessels, learning the roles and missions of the Navy and the importance of protecting territorial waters. The cadets also learned security situations in Northeast Asia and formed a sound perspective toward their nation. For third-year cadets, the Air Force Academy plans to organize field trips to Air Force operations units and specialized



Army, Navy, and Air Force cadets experiencing GOP guard duties (January 2018)

experience programs starting in 2019.

| Pilot Operation of Reserve Noncommissioned Officers' Training Corps | Since 2015, the MND has set up and operated a “Reserve Noncommissioned Officers' Training Corps (RNTC)” pilot program in 6 two-year technical colleges to gain stable access to outstanding NCO candidates. Two classes of RNTC—145 persons in the first class of 2017 and 173 persons in the second class of 2018—have been commissioned as NCOs, and the third and fourth classes are in school. In 2017, the MND evaluated the achievements of the first class to decide whether to continue operating the RNTC program. With the comprehensive consideration of the cadets' qualifications, demand for NCOs, preference over the university, and changes in the future population structure, the MND decided that it is necessary to continue the RNTC program, which is expected to become a regular program and be expanded starting in 2019.

| Vitalizing Defense Online Education | The ROK Armed Forces has been expanding its online education offerings so that field units can minimize time out of the office that on-site education entails and quality education is promptly provided to a large number of trainees. Online education is operated mainly in a way that trainees take orientation programs in online lectures linked to the on-site education programs of educational institutions of various levels. This way, trainees can complete the courses without having to stretch the duration of on-site education.

The ROK Armed Forces also operates open online courses to allow the servicemembers of field units, who do not participate in on-site education, to take the various online classes provided by the military's outstanding educational institutions without temporal and spatial constraints. In 2017, the Military-Massive Open Online Course (M-MOOC)³⁵⁾ program was launched, allowing all servicemembers to complete necessary courses online from their service site and thus improve their military expertise and job competency.

Military open online courses became available in 2015 when the Joint Forces Military

35) A military education system without maximum enrollment limits and open to all that offers web-based courses



Joint maritime training for
Army, Navy, and Air Force cadets

University (JFMU) launched the pilot operation of seven courses including operational procedures and maritime strategies. The number of open online courses offered by various institutions grew to 17 in 2016 and 35 in 2017. As of 2018, 16 institutions, including the JFMU, Korea Armed Forces Nursing Academy (KAFNA), Defense Agency for Spiritual and Mental Force Enhancement, and Army Infantry School, offered a total of 47 courses. The MND will continue to expand the online education program so that all servicemembers can receive the necessary military education anytime, anywhere.

| Improving the New Enlistee Training System | The MND is enhancing the training system for newly enlisted soldiers in line with the reduction of the service period, which is one of the “Defense Reform 2.0” initiatives. It expects to secure the maximum amount of time to utilize enlistees by conducting the basic military training and military occupation training required for executions of basic missions within the shortest possible period and deploying them in field operations as early as possible.

For basic military training, subjects that are necessary and fit for the characteristics of each branch will be set up, and the duration of training will be adjusted. For military occupation training, with the consideration of each military occupation’s characteristics, including its missions and roles, the subjects required for field operations will be intensively covered and expanded, while those deemed unnecessary will be abolished or given less emphasis.

| Restructuring of the Korea National Defense University and the Joint Forces Military University | As part of the implementation of Defense Reform 2.0, the MND plans to restructure military educational institutions, including the Korea National Defense University (KNDU) and Joint Forces Military University (JFMU), to enhance the efficiency in their operations and expand the utilization of the civilian workforce in noncombat fields. To boost the operational efficiency of the organizations, academic and educational institutions in the field of defense policy will be integrated into the KNDU. The MND is also reviewing a plan to restructure the JFMU toward a direction that strengthens joint education and maximizes the outcome of each branch’s education at the same time. Meanwhile, civilian military employees will replace military personnel in active duty positions at the KNDU, including the position of president, which is served by an active-duty general. The MND will also identify, among the jobs carried out by active-duty servicemembers, the areas where civilian workforce can be

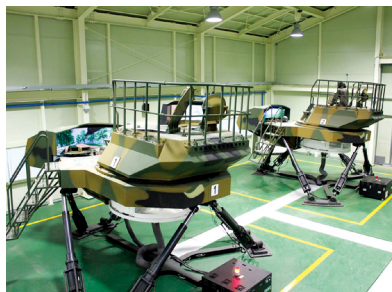
utilized and then outsource them to civilian contractors or directly hire civilian personnel.

3. Reinforcing a Realistic Unit Training

| Unit training | Under the objective of fostering strong combatants and combat units that fight and defeat enemies, the MND is pursuing projects to introduce scientific training equipment and acquire scientific training area to ensure the right conditions for a realistic unit training in each service.

The ROK Armed Forces has been adopting scientific training equipment because of the transformation of military strength to a qualitative and technology-intensive structure necessitated by the reduction of troops as well as constraints³⁶⁾ on education and training environments. The ROK Armed Forces has adopted training systems that utilize training equipment incorporating advanced science and technology, and continue to expand training and exercises using such systems. Advanced training equipment include the Multiple Integrated Laser Engagement System (MILES³⁷⁾), Tank Multipurpose Simulator (TMPS), submarine anti-ship simulation training equipment, Air Combat Maneuvering Instrumentation (ACMI), and Electronic Warfare Training System (EWTS).

In parallel with the adoption of scientific training equipment, the ROK Armed Forces is building scientific training centers to ensure that the environment for realistic training is focused on combat missions. The Army is setting up corps- and division-level scientific centers while organizing training sites by region and consolidating the training sites of military camps. The Navy has built scientific training centers incorporating simulation training equipment, such as the integrated maritime tactical training center and



Training using TMPS

³⁶⁾ There have been growing complaints filed by residents living in the vicinity of training centers and their local governments over shooting noise, traffic congestion during units' travel between their base and the training center, and pollution generated during training.

³⁷⁾ An education and training system equipment using cutting-edge science and technology including laser beam transmitters and detectors

guided weapons simulation tactical training center, and is now seeking to acquire a training center where vessel damage control training³⁸⁾ can be conducted in a vessel-like environment. The Air Force has acquired an integrated air base defense training ground and is in the process of introducing an integrated scientific training system for air defense artillery.

| Key Training and Exercises of the Army, Navy, Air Force, and Marine Corps | To foster individual combatants and units instilled with a warrior’s mindset and spirit, **the Army** is carrying out intensively realistic training that reflects actual battlefield situations, such as combat firing training under adverse conditions, as well as scientific training that involves MILES and combined training in diverse fields.

To equip its soldiers with combat operation capabilities corresponding to patterns of enemy attacks and combat situations, the Army has strengthened realistic combat shooting training involving targets of opportunity³⁹⁾ in diverse enemy scenarios. It also conducts intensive training under diverse situations with adverse conditions such as nighttime live fire training and base capture training involving actual carrying loads. Moreover, physical training focused on combat missions has been strengthened while using various methods to enhance training outcomes, including selecting and rewarding 300 of the finest combatants – as individuals or in teams – once a year.

Scientific training includes combat command training and training that utilizes MILES equipment and simulation equipment. Training using MILES equipment help improve combat capabilities significantly because clear and objective training results are provided upon the completion of an engagement exercise conducted at the military camp or random areas. It is conducted in various types of units, including infantry, mechanized units, and special warfare units, at the platoon to regiment levels. At the Korean Combat



A company training with MILES equipment (March 2018)

38) Training aimed at improving the ability to control all types of damage to naval ships and risk factors from the maintenance of a readiness posture in peacetime to response and recovery from damage situations so that fighting capabilities are maintained at their maximum level at all times

39) Targets that have not been planned and appear in real-time during combat

Training Center(KCTC), the training field was expanded, and a training system was established to enable regimental combat teams' training involving artillery, tanks, and helicopters starting in 2018. This helped the expansion of scientific combat training.

Simulator training, which involves firing, controlling, and tactical simulation in a virtual battlement environment, improves the capabilities to respond to unforeseen events that may occur in actual combat situations. The Battle Command Training Program (BCTP), which uses computer simulation techniques, is designed to cultivate the combat command capability of commanding officers and staff members. The BCTP has helped improve the troop-leading procedures of units at all levels and the ability to employ integrated combat capabilities. The Army plans to set up the Live Virtual Constructive Gaming (LVCG) scientific training system that links actual training situations in real areas (live), simulator training (virtual), BCTP using computer simulation techniques (constructive), and war-gaming (gaming).

In addition, the Army conducts various types of combined trainings, ranging from special operations, unconventional warfare, and air infiltration to WMD removal operations, combined arms exercises, air assault, and high-altitude low-opening training. The number of countries the Army conducts combined trainings with is also growing. The combined trainings carried out by the Army in the past two years are summarized in [Chart 3-12].

[Chart 3-12] The Army's Combined Exercises and Training during the Past Two Years

Unit: Time

| Year | Total | Domestic | | | Overseas | | |
|------|-------|----------|----------|--------------|----------|----------|--------------|
| | | Subtotal | ROK-U.S. | Multilateral | Subtotal | ROK-U.S. | Multilateral |
| 2017 | 44 | 42 | 42 | - | 2 | - | 2 |
| 2018 | 33 | 31 | 31 | - | 2 | - | 2 |

The Navy carries out cooperative and joint training, combined training, and cruise training based on commanding officer-centered tailored education to conduct realistic maritime training adapted to the respective battlefield environments of the East Sea, West Sea, and South Sea.

The joint forces of ground, naval, and air forces participate in cooperative and joint training that consists of training for various types of operations including anti-surface, anti-submarine, and anti-air operations. Other types of cooperative and joint training include maneuvers, northwest island defense, maritime interdiction, and joint response training against local provocations near the NLL. During these training sessions, the Navy verifies the performance

of precision-guided weapons and maximizes its ability to operate them through live-firing of missiles.

Combined training falls into two categories—the ROK–U.S. combined training to strengthen the combined defense system and the multilateral combined training aimed at promoting humanitarian assistance and military cooperation. The ROK–U.S. combined training is 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 maritime counter-SOF training, anti-submarine maritime search training, amphibious operations training, mine warfare training, rescue warfare training, and Joint Logistics Over-The-Shore (JLOTS) training.

Examples of multilateral combined training and exercises include mine warfare training, Cobra Gold training, the Western Pacific Mine Countermeasure Exercise (WPMCMEX), the Rim of the Pacific Exercise (RIMPAC), and the multilateral Exercise Komodo⁴⁰⁾ for disaster relief, as well as the Search-and-Rescue Exercise (SAREX) conducted with neighboring nations such as Japan and Russia. In recent years, the ROK has conducted passing exercises (PASSEX) with neighboring and partner countries including Australia, Canada, and New Zealand. The combined training and exercises carried out during the past two years are summarized in [Chart 3-13].



Missile live-fire exercise in the East Sea (October 2017)

[Chart 3-13] The Navy's Combined Exercises and Training during the Past Two Years

Unit: Time

| Year | Total | Domestic | | | Overseas | | |
|------|-------|----------|----------|--------------|----------|----------|--------------|
| | | Subtotal | ROK–U.S. | Multilateral | Subtotal | ROK–U.S. | Multilateral |
| 2017 | 31 | 27 | 23 | 4 | 4 | 1 | 3 |
| 2018 | 24 | 19 | 17 | 2 | 5 | - | 5 |

⁴⁰⁾ Komodo is an island on an archipelago of the Lesser Sunda Islands in Indonesia.



Navy live fire training
on the East Sea

Cruise training is an ocean navigation training aimed at enhancing cadets' mission capabilities. Cruise training involves fourth-year cadets of the ROK Naval Academy and takes place for a period of 100–130 days every year alternately in one of the four navigation routes in the world's four sea areas. In 2017 and 2018, respectively, cruise training covered 10 countries. Cruise training not only promotes military exchanges and cooperation with the host countries through passing exercises and combined naval communications training but also helps raise the ROK's stature by holding events to show appreciation toward the countries that participated in the Korean War, meet with overseas Korean communities, and carry out defense industrial cooperation.

To realistically carry out these training, the Navy is building a scientific training system by setting up the Integrated Maritime Tactical Training Ground and the Guided-Weapon Tactical Simulation Center, both of which make use of simulation equipment to reflect changes in naval weapons systems. This is coupled with a plan to construct a modern standard training center enabling naval ships damage control training in an environment similar to an actual ship.

The Air Force is carrying out wartime operational readiness training, local provocation readiness training, and training for specific missions in a realistic manner to establish an omnidirectional military readiness posture as well as strengthen the capabilities to conduct combined and joint operations under its leadership.

The two types of wartime operational readiness training are independent training conducted solely by the ROK Air Force and the ROK–U.S. combined training. Independent training includes combat readiness training, wartime battlefield space management training, wing/ combat command air strike package training, and large-scale campaign-level training (Soaring Eagle). The ROK–U.S. combined training and exercises include a large-scale combined air campaign exercise (Max Thunder), a multinational combined tactical exercise (Red Flag – Alaska), and a humanitarian assistance and disaster relief exercise (Cope North).



Multilateral combined tactical training (Red Flag – Alaska) (October 2018)



Air Force Red Flag Exercise in Alaska

The various kinds of local provocation readiness training conducted by the Air Force include the northwest island provocation readiness training, joint coastal infiltration training, nighttime infiltration and attack training, aircraft hijacking and air terrorism response training, guidance training for aircraft carrying defectors and refugees, and training for interdicting enemy special operations forces' maritime infiltration.

Training for specific missions by the Air Force ranges from defensive counter-air training to air interdiction/deep area strategic target attack training, close air support training, airborne/special operations training and combat search, and rescue training. Defensive counter-air training to block enemy infiltration forces' attempts at intruding into the ROK airspace includes territorial airspace intrusion response training, massive track infiltration response training, and joint and combined air-defense training. Air interdiction/deep area strategic target attack training consists of training aimed at disrupting, delaying, and destroying enemy support forces that have been augmented to the front area before they become a threat to the ROK Armed Forces, and training for attacking strategic targets in an enemy's deep area. Emergency air interdiction training is carried out as a combined or joint exercise with ground forces—the U.S. Joint Surveillance and Target Attack Radar System (JSTARS) and aircraft strike controllers of the Special Warfare Command—with focus on enhancing the capabilities to detect and attack moving targets. Close air support training to support operations by ground and naval forces is conducted as daytime and nighttime exercises, urban and maritime exercises, and rear-area close air support training. Airborne/special operations training, aimed at enhancing mission execution capabilities for low-altitude infiltration and airborne operations, includes joint air transport training and air mobility aircraft airdrop package training. Meanwhile, to improve mission execution capabilities for wartime combat search-and-rescue operations, the Air Force conducts joint search-and-rescue training with the Special Warfare Command, maritime search-and-rescue training under lighting support, and training by the combat search-and-rescue task force.

In tandem with the various types of training and exercises, the Air Force conducts scientific training, assisted by ground simulation training equipment, the Air Combat Maneuvering Instrumentation (ACMI), and the Electronic Warfare Training System (EWTS), because of limitations in carrying out actual air mobility training. The combined training by the Air Force during the past two years is summarized in [Chart 3-14].

[Chart 3-14] The Air Force's Combined Exercises and Training during the Past Two Years

Unit: Time

| Year | Total | Domestic | | | Overseas | | |
|------|-------|----------|----------|--------------|----------|----------|--------------|
| | | Subtotal | ROK-U.S. | Multilateral | Subtotal | ROK-U.S. | Multilateral |
| 2017 | 20 | 18 | 18 | - | 2 | - | 2 |
| 2018 | 21 | 18 | 17 | 1 | 3 | - | 3 |

The Marine Corps regularly conducts amphibious training at least twice a year to develop capabilities to execute forcible entry operations. It maintains an utmost operation readiness posture through a variety of training and exercises including rapid task force training, combined and joint training, and the tactical training of different echelons.

Rapid task force training is conducted as part of the large-scale amphibious operations exercises of regiment or higher-level units on an annual basis during the Ssangyong Training or Hoguk Training. The objective of rapid task force training is to develop capabilities to perfectly execute forcible entry operations, northwest island defense operations, stabilization operations, and nonmilitary operations. The training has helped the Marine Corps to cultivate combined and joint forcible entry operational capabilities. In addition, the Marine Corps conducts northwest island augmentation training as well as field training in Ulleung Island and Jeju Island.

The Marine Corps conducts and participates in a variety of combined exercises and training. The ROK and U.S. Marine Corps conduct the Korea Marine Exercise Program (KMEP)⁴¹—a combined tactical echelon-level exercise—at least 20 times a year to develop the capabilities of each military occupation and enhance combined operational capabilities. The ROK Marine Corps also participates in Cobra Gold, Khaan Quest, RIMPAC, and other overseas training. Also, through observing overseas trainings such as one from Australia and Balikatan Training in the Philippines, the Marine Corps is working on expanding its participation in overseas multilateral combined trainings. The combined training



ROK-U.S. amphibious exercise
(April 2017)

⁴¹) An ROK-U.S. combined training program 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

and exercises by the Marine Corps during the past two years are summarized in [Chart 3-15].

[Chart 3-15] The Marine Corps' Combined Exercises and Training during the Past Two Years

Unit: Time

| Year | Total | Domestic | | | Overseas | | |
|------|-------|----------|----------|--------------|----------|----------|--------------|
| | | Subtotal | ROK-U.S. | Multilateral | Subtotal | ROK-U.S. | Multilateral |
| 2017 | 19 | 18 | 18 | - | 1 | - | 1 |
| 2018 | 15 | 12 | 12 | - | 3 | - | 3 |

The tactical training of different echelons is aimed at attaining the completeness in the execution of operations to lead and manage isolated battlefields. 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 passing exercises at battalion- or lower-level and regular amphibious ship loading training.

| **Joint⁴²⁾ Exercises⁴³⁾ and Training⁴⁴⁾** | With the consideration of the rapidly changing security situations, the ROK Armed Forces has been reinforcing joint exercises and training to enhance joint operational capabilities and maintain a firm military readiness posture.

The Taegeuk Exercise is an annual command post exercise led by the Joint Chiefs of Staff to enhance wartime and peacetime operational capabilities and command capabilities. After the peacetime OPCON transfer, the Joint Chiefs of Staff in 1995 began the Taegeuk Exercise to strengthen operational capabilities. With the participation of operations commands (corps-level) since 1999, the Taegeuk Exercise has grown into a theater-level joint command post exercise. Since 2005, the ROK Armed Forces has utilized the Taegeuk Joint Operation Simulation (JOS) model—a theater-level joint operation simulation model developed by the JCS—that helped

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

43) 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

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



2017 Marine Corps
Cobra Gold
(Combined Amphibious
Operation) Exercise

substantively improve the outcomes of exercises.

The Hoguk Training is a military-wide field training exercise annually carried out under the command of the JCS to equip each echelon with capabilities to execute operation plans. Starting in 2015, the Hoguk Training has been linked with the Hwarang and other similar training programs, with the East Sea and West Sea exercises becoming integrated, to enhance the efficiency of training and strengthen its jointness. To improve the outcomes of joint operations, the ROK Armed Forces continues to enhance the Hoguk Training considering the operational environments, training conditions, and change in unit structures.

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 for wartime and peacetime integrated defense operational plans as well as firmly establish the integrated civilian–government–military–police defense posture. The training is also aimed at instilling security awareness in residents and promoting a shared understanding of the importance of security. The ROK Armed Forces plans to merge the Hwarang Training and the Chungmu Training⁴⁵⁾ to develop a realistic integrated defense training, where all national defense elements will participate.

| Combined⁴⁶⁾ Exercises and Training | To maintain a military readiness posture under the combined defense system and enhance the warfighting capabilities of combined forces, the ROK and the United States has been reinforcing combined exercises and training with an emphasis on upgrading the combat readiness posture and capabilities to execute and sustain combined operations.

The Key Resolve (KR) exercise and the Foal Eagle (FE) training are an ROK–U.S. combined theater-level command post exercise and a combined field training exercise, respectively, carried out annually during the first half of the year.

The KR exercise focuses on inspecting and assessing the combined defense posture and improving proficiency in warfighting procedures. In preparation for wartime OPCON transition,

⁴⁵⁾ Training aimed at building emergency response capabilities for the maintenance of a posture for the rapid mobilization of national resources and the establishment of a posture for an immediate shift to wartime mode

⁴⁶⁾ Cooperative relationship between the military units or government organizations of two or more allied nations

the ROK-led theater-level combined exercise execution/performance capabilities have been improving with the ROK JCS taking the lead in planning, operation of opposing forces, and after-action review in the 2017 and 2018 KR exercises.

The FE training is an ROK–U.S. combined field training conducted to cultivate operational capabilities to defend rear areas. Since 2002, the FE training was conducted together with the combined wartime augmentation exercise called the Reception, Staging, Onward Movement and Integration (RSOI) exercise⁴⁷⁾ to improve the efficiency of the training and enhance combat power. As the RSOI exercise was renamed as the KR exercise in 2008, the combination of the RSOI and FE exercises is conducted under the new title of KR/FE exercise.

The Ulchi Freedom Guardian (UFG) exercise is an ROK–U.S. combined theater-level command post exercise aimed at enhancing the independent response capabilities of the ROK Armed Forces and the ROK–U.S. combined response capabilities. The UFG exercise also intends to enhance the warfighting capabilities of the ROK–U.S. combined forces in the event of a full-scale war as well as improve proficiency with the warfighting system involving the government.

In 2018, the Taegyeuk Exercise conducted solely by the ROK Armed Forces replaced the UFG exercise considering the security situation. In 2019, combined exercises to prepare for wartime OPCON transition will be conducted with consultations between the ROK and the United States to improve the ROK Armed Forces' operational capabilities and its ability to lead combined exercises.

Since 2018, the ROK Armed Forces has implemented the Joint Training System (JTS)—a theater-level exercise and training system—in the headquarters of each service, operations commands, and joint units⁴⁸⁾ to establish systematic exercise and training management systems. In addition, various types of war-game models for joint and combined exercises have been developed and used to continuously enhance the ROK Armed Forces' capabilities to lead combined exercises and develop effective ways to conduct combined exercise and training. Following the Conditions-Based OPCON Transition Plan, the ROK and the United States are striving to establish a new combined exercise foundation system incorporated with the future

⁴⁷⁾ Launched in 1994 to replace the Team Spirit training

⁴⁸⁾ The JTS was introduced to the JCS in 2012, the Operations Command in 2017, and the headquarters of each service branch and joint units in 2018.

command structure while maintaining the military defense posture under the current combined defense system.

4. Strengthening the Spiritual Force Education for Servicemembers

| System and Current Status of Spiritual Force Education | To establish a sound perspective toward the homeland and national security in servicemembers, and arm them with a soldierly mind-set and an unwavering resolve to prevail, the ROK Armed Forces is strengthening its spiritual force education.

With the goal of “Spiritual Armament before Combat Skills Learning,” the spiritual combat power education for newly enlisted soldiers focuses on turning the new enlistees into soldiers. They are educated with the curriculum focused on the subjects of military spirit, national vision, and security vision, while training programs and barracks life as a whole are used as platforms for spiritual education.

Spiritual force education for servicemembers is carried out in two different ways—school-based education and unit-level education. In case of school-based spiritual force education, to equip military officers with the necessary capabilities, presentation- and discussion-oriented education and hands-on training for student-instructors have been strengthened.

For unit-level spiritual force education, intensive spiritual force education sessions are offered mainly to commanding officers on a daily, weekly, and half-year basis to bolster the spiritual readiness posture of troops. Educational effectiveness is amplified by experts through video lectures on different subjects via defense TV and IPTV⁴⁹⁾—a self-directed learning program that servicemembers voluntarily participate in—and on-site experiential and action-oriented education. Moreover, a newspaper-in-education (NIE) program and an education program that utilizes movies have been introduced as educational tools to nurture sound values and foster a strong military spirit in them.

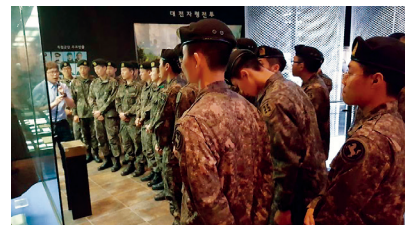
To boost the effectiveness of spiritual education, diverse and creative content that can appeal

⁴⁹⁾ Interactive television service delivered over Internet Protocol networks

to the current generation of servicemembers is produced, and support is also provided toward the production of such content. Specialists in relevant fields are invited as guest lecturers to conduct battalion-level moral education seminars.

| Expansion of History Education Program to Boost Patriotism and Pride | To encourage servicemembers to develop the right perception of history and to boost their patriotism and pride, the MND has been expanding history education programs. The spiritual force education program for servicemembers includes at least 10 sessions of history education on the Greater Korea Independence Army and the Korea Independence Army, while the collaboration program with the Independence Hall of Korea has been expanded to the entire military.

In addition, the MND has produced and used video contents designed to boost the patriotism and pride of servicemembers.



Visit to the Independence Hall of Korea as part of the experiential learning activities of the history education program (January 2018)

| Establishment and 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 force. Its primary tasks are to conduct education to instill military spirit in servicemembers and help them establish perspectives toward the homeland and security; research combat development concerning spiritual force and related doctrines; and develop content for spiritual force education for servicemembers.

While offering essential refresher courses for troop information and education (TI&E) officers and NCOs, the agency runs various specialized programs on military spirit, culture and art, and unification and national security. It has also developed and supplied advanced content on the spiritual force of servicemembers. Other activities of the agency include hosting seminars to promote the development of spiritual force and calling for research papers.

| Character Education for Servicemembers | To foster outstanding servicemembers who are also positive and responsible citizens of a democratic society, a character education system has been established, with an emphasis on seven fundamental values including creativity, courage, responsibility, respect, cooperation, loyalty, and justice. Intensive character education

by civilian experts is coupled with video-based education in everyday life.



Intensive character education class taught by a civilian specialist (May 2018)

Chapter 4

Building Elite Armed Forces Using Advanced Technology



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Advanced forces of the ROK Armed Forces

Section 1 Reorganizing the Unit Structure Using Advanced Technology

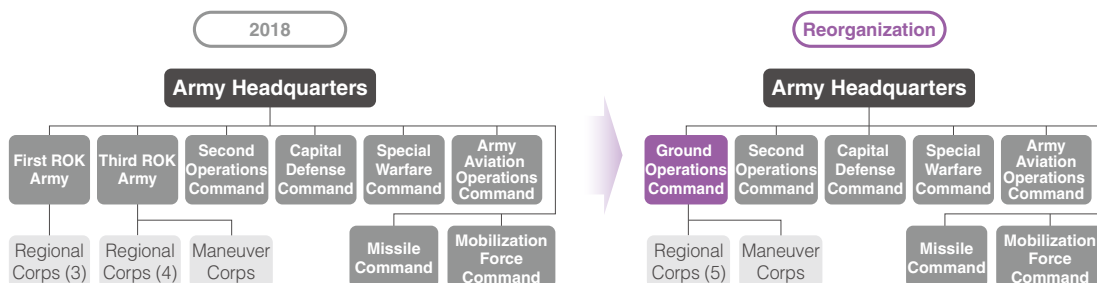
The MND plans to build up forces and develop elite unit structures capable of promptly handling omnidirectional security threats, including those from North Korea, using the advanced science and technology of the Fourth Industrial Revolution. The reorganization of the Army is aimed at developing a structure capable of rapid decisive operations. The new structure of the Navy with bolstered surface, undersea, and airborne operation capabilities will be geared for the operations of multidimensional forces, while the reorganization of the Marine Corps intends to help enhance its amphibious operation capabilities. The Air Force will be reorganized to have a structure capable of effect-based aerospace operations with the reinforcement of reconnaissance and surveillance capabilities as well as multilayered defense capabilities. Units directly controlled by the MND will be restructured with the consideration of each unit's effectiveness of duty execution and efficiency in organization and budget use.

1. Reorganizing the Unit Structures of Armed Forces

| Army | The unit structure of the Army will be reorganized in a way that it becomes capable of responding to omnidirectional security threats and conducting rapid decisive operations. The number of corps and divisions will be readjusted in line with the reduction of standing troops. The reform aims to develop a unit structure that requires fewer troops and, instead, relies more on the technologies of the Fourth Industrial Revolution including the Dronebot Combat System and the Warrior Platform gear. For unified and efficient command and execution of ground operations, the First ROK Army (FROKA) and the Third ROK Army (TROKA) have been merged to create the Ground Operations Command, which will be launched on January 1, 2019. The operational execution capabilities of the Second Operations Command will be significantly enhanced—the reorganization of its homeland divisions into local defense divisions will enable integrated defense operations, while the creation of intelligence and aviation groups will facilitate surveillance system operations, reconnaissance patrol operations, and strike operations in vast rear areas. A rapid response division will be established in the

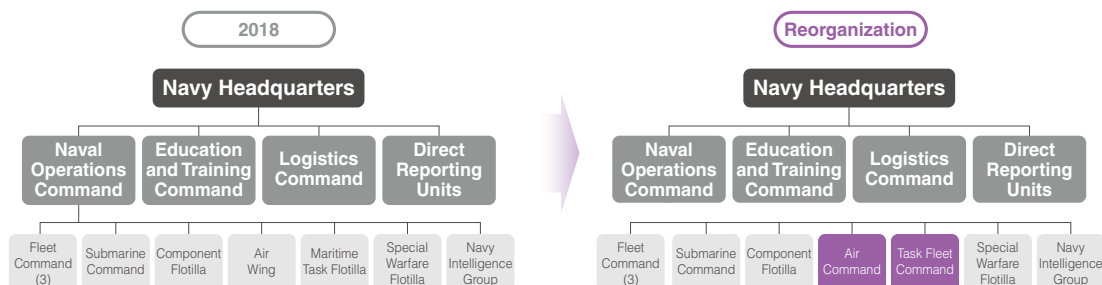
Army to quickly respond to a variety of threats occurring across forward and rear areas. The plan for the reorganization of the Army's unit structure is shown in [Chart 4-1].

[Chart 4-1] Army Unit Structure Reorganization Plan



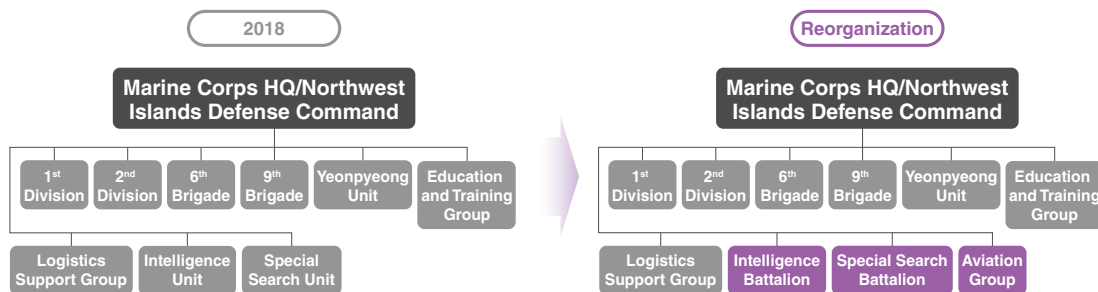
| Navy | The Navy will be reorganized to have a unit structure capable of carrying out multidimensional maritime operations. The unit structure will be developed via reforms that can efficiently operate multidimensional forces above water, underwater, and in the air to defend national interests in the sea including maritime jurisdiction and maritime routes in preparation for omnidirectional security threats. The Maritime Task Flotilla will be reorganized into the Task Fleet Command in conjunction with the buildup of destroyer forces to protect national interests in waters near and far from ROK shores. To ensure the completeness of maritime air operations in the vast areas of the sea, the Air Wing will be redesigned into the Aviation Command with the expansion of missions and the buildup of forces including maritime patrol aircraft and maritime operation helicopters. The plan for the reorganization of the Navy's unit structure is shown in [Chart 4-2].

[Chart 4-2] Navy Unit Structure Reorganization Plan



| Marine Corps | The Marine Corps will be transformed into a marine–air–ground taskforce 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 Marine Corps Headquarters will create an Aviation Group and an intelligence battalion, capable of conducting military administration functions as well as carrying out and commanding combined and joint operations including amphibious operations. Furthermore, the marine and amphibious divisions will reorganize their regiments into brigade-level units with reinforced intelligence, maneuver, and fire capabilities so that they can perform various types of missions as strategic task units. The plan for the reorganization of the Marine Corps’ unit structure is shown in [Chart 4-3].

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



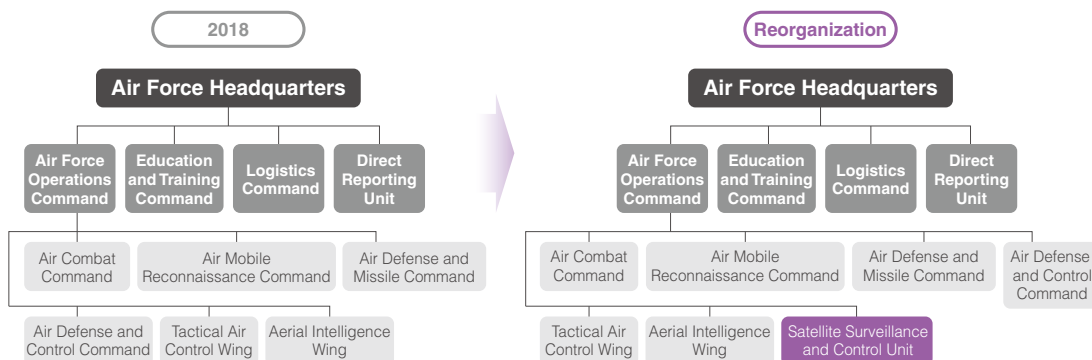
| Air Force | The Air Force will be reorganized to have a structure capable of strategic deterrence and aerospace operations. In line with the fielding of intermediate and high-altitude reconnaissance unmanned aerial vehicles and electronic warfare aircraft, the Reconnaissance Wing, Electronic Warfare Group, and Surveillance Control Group will be formed. Moreover, in connection with the fielding of an electro-optical satellite surveillance system, a Satellite Surveillance Control Unit will be launched to monitor satellite activities over the Korean Peninsula. To improve complex, broad-area, and multilayered defense, the Air Defense and Missile Command will be restructured



2018 ROK
Navy International Fleet Review

with the expansion of the ballistic missile surveillance squadron, Patriot missiles upgrade, and the creation of the Cheongung and Long-Range Surface-to-Air Missile (L-SAM) batteries. The plan for the reorganization of the Air Force's unit structure is shown in [Chart 4-4].

[Chart 4-4] Air Force Unit Structure Reorganization Plan Reorganization Plan



2. Reorganizing the Joint Units and Units Directly Controlled by the MND

Joint units and units directly controlled by the MND will be restructured with the consideration of each unit's effectiveness of duty execution and efficiency in organization and budget use. In case of the 27 units under the direct control of the MND, unnecessary administrative and support organizations will be downsized, and the civilian workforce will have a greater share in their workforce structures that have heavily relied on active duty personnel. Some units directly controlled by the MND will be merged or transferred to the service branches of the Armed Forces, with their expertise and characteristics developed to fit each branch.

The Defense Security Command has been recreated as the Defense Security Support Command, with its internal investigation and monitoring missions removed. The Armed Forces Medical Command will be restructured in accordance with the master plan for the armed services medical reform. Moreover, to cope with the growing threats to cybersecurity in the ROK and abroad, the Defense Cyber Command will be redesigned into the Cyber Operations Command, whose specialist workforce will be expanded and whose organization and mission-accomplishing capabilities will be reinforced.

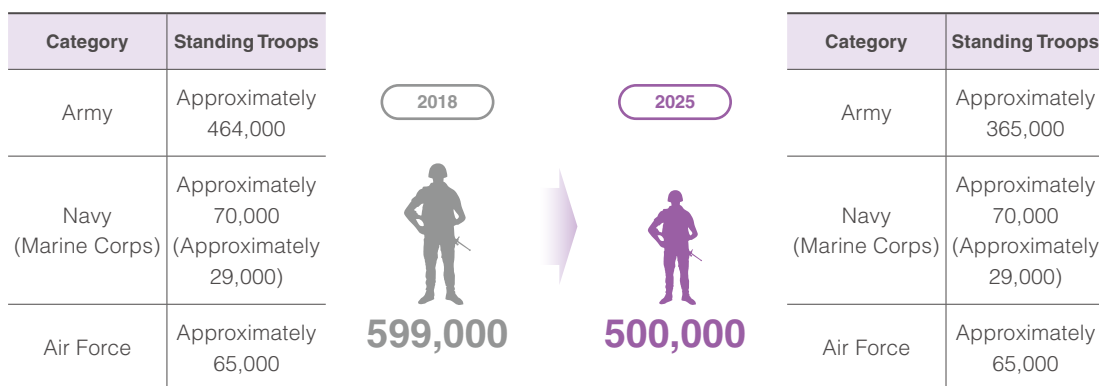
Section 2 Reducing Standing Troops and Restructuring the Defense Manpower Structure

The MND will gradually reduce the number of standing troops to 500,000 by 2022 and shorten the service period to 18 months in line with changes in the future strategic environment and unit restructuring plans. To prevent the decline in combat power due to fewer troops and a shorter service period, military personnel working in noncombat fields will be transferred to combat units, and those noncombat positions will be filled with civilian workforce. With the military personnel transferred to combat units being organized to essential combat positions, the actual combat power will be bolstered despite the reduction of standing troops.

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

The MND plans to gradually reduce the number of standing troops to 500,000 by 2022 in connection with the future strategic environment, military strategies, unit restructuring plans, and available military service resources, which also takes into account the outlook for military manpower supply. The number of troops belonging to the Army will be reduced to around 365,000, and those of the Navy, Marine Corps, and Air Force will be maintained. In terms of standing troops, in pursuance of the technology-intensive advanced military strength structure, the troop structure will become elite-focused, led by officers instead of soldiers. Those working in noncombat fields will be replaced by a civilian workforce, and active-duty personnel will be transferred to combat units to reinforce combat troops. Moreover, the fielding of advanced weapons and equipment will help strengthen combat capabilities despite the reduction of troops. The standing troop reduction plan is shown in [Chart 4-5].

[Chart 4-5] Standing Troops Reduction Plan



2. Reorganizing the Defense Manpower Structure

Redesigning the Defense Manpower Structure | Since the implementation of defense reforms began in 2006, the ROK Armed Forces has reduced about 83,000 standing troops and augmented more officers and Non-Commissioned Officers (NCOs), mainly NCOs, in positions that require proficiency and expertise.¹⁾ The acquisition of military officers and NCOs, however, is expected to face challenges in the future because of the expected decline in young adult population and decrease in young adult unemployment in the mid- to long-term. Measures to prevent the decline in combat capabilities caused by the reduction of standing troops and the shortening of military service period are necessary. Therefore, the MND will switch the existing troop restructuring plan focused on the increase of officers and NCOs into the “Defense Manpower Structure Reorganization Plan,” which structures the total defense manpower concept to include servicemembers, civilian military workers, and other types of civilian workers, and effectively reallocating them within.

The major direction of the reorganization of the defense manpower structure is as follows.

First, the workforce quota will be redesigned by service, status, and rank in line with the unit structure and size of troops as prescribed by Defense Reform 2.0, with the target year set at

¹⁾ The ROK Armed Forces reduced the number of standing troops by 83,000 from 682,000 as of the end of 2005 to 599,000 as of the end of 2018, and increased the number of non-commissioned officers by 30,000 from 97,000 as of the end of 2005 to 127,000 as of the end of 2018.

2022.

Second, noncombat areas will be managed by civilian workforce, including civilian military workers, while servicemembers will be mainly assigned to operations and combat positions.

Third, the rank structure of officers and NCOs will be transformed from a perfect pyramid shape to a pot shape, taking into consideration the prospect of acquiring junior officers, the operation of high-tech equipment, and the necessity to secure proficient combat power. The current hierarchy of officers and NCOs is an inefficient one, where the share of low-rank officers in the total quota is excessive, leading to the “large-scale acquisition and short-term utilization of officers.” Therefore, the plan is to transform the hierarchy into a pot shape, where lower ranks are reduced and mid-level ranks are increased, enabling the “small-scale acquisition and long-term utilization of officers.”

| Expanding the Employment of Civilian Workforce in Noncombat Fields | To prevent the potential loss of combat power caused by the reduction of standing troops, the MND plans to significantly increase the share of civilian personnel in the defense manpower from the current 5% to 10%. Positions in noncombat fields, excluding combat, and command and control positions involving the operations and management of firearms and ammunition, which must be performed by military personnel, will be filled in by civilian workforce. Civilian military employees will replace military personnel in noncombat positions that require expertise and long-term services including those in maintenance and budgeting. Moreover, civilian workers will take over areas, such as computation, facilities and installations management, and language, where civilian expertise can be useful. Furthermore, reservists with military-related expertise and skills will be employed in some of the military positions to be converted into civilian jobs.

| Adjusting the Quota of General Officers and Rationalizing Ranks | Until 2012, the quota of general officers had remained little changed compared to that of the period before the defense reforms, while the number of troops has been cut down, and units have been restructured in accordance with defense reforms. In 2012, the MND set a plan to reduce the quota of general officers by 60, but it decreased by only 8 by 2017, prompting criticism internally and externally. Changes in the quota of general officers since the 1950s are shown in [Chart 4-6].

The MND, therefore, chose the reduction in the number of general officers as a core task of Defense Reform 2.0. It set the “General Officer Quota Adjustment Plan” under the following

four principles toward the direction of reinforcing general officer positions in combat units and reducing them in noncombat fields to build a “strong military.”

The four principles of the plan are as follows.

First, general officer positions will be first allocated to combat units for the seamless combat readiness posture.

Second, general officer positions in noncombat fields that can utilize civilian workforce will be replaced by reservists or civilian experts.

Third, the principle is that the same ranks will be given for similar jobs and functions in each service and unit of the Armed Forces, although ranks may be adjusted in a balanced manner with the special characteristics of each service and the size of the units under their command taken into consideration.

Fourth, commanders in noncombat fields, including training, logistics and administration, will be restricted from being given excessively high ranks.

[Chart 4-6] Changes in the Number of General Officers

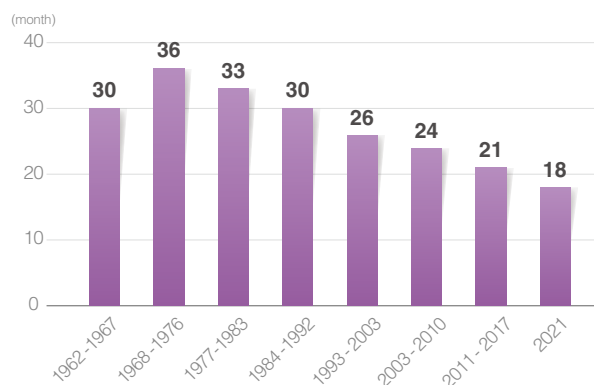
| Year | No. of General Officers | No. of Standing Troops | Major Events during the Period |
|------------|-------------------------|------------------------|--|
| 1953 | 109 | 706,000 | Creation of the First ROK Army |
| 1957 | 333 | 720,000 | Deployment of U.S. nuclear weapons and reduction of standing troops (1957–1959) |
| 1961 | 239 | 600,000 | Reduction of standing troops |
| 1969 | 329 | 600,000 | Creation of mobilization and homeland divisions for self-defense after the Blue House Raid and the USS Pueblo Incident in 1968 |
| 1975 | 360 | 600,000 | Implementation of the ROK Armed Forces' modernization plan (1971–1977) |
| 1979 | 442 | 608,000 | Force buildup under the Yulgok program (1977–1986) and the creation of the ROK–U.S. Combined Forces Command (1978) |
| 1986 | 387 | 630,000 | Plan to reduce the number of officers and NCOs (1982–1986) |
| 1989 | 434 | 655,000 | Force buildup in preparation for the Seoul 1988 Summer Olympics (1987–1988) |
| 2007 | 444 | 669,000 | Transfer of the peacetime operation control (OPCON; 1994) and implementation of defense reforms (2006–present) |
| 2013 | 441 | 633,000 | Establishment of the plan to reduce the quota of general officers (2012–2030, 60 officers) |
| 2017 | 436 | 618,000 | Modification of the plan to reduce the quota of general officers (2012–2030, 46 officers) |
| 2022(plan) | 360 | 500,000 | Reestablishment of the plan to reduce the quota of general officers (2018–2022, 76 officers) |

The MND will reduce the number of general officers from 436 in late 2017 to 360 by 2022 in accordance with the General Officers Quota Readjustment Plan. This plan aims to reinforce combat units while significantly expanding the scale of the reduction compared to that in the previous readjustment plan. It is noteworthy that the MND formed a consensus on the need to reduce the number of general officers and reached an agreement through adequate communication with each branch of the Armed Forces. Considering this, this plan is expected to be the key driving force of the implementation of Defense Reform 2.0.

3. Shortening the Mandatory Service Period

| Implementing the Service Period Reduction Plan | Starting on October 1, 2018, the MND shortened the service period of soldiers to develop the ROK Armed Forces into technology-intensive, strong elite forces and help relieve the youth's burden of mandatory military service. The service period for the Army and Marine Corps will be cut down from 21 to 18 months, and that for the Navy will be decreased from 24 to 22 months. The service period for the Air Force will be shortened from 24 to 22 months, and the MND will seek to reduce it by one more month.

The service period will be gradually shortened, one day per two weeks of service, so that the service period of each soldier does not vary greatly depending on when they have enlisted. 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 at the website of the Military Manpower Administration.



Changes in the length of the military service period (Army only)

The shortening of the service period is expected to help alleviate the burden of military service

borne by the youth who also face challenges in education and employment. It is also expected to allow servicemembers to return to the civilian society earlier and, therefore, contribute to the efficient use of the country's human resources.

| Measures to Prevent the Decline in Combat Power | To prevent the decline in combat power 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 in by NCOs. Moreover, the soldier training system will be enhanced, and realistic training will be strengthened to improve soldiers' proficiency as early as possible through scientific training. At the same time, noncombat missions will be minimized to help soldiers focus on combat missions while serving in the military. Thanks to such comprehensive defense reform, the overall strength of the ROK Armed Forces will be actually enhanced.

Section 3 **Force Enhancement Based on Jointness**

The MND is strengthening its defense capabilities to effectively counter the omnidirectional security threats, including diverse military threats, in order to establish a robust security posture. To this end, the ROK Armed Forces is building up its forces to realize the concept of joint military strategies and joint operations based on assessments of strategic environments and threat analysis.

1. Basic Direction of Force Enhancement

To effectively respond to the omnidirectional security threats posed by North Korea, including potential, transnational, and nonmilitary threats, within the framework of available funds, the MND is building up its forces based on the selection and concentration strategy. The MND will prioritize establishing capabilities to deter and counter nuclear and WMD threats as well as threats from Long-Range Artillery (LRA). It will also build up strategic deterrence capabilities to prepare for potential threats. Furthermore, in conjunction with the reorganization of the military structure, the MND will continue to pursue a balanced force buildup and secure forces to prepare against terrorism, cyber threats, accidents and disasters, as well as forces that can lead to the advancement of science and technology including the Fourth Industrial Revolution and IT.

From the standpoint of different battlefield functions, the battlefield recognition forces will establish a surveillance, reconnaissance, and early warning system for the spheres of defense and surveillance by acquiring step-by-step military reconnaissance satellites, various manned and unmanned surveillance aircraft, and electronic warfare and signal intelligence collection systems. They will also enhance battlefield visualization capabilities across all echelons that incorporate new concept technologies. The command and control, and communication forces will reinforce the function of the tactical C4I system of each branch of the Armed Forces as well as the

Allied Korea Joint Command and Control System (AKJCCS) and the Korea Joint Command Control System (KJCCS) to allow for expeditious battlefield situation awareness and decision-making. Moreover, a multidimensional communication system using satellite communications and airborne data relay will be developed, and capabilities to counter and defend against cyber threats will be further enhanced.

The ground forces will secure highly powerful and ultra-precision ground-to-ground missile forces to deter North Korea's nuclear and WMD threats, and also secure counterfire forces to counter LRA threatening the greater Seoul metropolitan area. Furthermore, ground and airborne maneuver capabilities will be reinforced to enable multidimensional maneuver and quick response, while an individual combat system²⁾ as well as a manned and unmanned complex combat system, including the Dronebot Combat System, will be established to help improve fighters' combat capabilities.

The naval forces will acquire destroyers (KDDX), frigates (FFX), submarines (KSS-III), and landing craft (LPX) to maintain maritime superiority around the Korean Peninsula, while securing open-sea task force operational capabilities to protect maritime rights and interests including amphibious operations and maritime routes.

The air forces will acquire next-generation fighters (F-X), the ROK's indigenous fighters (KF-X), joint moving target surveillance control aircraft, and precision-guided weapons to gain air superiority and rapidly incapacitate major high-payoff targets. To prepare for potential threats and obtain a wider range of operational execution capabilities, including those for the protection of national interests, large transport aircraft, aerial refueling tankers, and a space-based surveillance system will be acquired.

The defense forces will reinforce detection, tracking, and interception capabilities against various airborne threats including nuclear weapons, missiles, and LRA. Defense capabilities against Electro-Magnetic Pulse (EMP) as well as chemical, biological, and radiological threats will also be gradually reinforced.

2) An integrated combat system, which includes combat clothing, gear, and equipment, is worn by an individual soldier to project his/her maximum combat power.

2. Major Force Enhancement Projects and 2019–2023 Defense Mid-Term Force Enhancement Plan

| 2017 Force Enhancement Projects | The 2017 defense budget amounted to KRW 40.3 trillion, of which KRW 12.2 trillion was allocated to the force enhancement budget, representing a 4.5% increase from 2016. The major force enhancement projects for 2017 are shown in [Chart 4-7].

[Chart 4-7] Major Force Buildup Projects in 2017

| Weapons Systems | Ongoing Projects | New Projects |
|--|---|---|
| Battlefield Awareness/ Command and Control, Communications | <ul style="list-style-type: none"> • High-altitude reconnaissance unmanned aerial vehicle • Tactical Information Communication Network (TICN) | <ul style="list-style-type: none"> • Upgrade of the Military Information Management System |
| Maneuver/Fires | <ul style="list-style-type: none"> • K-2 tank, large attack helicopter • 230mm Multiple-Launch Rocket System (MLRS) | <ul style="list-style-type: none"> • Explosives detection and removal robot (R&D) • Unmanned lightweight combat vehicle (R&D) |
| Maritime Assets | <ul style="list-style-type: none"> • Gwanggaeto III-class destroyer (Batch II) • Jangbogo III-class submarine (Batch I) | <ul style="list-style-type: none"> • Maritime patrol aircraft II |
| Air Assets | <ul style="list-style-type: none"> • F-35A • Aerial refueling tanker | <ul style="list-style-type: none"> • Precision approach radar (PAR) |

| 2018 Force Enhancement Projects | The 2018 defense budget amounted to KRW 43.2 trillion, of which KRW 13.5 trillion was allocated to the force enhancement budget, representing a 10.8% increase from 2017. The major force enhancement projects for 2018 are shown in [Chart 4-8].

[Chart 4-8] Major Force Buildup Projects in 2018

| Weapons Systems | Ongoing Projects | New Projects |
|--|---|--|
| Battlefield Awareness/ Command and Control, Communications | <ul style="list-style-type: none"> • High-altitude reconnaissance unmanned aerial vehicle • Tactical Information Communication Network (TICN) | <ul style="list-style-type: none"> • Second upgrade of the ground tactical C4I system |
| Maneuver/Fires | <ul style="list-style-type: none"> • K-2 tank, ROK indigenous helicopter • 230mm Multiple-Launch Rocket System(MLRS) | <ul style="list-style-type: none"> • Firefinder radar II • 230mm non-guided missile (R&D) |
| Maritime Assets | <ul style="list-style-type: none"> • Gwanggaeto III-class destroyer (Batch II) • Jangbogo III-class submarine (Batch I) | <ul style="list-style-type: none"> • Tactical ship-to-surface missile (vertical type) • Combined influence minesweeping system |
| Air Assets | <ul style="list-style-type: none"> • F-35A • Aerial refueling tanker | <ul style="list-style-type: none"> • Upgrade of the Identification, friend or foe system • Service life extension of KF-16D |

2019–2023 Defense Mid-Term Force Enhancement Plan | For the implementation of “Defense Reform 2.0,” the MND will invest 94.1 trillion from 2019 to 2023 to acquire core forces to deter and respond to nuclear and missile threats as the top priority and build key military capabilities for wartime operation control (OPCON) transition to establish the ROK Armed Forces-led combined defense system. The MND will secure forces necessary for the reorganization of the military structure into a future-oriented one, while strengthening the capacity to protect ROK nationals residing abroad and respond to the growing nonmilitary threats such as terrorism as well as accidents and disasters. In addition, to help the ROK defense community lead the Fourth Industrial Revolution, the MND will strengthen national defense R&D capabilities and ensure conditions to invigorate the defense industry.

First, to respond to nuclear and missile threats, surveillance and reconnaissance forces, which can detect and identify signs of North Korea’s provocations, including military reconnaissance satellites and intermediate- and high-altitude UAVs, will be acquired. At the same time, command and control forces that can combine and spread detection and identification data and thereby link them with strike systems will be built. Missile forces capable of striking detected and identified targets from long distance as well as F-35As capable of stealth strikes will also be acquired. To improve the defense capabilities of the Korea Air and Missile Defense (KAMD) designed to intercept ballistic missiles fired toward the ROK, there will be a push to upgrade the

Cheolmae II and Patriot missiles, etc.

In addition, to help secure key military capabilities that the ROK Armed Forces needs for wartime OPCON transition, Counterfire Radar II, Military Satellite Communications System II, and precision-guided weapons will be acquired.

The following force buildup plans are intended for the reorganization of the military structure to develop a future-oriented structure. The ground forces will obtain reconnaissance UAVs and 230mm Multiple-Launch Rocket System (MLRS) to expand the surveillance and striking ranges. The fielding of new equipment, such as K-2 tanks, upgraded 105mm howitzers, and 81mm mortar II, will help reduce operating troops.

Maritime and amphibious forces will strengthen surface and anti-submarine operation capabilities through the fielding of the Gwanggaeto III-class destroyer (Batch II), etc. Multidimensional, high-speed amphibious operation capabilities are expected to be enhanced with the acquisition of amphibious utility helicopters. The air forces will gain air superiority through the deployment of the ROK's indigenous fighters (KF-X) and F-35A stealth fighters while securing long-distance operational capabilities with the deployment of aerial refueling tankers, etc.

To respond to growing nonmilitary threats, such as terrorism as well as accidents and disasters, counterterrorism capabilities and disaster response capabilities will be reinforced with the acquisition of folding guns for firing around the corner, binocular night vision devices, and medical evacuation helicopters. The fielding of a large-size transport ship is expected to enable swift medical support and the evacuation of ROK nationals residing abroad.

The MND will expand investment in defense R&D to bolster capabilities to develop Fourth Industrial Revolution-level cutting-edge weapons systems such as unmanned systems and robots. By doing so, it will lead the advancement of national science and technology and contribute towards the promotion of the defense industry and economic growth. The MND will continue to push for the strengthening of the foundation of the domestic defense industry and help bolster the ROK's national competitiveness.



A K-2 tank in an underwater crossing exercise (November 2017)

3. Efficient Pursuit of the Defense Force Enhancement Project

| Modification of Laws and Regulations regarding Defense Acquisition | The MND has been revising laws and regulations relevant to defense acquisition programs to carry out the defense force enhancement project, which aims to lay the foundation for responsible defense, more efficiently and transparently.

In 2016, the MND took the following measures to enhance the transparency of the defense force enhancement project. It adopted a munitions sales agent registration program, which mandates those intending to become munitions sales agents to register with the Defense Acquisition Program Administration (DAPA) and report the commissions that they have received. It also required defense contractors planning to hire people subject to employment screening to check if the employment of those people in their organizations is restricted. In addition, the methods and procedures of tests and evaluations³⁾ that had been based in directives are now stipulated in laws and, therefore, have become clarified. A working-level committee was set up in the Defense Acquisition Program Promotion Committee, which can now effectively support major policy decision-making.

In 2017, the MND allowed that, for core technology R&D projects, exemption from disciplinary actions for failures could be given for projects that fail to fulfill their research objectives but are deemed to have been faithfully carried out, thus helping to form the foundation for creative and challenging researches, and laying the regulatory groundwork to vitalize R&D.

| Requirement Review and Analysis and Evaluation | To effectively carry out the defense force enhancement project in consideration of the national finance and conditions to obtain a defense budget, the MND currently enforces a requirement review program that inspects projects and requirements for weapons systems determined by the Joint Chiefs of Staff (JCS) for their feasibility and adequacy, respectively.

The Force Requirements Review Committee is contributing towards making the defense

³⁾ A process that confirms and verifies whether technological, operational, and managerial requirements written in the proposal of requirements for a certain weapons system have been met. The Minister of Defense is responsible for establishing plans for tests and evaluations and making decisions on the results, and the duty has been delegated to and executed by the JCS.

acquisition process more efficient, having reviewed a total of 35 requirement cases since November 2016, of which 26 were identified in the very early stages as requiring revision or carrying various potential risk factors. Since 2015, the MND has been operating an integrated system of requirement review that determines the relative priority of the requirements, and such information is being put into use for the establishment of the Mid-Term Defense Plan.

In the last two years, a total of 222 cases of analysis and evaluation have been carried out to support various decision-making processes relating to the invitation of certain projects. Hence, the analysis and evaluation process will be developed into a method for reviewing redundancies and connections among similar or related defense acquisition projects, and identifying priorities from a comprehensive perspective. In addition, there are plans to establish a database management system to make it more convenient to accumulate, manage, and share the results of conducted analyses and evaluations, as well as to increase the transparency and efficiency of the process.

| Timely 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 research and development meets the military's performance standard and criteria.

As of November 2018, the MND has conducted tests and evaluations for a total of 139 projects, including the Tactical Information Communication Network project, since taking over the responsibility of testing and evaluating from the DAPA in 2014. The results of these tests and evaluations have since been utilized in the decision-making process of whether or not to pursue the field deployment of such projects. The MND will continue its efforts to conduct timely tests and evaluations to select and deploy only superior weapons systems with verified performance.

Section 4 Improving the Transparency of the Defense Acquisition Program and the Competitiveness of the Defense Industry

The MND has come up with measures to enhance transparency in defense acquisition programs, develop an efficient national defense acquisition system, strengthen the expertise of those working in defense acquisition programs, and develop flexibility in program management. It has also helped strengthen R&D capabilities in defense fields, build the competitiveness of the defense industry, and vitalize defense exports.

1. Enhancing Transparency in Defense Acquisition Programs

| Developing Sophisticated Measures to Prevent Corruption in Defense Acquisition Programs | The MND and the DAPA are strengthening preventive anti-corruption measures to eradicate cozy relations between the military and businesses. The registration program, designed to put all contractors involved in a tender for a defense acquisition project and the fulfillment of the contract within a legal and institutional management framework, and which has been applied to logistics trading agencies,⁴⁾ will be expanded to apply to all defense acquisition project brokers.⁵⁾ The MND has devised a measure to impose fines and penalty surcharges on defense acquisition project brokers who operate without registration coupled with another to take disciplinary action against public officials who, without authorization, engage

⁴⁾ An agency or a group that intermediate or act for a foreign enterprise throughout the course of the conclusion of a contract for the conclusion of the contract by and between the foreign enterprise and the Minister of DAPA, and in the course of the performance of the contract

⁵⁾ 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

in contact with unregistered brokers. In addition, efforts are being put in to expand the range of defense contractors that are restricted from hiring retired public officials as well as the scope of persons subject to examination for fitness for employment by defense contractors, while the management of retired public officials is being reinforced by tracking their employment record after retirement and mandating that personal contacts with former colleagues still in the public service be reported.

Additionally, the MND is bolstering the monitoring and supervision system to prevent corruption in two government-funded defense institutions, the Agency for Defense Development (ADD) and the Defense Agency for Technology and Quality (DTAQ). While the internal audit systems of the government-funded defense institutions will be strengthened, clear standards will be set up for all kinds of evaluations, inspections, and regulatory decision-making conducted under their supervision. Also, external experts' participation in these activities will be expanded. To enhance the integrity of all employees, a code of conduct with a standard matching that of government agencies is being developed, while at the same time, an ethical audit program is being adopted. Such efforts intend to enhance transparency in defense acquisition programs and obtain trust from the people.

| Creating an Environment for the Active Pursuit of Defense Acquisition Projects | The MND has been fostering an environment where those working in the management and contract administration of defense acquisition programs conduct business fairly in adherence to their own principles, and where the right conditions for proactive administration are ensured. Under review is the adoption of the exemption program for proactive administration,⁶⁾ which ensures opportunities to try again regarding the trials and errors made during the R&D phase. The program 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 is also devising a measure to bolster legal and technical support for those who have inevitably faced criminal investigations, audits, or other kinds of investigations while executing projects.

⁶⁾ A program that relieves public officials of responsibility or reduces their liability for negative results when they have sincerely and proactively performed their duties for the public's interests, unless there was any intentional act or gross negligence

A series of such working environment improvements are expected to boost the pride of the defense acquisition community and strengthen their sense of responsibility. This will eventually contribute to the acquisition of superior weapons.

2. Developing an Efficient Defense Acquisition System

| Management of Requirement, Planning, and Budgeting in Consideration of the Total Life Cycle and Swift Acquisition |

For the speedy and efficient acquisition of superior weapon systems, the MND will strengthen requirement planning capabilities, and enhance the planning and budgeting systems. In consideration of future warfighting concepts and technological developments, the MND will newly establish a preliminary concept research program⁷⁾ that precedes the determination of requirements. It will also set up a system that decides the order of priority in force integration from a comprehensive viewpoint in consideration of joint operation execution concepts and national defense finances. To prevent the obsolescence of technology during the process of acquiring weapon systems through R&D, the Required Operational Capability (ROC)⁸⁾ will have to be defined stage by stage. For this, the MND plans to create a consultation system that involves the MND, the DAPA, the JCS, and the headquarters of all Armed Forces.

To strengthen the link between acquisition and operation and maintenance, the MND plans to enhance the budgeting system in a way that integrates the force enhancement budget and equipment maintenance costs for weapon systems. It will also create a speedy pilot purchase program⁹⁾ to swiftly acquire the weapons system needed on the battlefield. This will help establish

7) A program for promoting concept research that establishes a mid-term plan through an in-depth studies during the requirement planning stage, by facilitating the project's entry into the budget formulation stage, and by helping to prevent errors that might occur in the acquisition stage

8) Required operational capabilities (ROC) define the levels of functions and weapon system capabilities that satisfy the operation concepts of weapon systems needed to be acquired for the attainment of military strategic goals. Required operational capabilities are categorized into major operational capabilities and technical and auxiliary capabilities, and used as standards in tests and evaluations for R&D projects or imports of weapons systems

9) It is a program designed for the speedy acquisition of weapon systems that meet operational requirements. In this program, the MND pilot-operations civilian technologies and weapon systems already in operation, and quickly deploy them in the battlefield once those weapon systems' performances are proven.

an efficient defense acquisition system that plays a leading role in handling security threats.

| Establishing a System for Rational Decision-Making and Collaborations | To efficiently pursue defense acquisition programs, the MND is reinforcing the functions of defense force policies, and bolstered its mediating and consultative functions for rational decision-making and harmonious collaborations among relevant institutions.

For effective and timely resolution of issues arising throughout the programs, the MND plans to newly set up mediating and consultative bodies comprised of the MND, the DAPA, and each service of the Armed Forces that will meet on a regular basis. To ensure that military buildup is consistent with the national security strategy and military strategies, the MND will communicate defense policy objectives and guidelines, and strengthen its feedback functions in policy implementation, as a means to bolster other policy and management functions.

Furthermore, the MND will reinforce the support system for the scientific and rational execution of tasks. It will strengthen its functions of analyzing and evaluating projects from the standpoint of the total life cycle, while the organization responsible for making decisions on test results will be adjusted from the MND to the JCS to improve the effectiveness and credibility of the tests and evaluations. A specialized agency to support tests and evaluations will be newly created to operate side by side. For the projects in the aircraft category, including acquisitions of aircraft and helicopters, a unified airworthiness certification¹⁰⁾ system for the Army, Navy, and Air Force will be adopted so that the flight safety of an aircraft is consistently guaranteed throughout from acquisition to operation. The MND will also adopt a defense acquisition information management system to boost the total life cycle cost efficiency, minimize redundant works, and promote data-based defense acquisition management. Hence, efforts will be put in to establish the defense acquisition system optimized for the ROK's defense acquisition environment and make it globally competitive by enhancing the transparency, expertise, and efficiency of defense acquisition programs.

10) The government's certification that attests that a military aircraft is fit to fly safely within the scope of its operations, and is capable of delivering its intended performance and functions

3. Strengthening Expertise and Flexibility in Project Management

| Strengthening Defense Acquisition Expertise | The MND and the DAPA have strived to secure acquisition personnel's expertise and improve the personnel management system to successfully carry out projects in the modern defense environment, where weapons systems are becoming more advanced and complex, and technologies are rapidly evolving. The two branches of the defense acquisition education system—the Occupational Work Training Center of the Korea National Defense University (KNDU) and the DAPA Education Center—will be merged into one under the control of the DAPA, with plans to set up a specialized educational institution for defense acquisition that delivers high-quality education and research.

Under the principle of “education first, assignment later,” the specialized educational institution will educate all personnel working in defense acquisition projects on expert knowledge on weapons systems and help them cultivate professional capabilities to implement policies from a macro-level view. The institution is expected to become a cradle of defense acquisition specialists that also contributes to the creation of a working environment that promotes communication and collaboration.

To improve efficiency in operations and promote the accumulation of expertise, the MND will newly establish the Project Management Office (PMO) system, where a series of project management processes between the start of a project and its end are carried out by one designated group. In addition, the DAPA will adopt the program of public officials in technical service¹¹⁾ to encourage its employees to manage projects responsibly as well as build expertise and work knowledge as defense acquisition specialist officials.

| Developing Flexibility in Program Management | The MND and the DAPA will create an environment for flexible and speedy project execution to respond to changes in the security environment as well as science and technology. To enable the selection and application of optimal project execution methods in consideration of the size, urgency, technological level,

¹¹⁾ They are public officials who are assigned to certain specialist areas only that require a high-level of expertise and long-term service. Their titles are categorized into chief specialist officials and specialist officials. (Regulations on the Personnel Management of Public Officials in Technical/Professional Service, Presidential Decree No.28211, July 26, 2017)

and other elements of a project, the MND will diversify R&D and purchasing methods—for example, through the development of international cooperation systems and the adoption of the fast-track purchase program—as well as R&D models that take into account the types of weapons systems such as military vessels and software.

The MND also plans to systematize the interim project evaluation so that requirements and the total cost of a project can be reviewed and modified in the middle stage of development, and improve the contract program into a flexible program suitable for evolutionary acquisition¹²⁾ to launch a project management program that can manage performance, costs, and schedule step-by-step.

Furthermore, the MND will lay the foundation for efficient project execution by revising the Defense Acquisition Program Act and relevant regulations. The DAPA's technical and repetitive tasks, such as cost accounting and standard document management, will be contracted out, and the agency will undergo reorganization to have a project management–focused structure, and thus, boost efficiency and transparency.

4. Strengthening Defense R&D Capabilities

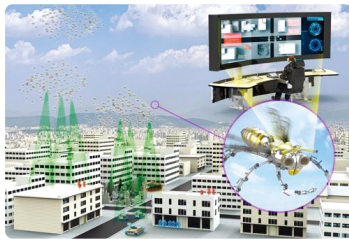
| Enhancing the Defense R&D Execution System | The MND and the DAPA are innovating the defense R&D system to implement the concept of responsible defense and effectively prepare for future wars, where advanced technologies will dictate the patterns of warfare.

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. The MND will improve the defense R&D system to allow for the development of creative and challenging technology where the Fourth Industrial Revolution and cutting-edge new technology guide and create the requirements for weapons systems. To achieve

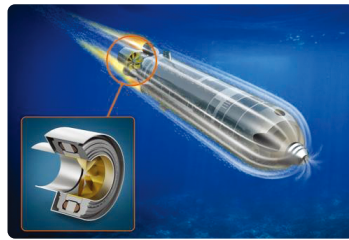
¹²⁾ An advanced acquisition concept of developing usable systems relatively quickly through the time-phased filings of requirements and the addition of the latest advanced technologies to the systems in increments, instead of developing a perfect system over a long period. The concept is divided into the incremental development and spiral development approaches.

this objective, the MND will set up a future challenge technology development¹³⁾ program and strengthen strategic technology planning under the principle of selection and concentration.

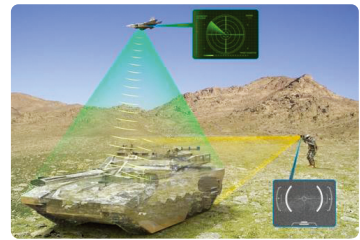
[Chart 4-9] Future of Defense in Connection with the Fourth Industrial Revolution (Examples)



Micro-drone swarm technology



Supercavitating midget submarine with water-breathing propulsion



Invisible stealth tank

In addition, the roles of government-funded defense institutions will be redefined to help create conditions, in which each institution can concentrate its capabilities into selected areas. The ADD will focus on the development of core and new technologies, while DTAQ will be dedicated to defense quality management and reliability evaluation. Additionally, to enhance investigation, forecasting, technology planning, analysis, evaluation, and the management of future technologies, the Defense Technology Planning and Evaluation Institute, an organization specializing in these functions, will be newly established.

Expanding the Utilization of Defense R&D Capabilities in Defense Fields | 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. The agreement method will be adopted in the field of technology development, while the range of application of the sincere performance recognition program¹⁴⁾ will be expanded. The MND also plans to reduce the burden of weapons system development imposed on contractors by expanding the

¹³⁾ Innovative, challenging defense technologies that are not based on weapon system requirements or that can create requirements themselves

¹⁴⁾ A program that waives the disadvantages that researchers may receive and gives them opportunities to try again when their research projects have stopped or failed because of weak results but they are deemed to have sincerely carried out their projects

application of the cap on the maximum amount of penalties for delay¹⁵⁾ to a wider range of projects. The cap on the maximum amount of penalties for delay at 10% of the contract value, which has been applied to system development projects, will be applied to pilot production projects. In addition, the MND will provide incentives for defense R&D projects, including the 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 plans to set up a cooperation system where national R&D capabilities can be utilized. First, national R&D capabilities will be actively applied in fundamental researches, and a system for collaboration and the division of duties between national R&D programs and defense R&D programs will be established. In an effort to achieve this objective, the MND, the DAPA, and the Ministry of Science and ICT (MSIT) formulated and announced the “Strategy for Future Defense Development Based on Science and Technology” in April 2018, and plan to carry out a pilot project to develop innovative technologies for future defense under the leadership of MSIT in 2019. Furthermore, the MND will provide a regulatory foundation to allow for such efforts for innovation to continue by pursuing the enactment of the “Act on Promotion of Innovation in Defense Science and Technology” (provisional title).

5. Building a Competitive Defense Industry and Vitalizing Defense Export

| Bolstering the Competitiveness of the Defense Industry with a Focus on Technology and Quality | 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 providing the foundation for the buildup of military strength and the realization of responsible defense. It has been, so far, challenging for outstanding private-sector firms with technological capabilities to enter into

¹⁵⁾ When the counterpart to a contract delays the performance of contractual obligations, the counterpart is required to pay the amount calculated by multiplying the contract price by the rate prescribed by the ordinance of the Ministry of Strategy and Finance and the number of delayed days in cash as penalty for delay. The MND program limits the maximum amount of cash penalties to a certain proportion of the contract price.

and grow within the defense industry because of the price-based competition and high entry barriers. To provide a new opportunity for the defense industry to advance, the Defense Industry Promotion Conference was held and presided by the president of the Republic of Korea in September 2018. The conference was attended by nearly 150 officials including the ministers and heads of relevant government agencies—the Ministry of Trade, Industry and Energy; the MSIT; and the Financial Services Commission—as well as defense industry representatives and experts. The government agencies made a joint presentation on the defense industry development plans that call for a paradigm shift toward an enterprising, open, and export-oriented defense industry. They also agreed to actively implement the plans. First, the technology and quality criteria will be given more weight in weapons system R&D proposal evaluations to ensure that companies with outstanding technologies are chosen. To encourage more small and medium enterprises (SMEs) and ventures to join the defense industry, a defense ventures and innovative technology support program¹⁶⁾ will be newly launched, with an expansion of tailored support, which will provide SMEs and ventures with the growth ladder that would help them develop into competitive defense companies.

To help accelerate the technological innovation by SMEs and ventures, the government plans to establish a virtuous cycle,¹⁷⁾ in which each service of the Armed Forces and system suppliers create requirements for the localization of weapons systems, and where SMEs and ventures develop them. Meanwhile, the MND will pursue the enactment of the



Defense Industry Promotion Conference
(September 2018)

“Defense Industry Promotion Act” and establish the “Defense Industry Promotion Agency” (provisional name) to correct the practice of unfair trade between large companies and SMEs,

¹⁶⁾ It is a program for discovering and supporting developments of highly advanced technologies that the military and system suppliers need. The program awards up to KRW 500 million to a project over a period of up to three years.

¹⁷⁾ Establishing comprehensive part management policies (MND) → Finding requirements for localizations of parts (Armed Forces and system suppliers) → Executing part localization projects (DAPA) → Developing and supplying parts (Defense SMEs and ventures)

and establish the appropriate scope of responsibility-sharing between system suppliers and their contractors. By doing so, the MND aims to strengthen the mutually beneficial cooperation between large corporations and SMEs and thus, promote cooperative partnerships between them, and systemically nurture the defense industry.

| Vitalizing Defense Exports | Exports of defense articles have contributed to the strengthening of national defense capabilities and the enhancement of economic vitality by keeping defense contractors operating and creating quality jobs. They have also played an important role in contributing to the expansion of defense cooperation with partner countries. To assist the domestic defense industry in becoming globally competitive, the ROK government has, so far, supported R&D for the remodeling and development of defense articles for export; established intergovernmental cooperation channels, such as the Memoranda of Understanding (MOUs), signed with foreign governments for defense industrial cooperation; and assisted SMEs' entry into overseas markets. In 2017, defense exports reached USD 3.12 billion, which is 10 times or more than the amount in 2006. [Chart 4-10] shows the growth in defense exports.

A remarkable growth in defense exports both in quantity and quality has been achieved—the range of target countries for exports expanded from those in North America to Asia, and the categories of export items became more advanced from being ammunition and firearm centered to expanding the range of maneuver, fires, aviation, etc.

[Chart 4-10] Changes in Defense Exports



Following the recent intensification of competition in the global defense export market and the diversification of customer countries' requirements, there is a need for policy changes to

explore defense export opportunities. To foster an active export-oriented defense industry and create jobs, the government has set up the “Basic Plan for Defense Industry Promotion for 2018–2022” and is proactively adopting active export programs. By 2019, the offset trade¹⁸⁾ program, which focuses on the acquisition of defense technologies, will be converted into the Industrial Cooperation¹⁹⁾ program that aims to foster the defense industry, promote exports, and create jobs. The Banking²⁰⁾ program and the Industrial Cooperation Quota program²¹⁾ are also planned to be introduced.

To diversify export items and methods to proactively respond to customer countries’ demands, the revision of relevant laws and regulations is underway to enable the DAPA to directly sell defense articles in the event that foreign governments make such requests. The MND is also developing diverse export methods including the sales of used arms, leasing, and the export of a comprehensive range of goods and services as a package. In addition, there are plans to build infrastructure for more specialized and systematic support through the creation of the Defense Export Support Group (provisional name), a team dedicated to defense export, within the DTAQ in 2019 and the launching of the “Defense Industry Promotion Institute Agency” (provisional name).

To promote defense cooperation with the governments of defense consumer countries, the MND will continue its intergovernmental cooperation efforts including signing agreements on defense industry logistics support, organizing defense industry and logistics joint committee meetings, and arranging exchanges of high-level defense officials. It will also strengthen overseas local support activities through the expansion of the program to dispatch defense industrial

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- ¹⁸⁾ 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
 - ¹⁹⁾ The practice of, when buying weapons and equipment from abroad, proposing a joint development and production of parts and technologies or a joint investment to the foreign counterpart of the contract, or mandating a certain cooperative relationship such as a cooperation on exports of domestic parts and technologies
 - ²⁰⁾ The practice of a foreign company fulfilling its offset trade obligations in advance regardless of obligations associated with its current projects, thereby accumulating the offset trade credit, which it can utilize for future projects
 - ²¹⁾ It is a program that, in a purchase of a weapon system from abroad, mandates a certain proportion of the basic contract price paid with domestic companies’ parts and services. The program aims to expand export opportunities and foster the defense industry.

cooperation officials who are specialists in international defense industrial cooperation.

Furthermore, defense industry exhibitions, such as the Seoul International Aerospace & Defense Exhibition (Seoul ADEX) and International Maritime Defense Industry Exhibition (MADEX), are being held to promote the products of domestic defense firms and create business opportunities.

The 2017 Seoul ADEX provided a “venue for international defense industrial cooperation” as 78 high-ranking defense officials from 53 countries attended the event. The exhibition attracted 280,000 visitors with a record high of 405 companies participating in the event, resulting in business deals and consultations for projects worth USD 18.8 billion altogether. The Seoul ADEX served as a momentum to develop the domestic aerospace and defense industry into an export-oriented global industry.

The government will continue its efforts to transform the structure of the defense industry into an export-oriented one and expand defense exports while also proactively creating requirements, such as the localization of core parts, to contribute to job creation so as to allow the defense industry to become a new growth engine for the ROK economy.



Air Force Black Eagles
promotional video



2017
Seoul ADEX

Section 5 Systematic Development of Fundamental Warfighting Capabilities

The MND has been enhancing the mobilization posture and the reserve forces training system to develop an efficient system for the mobilization of troops and materials, and make up for the shortfall in troops resulting from the reduction of standing troops with elite reserve forces. It continues to systemically enhance fundamental warfighting capabilities by innovating defense informatization using the cutting-edge technologies of the Fourth Industrial Revolution as well as bolstering logistics support capabilities that incorporate advanced technologies and outstanding civilian resources.

1. Developing Elite Reserve Forces

| Establishing a Robust Mobilization Support System | To attain deterrence capabilities to prevent war and strengthen war sustainment capabilities, the MND has been continuously improving its mobilization plans to more efficiently marshal available human and material resources to support military operations in wartime and other national emergencies.

In 2018, the Army Mobilization Force Command was established to strengthen wartime mobilization forces. Its establishment provides the foundation to develop elite mobilization forces for units that are critical to operations in the early stage of war.



The ceremony for the establishment of the Army Mobilization Force Command (April 2018)



Army Mobilization Force
Command established

To maintain the forces' quick response posture for mobilization and enable them to exert combat power immediately after mobilization, the Army Mobilization Force Command will foster mobilization divisions and mobilization supplement battalions and, therefore, ensure the optimal conditions for conducting operations during a contingency.

In June 2018, the Reserve Forces Research Center was set up within the Research Institute for National Security Affairs of the KNDU to carry out specialized research on policies and strategies for national mobilization and reserve forces. By organizing seminars as well as promoting exchange and cooperation with international research institutes, the Reserve Forces Research Center will nurture reserve force experts and provide support for the formulation and development of national mobilization policies and strategies.

For troop mobilization that effectively meets the operational requirements of the Armed Forces, the MND has been improving the performance of the Defense Mobilization Information System²²⁾ and plans to continuously expand its connection with other government agencies' information systems.

To improve the effectiveness of troop mobilization in wartime, government–military joint simulation exercises for mobilization procedures in wartime have been conducted. In the Chungmu Training, the government's Chungmu Plan and the Armed Forces' mobilization plans are tested through exercises involving the actual mobilization of human and material resources.

To optimize the number of goods and businesses mobilized in wartime, the MND has been reviewing and verifying mobilization requirements with the Ministry of the Interior and Safety; the Ministry of Trade, Industry and Energy; and other government agencies responsible for resource management. For the efficient mobilization of supplies, the MND will continue to improve the effectiveness of resource mobilization by conducting surveys on mobilization resources with other government agencies and organizing events such as the Critically Managed Resources Testing Day.

| Organization of Reserve Forces and Resource Management | Reservists are organized and managed to be prepared for total war. Together with active-duty units, they make up an

²²⁾ An information system that shares MND's database concerning mobilization and reserve forces with government agencies, the Army, the Navy, the Marine Corps, and other relevant organizations to execute tasks

important share of the country's defense capacity in wartime while protecting security and responding to natural disasters in their respective regions during peacetime. Organized in accordance with the Reserve Forces Act and the Military Personnel Management Act, the reserve forces are mobilized to augment active-duty units during wartime or carry out local and workplace defense missions during wartime or peacetime.

The number of reservists stood at around 2.75 million as of December 2018, and there are about 6,000 volunteer reservists,²³⁾ including female reservists and special operations reservists, nationwide.

Reservists are organized into local reserve units at the administrative district or workplace level, and are separately managed depending on the number of years served and the type of wartime missions to which they are assigned. Reservists are managed locally as the defense minister's responsibility for their management has been delegated to military units assigned to respective districts.

The MND will continue to enhance the reservist system, creating conditions in which the reserve forces, an important pillar of the national defense capacity, can project their maximum combat power.

| Enhancing the Reserve Force Training System | The MND plans to merge and upgrade 208 training sites spread across the country into 40 scientific reserve force training centers by 2024 to bolster mission capabilities through realistic training as well as enhance the efficiency in training site management and budget operation. Scientific reserve force training centers are installed with virtual simulation shooting ranges where reservists can practice zeroing fire, record firing, and squad-level combat shooting. The centers also operate equipment for squad-level battle drills, including urban combat drills, which utilize battle training equipment.²⁴⁾ The MND will also improve reservist satisfaction with training and enhance reservist mission capabilities

²³⁾ A group of reservists selected from 18-year-old or older ROK nationals who have joined the reserve forces pursuant to Article 3 of the Reserve Forces Act

²⁴⁾ A complete set of two-way battlefield training equipment consisting of laser guns, sensors, training control and analysis systems, and electronic display boards

by systemically running training programs with smart training management systems.²⁵⁾ The system is designed for real-time management of all training stages including reservists' entry into training camp, training evaluation, and release from training camp.

As of the end of December 2018, the MND is operating five scientific reserve force training centers.²⁶⁾ In cooperation with local governments, it is planning a program to open training centers to local residents on weekends, while utilizing the sites for security-related experiences and leisure when there is no scheduled training.

Efforts are underway to improve training methods and boost the benefits given to the people. To enhance reservists' mission capabilities, courses relevant to each unit's wartime mission will be reviewed and, if appropriate, incorporated into the reserve force training program. At the same time, compensation for reserve force training will be raised²⁷⁾ to boost reservists' morale and their participation in training.

Furthermore, the part-time service program for reservists,²⁸⁾ which started in 2014 as a pilot project, will be expanded in terms of scale and eligibility by 2023 to enhance the mission capabilities of mobilization units in wartime.

2. Innovation of Defense Informatization Using Advanced Technologies of the Fourth Industrial Revolution

| Applying Advanced ICT Technologies to Defense Fields | The MND plans to apply cutting-edge Information and Communication Technology (ICT) to defense fields to proactively prepare for the changing security environment and the advancement of ICT.

²⁵⁾ It is a scientific training management system that applies advanced ICT technologies to the training of reserve forces. The system is capable of managing reservists' entry to and release from training camps as well as evaluating and supporting training.

²⁶⁾ One in the Gyeonggi region (Geumgok training center set up in 2014), three in the Chungcheong region (Goesan, Chungju, and Okcheon in 2017), and one in Gangwon Province (Manjong in 2018)

²⁷⁾ The compensation for mobilization training has increased from KRW 10,000 in 2017 to KRW 16,000 in 2018 and KRW 32,000 in 2019.

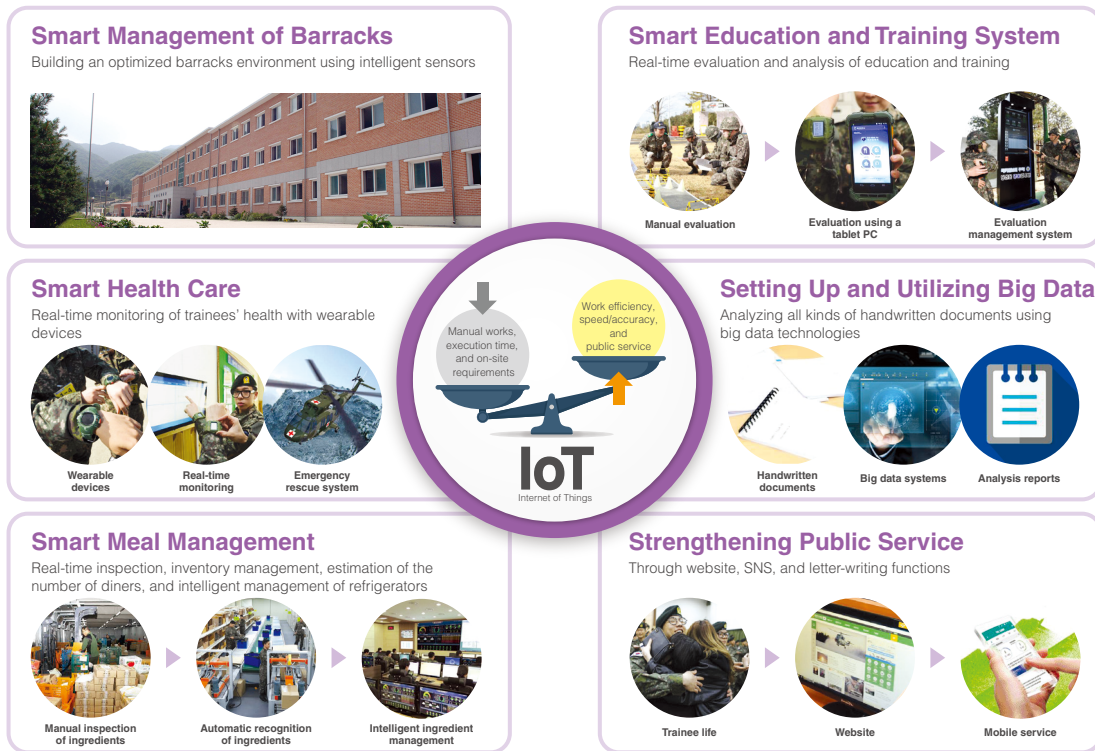
²⁸⁾ A program in which volunteers are selected among reserve officers assigned to mobilization divisions and mobilization supplement battalions, and serve part-time for 15 days a year, participating in unit trainings and managing mobilization resources to firmly establish immediate mission execution posture for emergencies

Under this broader objective, the MND will develop an intelligent weapons system by applying Artificial Intelligence (AI) and big data technologies. It plans to significantly improve Intelligence, Surveillance, and Reconnaissance (ISR) capabilities by establishing the “Intelligent ICT Surveillance and Reconnaissance System” that is capable of combining and analyzing the imagery intelligence obtained from various sensors like military satellites, reconnaissance aircraft, and UAVs. The long-term plan is to develop an AI-based intelligent command and control system, utilize the system to analyze and share battlefield situations in real time, and, thus ensure rapid command and control.

The MND also plans to operate a realistic training system by applying Virtual Reality (VR) technologies. With the consideration of battlefield environments and the characteristics of each Armed Forces branch’s missions, it will create the “special operations simulation training system” for the Army, the “submarine crew training system” for the Navy, and the “air base operation training system” for the Air Force. In addition, the development of the education program for the maintenance of military equipment, which involves safety risks and requires a high level of technical proficiency, as well as a system that supports actual maintenance activities are underway. The VR-assisted training system is expected to contribute to accident prevention and budget reduction.

Advanced ICT technologies will be integrated into the existing systems to help create a smart barracks environment. To save management costs and efficiently operate the workforce, intrusion detection systems using vibration and thermal detection sensor technologies as well as Internet-of-Things (IoT)-based systems for the remote management of personnel, equipment, and facilities will be installed. Another plan is to establish the “Smart Trainee Management System” within the Korea Army Training Center to facilitate the real-time assessment of education and training. Wearable devices will be used to manage trainees’ health data, while the automated control of indoor temperature and humidity is expected to help create a more pleasant environment in military barracks. The quality of military medical services will be improved with the establishment of a remote diagnosis and treatment system using wireless LTE solutions, which enables the proper treatments of patients in critical conditions during evacuation.

[Chart 4-11] The Smart Trainee Management System of the Korea Army Training Center



The MND will continue to promote the innovative enhancement of military strength by applying ICT technologies to defense and expanding exchange with relevant government agencies as well as specialized industrial, academic, and research organizations.

Building a Hyper-Connected Network and Next-Generation Computing Environment

The MND has been building a future-oriented next-generation Military Broadband Convergence Network (MBCN) for the era of hyper-connectivity and hyper-intelligence. The existing MBCN, set up in 2011 in a build-transfer-lease (BTL) program, became an outstanding piece of infrastructure that now accommodates 7,000 lines and can be used in field operations. The MND will continue to build an MBCN capable of ultrahigh-speed and high-volume data flow to handle future changes in the battlefield environment.

The next-generation computing environment will be cloud²⁹⁾-based, establishing it to be more cost-effective, efficient, and secure. The MND has been reviewing projects to apply relevant technologies to defense fields including a project to set up a cloud computing environment in cyber knowledge information facilities. To develop smarter operation support conditions, it will create a defense mobile environment that integrates commercial mobile communication technologies.

| Advancement of the Defense Information System | To streamline defense-related duties and decision-making processes, the MND has been upgrading its information systems for key areas, including human resources, logistics, mobilization, and finance, and has been building an information system that all forces can share. For effective management of defense data, it plans to assist decision-making processes with defense data and data generated in civilian sectors through the application of big data and AI technologies.

The MND will gradually expand the use of open software in the military in conjunction with the government-wide policy to promote open software use while proactively adopting domestically developed commercial software.

In preparation for wartime OPCON transition, the MND has been developing the defense modeling and simulation (M&S)³⁰⁾ system to improve the capabilities for ROK Armed Forces–led combined exercises and training. Various war-game models for joint exercises are being upgraded, and the Live, Virtual, Constructive (LVC) training system³¹⁾ densely integrated with cutting-edge ICT technologies is under development.

| Strengthening Interoperability | The development of military science and technology is expected to create a network-centric operational environment in future wars. In such environment, information has to be shared in real time via information systems connected with

29) A virtual data storage where data can be accessed through a network connection anytime from anywhere because the data is saved in network-connected datacenters

30) It is a compound term consisting of modeling and simulation. It is a tool and method that assists requirement filings, requirement determinations, acquisition, analysis and evaluation, and education and training with scientific techniques.

31) A cutting-edge realistic training system capable of integrating and operating Live (real operations), Virtual (virtual simulations), and Constructive (war-gaming) systems into one constructive environment

surveillance, command and control, and strike systems, and decisions have to be made rapidly, making interoperability³²⁾ between systems vital in this field.

To ensure interoperability between weapons systems and information systems, the MND has updated the Defense Informatization Standards³³⁾ every year, established an integrated management system for information system interconnection, and run the program for evaluating and certifying interoperability according to international standards.³⁴⁾ It continues its efforts to improve interoperability, including the establishment of procedures to manage the interoperability of the ROK Armed Forces tactical data link as well as the defense interoperability evaluation and certification system.

The MND plans to further develop the policies for interoperability in defense fields by setting up a mid- and long-term development plan that reflects the latest advancements in ICT technologies and changes in the interoperability environment.

3. Strengthening Logistics Support Capabilities Using Advanced Technologies and Outstanding Civilian Resources

| Repair Parts and Procurement Innovation | In 2012, the “Repair Parts Requirement Analysis Team” was created within the Korea Institute for Defense Analyses (KIDA) to promote effective inventory management supported by scientific analysis and forecasting of demand for repair parts. The team has been developing demand forecasting models for the repair parts of major equipment.

By 2017, demand forecasting models for a total of 23 units of equipment were developed and used. The accuracy of demand forecasts for repair parts improved from 73% in 2013 to 79% in 2017, and the forecasts helped save over KRW 20 billion in defense spending. In the formulation

³²⁾ A feature that enables the sharing, exchange, and operation of information and data between ground, naval, and air forces and electronic elements

³³⁾ An information technology standard applied to obtain compatibility and interoperability between systems during the development of a force support system

³⁴⁾ A program in which the MND evaluates and certifies whether the requirements for interoperability have been met and interoperability has been achieved during the development of a weapon system or a force support system

of the 2018 defense budget, KRW 12.9 billion of cost savings were achieved, thanks to the demand forecasts for 19 units of equipment. In the formulation of the 2019 defense budget, KRW 16.9 billion of cost savings were reached, due to demand forecasts for 23 units of equipment. The management of repair parts for equipment that are planned to retire has also improved—in case of equipment planned to retire within five years, a budget is allocated only to essential repair parts, while repair parts that have already been procured are recommended to be used. As a result, around KRW 20 billion were saved in the formulation of the 2019 defense budget.

The MND set an objective to raise the accuracy of demand forecasts for repair parts to 85% by 2023, and has been enhancing the repair parts management system that covers the procurement of appropriate repair parts for each equipment and efficient inventory management.

Regarding the spare parts of imported equipment that have limited timely procurement, the MND verifies the causes of the challenges for each spare part with the overseas supplier, analyzes them, and devises solutions using the “no-bid item procurement handling manual.”³⁵⁾ This practice helped boost the rate of on-schedule foreign spares procurement on schedule from 67% in 2013 to 74% in 2017. Continuous efforts for the stable procurement of spares are underway—for example, the MND is seeking to establish a production system that utilizes 3-D printing technology for the on-schedule supply of spares with diminishing supply and difficult procurement.

| Distribution Innovation | Since 2014, the MND has pursued innovation in military supplies distribution to provide the needed supplies to combat units on schedule. It has streamlined the supply support procedures; unified the delivery networks for units in the same area; and standardized distribution facilities, equipment, and supplies.

As a result of the distribution innovation programs, the previous four- to five-step supply support process has been streamlined into the two- to three-step process. Other achievements include a 40% improvement in the distribution speed and a 50% reduction in transportation costs. Thanks to the use of information systems and the acquisition of material handling equipment, the average number of days taken to deliver military supplies to a combat unit from

³⁵⁾ A manual that describes in detail the actions to be taken for each purchase process, from the confirmation of item information to the procurement of the item, when no bid was made for the procurement of a repair part of an imported equipment

the point of an order shrank from 34.2 to 6.4. The MND plans to apply these distribution innovation measures to more units and types of military supplies.

| Maintenance Support Innovation | To maintain adequate availability of equipment through timely maintenance support amid increases in the acquisition of advanced weapons systems, the MND has been building a maintenance support system that integrates and utilizes civilian, public, and military assets.

The Performance-Based Logistics (PBL) program, which started in 2010 as a pilot project for the KT/A-1 aircraft of the Air Force, was applied to nine units of equipment by 2017, delivering outcomes including a reduction in procurement lead time, improved availability rate of equipment, and cost savings.

To boost the performance of the PBL program, the scope of equipment subject to the program, which has been mainly air equipment, is being expanded to include tanks and self-propelled guns. For the object verification of its outcomes, in-depth assessments of the program have been carried out under the supervision of the KIDA since 2017. The assessments concluded that the availability rate of equipment increased, inventory costs decreased, and the pace of logistics support improved. The assessment resulted in a recommendation on the direction of improving and developing rules and regulations to expand the program in the future. The MND plans to revise the “Directives on Performance-Based Logistics” by embracing the recommendation, and optimize the PBL projects in consideration of the environment for maintenance and parts procurement for major equipment.

Furthermore, since 2015, the MND has set up field operation maintenance support centers to attract a large number of civilian maintenance contractors spread across the country to forward areas, where many field operation units are located. As a result, it has utilized the technical skills and resources of civilian maintenance contractors, achieving the result of swift maintenance support including the shortening of delivery and waiting times. The MND plans to gradually expand field operation maintenance support centers.

| Improving the Quality of Military Supplies | The MND has been listening to servicemembers’ opinions on the use of military supplies to improve their quality while seeking the commercialization of military supplies and the enhancement of the national defense standard to help expand private-sector companies’ participation in the military procurement market.

The commercialization of the military supplies program involves the identification of military supplies that can be replaced with commercial products; the testing of commercial products from the civilian sector; and the swift purchase and supply of products that meet military requirement standards. This program is expected to boost the efficiency³⁶⁾ in military supplies management by enhancing the quality and performance of supplies, saving on R&D costs, and securing a large number of sources of supply.

To improve national defense standards, the MND has proactively revised and improved backward, unreasonable standards created 20–30 years ago while publishing national defense standards on the Internet³⁷⁾ to foster lower entry barriers into the military supplies market. It is also working on a measure to manage national defense standards in cooperation with the agency that manages Korean Industrial Standards (KS).

| Force Support System Development | Force support systems³⁸⁾ are the key element for ensuring the combat performance of weapons systems and covers most of the military supplies. Force support systems, however, tend to lag behind in comparison to the advancement of weapons systems, so the MND has been building a system where outstanding civilian technologies can be integrated into or “spin on” military supplies, and the military and the civilian sector can jointly develop or “spin up” technologies that neither of them possesses through cooperation with industrial, academic, and research institutions. In order to realize this goal, the MND launched a civil–military technological cooperation program³⁹⁾ in 2016. Four items, including the lightweight bulletproof helmet, are under development, and it plans to continue expanding the program.

In 2017, the Force Support System Research Center was set up within DTAQ to systemically

³⁶⁾ Cost savings of KRW 83.1 billion were achieved through the commercialization of 215 items between 2016 and 2017.

³⁷⁾ Among a total of 21,599 standards, 11,017 (51%) can be disclosed to the public. The MND published 4,143 in 2013, 4,623 by 2014, and 8,961 by 2015, and completed publishing all (11,017) by 2016.

³⁸⁾ It is a term for all military systems except weapon systems, including equipment, materials, general facilities, resource management, infrastructure software, and others. It was formerly called non-weapon systems until 2012.

³⁹⁾ A project that relevant central administrative agencies jointly carry out to effectively execute the development and transfer of technologies commonly utilized in the military and the civilian sector, specifications standardization, and exchange of technological information

conduct R&D for force support systems and act as the point of contact between the military and industrial, academic, and research institutions. The MND will annually increase the number of specialist personnel working at the center and utilize the center as a truly specialized institution for force support system research.

| Strengthening International Logistics Cooperation | The MND continues to pursue international logistics cooperation with partners and allies to improve war sustainment capabilities and properly prepare for unforeseen threats.

Logistics cooperation with the United States, the ROK's ally, has continued in forms of regular meetings of bilateral consultative bodies; various bilateral and multilateral conferences; cooperation on wartime reinforcement support plans; and mutual logistics support during combined training. The "Umbrella Agreement between the ROK and U.S. concerning Wartime Host Nation Support (WHNS UA)" signed in 1991 is designed to support the rapid

deployment of U.S. forces in the Korean Peninsula, with plans to assist U.S. reinforcements in 12 areas including engineering, maintenance, and supply in wartime. The ROK-U.S. WHNS Combined Steering Committee was held in Seoul in September 2016, and agreed on specific support plans for 11 of the 12 WHNS areas including transportation, petroleum, and supply. The committee concurred that the two countries would continue cooperation. The ROK-U.S. Logistics Cooperation Committee, a subcommittee of the ROK-U.S. Security Consultative Meeting (SCM), met in Seoul in July 2017, and in Washington D.C. in July 2018, and discussed the creation of a working-level consultative group for total life cycle management, explosives safety assessment, and cooperation in the field of ammunition. The committee agreed on future bilateral cooperation regarding individual combat systems, and it is expected to significantly contribute to the advancement of the individual soldier systems of the ROK Armed Forces.

Logistics cooperation with partner countries, including Thailand, New Zealand, Turkey, the Philippines, Israel, Australia, the United Kingdom, and Singapore, is based on a mutual logistics support agreement. With certain partners, including Australia and Israel, the ROK has formed consultative groups that meet regularly, and has increased cooperation in areas of mutual



The 49th meeting of the ROK-U.S. Logistics Cooperation Committee (July 2017)

interests including issues related to military meals, and cooperation in the field of ammunition.

[Chart 4-12] Mutual Logistics Support Agreements Status

| Nations That Have Concluded MLSAs 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/ United Kingdom (2012), Mongolia (2013), Germany (2016), Vietnam (2018) |

In September 2017, the 46th Pacific Area Senior Officer Logistics Seminar (PASOLS) was successfully held in Seoul. The meeting contributed to the exchange of international logistics cooperation as 129 officials from 26 member states attended the meeting and held in-depth discussions on the development of a multilateral logistics cooperation system and logistics support measures in international peacekeeping operations.



The 46th Pacific Area Senior Officer Logistics Seminar (September 2017)

To enhance defense cooperation and vitalize defense exports, the MND is strategically transferring the military supplies that the ROK Armed Forces no longer uses to partner nations. In the past, it transferred military supplies mainly to Asian countries, but such transfer recently has been expanded to countries in South America and Africa. Transfer items are also diversifying from vessels, aircraft, and maneuvering and engineering equipment to fire equipment and ammunition. The overview of transfers of military supplies is shown in [Chart 4-13].

[Chart 4-13] 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, fire equipment, landing equipment, ammunition, and others |

Section 6 Securing an Adequate Defense Budget and Enhancing the Efficiency of Defense Budget Management

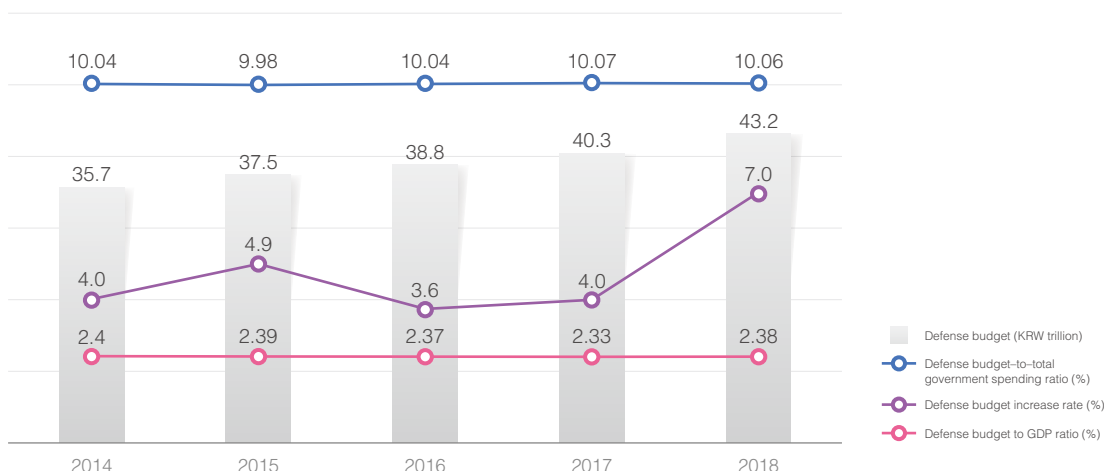
To maintain a firm defense posture against diverse security threats and stably implement defense reform, an adequate defense budget must be secured. In addition to efforts to secure an adequate defense budget, the MND is promoting highly efficient management across all areas of national defense to effectively 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 the nation to bear financial burden as well as the costs of building, operating, and maintaining military strength to counter security threats.

The proportion of the defense budget in the Gross Domestic Product (GDP) and government spending has little changed in the past five years. In 2018, the defense budget accounted for 2.38% of the GDP and 10.06% of total government spending. The Defense Budget trend over the past five years is shown in [Chart 4-14].

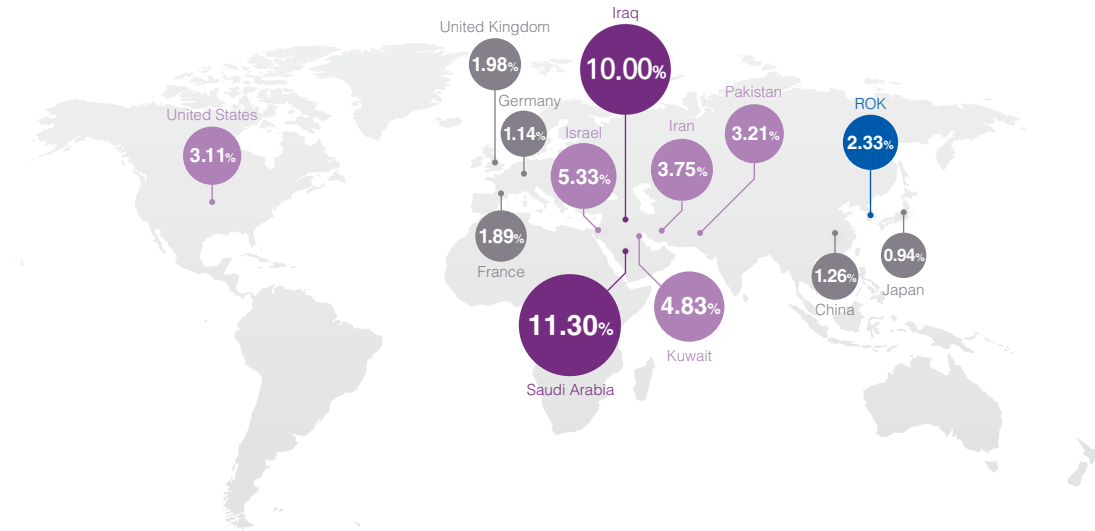
[Chart 4-14] Defense Budget Trend over the Past Five Years (Original Budget)



The defense budget to GDP ratio of each country tends to be proportional to the severity of the security threats that it faces. As [Chart 4-15] shows, countries facing a relatively low level of security threats, such as France, the United Kingdom, Japan, China, and Germany, spend about 1-2% of their GDP on defense budget. 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 budget.

In 2017, the ROK's defense budget to GDP ratio came to 2.33%, which is higher than the world average of 1.99% but lower than those of nations involved in conflicts or military confrontations.

[Chart 4-15] Defense Budget to GDP Ratios of Key Nations



* Source: The Military Balance 2018 (Center for Strategic and International Studies, February 2018)

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, potential threats, and transnational and nonmilitary threats. To lay the foundation for the complete denuclearization of the Korean Peninsula and a long-lasting peace regime, superior defense capabilities must be obtained. Moreover, an adequate level of military strength is necessary for the ROK to independently lead inter-Korean issues amid neighboring countries in Northeast Asia building their military strength.

At the same time, as public interest in human rights and other fundamental rights continues to grow, the protection of servicemembers' human rights has to be strengthened, and a service environment where servicemembers can safely focus on combat missions should be created. In response to the decreasing population, "Defense Reform 2.0," which aims to reorganize the military structure in an information- and technology-intensive way as well as upgrade weapons systems, will have to be seamlessly implemented. However, as a large portion of the defense budget is being spent on rigid expenses, including labor costs, meal costs, and equipment maintenance costs, the total defense budget needs to increase to secure a larger amount of discretionary expenses.

A level of defense capabilities that corresponds to the size of the ROK economy needs to be maintained for the people to have a peaceful and comfortable life amid various security variables. This can be achieved only when supported by an adequate defense budget.

3. Defense Budget and the Mid-Term Defense Plan

| 2019 Defense Budget | To ensure the right conditions for the implementation of “Defense Reform 2.0,” which aims to build a strong defense capacity, the 2019 defense budget was set at KRW 46.7 trillion, representing an 8.2% increase from the previous year. The force enhancement budget for the acquisition and development of weapons systems is KRW 15.4 trillion, accounting for 32.9% of the defense budget. The force operating costs required to operate and maintain troops and existing forces totalled KRW 31.3 trillion, representing 67.1% of the defense budget. The size and allocation of the 2019 defense budget based on general accounting are shown in [Chart 4-16].

[Chart 4-16] 2019 Defense Budget (General Account)

(Unit: KRW billion, %)

| Category | | 2018 Budget (A) | 2018 Budget (B) | Changes (B-A) | Increase Rate (%) |
|--------------------------|----------------------------------|-----------------|-----------------|---------------|-------------------|
| Total Defense Budget | | 43,158.1 | 46,697.1 | 3,539.0 | 8.2 |
| Force Operating Costs | Subtotal | 29,637.8 | 31,323.8 | 1,686.0 | 5.7 |
| | Troops Operating Costs | 18,400.9 | 18,775.9 | 375.0 | 2.0 |
| | Operations and Maintenance Costs | 11,236.9 | 12,547.9 | 1,311.0 | 11.7 |
| Force Enhancement Budget | | 13,520.3 | 15,373.3 | 1,853.0 | 13.7 |

Force operating costs increased by 5.7% from 2018 to KRW 31.3 trillion. About KRW 3.2 trillion has been allocated for the implementation of seven major government projects in the defense field including the enhancement of the quality of military meals. A budget of around KRW 2.6 trillion has been allocated to implement 13 projects from the defense management and

barracks culture areas of Defense Reform 2.0 including the reinforcement of civilian employees of the military force and other types of civilian workforce for the redesigning of defense. The budget was formulated with an emphasis on improvement in servicemembers' working conditions, the strengthening of realistic training, the enhancement of counter-cyber threat capabilities, an adequate follow-up logistics support and the advancement of military health care to help the existing forces to fully utilize their capabilities.

Furthermore, the pilot project for covering the costs of servicemembers' self-development during their military service has been expanded, and the budget for acquiring the platoon-level Multiple Integrated Laser Engagement System (MILES) to bolster realistic training in response to the shortening of the service period has been increased. For reserve forces, scientific training centers have been set up, and mobilization training allowances have been readjusted to a realistic level.

As the number of female military personnel is increasing, the budget required to improve female servicemembers' working conditions has been raised. It covers the expansion of military daycare centers, labor cost requirements for hiring nighttime child care teachers, and the extension of gender sensitivity education.

To reduce servicemembers' fatigue duties step-by-step, the budget for procuring snow-removing equipment as well as hiring civilian personnel for cleaning and weeding has been allocated. The hiring of licensed medical personnel, including pharmacists and nurses, increased to eradicate the auxiliary medical activities carried out by unlicensed medics, while subsidies for medical care in civilian hospitals have been expanded to ensure servicemembers' right to choose where they get treated.

To improve the quality of military meals and satisfy the palate of new generation of servicemembers, the basic meal allowances have been raised by 2.0%, and more civilian cooks have been hired. The budget for procuring materials to enhance servicemembers' working conditions, including hand sanitizers, fine-dust masks, and air purifiers, has been covered to the highest possible level.

The budget for tearing down idled military facilities and barbed wire border fences along coasts and riversides as well as the requirements for seismic retrofit works on residential and multiuse facilities in highly seismic regions were raised. The MND proactively included the budget for applying advanced ICT across all fields of defense and bolstering cyber capabilities such as the budget for building the civilian-military technology convergence network, and

cyberattack and defense training centers. The costs of hiring public defenders for the families of servicemembers killed in military accidents and victims of military crimes were newly covered in the 2019 budget.

In addition, to ensure that existing forces perform their optimized functions, the budget for stable maintenance support and acquisition of equipment and materials to replace aging ones and solve shortages has been raised. The budget for the combat test requirements for the Dronebot Combat System has also been covered in preparation for the new deployment of drones.

The 2019 defense budget also covers the costs for strengthening the capacity to recover the Korean War remains in the DMZ and identifying the remains amid improvements in inter-Korean relations. The budget for supporting servicemembers' job-searching activities and that for providing servicemembers with winter padded jackets, which the people participated in formulating, have been actively reflected.

The force enhancement budget grew by 13.7% to KRW 15.4 trillion in 2018 compared to a year earlier. The budget was formulated with a set of objectives including the acquisition of key forces to deter and counter nuclear and missile threats, forces needed for wartime OPCON transition, and forces necessary for the reorganization of the military structure, as well as the execution of defense R&D and the securing of conditions to vitalize the defense industry.

First, KRW 5.1 trillion has been allocated to 32 projects designed to build key forces to deter and counter nuclear and missile threats, while KRW 1.8 trillion has been allocated to 16 projects to strengthen the ROK Armed Forces' key military capabilities to lead the combined defense.

A total of KRW 3.5 trillion has been allocated to 34 projects for the expansion of operational areas as a result of the military structure reorganization, and for the reinforcement of surveillance and reconnaissance capabilities as well as command and control capabilities in preparation for the reduction of troops. For the efforts to ensure the right conditions for the growth of the defense industry and the execution of defense R&D, which will lead the Fourth Industrial Revolution through convergence with national R&D programs, KRW 3.2 trillion has been allocated.

Mid-Term Defense Plan for 2019–2023 | The Mid-Term Defense Plan is a blueprint for the construction and operation of military forces over the next five years in response to threats and security environment changes anticipated in the present and the future.

The Mid-Term Defense Plan for 2019–2023 thoroughly reflects the major government projects of the Moon Jae-in administration, projects under “Defense Reform 2.0,” and the National Defense Policy for 2019–2033. The Plan makes a reasonable adjustment of force operating costs, including labor costs, through the reorganization of the defense workforce structure and efficient defense operations while channeling available fiscal resources to the force enhancement budget.

The total budget allocated to the Mid-Term Defense Plan for 2019–2023 is KRW 270.7 trillion. Under the plan, force operating costs will increase at an average rate of 5.8% per year; the force enhancement budget, at 10.8%; and the overall defense budget, at 7.5%. The breakdown of the budget for the Mid-Term Defense Plan for 2019–2023 is shown in [Chart4-17].

[Chart 4-17] Mid-Term Defense Budget Breakdown

(Unit: KRW trillion)

| Category | 2018 | Years Subject to the Mid-Term Plan | | | | | |
|---|----------------------------|------------------------------------|----------------------------|---------------------------|---------------------------|---------------------------|----------------------------|
| | | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Defense Budget (Growth Rate) | 43.2 (7.0%) | 46.7 (8.2%) | 50.3 (7.8%) | 54.1 (7.5%) | 57.8 (6.8%) | 61.8 (7.0%) | 270.7 (7.5%) |
| Force Operating Costs (Growth Rate) (Share) | 29.6 (5.3%) (68.7%) | 31.3 (5.7%) (67.1%) | 33.3 (6.3%) (66.2%) | 35.4 (6.3%) (65.4%) | 37.3 (5.3%) (64.5%) | 39.3 (5.4%) (63.5%) | 176.6 (5.8%) (65.2%) |
| Force Enhancement Budget (Growth Rate) (Share) | 13.5 (10.8%) (31.3%) | 15.4 (13.7%) (32.9%) | 17.0 (10.8%) (33.8%) | 18.7 (9.8%) (34.6%) | 20.5 (9.8%) (35.5%) | 22.5 (9.8%) (36.5%) | 94.1 (10.8%) (34.8%) |

The major contents of the Mid-Term Defense Plan for 2019–2023 in the category of force operations are as follows.

First, to ensure that the existing forces exercise their capabilities, KRW 5.3 trillion is allocated to the expansion of war sustainment capabilities via the achievement of an adequate equipment availability rate and ammunition performance. KRW 346.4 billion is allocated mainly to the strengthening of education and training for combat missions. The adequate equipment availability rate will be achieved through the procurement of combat-critical repair parts, the expansion of PBL support, and maintenance support for new weapons systems. For the assurance of ammunition performance, ammunition storage facilities will be modernized with

the construction of about 480 igloo magazines by 2023. To foster elite servicemembers through scientific education and training, 42 sets of new platoon-level MILES will be acquired, and 9 corps- and division-level scientific training centers will be set up by 2023. Servicemembers' spiritual combat power will be bolstered, and the training and supplementary education system that reflects jointness and field operation requirements will also be developed.

Second, KRW 3.4 trillion is allocated to the program of assigning active-duty servicemembers mainly to combat missions and expanding the hiring of civilian personnel in noncombat fields, such as logistics, administration, and education, under the objective of developing an effective workforce structure for the exercise of combat power in conjunction with the reduction in standing troops and the shortening of the service period. In consideration of workforce supply issues, including the shortening of the service period, the MND also plans to transform the officer and NCO rank structure from the current pyramid-shaped structure to a pot-shaped structure, where a smaller number of officers are acquired and, instead, utilized for a longer period. It plans to invest KRW 798.2 billion in developing an elite reserve force. To provide realistic reserve force training, 208 reserve force training sites will be reorganized into 40 reserve force training units capable of scientific training, and mobilization divisions will be reinforced. To properly compensate reservists who temporarily leave their jobs to participate in reserve force training, reserve force training allowances will be readjusted to a realistic level under the objective of raising them to 50% of the 2017 minimum wage by 2022. The MND plans to resolve the issue of shortage of reservist officers and NCOs, and establish the roles of reservist officers and NCOs in wartime by adopting the peacetime service program for reservists.

Third, the MND will establish a transparent and efficient defense operation system adopting the advanced technologies of the Fourth Industrial Revolution and guaranteeing the people's property rights and the benefits that they deserve. A total of KRW 1.7 trillion is allocated to the strengthening of the open defense operation system that is mutually beneficial to local communities. The resources will be used to reduce the barbed wire border fences along coasts and rivers, idled military facilities, the unauthorized use of private and public lands by the military, and other structures and practices posing threats to the people's safety and restraining their property rights to the extent that it does not affect the execution of military operations. The MND plans to invest KRW 841 billion in the establishment of Smart Wing, the special operations simulation training system, and the smart barracks environment, as well as for transforming conventional forces into the smart military through the application of the

advanced technologies of the Fourth Industrial Revolution to defense operations including the acquisition of individual combat systems and transport drones.

Lastly, the MND plans to drastically improve servicemembers' human rights, welfare benefits, and working conditions to the level that meets the expectation of the people and social standards. A total of KRW 24 billion is allocated to human rights protection activities for servicemembers including the hiring of public defenders to support servicemembers who became victims of accidents and crimes within the military and the support for the activities of the Committee to Ascertain the Truth of Military Accidents Resulting in Death. The MND will also invest KRW 21.4 trillion into improving the welfare benefits and working conditions for servicemembers. The salaries for soldiers will be raised to 50% of the 2017 minimum wage by 2022, while the daily basic meal cost per soldier will increase to KRW 9,309 by 2023, and the hiring of civilian cooks as well as nutrition and food hygiene managers will be expanded in efforts to improve the quality of food, clothing, and shelter for soldiers. The monthly cash payment for the purchase of personal articles will be raised to KRW 9,000 per soldier, and the project to modernize the military barracks of the Army will continue. The military medical care system will also be improved with the specialization and modernization of military hospitals. The MND also plans to extend the pilot project, which provided self-development subsidies to 2,000 servicemembers as of 2018, to all servicemembers by 2023. In addition to these investments, KRW 2.3 trillion is allocated to ensure working conditions where servicemembers can focus on their military service. The hiring of a civilian workforce to carry out servicemembers' fatigue duty, such as weeding and cleaning, will be expanded to ensure conditions for servicemembers to focus on combat missions, and the housing support program for career soldiers will be enhanced. As the female military workforce is growing, the MND will come up with measures to ensure the right working conditions for female servicemembers. It will bolster the support for the operation of military daycare centers, provide education to improve gender awareness, conduct investigations on sexual violence, and expand the operation of counselors for sexual grievances.

To build elite military forces capable of coping with omnidirectional security threats, fiscal resources in the force development category have been allocated with an emphasis on securing core forces to deter and respond to nuclear and WMD threats as the top priority as well as forces needed for wartime OPCON transition for the ROK's leadership in combined defense and for the reorganization of the Armed Forces' structure. Resources have also been allocated to other priorities of bolstering capabilities to respond to diverse nonmilitary threats, such as terrorism,

natural disasters, as well as strengthening the capacity of the domestic defense industry, and defense science and technology capabilities. Specific plans are as follows.

First, KRW 32.3 trillion is allocated to acquire core forces to cope with nuclear and WMD threats. To acquire capabilities to strike strategic targets, the MND will enhance surveillance and long-range strike capabilities by procuring military reconnaissance satellites, reconnaissance UAVs, long-range Air-to-Ground Missiles (AGMs), and F-35As. To establish the KAMD system, it will continuously strengthen ballistic missile detection capabilities and capabilities to defend key facilities by procuring additional ballistic missile early warning radars and upgrading Patriot missiles. Overwhelming response capabilities will also be obtained through the reinforcement of missile forces.

Second, KRW 33.4 trillion is allocated to the securing of forces necessary for the reorganization of the military structure and wartime OPCON transition for the ROK's leadership in combined defense. About KRW 4.5 trillion is allocated to reinforce counterfire warfare execution capabilities, precision-guided weapons, and communication capabilities for the acquisition of key military capabilities related to wartime OPCON transition. With KRW 28.9 trillion allocated to the essential forces of different battlefield functions for the reorganization of the military structure, division-level reconnaissance UAVs, wheeled armored vehicles, and aerial refueling tankers will be procured to enhance battlefield recognition capabilities and maneuverability capabilities.

Third, KRW 900 billion is allocated to respond to growing nonmilitary threats. This will be spent to procure folding guns for firing around the corner, night vision binocular devices, and robots for detecting and removing explosives to improve anti-terrorism units' special strike capabilities, daytime and nighttime surveillance capabilities, and remote explosives detection and removal capabilities. The planned fielding of medical evacuation helicopters and an amphibious transport ship is expected to strengthen capabilities to carry out relief activities and the protection of ROK nationals residing abroad in the event of a natural disaster.

Lastly, KRW 21.9 trillion is allocated to carry out defense R&D and invigorate the defense industry. It is expected to back up the national defense science and technology promotion policies so that the share of defense R&D in the defense budget increases to an annual average of 8.1%. Heavy investment will be made into the restructuring of R&D institutions and the reinforcement of relevant infrastructure under the objective of developing weapons systems and technologies that lead the Fourth Industrial Revolution and ensure creative R&D. The share of

domestic investment in the fund will be maintained at an annual average of 81% to ensure stable business conditions for defense contractors, thereby bolstering the foundation of the domestic defense industry and its competitiveness.

4. Efficient Defense Management

| Implementing Defense Fiscal Reform | To spread advanced management techniques within the military and increase the efficiency of defense operations, the “Defense Management Efficiency Inspection Committee,” presided by the Vice Minister of National Defense and joined by civilian experts, has been in operation since 2013. The committee is the first group to conduct preliminary feasibility studies and in-depth evaluations of force operations projects. With groups of civilian experts, the committee has selected and implemented tasks in areas of logistics innovation including procurement, repair parts, and distribution.

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 has selected projects that significantly impact defense finance and require fundamental system improvement, and has regularly reviewed and managed 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 personnel, thereby improving efficiency in troop operations and contributing to the government’s job creation policy.

In 2018, the MND updated the military telephone switchboard system to reduce telephone switchboard operating costs and the number of operators. The MND also has been carrying out a program that contracts out the management of military housing facilities spread across the country to civilian entities to reduce management workforce and labor costs. The MND has been implementing financial reforms with an emphasis on maximizing the outcomes of financial reforms by identifying and eliminating waste of resources as well as inefficiencies across all areas

of national defense. The MND will continue to implement defense financial reforms to make the most of the limited defense budget.

Operation of the Military Executive Agency System | To enhance expertise and management efficiency in carrying out defense-related duties, the MND has designated and operated organizations, whose responsibilities are businesslike 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 of their agencies. Pilot operation of several military executive agencies began in 2009, and the number has continuously grown. As of 2018, 16 organizations in the areas of maintenance, supply, and medical care; printing; and information services operated as military executive agencies. The status of military executive agencies is shown in [Table 4-18].

[Chart 4-18] Military Executive Agency (16 Agencies)

| Total | 16 | Under the Control of 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 | 83 rd Information & Communication Maintenance Depot |
| 2012 | 3 | The Armed Forces Medical Research Institute | | Naval Repair Depot Two | 82 nd 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 Naval Supply Depot has reduced the average duration of handling a request by 37.14 days since being designated as a military executive agency in 2009. The Armed Forces Capital Hospital reduced the private referral treatment rate from 8.5% to 3.04%, and was certified as a general hospital in 2015, contributing to the enhancement of military medical care. Military executive agencies have increased their competitiveness, and gained trust in the quality of their products and services based on proactive work ethics. Together, they have obtained 59 external certifications, 206 publishing copyrights, and 117 patents, and published 355 research papers.

| Efficient Use of Civilian Resources | The MND has established the five-year “Basic Plan for the Use of Civilian Resources in Defense” to reduce annual military expenditures and improve service quality by utilizing civilian personnel, capital, facilities, and management techniques in combat support–related areas including logistics, facility management, and welfare facility operations.

In accordance with the Basic Plan for the Use of Civilian Resources in Defense (2017–2021), service support duties of supply units, such as laundry, waste collection, materials maintenance, and food transportation and distribution, have been contracted out to civilian companies to enhance the welfare of servicemembers and create an environment in which they can concentrate on combat missions. Moreover, Energy Service Company (ESCO) and Water Saving Company (WASCO)⁴⁰⁾ projects have been undertaken to improve the aging energy and water supply facilities without the initial injection of fiscal resources, thus reducing utility charges.

The MND will actively utilize civilian expertise and creativity in all areas of defense to contribute to the reform of the military structure and efficient defense management with the comprehensive consideration of objectives including creating conditions where servicemembers can concentrate on combat missions, promoting stability in service support, and enhancing the welfare of servicemembers.

⁴⁰⁾ It is a project to attract private-sector investment with energy- and water-saving expertise, which improves military facilities without the initial financial investment and reduces utility fees. The budget saved over a set period will be used to pay for the project.

Chapter 5

Development of the ROK-U.S. Alliance, and Expansion of Defense Exchanges and Cooperation



| | | |
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Signing of the ROK-U.S. Alliance Guiding Principles (October 2018)

Section 1 Development of Mutually Reinforcing ROK–U.S. Alliance

The ROK and the United States have maintained a robust combined defense posture throughout the entire process of implementing measures to ease tension and build confidence between the two Koreas. While preserving and strengthening their long-standing trust and solidarity during the process, the ROK and the United States have also effectively responded to all security threats and managed a variety of alliance issues in a mutually beneficial manner. The ROK and the United States will effectively counter common security threats by utilizing their strategic assets and military capabilities in a way that they complement each other. To further develop the ROK–U.S. Alliance in a mutually reinforcing and forward-looking manner, the two countries will continue to enhance their cooperative relationship as allies.

1. Continued Development of the ROK–U.S. Alliance as a Comprehensive Strategic Alliance

For the last 65 years, the ROK–U.S. Alliance has not only defended the ROK from external threats but also contributed to the country’s political and economic development.

At the ROK–U.S. Summit in June 2017, the leaders of the two countries reaffirmed their solid partnership built on mutual trust and shared values of freedom, democracy, human rights, and lawful order. The two sides agreed to continue advancing a comprehensive strategic alliance.

Based on this agreement, the defense authorities of the ROK and the U.S. examine and coordinate policies on all relevant security issues, resolve major agenda of the Alliance, and discuss ways to further develop the Alliance through various high level–security consultative bodies including the Security Consultative Meeting (SCM),¹⁾ the ROK–U.S. Military Committee

¹⁾ The highest level of the ROK–U.S. bilateral security consultative body participated in by the ROK Minister of National Defense, the U.S. Secretary of defense, and senior (key) defense and foreign affairs officials

Meeting(MCM),²⁾ and the Korea–U.S. Integrated Defense Dialogue(KIDD).³⁾

In October 2018, the ROK and the U.S. held the 50th SCM and reaffirmed the robust strength of the Alliance. Since the first meeting in May 1968, the SCM played a pivotal role in the development of the Alliance. For the last 50 years, SCM provided a venue for effective

consultations where the two countries discuss various alliance issues and propose their vision for forward-looking development of the Alliance. The 10th SCM in 1977, in particular, made a significant contribution to the maintenance of peace and stability on the Korean Peninsula. In 1978, the ROK–U.S. Combined Forces Command(CFC) and the MCM were created as a result of the 10th SCM. This led to the establishment of an effective and systematic combined defense system whereby the SCM, MCM, and CFC realize the directives given by the two countries' national command authorities.

At the 50th SCM, the ROK Minister of National Defense and the U.S. Secretary of Defense decided to strengthen the coordination and cooperation towards the common objective of a complete denuclearization in a final and fully verified manner and establishing permanent peace on the Korean Peninsula. They concurred that the “Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain” should be implemented in a way that contributes substantively to the easing of tension and the establishment of peace, and they also decided to maintain a robust ROK–U.S. combined defense posture during the process. The Minister and the Secretary also reviewed the progress of relevant tasks for the transition of the wartime operational control (OPCON) and signed four strategic documents⁴⁾ including the



The 50th SCM (October 2018)

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- 2) The highest level of the ROK–U.S. bilateral military consultative body between the Joint Chiefs of Staffs (JCS) of the two countries
 - 3) First held in 2012, KIDD is an integration of various ROK-U.S. defense consultative bodies for better efficiency and effectiveness.
 - 4) The four documents are “Alliance guiding principles,” or guiding principles following the transition of wartime operational control; Conditions-Based OPCON Transition Plan (COTP) 3rd Edition; Memorandum for Record (MFR) for Future Combined Forces Command; and The Terms of Reference for Relationships (TOR-R) between the ROK Joint Chiefs of Staff, the United Nations Command, and the ROK–U.S. Combined Forces Command.



50th Security Consultative Meeting (SCM)

“Alliance Guiding Principles,” which the ROK and the U.S. jointly developed to ensure a strong combined defense posture following the OPCON transition. The two sides decided to evaluate the initial operational capability (IOC) of the ROK Armed Forces–led combined defense system in 2019 and to closely cooperate to meet the necessary conditions for an early OPCON transition. Meanwhile, the ROK Ministry of National Defense (MND) and the U.S. Department of Defense (DoD) agreed to hold discussions regarding the joint vision to further develop the Alliance’s defense cooperation in a mutually reinforcing and forward-looking manner to be better prepared for potential changes in the future security environment. To defend the ROK, the U.S. reaffirmed the commitment to maintain the current force level of the United States Forces Korea (USFK) and to extend deterrence to the ROK using the full range of military capabilities including nuclear, conventional, and missile defense capabilities. The two countries decided to jointly explore ways to enhance the Alliance’s deterrence posture and implement the tailored deterrence strategy while considering the effects of changes in the security environment on the Korean Peninsula and in the region. Following the SCM, the MND and the DoD held the Alliance Dinner at the U.S. National Archives and Records Administration (NARA),⁵⁾ in which the original copy of Mutual Defense Treaty Between the ROK and the U.S. is kept. During the event, the two sides reaffirmed the robust solidarity between the two countries and strengthened their mutual commitment to the perpetual advancement of the Alliance.

The ROK and the U.S. have been expanding the cooperation to address the security challenges of Northeast Asia and the world beyond the Korean Peninsula. The scope of the Alliance’s cooperation is also broadening to cover new areas including cyber, space, the defense industry, science and technology, and maritime security. Furthermore, the two countries are continuing to strengthen their global partnership to jointly counter transnational and nonmilitary threats through peacekeeping operations (PKO), counter-piracy operations, stabilization and reconstruction support, and humanitarian assistance and disaster relief.

The two countries have shared the space situational awareness data since the Memorandum of Understanding (MOU) on Space Situational Awareness Service and Information Sharing was signed in September 2014. The high-level Table Top Exercise (TTX) for space cooperation

⁵⁾ NARA keeps and displays the original Declaration of Independence, the U.S. Constitution, and the Bill of Rights, among others. Headquartered in Washington D.C., NARA operates 2 archives buildings, 12 regional archives, 13 presidential libraries, and the National Personnel Records Center.

between the MND and the DoD was launched in September 2017, enhancing cooperation to better cope with common space threats such as jamming attempts against satellite communication and navigation devices. The MND and the DoD will continue to explore opportunities for bilateral and multilateral exercises to strengthen mutual space operational capabilities and to build mission assurance.

The ROK and the U.S. continue to bolster defense science and technology cooperation and defense industry cooperation to utilize each country's comparative advantages in a mutually reinforcing manner. To do so, the two countries have been operating various high-level consultative bodies including the Defense Technology Strategy and Cooperation Group (DTSCG), Defense Technology and Industrial Cooperation Committee (DTICC), Defense Technology Security Consultative Meeting (DTSCM), Security Cooperation Committee (SCC), and Logistics Cooperation Committee (LCC).

As an international partner, the ROK and the U.S. will further develop the Alliance in a mutually reinforcing and forward-looking manner to effectively manage common security threats and to extend the Alliance's contribution to the peace and prosperity of not only the Korean Peninsula but also the region and the world.

2. Maintaining a Firm ROK–U.S. Combined Defense Posture

While the inter-Korean tension de-escalation and military confidence building continues, the ROK and the U.S. continue to maintain a robust combined defense posture.

The two countries have continuously enhanced the combined operations plans to prepare for potential contingencies in both wartime and peacetime; verified the operations plans and bolstered command and control capabilities through combined exercises such as the Key Resolve (KR) exercise and the Foal Eagle (FE) training; and improved combined operations execution capabilities and interoperability through combined trainings including anti-submarine warfare training, search-and-rescue training, and large-scale combined air campaign exercise. (Max Thunder)⁶⁾

⁶⁾ Conducted to enhance the plans for large-scale strike package missions and combined operations capabilities

The two countries achieved strategic deterrence through the deployment of strategic assets and the strengthening of combined exercises under close coordination in 2017 when the crisis on the Korean Peninsula was heightened due to North Korea's 6th nuclear test and the firing of multiple ballistic missiles.

In 2018, the ROK and the U.S. carefully selected some combined exercises and training to postpone or to adjust schedule as a part of the confidence building measures to facilitate denuclearization and establishment of peace on the Korean Peninsula. Amid such situation, the two countries have been developing complementary measures including the continued execution of independent and combined exercises that are necessary to maintain the military readiness posture of the armed forces of the ROK and the U.S.

Meanwhile, in May 2018, the ROK and the U.S. agreed to relocate the CFC, which had been planned to temporarily remain in the Yongsan Garrison until the completion of wartime OPCON transition, to the MND compound at an earlier date. The relocation of the CFC to the MND compound is expected to further strengthen the ROK–U.S. coordination and combined defense system, facilitate a transition to a new combined defense system following the transition of wartime OPCON, and accelerate the return of the Yongsan Garrison to the ROK, thus contributing to the Yongsan Park development project.

The ROK and the U.S. will maintain a robust combined defense system and continue to enhance the interoperability between the armed forces in all areas including policies, strategies, and tactics, regardless of the progress of the OPCON transition or the complete denuclearization and establishment of peace on the Korean Peninsula.



Combined exercise involving the F-15K, B-1B, and F-35B aircraft (June 2017)

3. Ensuring a Stable Stationing Environment for United States Forces Korea

| United States Forces Korea Base Relocation | To ensure a stable stationing environment

for the USFK and the balanced development of the ROK territory, the ROK and the U.S. carried out the USFK base relocation project that consolidates and rearranges the USFK bases scattered across the country into two hub bases in Pyeongtaek and Daegu.

The USFK base relocation project consists of the Yongsan Relocation Plan (YRP) and the Land Partnership Plan (LPP). YRP moves units stationed in Yongsan, Seoul, including the USFK Command, to a newly constructed Camp Humphreys in Pyeongtaek. LPP moves the United States 2nd Infantry Division in Dongducheon and Uijeongbu in the northern side of the Han River to Camp Humphreys as well.

As of November 2018, having nearly completed the construction of Camp Humphreys, the MND is in the process of transferring facilities and installations to the U.S. and each of the units are relocating to Camp Humphreys according to its own plans. The 8th Army Command relocated from Yongsan to the Pyeongtaek in 2017, and major units including the USFK Command, United Nations Command (UNC), and U.S. 2nd Infantry Division Headquarters, relocated in 2018. Most of the U.S. units are expected to complete their relocation by the end of 2019. 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.

Meanwhile, the construction of resident support facilities and amenities including roads, waterworks, sewerage facilities, and community centers for Pyeongtaek residents are underway in accordance with the “Special Act on Support, Etc. for Pyeongtaek-si, Etc. Following Relocation of U.S. Military Bases in Korea.” In conjunction with the relocation project, the existing U.S. base sites are being returned to the ROK. As of November 2018, a total of 54 U.S. bases have been returned to the ROK, and 26 additional bases will be gradually returned in accordance with the procedures of the Status of Forces Agreement (SOFA).

The MND recognizes the importance of the USFK’s relocation and camp returns, and will continue to closely cooperate with the U.S. to successfully complete the YRP and LPP.

| Defense Burden Sharing | Defense burden sharing refers to the ROK government bearing a portion of the total stationing costs of the USFK to ensure a stable stationing environment

for the USFK. Defense burden sharing is an exception to Article 5⁷⁾ of the SOFA, which states that the U.S. bears all expenditures for the stationing of the USFK in the ROK. The ROK started its contribution in 1991 following the Special Measures Agreement (SMA⁸⁾). In 2018, the contribution was made in accordance with the 9th edition of the SMA.⁹⁾

The defense burden sharing cost consists of three categories—labor cost, the ROK-funded construction, and logistics cost. The ROK and the U.S. divide and allocate the total amount of annual defense budget 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 annual defense burden sharing is set to a reasonable 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.¹⁰⁾

Most of the defense burden 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 Command, while 88% of ROK funded construction—with the remaining 12% being design and construction oversight costs—and 100% of the logistics cost is supported by domestic contractors in kind (facilities, equipment, and service, etc.)

7) Article 5 of the SOFA (Facilities and Areas—Cost and Maintenance) provides the following:

- 1. The United States will bear, without cost to the ROK, all expenditures incident to the maintenance of the USFK.
- 2. The ROK will furnish, without cost to the United States, all facilities and areas.

8) The official title of the SMA is the “Agreement between the United States and the Republic of Korea Concerning Special Measures Relating 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.”

9) The United States 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 United States financial situation and the ROK's economic growth, the ROK and the United States signed the SMA in 1991. Since then, the ROK has shared a portion of the USFK's stationing costs.

10) The amount of the defense burden sharing cost paid by the ROK was set at KRW 920 billion in 2014 following the 9th SMA concluded in February 2014. The amount of annual contribution between 2015 and 2018 will be decided considering the previous year's defense burden sharing amount and the consumer price index (CPI) from two years earlier. Future increments shall be no more than 4% of the previous year's annual contribution.

[Chart 5-1] Annual Defense Burden Sharing Amount Agreed Upon by the ROK and the United States

Unit: USD 100 million

| Round | 1 st , 2 nd | | | | | 3 rd | | | 4 th | | | 5 th | | |
|--------|-----------------------------------|------|------|------|------|-----------------|------|------|-----------------|------|------|-----------------|------|------|
| 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 |

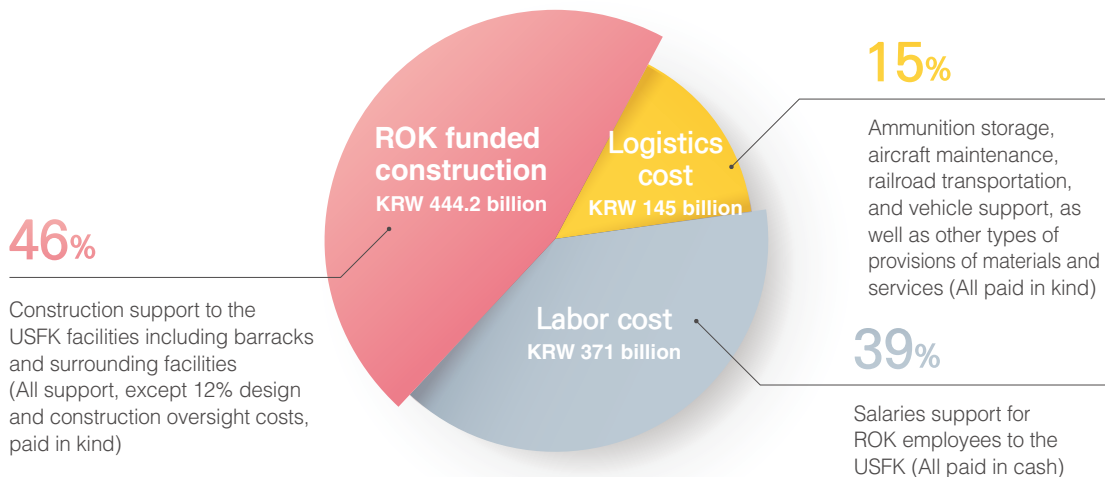
Unit: KRW 100 million

| Round | 6 th | | 7 th | | 8 th | | | | | 9 th | | | | |
|--------|-----------------|-------|-----------------|-------|-----------------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|
| Year | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Amount | 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 |

* Since the 6th SMA, the currency for payment has been switched to Korean won.

[Chart 5-2] Defense Burden Sharing Status

As of 2018



The SMA has undergone many changes over the last 28 years. The ROK and the U.S. governments have strived to continuously 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 improved through the 8th and 9th SMAs, and the two countries have continued to strive to enhance the defense burden sharing allocation and execution system in a forward-looking manner by further strengthening transparency, mutual respect and reciprocity, and rational systems in the 10th SMA.

In addition to the defense burden sharing provided in accordance with the SMA, the ROK government directly and indirectly supports the USFK to strengthen the combined defense posture and ensure an appropriate stationing environment for the USFK. The composition and scale of direct and indirect supports¹¹⁾ for the USFK have changed in line with changes in the security environment. These supports, excluding the nonrecurring cost to build the Pyeongtaek base, amounted to around KRW 3.4 trillion in 2015.¹²⁾

| Enhancing ROK-U.S. Mutual Understanding | The ROK and the U.S. operate diverse programs to help enhance trust between the two countries. The MND has run the “Friends Forever” cultural experience program that introduces Korean history and culture to the USFK servicemembers. Since 1972, some 19,000 USFK servicemembers have participated in the program. In 2017, a total of nearly 250 USFK servicemembers participated in Taekwondo camps, Haeinsa temple stay, and visits to historical sites in Gongju and Gyeongju over five different sessions, broadening their understanding of Korean history and culture. In October 2017, the ROK MND organized the Alliance Dinner in celebration of the 49th SCM and invited around 500 representatives of SCM delegations, key government officials, USFK and CFC servicemembers, and the Korean Augmentation to the United States Army (KATUSA) personnel. In October 2018, the Alliance Dinner was held in Washington D.C. in celebration of the 50th SCM. The dinner served as an occasion to show appreciation to U.S. personnel who have made a significant contribution to the development of the Alliance, inviting the senior officials of the Korean War Veterans Association (KWVA); Korea Defense Veterans Association (KDVA); Korean War Veterans Memorial Foundation (KWVMF); and Chosin Few, a group of veterans who served at the Battle of Chosin Reservoir.



The ROK-U.S. Alliance Dinner (October 2017)

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- ¹¹⁾ Direct support involves government spending, while indirect support refers to a form of support that does not involve government spending but supports the USFK in a way that helps save the forces' financial resources.
- ¹²⁾ Refer to Appendix 17, “Direct and Indirect Financial Support for the Stationing of the USFK” (p.382) for details.

During the dinner, the MND honored late General Mark Clark¹³⁾, the recipient of the 6th General Paik Sun-yup ROK–U.S. Alliance Award, and his family accepted the award on behalf of him. Since 2013, the MND has annually awarded the General Paik Sun-yup ROK–U.S. Alliance Award¹⁴⁾ to U.S. citizens who have been dedicated to the Alliance and the defense of the ROK. The honored recipients of the award in the past five years include General Walton Walker,¹⁵⁾ Colonel William Weber,¹⁶⁾ General James van Fleet,¹⁷⁾ Major General John Singlab,¹⁸⁾ and General John Vessey.¹⁹⁾



The General Paik Sun-yup ROK–U.S. Alliance Award (October 2018)

The USFK also runs various programs to enhance mutual understanding between the ROK and the U.S.. The USFK officially launched the Good Neighbor Program in 2003 for local communities, which involves open house events, local festivals, friendship dinners, visits to U.S. military vessels, and English language classes. The program has enabled cultural exchanges between the USFK and local communities, and helped enhance their understanding of each other. USFK servicemembers 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.

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- ¹³⁾ 2018 recipient; served as the 3rd UNC commander, negotiated and signed the Armistice Agreement as the representative of the UN forces
 - ¹⁴⁾ Established in 2013 in honor of the 60th anniversary of the Alliance for United States personnel who promoted the significance and importance of the Alliance, and contributed to its development
 - ¹⁵⁾ 2013 recipient; laid the groundwork for Incheon Landing by successfully defense of the Nakdonggang River Line during the early stage of the Korean War
 - ¹⁶⁾ 2014 recipient and the chairman of the Korean War Veterans Memorial Foundation; has actively campaigned for better recognition of the Korean War in the United States
 - ¹⁷⁾ 2015 recipient; served in the Korean War as the commander of the United States 8th 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
 - ¹⁸⁾ 2016 recipient; 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 ROK–U.S. CFC
 - ¹⁹⁾ 2017 recipient; served as the first commander of the CFC; played a decisive role in the creation of the CFC as the commander of the USFK

Section 2 **Expeditious Wartime Operational Control Transition Based on a Robust ROK–U.S. Alliance**

The ROK and the United States have been thoroughly preparing for the transition of wartime OPCON, which facilitates a transition to the new ROK Armed Forces–led combined defense system, while maintaining a firm combined defense posture in preparation for potential North Korean aggression and provocations. By systematically managing relevant tasks for OPCON transition including the development of the combined command structure and strategic documents, combined exercises and certification, and the ROK Armed Forces' acquisition of capabilities, and by regularly evaluating the progress in the preparation, the ROK Armed Forces is pursuing early transition of OPCON while maintaining stability.

1. Background and History

The ROK has achieved economic growth and national growth based on the ROK–U.S. Alliance in the last 60 years. Now is the time for the ROK to use the country's own defense capabilities to sustain peace and prosperity on the Korean Peninsula as well as to enhance the Alliance in a forward-looking manner. To realize responsible defense that matches the ROK's national power and military strength, the ROK Armed Forces needs to build capabilities to lead the combined defense system and exercise wartime operational control (OPCON).

The ROK Armed Forces has been systematically and proactively preparing for OPCON transition to establish a new ROK-led combined defense system while expanding its independent response capabilities to effectively counter North Korean threats.

In June 2017, the leaders of the two countries agreed to continue the Alliance's cooperation to further accelerate wartime OPCON transition compared to the previously agreed timeline. In accordance with the leaders' agreement, the ROK Armed Forces has been systematically carrying out major tasks including the development of a post-OPCON transition combined defense structure, the development of strategic documents defining the future combined

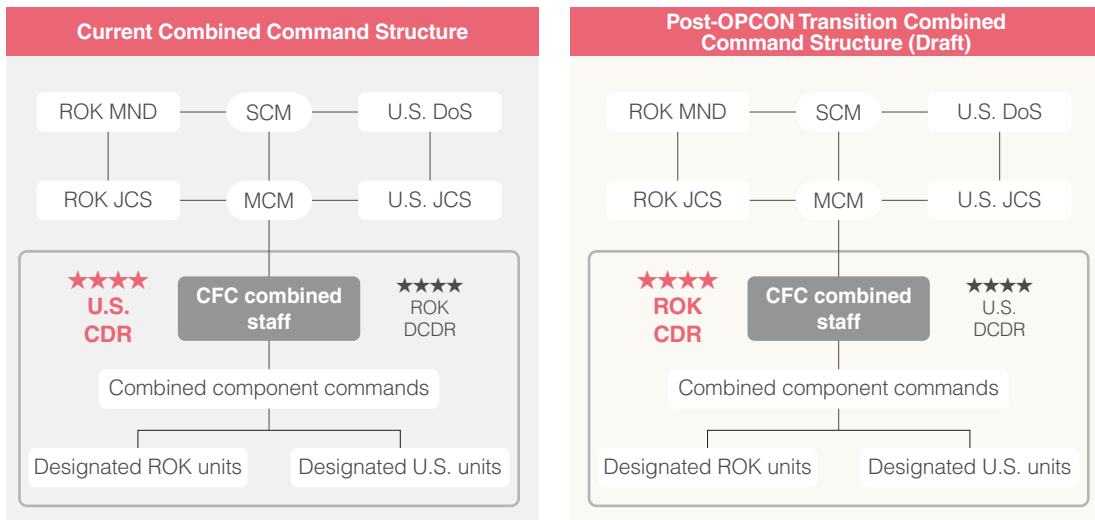
defense system, and the enhancement of combined exercises and certification plan, as well as the acceleration of the ROK Armed Forces' capability acquisition in conjunction with the implementation of Defense Reform 2.0. Furthermore, the ROK and the U.S. have been closely consulting each other to meet the conditions for OPCON transition at an earlier date and to pursue it in a stable manner by regularly evaluating the progress in the preparation at the same time. At the 50th SCM held at Washington D.C. in October 2018, in particular, the ROK Minister of National Defense and the U.S. Secretary of Defense decided to continue their effort to jointly evaluate the necessary conditions for OPCON transition while taking changes in the security situation fully into consideration.

2. Systematic and Active Pursuit of Conditions-Based Wartime Operational Control Transition

| Development of Combined Command Structure | In a combined command structure, the armed forces of two or more countries cooperate with and command each other to attain common goals. The ROK and the U.S. have formed the CFC with the U.S. Commander – ROK Deputy Commander structure and have cooperated to deter external attacks and aggression under the directives of the national authorities, the SCM, and the MCM to defend against and destroy threats if deterrence fails.

The current “U.S. commander – ROK deputy commander” system is planned to be switched to “ROK Commander – U.S. Deputy Commander” system following the OPCON transition. The tentative combined command structure to be applied following the OPCON transition is shown in [Chart 5-3].

[Chart 5-3] Post-OPCON Transition Combined Command Structure (Draft)



The ROK and the U.S. plan to apply the new tentative structure to combined exercises starting in 2019. After carrying out such combined exercises, the two countries will refine and further enhance the structure to finalize it during wartime OPCON transition.

Development of Strategic Documents | The ROK and the U.S. define the combined command structure that covers the CFC commander's duties and roles as well as the relationship among ROK JCS, U.S. JCS, CFC, UNC, and USFK in strategic documents based on the Mutual Defense Treaty.

At the 50th SCM held on October 31, 2018, the ROK Minister of National Defense and U.S. Secretary of Defense agreed to maintain a structure similar to the current CFC structure after wartime OPCON transition, have a ROK general serve as the CFC commander, maintain the stationing of USFK, maintain the UNC, and continue the extended deterrence policy of the U.S.. This agreement helped form an environment conducive to an expedited OPCON transition. The defense authorities of the ROK and the U.S. plan to develop new strategic documents based on the agreement for the post-transition combined command structure led by the ROK Armed Forces. The new strategic documents will specify the duties and roles of the ROK and U.S. defense and military authorities as well as theater-level commands, and their command and cooperation relations. The two countries will continue to refine and enhance them through combined certifications planned for 2019 under the objective to complete them before wartime OPCON transition.

| Enhancing Combined Exercises and Certification Plan | The ROK and the U.S. have examined and refined the two countries' theater operations capabilities under the combined command structure through the combined exercises that they conduct to master the execution processes for crisis management and joint operations plans. Once the transition is complete, the ROK CFC Commander will command the massive ROK–U.S. combined forces including U.S. emergency reinforcements and must lead the war to victory. Therefore, the two countries will supplement weaknesses and improve warfighting capabilities through combined exercises and certifications applied with a new post-OPCON transition combined command structure led by the ROK Armed Forces.

| Accelerating the ROK Armed Forces Capability Acquisition | For OPCON transition, the ROK Armed Forces needs to acquire core military capabilities and critical response capabilities²⁰⁾ to counter North Korea's nuclear and missile threats at an early stage. Since the “Conditions-Based OPCON Transition Plan (COTP)” was approved in 2015, the ROK Armed Forces has been striving to acquire comprehensive capabilities to counter nuclear and missile threats. Particularly after the inauguration of President Moon Jae-in, the ROK Armed Forces has strived to systematically reflect force requirements necessary for OPCON transition in conjunction with Defense Reform 2.0. The efforts to accelerate the ROK Armed Forces' capability acquisition, including the related defense budget formulation, will continue.

| Evaluating the Progress in the Preparation for Wartime OPCON Transition | The ROK and the U.S. have regularly evaluated and reviewed the progress in the preparation for wartime OPCON transition through the combined implementation governance system that consists of three subcommittees—military transition, planning and policy, and alliance management—and conducted evaluations through SCM, MCM, and the steering committee. Through these evaluations, the two countries' armed forces will stably pursue OPCON transition toward the direction that contributes to bolstering combined defense capabilities. Going forward, the ROK will continue to evaluate the progress in the preparation under close coordination between the two countries so that the transition is conducted on the basis of the robust Alliance.

²⁰⁾ Capabilities that the ROK Armed Forces has to acquire before the transition to lead combined defense

Section 3 Expansion of Defense Exchanges and Cooperation

The ROK Armed Forces has been developing cooperative defense relations with China, Japan, and Russia based on the ROK–U.S. Alliance to promote peace and stability on the Korean Peninsula and Northeast Asia. The ROK Armed Forces has also been contributing to world peace by expanding the boundaries of defense diplomacy to Southeast Asia, the Middle East, Central and South America, and Africa, and by actively participating in multilateral security consultative bodies.

1. Strengthening Defense Exchanges and Cooperation with Neighboring Countries

| Defense Exchanges and Cooperation with China |

The ROK and China have developed their relationship in various areas, such as politics, economy, society, and culture, since the establishment of diplomatic relations in 1992, and their relationship was upgraded to a “strategic cooperative partnership” in 2008. However, after July 2016, when the decision to deploy the U.S. Terminal High-Altitude Area Defense (THAAD)

system in the ROK to counter the growing nuclear and missile threats from North Korea was announced, most defense exchanges and cooperation between the ROK and China, except the humanitarian repatriation of Chinese soldiers’ remains and education exchange, were suspended. China strongly opposed the deployment, arguing that it would harm the country and the region’s strategic security interests.

In December 2017, during the ROK–China Summit, the leaders of the two countries decided to expand bilateral cooperation to areas, such as politics, diplomacy, and security, and to vitalize various high-level strategic dialogues. Since the summit, the two countries have been restoring



ROK–China Defense Ministerial Talks
(October 2018)

defense exchanges and cooperation, for example, organizing the 16th Defense Policy Talks in May 2018. During the ASEAN Defense Ministers' Meeting-Plus (ADMM-Plus) in October 2018, the Defense Ministers of the ROK and China convened bilateral talks and agreed not only to bolster trust between the two countries but also pursue defense exchanges and cooperation in a more substantive manner by vitalizing senior official exchanges and exchanges among military units as well as installing additional hotlines between the air forces through the resumption of working-level air defense talks.

The ROK and China had exchanges in diverse areas in the past, including the senior officials, such as ministers and vice ministers of defense as well as JCS chairmen; regular meetings, such as defense strategic dialogues and defense policy talks; exchanges among military units; and the repatriation of Chinese soldiers' remains. Their exchange activities also included academic conferences jointly organized by the two countries' military research institutes, mutual education exchanges by respective education institutes, and sports exchanges.

The ROK and China are currently discussing the resumption of working-level air defense talks that have been on hiatus since 2013 to prevent possible airborne collisions that can be caused by Chinese military aircraft's ingress into the Korea Air Defense Identification Zone (KADIZ). The two countries are also discussing the resumption of Vice Minister defense strategic dialogues and the installation of additional hotlines between their navies.

Looking forward, the ROK and China will strive to contribute to peace and stability on the Korean Peninsula and Northeast Asia by continuously strengthening strategic communication; vitalizing defense exchanges and cooperation at various levels and in diverse fields in order to reinforce their "strategic cooperative partnership" substantively.

| Defense Exchanges and Cooperation with Japan | The ROK and Japan are geographically and culturally close neighbors as well as partners cooperating for global peace and prosperity.

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 Ministerial Meeting. Following the ROK–Japan



ROK–Japan Defense Ministerial Talks (October 2018)

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 of the ROK and Japan held bilateral talks during the ADMM-Plus in October 2018 as well, and agreed to continue to enhance their defense exchanges and cooperation in a forward-looking manner.

The ROK and Japan have also been enhancing mutual understanding through defense policy talks and foreign affairs and defense security policy consultative meetings. In March 2018, the two countries held the foreign affairs and defense security policy consultative meeting for the first time in three years to share their respective understanding of the Northeast Asian security environment and to broaden their understanding of each other's defense policies.

However, some Japanese political leaders' perception of history and claims of dominion over Dokdo Island have become obstacles to the forward-looking development of the relationship between the two countries.

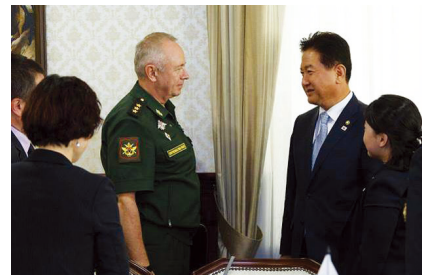
The ROK will continue to cooperate with Japan for peace and stability on the Korean Peninsula and Northeast Asia while firmly and strictly responding to Japan's distortion of history and unjust claims on Dokdo Island.

| Defense Exchanges and Cooperation with Russia | Russia is a key partner in the ROK government's New Northern Policy and an important party for cooperation with regard to peace on the Korean Peninsula. The ROK and Russia have continued to develop their "strategic cooperative partnership" by strengthening friendly cooperation and deepening trust between each other through bilateral summits in September 2017 as well as June and November 2018.

In addition, the two countries have been improving mutual trust in the fields of defense and security. ROK defense officials attended the Moscow Conference on International Security in 2017 and 2018, while communication between the two countries' military authorities has strengthened through various consultation channels including the chief director-level meetings of their JCS, the joint military committee, and meetings between the services of their armed forces.

To build trust on the military front, the two countries have been continuously reviewing the implementation of the "ROK-Russia Maritime Accident Prevention Agreement" signed in 1994 while seeking to install hotlines between their air forces in accordance with the "ROK-Russia Prevention of Dangerous Military Activities Agreement."

At the 3rd ROK–Russia Defense Strategic Dialogue held in August 2018, in particular, the two sides agreed to elevate the level of their strategic dialogue to Vice Minister-level and organize it regularly in consideration of the significance of the ROK–Russia relations. During the meeting, the two sides built a consensus on the need for exchanges of military officials, the installation of hotlines between their air forces, the reorganization of the institutional framework to bolster defense exchanges and cooperation, and bilateral joint research to build trust on maritime affairs.



The 3rd ROK–Russia Defense Strategic Dialogue (August 2018)

The MND will expand defense exchanges and cooperation with Russia; enhance military-level trust in support of the ROK government’s New Northern Policy²¹⁾; and, therefore, eventually help develop the ROK–Russia relations into one that contributes to peace and stability on the Korean Peninsula and Northeast Asia.

2. Expanding Defense Exchanges and Cooperation with Key Countries in Each Region

| Southeast Asia and Oceania | The ROK Armed Forces strives to establish a diversified defense diplomacy framework and generate substantive defense cooperation with Southeast Asian countries in accordance with the government’s “New Southern Policy”²²⁾ toward stronger cooperation with ASEAN.

The ROK has been strengthening cooperation with Southeast Asian nations in a way that contributes to the enhancement of security in Northeast Asia through multilateral cooperation to address regional security threats. At the same time, the ROK is actively pursuing reciprocal

²¹⁾ A policy to connect the ROK’s transportation, logistics, and energy infrastructure with Eurasian countries in the north of the Korean Peninsula, including Russia, China, Mongolia, and Central Asian countries, to create the new growth engine for the ROK economy and seek mutual prosperity with the countries while promoting peace and prosperity on the Eurasian continent including the Korean Peninsula

²²⁾ A foreign policy to strengthen friendly cooperation with 10 ASEAN member states and India to the level of cooperation between the ROK and neighboring states on the political, cultural, and human interaction fronts

defense cooperation and defense industrial cooperation tailored to characteristics of each country in efforts to meet their respective security needs.

In September 2017, at the 6th Vice-Ministerial Defense Strategic Dialogue, the ROK and Vietnam discussed senior official exchanges, peacekeeping operations, and promotion of maritime security cooperation. The two countries agreed on the need to enhance defense industrial cooperation and logistics cooperation to the level that matches their “strategic cooperative partnership.”

In the same month, the ROK and Myanmar held vice-ministerial bilateral talks on the occasion of the Seoul Defense Dialogue (SDD), and Myanmar became the 6th ASEAN member state to sign an MOU on defense cooperation with the ROK.

In 2018, a greater emphasis was put on defense cooperation and defense industrial cooperation between the ROK and Southeast Asian nations after establishment of the “government-wide comprehensive plan to pursue New Southern Cooperation”.

In late January 2018, while attending the Fullerton Forum²³⁾ in Singapore to deliver a keynote speech, the ROK Minister of National Defense hosted meetings with the Defense Ministers of Singapore, Indonesia, and Thailand, and paid a visit to the President of Indonesia, Prime Minister of Singapore, and Prime Minister of Thailand. In 2018, the ROK government discussed bilateral coordination for multilateral security cooperation within the region as well as ways to bolster strategic cooperation, with Singapore, the 2018 chair of ASEAN. With Indonesia, whose relationship with the ROK was elevated to a “special strategic partnership” after President Moon Jae-in’s visit in November 2017, the ROK government explored ways to strengthen mutually beneficial cooperation in the fields of security and defense industry. In the ROK–Thailand Defense Ministerial Meeting that took place for the first time in 18 years to commemorate the 60th anniversary of diplomatic relations, both sides agreed to carry out close cooperation on vitalizing exchanges in the defense and defense industry sector.

In March 2018, the ROK Minister of National Defense met with Singapore’s Defense Minister who visited the ROK to discuss the agenda for the upcoming ADMM-Plus. The two

²³⁾ 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 United States, China, Japan, and Russia, as well as the EU and NATO.

Ministers discussed ways to enhance multilateral joint response capabilities for counterterrorism and maritime security, and agreed to enable the ROK government to take lead on the Korean Peninsula issue in multilateral security consultative bodies.

In April 2018, on the occasion of the Vietnamese Minister of National Defense's visit, a bilateral Defense Ministerial Meeting was held. The two Defense Ministers agreed to bolster defense cooperation and defense industrial cooperation to promote strategic cooperation between the ROK and Vietnam, a key nation in the New Southern Policy. They signed the "ROK–Vietnam Statement on Common Vision for Defense Cooperation" that paves the way to strengthen and enhance bilateral defense cooperation in the future.

In the same month, the ROK Minister of National Defense met with Secretary of National Defense of the Philippines, who visited the ROK to attend a frigate construction ceremony, and discussed the outcome of the inter-Korean summit and the defense issues between the ROK and the Philippines, as well as ways to strengthen defense industrial cooperation.

In early June of 2018, the ROK Minister of National Defense visited Vietnam during the trip to Southeast Asia to attend the 17th ASS and held ROK–Vietnam Defense Ministerial Talks and paid a courtesy call to the Vietnamese Prime Minister. During the Defense Ministerial talks and the courtesy call, regional security dynamics, including that of the Korean Peninsula, and ways to enhance defense and defense industrial cooperation were discussed. The two Defense Ministers signed the "Mutual Logistics Support Agreement," laying the foundation for logistics cooperation and establishing an institutional framework for a comprehensive defense cooperation.

In September 2018, during the SDD, the ROK Vice Minister of National Defense hosted separate Vice–Ministerial Meetings with the Cambodian Secretary of State of the Ministry of National Defense and the Bruneian Permanent Secretary of Ministry of Defense. During the meeting, the ROK signed MOUs on defense cooperation with both Cambodia and Brunei, which establish the institutional foundation to strengthen defense exchanges and cooperation with the two nations.

In December 2018, the ROK Vice Minister of National Defense visited Vietnam and Indonesia in support of the ROK government's New Southern Policy. During the visit to Vietnam, the ROK and Vietnam held the 7th Defense Strategic Dialogue, and decided to strengthen and expand senior official exchanges, cooperation on peacekeeping operations, cooperation for the recovery of remains of the fallen soldier, and defense industrial cooperation. During the visit

to Indonesia, the ROK Vice Minister of National Defense discussed major issues, including the KFX–IFX and submarine projects, and agreed with Indonesian officials to expand and enhance defense cooperation and defense industrial cooperation between the two countries.

With Australia and New Zealand—key nations of the Oceanian region and the ROK’s long-standing partners—the ROK has been actively seeking the expansion and vitalization of defense cooperation through senior military official exchanges including regular meetings of consultative bodies.

The ROK and Australia convened a bilateral Defense Ministerial Meeting during the SDD in September 2017. The Defense Ministers of the two countries mainly discussed the security situation on the Korean Peninsula and the region as well as ways to vitalize defense industrial cooperation and defense cooperation. In October 2017, at the 3rd ROK–Australia Foreign Affairs and Defense Ministerial Meeting, the Foreign Affairs and Defense Ministers of the two countries noted that their bilateral cooperation has further deepened and enhanced since the 2nd meeting. During the defense ministerial talks that followed the meeting, the two sides continued concrete discussions on defense cooperation. The Defense Ministers of the ROK and Australia noted that the interoperability of the two countries had improved, thanks to their navies’ substantive combined training and the identification of cooperation areas through the defense ministerial talks held during the SDD as well as regular meetings of the consultative bodies of each service of their armed forces.

The ROK and New Zealand held the Defense Ministerial Talks in October 2018 and the 15th and 16th defense policy talks in February 2017, and March 2018, respectively. During the meeting, the two countries explored ways to enhance defense exchanges and cooperation, including combined training, UN peacekeeping operations, defense industrial cooperation, and cooperation, between each service of their armed forces. The two sides also concurred that the international community’s faithful implementation of UN Security Council resolutions through the evaluation of regional security dynamics, including the Korean Peninsula, is the key to sanctions on North Korea.

| Southwest Asia | Southwest Asia is considered a strategic point that connects the Middle East and Asia. The ROK has engaged in defense exchanges and cooperation with key countries in Southwest Asia through senior military official exchanges and regular meetings of consultative bodies.

The ROK–India relationship was elevated to a “special strategic partnership” during the Indian Prime Minister’s visit to the ROK in May 2015. At the Defense Ministerial Meeting in June 2017, the two countries discussed ways to strengthen bilateral defense cooperation including coordinating responses toward North Korea as well as vitalizing military education exchanges and defense industrial cooperation. The two countries also decided to hold meetings between their foreign affairs and defense vice ministers in the near future, which they had agreed to organize in 2015.

In October 2017, during the Seoul International Aerospace & Defense Exhibition (Seoul ADEX), the ROK Minister of National Defense met with the Sri Lankan State Minister of Defense and the Indian Defense R&D Secretary. The ROK Minister of National Defense and the Sri Lankan State Minister of Defense discussed the importance of coordination for sanctions on North Korea and ways to develop defense industrial cooperation in a forward-looking manner. In a separate meeting with the Indian Defense R&D Secretary, the ROK Minister of National Defense had concrete discussions on ways to expand the mutually reinforcing bilateral defense industrial cooperation based on their “special strategic partnership.”

In August 2018, the ROK Minister of National Defense undertook an official visit to India and held a bilateral Defense Ministerial Meeting to follow up on the ROK–India summit held in July. To continuously enhance the level of defense cooperation and defense industrial cooperation, the Defense Ministers of the two countries decided to hold meetings of their Foreign Affairs and Defense Vice Ministers as well as meetings of the consultative bodies of each service of their armed forces. Both sides also committed to further develop military education exchange, cooperation on peacekeeping operations, defense technology cooperation, and joint research and development.

The ROK will proactively seek ways to expand defense cooperation and defense industrial cooperation with countries in Southwest Asia through continuous senior military official exchanges and regular meetings of consultative bodies.

| Central Asia | Central Asia is the key region of Eurasia that connects Asia, Europe, and Africa, and that consists of key countries in the central area of the ROK government’s New Northern Policy. It is also a highly geopolitically valuable region that China’s One Belt, One Road, passes through and that is linked with Russia’s New East Policy. Five Central Asian countries formed the Commonwealth of Independent States (CIS) after achieving their

independence from the former USSR, and have been making progress toward political stability and economic growth since independence.

In April 2015, the ROK and Uzbekistan signed an MOU on military education exchanges and cooperation, and held defense policy talks every year to discuss ways to expand cooperation. Education exchanges between the two countries have deepened starting in 2017, and instructors from the Joint Forces Military University (JFMU) are dispatched to Uzbekistan's military academy to transfer their knowledge and experience in military science such as operational art. In August 2018, the ROK Vice Minister of National Defense visited Uzbekistan to hold high-level bilateral defense talks during which the two sides agreed to bolster education exchanges, counterterrorism cooperation, and defense industrial cooperation. Uzbekistan also pledged its utmost support and cooperation towards the ROK government's efforts to achieve complete denuclearization and permanent peace on the Korean Peninsula, which will provide an impetus for inducing Central Asian nations to play a constructive role in resolving the Korean Peninsula issue.

The ROK and Azerbaijan signed an MOU on defense exchanges and cooperation in December 2013, which paved the way in enhancing bilateral defense exchanges and cooperation. The ROK also signed an MOU on defense cooperation with Turkmenistan in May 2015, and the two countries have been exploring ways for substantive cooperation such as systematic defense industrial cooperation.

Since 2015, the MND has invited Central Asian countries to the SDD to strengthen communication as well as vitalize education exchanges and defense industrial cooperation between the ROK and Central Asian nations, thereby actively supporting the ROK government's New Northern Policy on the defense front.

In 2018, the inaugural ROK–Central Asia Plus Defense Vice Ministerial Talks was held as a result of the SDD.

The ROK–Central Asia Plus Defense Vice Ministerial Talks is a ministerial consultative body to promote peace and common prosperity in Northeast Asia and Eurasia. The first meeting in 2018 was attended by the Vice Minister-level officials from 4 countries, including Uzbekistan,



ROK–Central Asia Plus Defense Vice Ministerial Talks
(September 2018)

Mongolia, Kazakhstan, and Kyrgyzstan, and ambassadors of Tajikistan and Turkmenistan to the ROK. The officials exchanged constructive views to promote peace and common prosperity in Eurasia, and decided to continue developing a sustainable defense exchange and cooperation platform for confidence building and the enhancement of bilateral relations.

| Middle East | The Middle East has significant value as a major supplier of energy resources in the world. The ROK has strived to strengthen defense cooperation with countries in the region.

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 relations in 1980. The two countries' relationship was upgraded to a "strategic partnership" in 2009, and the ROK has been operating the Akh Unit in the UAE since January 2011 after obtaining the consent of the National Assembly. Their relationship was further elevated to a "special strategic partnership" in March 2018 when President Moon Jae-in and Crown Prince of Abu Dhabi Mohammed Al-Nahyan hosted a summit, and agreed to strengthen and expand bilateral cooperation with the creation of a foreign affairs and defense consultative body. In April 2018, the ROK Minister of National Defense visited the UAE with the Minister of the Defense Acquisition Program Administration (DAPA) and the President of the Agency for Defense Development (ADD) to follow up on the summit. In addition to paying a visit to the crown prince, the ROK officials held a meeting with the UAE Minister of State for Defense, and agreed to bolster and expand bilateral defense cooperation and defense industrial cooperation. In October 2018, the UAE Undersecretary of Defense visited the ROK and held Vice-Ministerial talks as well as the 1st Foreign Affairs and Defense Meeting. In December, the UAE Minister of State for Defense visited the ROK and held defense ministerial talks with the ROK Minister of National Defense. Through such active mutual exchanges, the ROK and the UAE are maintaining stable cooperation.

In March 2017, during the ROK Vice Defense Minister's visit to Egypt, the ROK and Egypt signed an MOU on defense cooperation and agreed to expand bilateral defense cooperation in various fields including logistics and military education and training. In September 2017, Egypt's Minister of Defense made an official visit to the ROK and held bilateral talks with the ROK Minister of National Defense. Egypt's Defense Minister expressed active support for the ROK's policy toward North Korea, and the Defense Ministers of the two countries agreed on

continuous defense exchange and cooperation to bolster bilateral defense industrial cooperation.

In September 2017, the ROK Vice Minister of National Defense met with Saudi Arabia's Defense Minister Assistant who visited the ROK to attend the 6th SDD. They held bilateral talks, and agreed to actively make efforts to strengthen bilateral defense exchanges and cooperation between the two countries.

In October 2017, the ROK Minister of National Defense hosted separate meetings with Lebanon's Minister of National Defense, Oman's Defense Ministry secretary-general, and Egypt's Minister of Defense and military production during their visit to the Seoul ADEX. In the meetings, the ROK Minister of National Defense actively supported the effort to vitalize defense exports by requesting their interest towards the ROK's outstanding defense articles.

In November 2017, the ROK Minister of National Defense visited Oman and held a ministerial meeting. The Defense Ministers of the two countries decided to make mutual efforts to expand bilateral defense cooperation and particularly had in-depth discussions on ways to extend defense industrial cooperation.

In the same month, the ROK Minister of National Defense visited Lebanon to inspect the Dongmyeong Unit's UN peacekeeping operations and met with Lebanon's Minister of Defense Yacoub Al-Sarraf. In the ministerial talks, the two sides decided to continue mutual efforts to systematize bilateral defense cooperation.

In July 2018, the ROK and Egypt held director general-level defense policy talks for the first time, and agreed to further strengthen bilateral defense exchanges and cooperation between the two countries.

In September 2018, the ROK Vice Minister of National Defense convened bilateral talks with Saudi Arabia's Defense Minister Assistant who visited the ROK to attend the SDD. Both sides agreed to exert mutual efforts to enhance defense exchanges and cooperation between the two countries.

The MND will continue to pay attention to changes in regional dynamics in the Middle East, and further enhance defense cooperation and defense industrial cooperation between the ROK and key countries in the region, including the UAE, Egypt, and Saudi Arabia, by regularly organizing high-level military meetings and working-level talks.

| Europe and Canada | The ROK has been strengthening defense cooperation with countries in Europe through senior military official exchanges while also expanding cooperation with the

European Union (EU) and the North Atlantic Treaty Organization (NATO).

In March 2017, the ROK and Finland held defense ministerial talks, where the two countries' Defense Ministers discussed ways to enhance bilateral defense cooperation such as the expansion of senior military official exchanges and the vitalization of defense industrial cooperation.

In the same month, the ROK and France held the 4th ROK–France Defense Strategic Dialogue presided by the ROK Deputy Minister for National Defense Policy and France's Director General for International Relations and Strategy. During the meeting, the two sides had concrete discussions on the cooperation matters agreed upon in the 2016 ROK–France Defense Ministerial Talks. In September, the ROK Minister of National Defense and the French Defense Minister talked on the phone regarding North Korea's 6th nuclear test and exchanged views on the security situation on the Korean Peninsula.

The ROK Vice Minister of National Defense held meetings with the United Kingdom Minister of State for Defense in April 2017, the Vice Chief of the Defense Staff in January 2018, and the Commander of the Joint Forces Command in August 2018, and, again, with the Minister of State for Defense in September 2018. ROK and United Kingdom officials highlighted the two countries' long-standing friendly cooperative relationship initiated by the United Kingdom forces' participation in the Korean War, and discussed regional security situations and issues in defense cooperation and defense industrial cooperation as well as the direction of future cooperation.

In January 2018, Spain's Minister of Defense visited the ROK for the first time in 30 years and held the ROK–Spain Defense Ministerial Meeting, where the two sides discussed various issues in bilateral defense cooperation and defense industrial cooperation. The ROK and Spain convened defense policy talks in April as a follow-up to the meeting to explore concrete ways for defense cooperation.

In October 2018, during President Moon Jae-in's visit to Italy, the ROK and Italy signed a bilateral defense cooperation agreement and decided to further expand the scope of defense cooperation.

In February 2018, the Defense Ministers of Switzerland and Latvia visited the ROK for the 2018 Winter Olympics in PyeongChang and held respective ministerial talks with the ROK Minister of National Defense, sharing the view on the need to make joint efforts to expand defense cooperation and defense industrial cooperation.

In the same month, the ROK Vice Minister of National Defense visited Hungary to attend

the 2nd round of defense vice-ministerial talks between the ROK and the Visegrad Group.²⁴⁾ The Vice Minister and the representatives of the member states of the Visegrad Group exchanged views on regional security situations, and discussed ways to enhance defense cooperation and defense industrial cooperation. The Vice Minister also held bilateral talks with the counterpart of each member state, and explored ways of substantive defense cooperation and defense industrial cooperation between the ROK and Central European countries that are considered the new growth engine of Europe.

In September 2017, the ROK Vice Minister of National Defense met with the delegation from the NATO Parliamentary Assembly during their visit to the ROK, and discussed ways to enhance defense cooperation between the ROK and NATO, mainly in their common areas of interest including cybersecurity cooperation. In the meeting, the ROK Vice Minister of National Defense called for NATO's cooperation in establishing peace on the Korean Peninsula.

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. Moreover, in November 2017, the 2nd ROK–EU Security Defense Dialogue was held. Substantive security cooperation between the ROK and the EU has been expanding, as seen in the ROK Defense Minister's meeting with the European Parliament foreign affairs commissioner during the visit to the ROK in April 2018.

Meanwhile, in September 2017, the ROK Vice Minister of National Defense held talks with Canada's National Defense Department Deputy Minister who visited the ROK to attend the 6th SDD. The Vice Minister praised Canada's hosting of the upcoming UN Peacekeeping Defense Ministerial Conference in November 2017 as well as broader efforts that contribute to world peace and security. In the meeting, the two sides agreed to expand and enhance the two countries' friendship, and to enhance the interoperability of the two countries through continuous mutual visits between their navies and combined maritime training.

While continuously cooperating with the EU and NATO, the MND will enhance bilateral defense cooperation with the ROK's long-standing partners, such as the United Kingdom

²⁴⁾ 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 Visegrad, where their first meeting took place in 1991.

and France, and expand the boundaries of its defense diplomacy to countries in Central and Northern Europe.

| Central and South America | The ROK has been actively engaging in economic cooperation with countries in Central and South America, and is also continuously exploring ways of defense cooperation by, for example, vitalizing high-level military official exchanges.

In June 2017, the ROK government's delegation for defense industrial cooperation with Central and South America visited Colombia and Mexico, and learned about their defense industries, and confirmed the possibility of defense industrial cooperation with the ROK. In August 2017, a Mexican naval training ship visited the Busan base as part of its midshipman cruise training, providing an occasion for the ROK and Mexico to build a close cooperative relationship. In October 2017, the ROK Deputy Minister for Military Force and Resources Management met with Ecuador's Chief of the Joint Command of the Armed Forces, who visited the ROK to attend the Seoul ADEX, and discussed ways to vitalize defense cooperation and defense industrial cooperation.

The MND will maintain friendly relations with key countries in Central and South America by vitalizing regular high-level military official exchanges and actively pursuing defense industrial cooperation.

| Africa | In March 2017, the ROK Vice Minister of National Defense visited Angola and signed an MOU on defense cooperation. During the visit, the two countries agreed to vitalize bilateral defense exchanges and cooperation in various areas including senior military official exchanges, exchanges between each service of their armed forces, and defense industrial cooperation.

In July 2017, a MND delegation visited Ethiopia and Uganda, and held the 1st Defense Policy Talks with each nation, and these meetings helped the MND delegation as well as the representatives of Ethiopia and Uganda broaden their understanding of each other's regional situations. The ROK and the two African nations decided to continuously strengthen bilateral defense exchange and cooperation. In September 2017, the ROK Vice Minister of National Defense held separate talks with the Vice Defense Ministers of Ethiopia and Uganda who visited the ROK to attend the SDD, and discussed ways to promote bilateral cooperation with each Vice Defense Minister. In December 2017, a delegation from the Ethiopian Ministry of

Defense came to the ROK and visited key defense organizations, including the Korea Institute for Defense Analyses (KIDA), and studied the ROK's defense development history and experiences.

In September 2018, during the SDD, the ROK Vice Minister of National Defense held separate meetings with the Ethiopian Vice Defense Minister and the Ugandan Minister of State for Veteran Affairs to discuss defense cooperation. In the meeting between the ROK Vice Minister of National Defense and the Ethiopian representatives, the two countries agreed to continue efforts to expand mutual defense cooperation including defense policy talks, military education exchanges, cooperation for peacekeeping operations, and support for veterans' affairs programs. The Ugandan representatives expressed appreciation for military education exchanges for young officers who will lead the two countries' future defense relations.

The MND will continue its efforts to build the foundation for defense cooperation with key countries in Africa, and to identify cooperative projects that the ROK and the African countries can mutually pursue.

3. Implementing the New Southern Policy on the Defense Front and Reinforcing Multilateral Security Cooperation

Various multilateral security cooperation measures are underway to jointly respond to traditional and nontraditional threats, and to promote regional peace and stability. Multilateral security cooperation activities have recently intensified because of the growing unconventional and transnational threats that cannot be coped with alone by a single nation such as large-scale natural and man-made disasters, terrorism, piracy, and refugee issues.

The MND has strengthened its multilateral security cooperation activities through active participation in multilateral security forums in the Asia-Pacific region to promote regional peace and stability as well as secure the international community's support for the ROK government's security policies. Since 2013, the MND has attended the Halifax International Security Forum (HISF), the largest multilateral security conference in North America, expanding the sphere of its multilateral security cooperation efforts. Through the MND's active participation in various multilateral security forums and security cooperation activities, countries around the world are increasingly showing support for the ROK government's policies toward North Korea and unification aimed at the denuclearization and establishment of permanent peace on the Korean

Peninsula. The MND has also held multiple separate bilateral and trilateral meetings with key partner nations on the occasion of multilateral security forums. In those separate meetings, the ROK MND and its partners exchanged views on security situations and discussed major issues, thereby strengthening defense cooperation.

Furthermore, since 2017, the MND has hosted the “ROK–ASEAN Vice Defense -Ministerial Meeting” during the SDD, contributing to the implementation of the ROK government’s New Southern Policy. The multilateral security forums in the Asia-Pacific region that the MND attends are listed in [Chart 5-4].

[Chart 5-4] Multilateral Security Consultative Forums That the MND Attends

| 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 vice minister–level defense 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 enhanced communication and cooperation regarding common military interests, thereby, improving the regional security environment and expanding the horizon of defense diplomacy. In recent years, delegations from all over the world—not only Asia-Pacific countries but also key nations in the Americas, Europe, the Middle East, and Africa—attended the SDD to exchange views on security issues. The status of the SDD as a major senior official-level multilateral security consultative body in the region is growing stronger.

²⁵⁾ Multilateral security conferences held between governments to promote regional and world peace and stability, and to discuss participating countries' common security interests

²⁶⁾ Multilateral security conferences engaging participating nations' governments, civilian groups, and academics to promote regional and world peace and stability, and to discuss participating countries' common security interests



2018 Seoul Defense Dialogue (SDD)

In the 1st SDD, representatives from 15 countries and 2 international organizations attended and had meaningful discussions on the theme “Cooperation for a Safer Asia-Pacific Region—Challenges and Solutions.” It was a successful launch of a Vice Defense Ministerial multilateral security dialogue in the Asia-Pacific region. The 2nd SDD was attended by representatives from 20 countries, including a European nation that participated in the SDD for the first time, as well as 3 international organizations. The 3rd SDD in 2014 was joined by representatives from 24 countries including South American countries and 3 international organizations. During the 3rd SDD, the Cyber Working Group was officially launched, laying the foundation for multilateral security cooperation on cybersecurity. Moreover, during the event, the MND hosted the Northeast Asia minilateral talks, utilizing it as a venue for substantive defense cooperation. The meeting was attended by officials from the ROK, the U.S., China, Japan, Russia, and Mongolia.

The 4th SDD in 2015 was joined by 30 countries and 4 international organizations. During the event, the SDD vision statement that aims to vitalize multilateral defense cooperation was adopted, while the MND hosted the Mexico, Indonesia, Korea, Turkey, and Australia (MIKTA) defense meeting for the first time to discuss ways to promote regional peace and stability as well as regional and international security issues. The 5th SDD in 2016 was attended by representatives from 34 countries and 5 international organizations, with vice minister-level officials from Uganda and Ethiopia in Africa participating for the first time. The Vice Defense Ministerial Talks between the ROK and the four Visegrad Group nations took place for the first time during the 5th SDD. Representatives of the ROK and the 4 Visegrad Group countries that have become increasingly close with the ROK discussed measures to counter North Korea’s nuclear program as well as ways to vitalize their defense industrial cooperation.

The 6th SDD, held in 2017 under the theme “Visions for Security Cooperation in an Age of Uncertainty,” was attended by representatives from 40 countries and 3 international organizations. The event helped expand the support base for the ROK government’s policies toward North Korea, while the MND hosted the ROK–ASEAN Vice Defense-Ministerial Talks involving ASEAN member states for the first time, in support of the ROK government’s New Southern Policy.

The 7th SDD in 2018, held under the overarching theme “Sustainable Peace: From Conflict to Cooperation,” had the largest number of participating nations since its launch in 2012, with 52 nations and 3 international organizations attending. In the first plenary session on the subject “Denuclearization of the Korean Peninsula and the Establishment of a Peace Regime,” defense

officials and civilian security experts from the ROK, the U.S., Japan, China, and Russia participated as panel. They discussed how the establishment of peace on the Korean Peninsula would affect global security as well as the international community's cooperation for the implementation of the



The 7th SDD (September 2018)

Panmunjom Declaration, and neighboring countries' positions and roles in the establishment of a peace regime on the Korean Peninsula. The 7th SDD also involved sharing of and intense discussions on the security issues of global interest, including strategic balance in Northeast Asia, maritime security cooperation, and cybersecurity, as well as the issues of various security threats facing the international community such as energy security and peacekeeping operations. Furthermore, to implement the ROK government's New Southern Policy and New Northern Policy, the MND hosted the 2018 ROK–ASEAN Vice Defense-Ministerial Talks following previous year's meeting, while the inaugural ROK–Central Asia Plus Vice Defense-Ministerial Talks with five Central Asian nations and Mongolia took place. During the conference, the ROK held bilateral meetings with 31 participating nations, including the U.S., the United Kingdom, Russia, and Japan, and explored ways to increase mutual defense cooperation.

The MND will continue to develop the SDD as a venue for multilateral security cooperation that contributes to the establishment of peace on the Korean Peninsula, the stability of Northeast Asia, and world peace.

| Asia Security Summit (ASS) | The ROK Minister of National Defense has been attending the Asia Security Summit, the largest multilateral security meeting in the Asia-Pacific region, every year since 2004. In his speech at the 17th plenary session in 2018, the ROK Minister of National Defense explained the significance and outcomes of the inter-Korean summit that took place as a result of the consistent pursuit of President Moon Jae-in's Korean Peninsula policy, and called for the international community's support for the complete denuclearization and establishment of permanent peace on the Korean Peninsula. The Minister's emphasis on cooperation between the ROK and North Korean defense authorities, which will be expanded to ease tension and build confidence on the Korean Peninsula, received positive responses from participating nations.

| ASEAN Defense Ministers' Meeting Plus (ADMM-Plus) | Since 2010, the MND has been attending the ADMM-Plus every year. In the speech at the 5th ADMM-Plus held in Singapore in 2018, the ROK Minister of National Defense presented the ROK government's position regarding the complete denuclearization and establishment of permanent peace on the Korean Peninsula. The Minister emphasized that the ROK government was faithfully implementing the Inter-Korean Agreement in the Military Domain, and called for the international community's support and cooperation for the ROK's position. The ROK Minister of National Defense also held separate bilateral and multilateral ministerial meetings with the counterparts from the U.S., China, Japan, Russia, and ASEAN member countries on the occasion of the ADMM-Plus. The Minister of National Defense actively put efforts to engage in defense diplomacy with four neighboring countries and strengthen defense cooperation with ASEAN member states to implement the New Southern Policy on the defense front.

Between 2014 and 2016, the ROK and Cambodia co-chaired the Experts' Working Group (EWG) on peacekeeping operations, one of the six EWGs of the ADMM-Plus. Since 2017, the ROK and Singapore have co-chaired the Maritime Security EWG.



The 5th ADMM-Plus (October 2018)

| ROK–ASEAN Vice Defense Ministerial Talks | The inaugural ROK–ASEAN Vice Defense Ministerial Talks took place during the SDD in Seoul in 2017. Delegates from ASEAN member countries agreed on the need for defense cooperation between the ROK and ASEAN, and expressed support for the proposal to continue holding the Vice Ministerial talks regularly. In the 2018 ROK–ASEAN Vice Defense Ministerial Talks, the representatives discussed ways to enhance defense industrial cooperation between the ROK and ASEAN, and concurred that the countries should strive to make defense industrial cooperation mutually beneficial.

| Other Multilateral-Security Cooperation Forums | Since 2013, the MND has participated in the Fullerton Forum held in Singapore, and discussed issues related to the Korean Peninsula and regional security issues with senior defense officials and security experts from Asia-Pacific countries including the U.S., China, Japan, and Russia. At the 2018 Fullerton Forum, in particular, the ROK Minister of National Defense underscored the ROK government's firm position on the denuclearization of the Korean Peninsula and shared the ROK's security policies with the participants.

The MND has been participating in the ASEAN Regional Forum (ARF) since 2003, and the ROK and Thailand have co-chaired the inter-sessional meeting on humanitarian assistance and disaster relief since 2017. The MND has further bolstered its multilateral security cooperation activities by attending the Tokyo Defense Forum (TDF) annually, which is a director general-level security consultative mechanism in the Asia-Pacific Region, as well as the Xiangshan Forum²⁷⁾ in China. Furthermore, the MND attends the Northeast Asia Cooperation Dialogue (NEACD) every year, whose key members include the participating states of the Six-Party Talks, to build military confidence among the nations and explore ways to promote cooperation for peace in Northeast Asia.

The MND will continue to put its efforts to gain broader support for the ROK's security policy by bolstering stronger multilateral security cooperation activities and share the ROK government's position on peace and stability on the Korean Peninsula and Northeast Asia with partner countries.

4. Strengthening International Non-proliferation and Counter-Proliferation Activities

| International Non-proliferation Efforts²⁸⁾ | Since the end of the Cold War, the international

²⁷⁾ The Xiangshan Forum is a track 1.5 (government plus civilian participants) multilateral security consultative meeting attended by defense officials and security experts from around 50 countries across the world. It was launched in 2014 under the supervision of China's Ministry of National Defense. Between 2006 and 2013, it was held every other year, and civilian institutions participated in it.

²⁸⁾ Diplomatic efforts to prevent the proliferation of various types of weapons including WMDs as well as their delivery systems and conventional weapons

community has been strengthening global nonproliferation efforts to curb the spread of weapons of mass destruction (WMD), WMD-related materials, technologies and delivery systems, as well as conventional weapons. The global nonproliferation 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 technology. The international community has also enhanced the effectiveness of non-proliferation regimes by adopting sanctions based on UN Security Council Resolutions against breaches of the nonproliferation act, and addressing the problem of implementing regulations against non-member states and non-state actors.

Since joining the UN in 1991, the ROK participated in various international non-proliferation activities concerning nuclear weapons, chemical and biological weapons, missiles, conventional weapons, multilateral export control, etc.²⁹⁾ The MND established legal and institutional foundation for the execution of non-proliferation responsibilities in accordance with non-proliferation treaties and international organizations. The thorough and faithful execution of these responsibilities contributed greatly to the improvement in credibility and transparency of the ROK. The MND also actively expresses the ROK's position at relevant conferences to ensure that non-proliferation regulations do not adversely affect ROK's defense technology, defense industry, or military capacity.

As a member of major nuclear non-proliferation regimes,³⁰⁾ the ROK has contributed to the international community's non-proliferation efforts by steadily implementing the comprehensive safeguard agreement with the International Atomic Energy Agency (IAEA)³¹⁾ and by exchanging information with the member states of the Nuclear Suppliers Group (NSG)³²⁾ to

²⁹⁾ See Appendix 19, "International Disarmament and Non-proliferation Agreements and Organizations" (p.386).

³⁰⁾ After joining the IAEA in 1957 and signing onto the Non-proliferation Treaty (NPT) in 1975, the ROK joined the Zangger Committee (ZC) in 1995, the NSG in 1996, and the Comprehensive Nuclear Test-Ban Treaty (CTBT) in 1999.

³¹⁾ The IAEA is an international organization that provides technological support to promote the peaceful use of nuclear energy and that seeks to prevent the military use of nuclear materials. (IAEA: International Atomic Energy Agency, established in 1957, 170 member states)

³²⁾ 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. (NSG: Nuclear Suppliers Group, established in 1978, 48 member states)

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 government agencies to support the ROK government's nuclear non-proliferation policy.

In the domain of chemical and biological weapons non-proliferation, the ROK joined the Biological Weapons Convention (BWC)³³⁾ in 1987 and the Chemical Weapons Convention (CWC)³⁴⁾ in 1997, and established related laws³⁵⁾ for the domestic implementation of these conventions. The MND has been fulfilling its defense-related obligations through measures, including regular inspection of military research institutes, maintenance of safety management systems, and dispatch of defense specialists to relevant international conferences to share information about states of proliferation concern, and acquire the latest information and technologies. Since joining in 1996 the Australia Group (AG)³⁶⁾ (export control regime for chemical and biological weapons non-proliferation), the MND and DAPA have worked with the Ministry of Trade, Industry and Energy (MOTIE) to improve local laws for a more systematic implementation of export control measures.³⁷⁾

Missile proliferation control is also important because threats of WMD, including nuclear weapons and chemical and biological weapons, are directly linked to the missile capabilities that deliver them. The ROK has proactively participated in international efforts to prevent the proliferation of missiles by voluntarily joining export control regimes including the Missile

³³⁾ The BWC bans the development, production, and stockpiling of biological weapons including biological agents and toxins. (BWC: Biological Weapons Convention, established in 1975, 182 state parties)

³⁴⁾ 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. (CWC: Chemical Weapons Convention, established in 1997, 193 state parties)

³⁵⁾ Include the "Act on the Control of the Manufacture, Export and Import, etc., of Specific Chemicals and Chemical Agents for the Prohibition of Chemical and Biological Weapons" (Chemical and Biological Weapons Prohibition Act)

³⁶⁾ 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. (AG: Australia Group, established in 1985, 43 countries)

³⁷⁾ 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 UN Security Council Resolution 1540.

Technology Control Regime (MTCR)³⁸⁾ in 2001 and the Hague Code of Conduct against Ballistic Missile Proliferation (HCOC)³⁹⁾ 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 but also conventional arms. The member states of the Wassenaar Arrangement (WA)⁴⁰⁾ have agreed on guidelines and lists to control transfers of conventional weapons as well as dual-use goods⁴¹⁾ 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)⁴²⁾ that took effect in 2014 is the first legally binding single treaty concerning conventional arms that control the transfers of 7 categories of weapon systems,⁴³⁾ small weapons, light firearms, and ammunition parts. The ROK, an original signatory of the ATT, ratified the treaty in 2017.⁴⁴⁾ The MND and the DAPA have closely monitored the implementation of the treaty while seeking to gradually improve domestic laws and regulation that fit domestic circumstances in response to increasingly strict international standards.

38) MTCR is an export control regime where member states voluntarily control the spread of rockets and unmanned aerial vehicles capable of delivering WMD as well as related equipment and technologies. (MTCR: Missile Technology Control Regime, established in 1987, 35 member states)

39) HCOC 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 WMD. (HCOC: Hague Code of Conduct against Ballistic Missile Proliferation, established in 2002, 139 member states)

40) An export control regime concerning conventional arms as well as dual-use goods and technologies. (WA: Wassenaar Arrangement, established in 1996, 42 members states)

41) Items that have both industrial and military applications

42) A treaty that establishes common standards to regulate the international trade in conventional arms to prevent their illegal trade and use. (ATT: Armed Trade Treaty, established in 2014, 99 parties)

43) Includes battle tanks, armored combat vehicles, large-caliber artillery systems, combat aircraft, attack helicopters, warships, missiles, and missile launchers

44) Major non-signatories to the ATT include North Korea, China, Russia, Canada, India, Pakistan, and Indonesia. The United States signed the ATT but has not ratified it.

As a country that has joined all four major international export control regimes,⁴⁵⁾ the ROK designates and controls goods and technologies that require trade restrictions, such as export permission requirement, as strategic items,⁴⁶⁾ in accordance with international export control principles. In the process of approving exports, the MND closely consults relevant government agencies on export-related military matters and determining whether the importing country complies with export control regulations.⁴⁷⁾

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 the security of the Korean Peninsula.

| International Counter-Proliferation Activities⁴⁸⁾ | The emergence of WMD and terrorism-related threats in the wake of the September 11 attacks in 2001 raised concerns that traditional methods, such as export controls, may have limited effect in preventing the proliferation of WMD. As a result, proactive counter-proliferation policies have emerged.⁴⁹⁾ The Proliferation Security Initiative (PSI)⁵⁰⁾ led by the U.S. is one of the major counter-proliferation measures. The MND has continuously cooperated with the international community to prevent the spread of WMD and counter related threats.

The ROK government officially became a member of the PSI in 2009 to actively participate in the international endeavor to prevent the proliferation of WMDs. In 2010, it joined the

⁴⁵⁾ The four major international export control regimes are the NSG, AG, MTCR, and WA. There are currently 30 "clean countries" that have joined all four regimes. In Asia, the ROK and Japan have.

⁴⁶⁾ These are items that international export control regimes have designated as subject to export controls. They may include conventional arms, WMC, and missiles, as well as materials, software, and technology that can be used to develop and produce them.

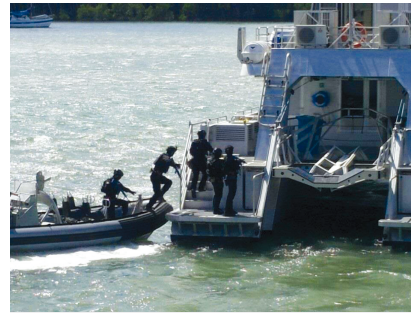
⁴⁷⁾ The DAPA makes final approvals for military-use strategic items because the duty has been delegated by the MND

⁴⁸⁾ All kinds of efforts to protect their territories and people by reducing or eliminating the actual threats posed by WMD or by deterring enemies' desire to use them (counter-proliferation)

⁴⁹⁾ 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.

⁵⁰⁾ These are international cooperative activities launched in June 2003 under the leadership of the United States to prevent the international proliferation of WMD. Activities include information-sharing among member states, a ban on the trade of WMC as well as their delivery systems and illegal weapons, and joint operations. (PSI: Proliferation Security Initiative)

Operational Experts Group (OEG),⁵¹⁾ which is a group of countries leading the initiative. 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 OEG meeting in Seoul in September 2012.



PSI exercise (2017)

Since 2014, six countries—the ROK, the U.S., Japan, Singapore, Australia, and New Zealand—have hosted PSI exercises in the Asia-Pacific region annually in rotation. The MND participated in PSI exercises on over 10 occasions between 2009 and 2018. The ROK Navy dispatched a naval vessel as well as a boarding and inspection team to the U.S. and Singapore in 2014 and 2016 to participate in maritime interdiction training. Moreover, since 2017, ROK CERN Defense Command dispatched part of the WMD search team to support the ROK–U.S. joint training program on WMD search procedures for Southeast Asian observer countries.

The MND will host the PSI exercise in 2019. By actively fulfilling its given role in the exercise, the MND will continue to participate in the international community's counter-proliferation efforts.

[Chart 5-5] PSI Exercise Hosting Countries

| Year | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------|-----------|------|------------------|-----------|------|---------------|-------------|-----------|-----------|-------|
| Country | Singapore | ROK | No exercise held | ROK Japan | UAE | United States | New Zealand | Singapore | Australia | Japan |

⁵¹⁾ The Operational Experts Group (OEG) consisting of 21 major member states is in charge of the operation of PSI.

Section 4 Contribution to International Peace through Overseas Deployments

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 2018, around 1,000 ROK personnel were deployed and engaged in various missions,⁵²⁾ including UN peacekeeping operations, peace operations of multinational forces, and defense exchanges and cooperative activities, helping elevate the ROK's international stature.

1. 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. Fourteen mission groups⁵³⁾ are currently carrying out their duties, including armistice supervision and reconstruction support, in conflict areas around the world.

Starting with the deployment of an engineering unit to Somalia in 1993, the ROK, which

52) Comparison of various international peacekeeping activities

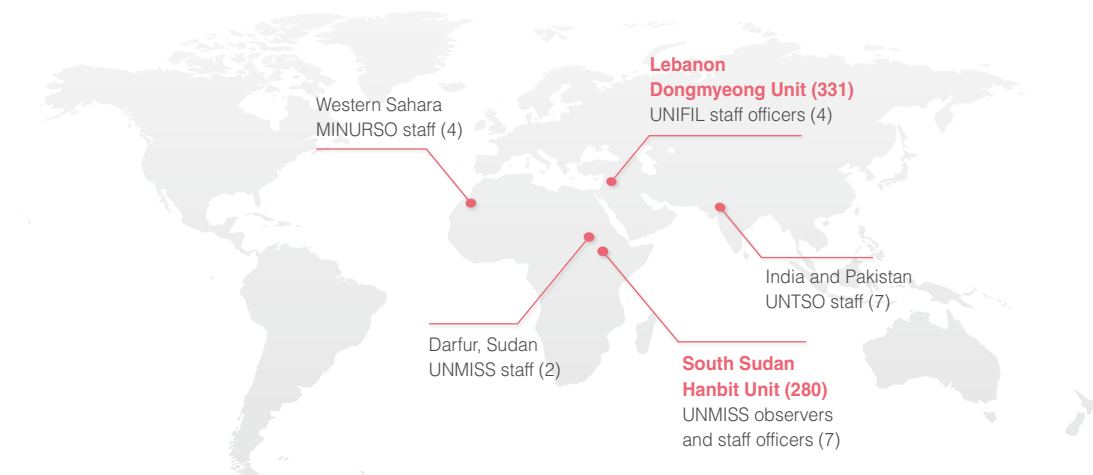
| Category | UN PKO | Multinational Forces' Peace Operations | Defense Exchanges and Cooperation Activities |
|---------------------|---|--|--|
| Host | Led by the UN | Led by regional security organizations or particular countries | Led by deploying nations |
| Command and Control | PKF commander appointed by the UN secretary-general | MNF commander | Military commanders of deploying nations |
| Expenses | Borne by UN | Borne by deploying countries | Borne by deploying countries |

53) 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), one in South America (Haiti), and one in Asia (India and Pakistan). Nearly 120 countries have together deployed around 70,000 personnel to these missions.

joined the UN in 1991, has deployed the ROK Armed Forces Medical Assistance 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 across the world. As of November 2018, a total of 635 ROK personnel were carrying out their missions in six countries. They include 331 of the Dongmyeong Unit in Lebanon, 280 of the Hanbit Unit in South Sudan, and those individually deployed. An overview of the ROK's participation in peacekeeping is shown in [Chart 5-6].

[Chart 5-6] ROK Participation in UN Peacekeeping Operations

As of November 2018 Unit: Persons



| Dongmyeong⁵⁴⁾ Unit in Lebanon | In 1978, the UN established the United Nations Interim Force in Lebanon (UNIFIL) following the adoption of UN Security Council Resolutions 425 and 427, and began to monitor the armistice agreement between Lebanon and Israel.

In 2006, when the conflict between Israel and



Surveillance activity at a fixed guard post (July 2017)

⁵⁴⁾ "Dongmyeong" means bright light of the east from an Eastern country, and signifies the hope for a bright future and peace.

Hezbollah intensified, the UN increased the number of peacekeepers from 2,000 to 15,000 and requested member states to participate .

In July 2007, with the National Assembly's approval, the ROK government deployed Dongmyeong Unit, a peacekeeping unit of 350 personnel for Lebanon, 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 multifunctional 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 treating more than 100,000 patients to date, renovating the sewerage system and school facilities, and constructing libraries. The unit's successful civil–military operations have been well received in Lebanon and significantly contributed to stabilizing the situation in southern Lebanon. The major activities of Dongmyeong Unit are listed in [Chart 5-7].

[Chart 5-7] Dongmyeong Unit's Major Activities

As of November 2018

| | |
|--|---|
| Operational Activities | <ul style="list-style-type: none"> • Surveillance and reconnaissance in the operation area: 36,474 times • Independent on-foot and vehicular reconnaissance, and explosive ordinance disposal (EOD) reconnaissance: 47,456 times • Combined reconnaissance with Lebanese forces: 8,714 times |
| Civil–Military Operations and Humanitarian Assistance | <ul style="list-style-type: none"> • Medical support for local residents: 108,386 times • Treatment of livestock: 33,963 heads • Computer, Korean, Taekwondo, and sewing classes: 5 towns • Projects for local residents: 390 projects (Public facilities, school facilities, sewage facilities, etc.) • Support for Lebanese forces: 92 cases |

| **Hanbit⁵⁵⁾ Unit in South Sudan** | After Sudan gained independence from the joint colonial rule of the United Kingdom and Egypt, a civil war broke out between South Sudan and North Sudan in 1955 due to political and religious causes. South Sudan became independent

⁵⁵⁾ 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.

from Sudan in July 2011 after two peace treaties. To assist the reconstruction of the newly independent nation, the UN installed the United Nations Mission in the Republic of South Sudan (UNMISS) and requested its member states to deploy troops.

After receiving the consent of the National Assembly in September 2012, the ROK government organized the Horizontal Military Engineering Company or the Hanbit Unit (engineering unit supporting reconstruction in South Sudan) and deployed the unit to South Sudan on March 31, 2013.⁵⁶⁾

In the Bor region that had been devastated by civil war, the Hanbit Unit has successfully conducted 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, drinking water supply, and medical support. The major activities of Hanbit Unit are listed in [Chart 5-8].



Bor–Pibor road rehabilitation works (June 2018)

In addition, the unit operates seven courses in Hanbit Vocational School, including the farming and woodwork courses of Hanbit Agricultural Technology Research Center (HATRC), to help form the base for the livelihood of the local residents of South Sudan.

⁵⁶⁾ The deployment to South Sudan is the ROK's 7th UN peacekeeping forces deployment following deployments to Somalia (1993–1994, reconstruction support), Western Sahara (1994–2006, medical support), Angola (1995–1996, reconstruction support), East Timor (1999–2003, security and border control), Lebanon (2007–present, armistice supervision), and Haiti (2010–2012, reconstruction support).

| | |
|--|---|
| Reconstruction Support Operations | <ul style="list-style-type: none"> • Construction of a new terminal (12 gates) at the Bor Airport; installation of amenities, including a septic tank, sports facilities, and an oil storage; and repairs of facilities, including the runway, internal and external access roads, parking ramps, and fences • Restoration of the Bor–Pibor road (197km) and Bor–Mangalla road (125km) • Road repairs, drainage renovation, and drainage and restoration equipment support for submerged areas in the Bor region • Construction, maintenance, and repairs of infrastructure including landfill and borrow pit • Repairs of the access road (200m) in the Pibor town and a soccer field |
| Civil–Military Operations and Humanitarian Assistance | <ul style="list-style-type: none"> • Establishment of the Jonglei State Peace Center • Supply of medicine and other materials to Bor Hospital • Supply of educational materials to elementary schools in the Bor and Pibor regions • Renovation of the lecture hall of the continuing education center in John Garang Memorial University • Operation of Hanbit Farm: Planted 350 pieces of mango and guava trees • Operation of Hanbit Vocational School (Seven programs including farming): 556 graduates, 9th class in session • Training in the ROK: 62 persons visited the ROK over 6 sessions • Medical support for local residents: 21,500 patients • UNMISS Taekwondo and Korean language classes |
| Refugee Protection | <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 |
| UN Forces Facility Construction Support | <ul style="list-style-type: none"> • Construction of 12 units of UN staff lodging in the Bor base, guard posts, and shelters at the Bor Airport • Reinforcement of the protective walls and internal roads (4.8km) of the Bor base • Reinforcement of protective walls in the Pibor and Akobo independent operation base (Pibor: 2km, Akobo: 200m) • Reinforcement of protective walls, external moats, and parapet walk (1.8km) • Repairs of drain and installation of pads for generators in the Bor base |

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 and Pakistan, Lebanon, South Sudan, and Western Sahara. Some of them work as observers and armistice supervision agents, and some, as military staff officers in UN missions. Observers monitor armistice violations and undertake tasks, such as patrols, investigations, reporting, and mediation, under the control of UN missions. The staff officers of UN missions carry out their duties in the major staff offices of each command such as intelligence, operations, and logistics offices.

2. Multinational Forces' Peace Operations

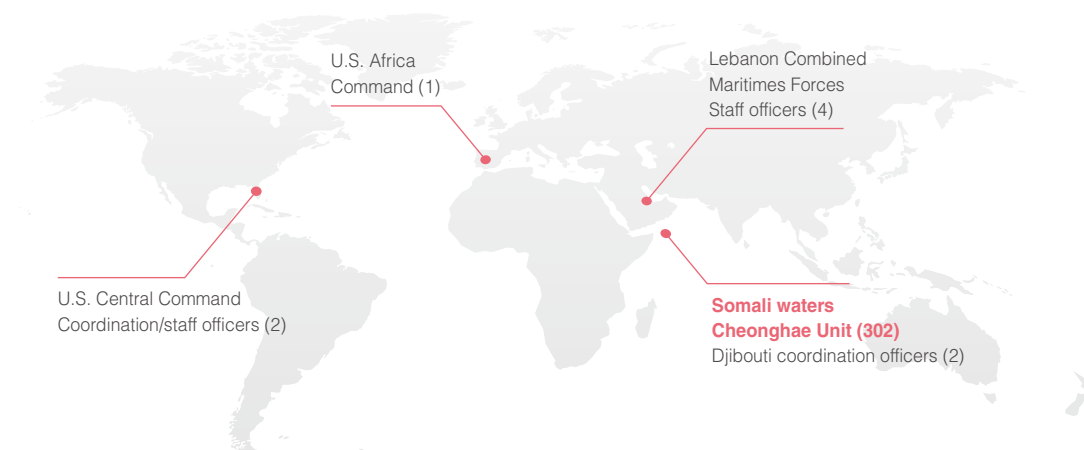
Peace operations of multinational forces are activities undertaken by multinational forces under the leadership of select countries and regional organizations based on UN Security Council resolutions or other grounds. Together with UN peacekeeping operations, peace operations by multinational forces play an important role in the stabilization and reconstruction of conflict regions. Starting in 2001, the ROK government has deployed Haeseong, Cheongma, Dongeui, Dasan, and Ashena units to Afghanistan, and Seohee, Jaema, Zaytun, and Daiman units to Iraq.

The Ahsena 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 without experiencing any loss or damage 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 2018, the ROK deployed 311 personnel in five countries for multinational forces' peace operations including 302 of the Cheonghae Unit and 9 individually deployed personnel. An overview of the ROK's participation in multinational forces' peace operations is shown in [Chart 5-9].

[Chart 5-9] ROK's Participation in Multinational Forces' Peace Operations

As of November 2018 Unit: Persons



| **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 beginning from 2004. The UN Security Council consequently adopted Resolution 1838⁵⁷⁾ with the UN requesting member states to deploy military vessels and aircraft to the region. The ROK government deployed Cheonghae Unit to the Gulf of Aden off the Somalia coast in March 2009 after obtaining the consent of the National Assembly.

Cheonghae Unit's major missions are to protect domestic and foreign vessels, support safe voyages, participate in maritime security operations of the Combined Maritime Forces (CMF) and the EU, and protect ROK citizens in contingencies. As of November 2018, the unit is composed of one destroyer, one helicopter, three rigid-hull inflatable boats (RIBs), and 302 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 the transportation of strategic goods, including crude oil and liquefied natural gas, and about 29% of the total maritime cargo volume of the ROK passes through the area.⁵⁸⁾

Cheonghae Unit escorts vessels at their request; shares piracy information with vessels passing the Gulf of Aden via wired and wireless means; warns of dangers, if necessary; and executes counter-piracy operations in cooperation with the CMF and the EU. In February 2017, the unit participated in the EU's counter-piracy operation for the first time and blocked pirates' entry into waters off Gulf of Aden from the northern Somali coast.⁵⁹⁾

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 "operation of evacuating ROK nationals residing in Libya," where ROK nationals and foreigners were safely evacuated from Libya to nearby countries.

⁵⁷⁾ 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.

⁵⁸⁾ Two Chinese destroyers and one logistics support vessel are participating in counter-piracy operations. Japan has committed two vessels and two patrol aircraft to the counter-piracy operations since 2009 while also providing one vessel to the CTF-151 in 2014 and acting as the commander of the CTF-151 in 2015.

⁵⁹⁾ 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.



Cheonghae Unit
in the Gulf of Aden
(promotional animation)

Such accomplishments helped raise the stature of the ROK Armed Forces in the world. In April 2015, the first “floating” ROK embassy was opened on the destroyer, *Wang Geon*, to safely evacuate the ROK citizens who were caught in Yemen’s capital, Sana’a, as well as to maintain contact with and protect any ROK citizen who remained in Yemen. This is a stellar example of organic cooperation between the MND and the Ministry of Foreign Affairs to protect overseas ROK nationals. In April 2018, the unit completed an operation to safely transport three ROK nationals, who had been rescued from pirates of Ghanaian territorial waters from the Lagos Port in Nigeria to the Tema Harbor in Ghana. The major activities of the Cheonghae Unit are shown in [Chart 5-10].

[Chart 5-10] Cheonghae Unit's Major Activities

As of November 2018

| Convoy | | Safe Voyage Escort | | Maritime Security Operations | Counter-piracy Operations |
|--|-----------------|---|-----------------|------------------------------|---------------------------|
| ROK Vessels | Foreign Vessels | ROK Vessels | Foreign Vessels | | |
| 499 | 1,807 | 15,828 | 2,922 | 612 times (1,827 days) | 21 times/31 vessels |
| Safe Voyage Escort | | | | | |
| Operation Dawn of Gulf of Aden (January 2011) | | Rescued all crew, including the captain; shot 8 pirates; and captured 5 alive | | | |
| Evacuation operation of ROK nationals in Libya (March 2011) | | 37 ROK nationals evacuated to Malta and Greece from Libya | | | |
| Evacuation operation of ROK nationals in Libya (August 2014) | | 18 ROK nationals and 86 foreigners evacuated to Malta from Libya | | | |
| Evacuation operation of ROK nationals in Yemen (April 2015) | | 6 ROK nationals and 6 foreigners evacuated to Oman from Yemen | | | |
| Escort operation for crew members abducted in Ghanaian waters (April 2018) | | Escorted 3 ROK nationals from the Lagos Port in Nigeria to the Tema Harbor in Ghana | | | |

Staff Officers and Coordination Officers in 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, 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.

3. Defense Exchanges and Cooperation Activities

At the request of a given country, the ROK Armed Forces deploys its forces to areas where there is no risk of combat and servicemembers' safety is assured to conduct defense exchanges and cooperation activities in noncombat fields such as education and training, humanitarian assistance, and disaster relief.

In November 2013, the ROK government deployed Araw Contingent to support recovery efforts in the Philippines that suffered severe damages from a typhoon. Araw Contingent successfully completed its mission of assisting with the recovery of the damaged area and withdrew on December 2014. In March 2014, following the disappearance of a Malaysian passenger plane, the ROK Armed Forces conducted a prolonged overseas multinational coalition search operation. Furthermore, in effort to stop the spread of the Ebola virus, the ROK government dispatched the Korea Disaster Relief Team (KDRT) to Sierra Leone, one of the major West African countries affected by the outbreak. The KDRT which consists of 6 medical officers, 9 nursing officers, and civilian medical personnel, was deployed to Sierra Leone from December 2014 to March 2015.

| Akh⁶⁰⁾ Unit in the United Arab Emirates | 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 consent of the National Assembly, in January 2011, the ROK government deployed the UAE Military Training Cooperation Group, known as the Akh Unit, to the Al Ain region in response to the request. The 1st rotation of the unit had around 130 troops, and the number increased to 150, starting with the 5th group. The Akh Unit was relocated to Sweihan on September 28, 2016, at the UAE General Staff Department's request to the MND. The UAE government fully covered the construction and relocation cost of KRW 32 billion.

The Akh Unit provides education and training to the UAE forces' special warfare units, conducts combined exercises and training with the UAE forces while protecting the ROK citizens during contingencies. The ROK Armed Forces successfully helped enhance the UAE forces'

⁶⁰⁾ The name "Akh" means "brother" in Arabic and intends to express friendliness toward the people of the UAE.

education and training system as well as special warfare operations capabilities. Meanwhile, the ROK Armed Forces utilizes the deployment as an opportunity to improve its own special operations capabilities through training in arid desert environments that the ROK Armed forces cannot experience back home as well as realistic training that utilizes the UAE forces' cutting edge facilities and equipment. In case of high altitude and nighttime parachuting training, in particular, the ROK servicemembers are able to complete a high volume of the training within six months in the UAE that would otherwise take six to seven years in the ROK. The ROK Armed Forces also saves on training costs by utilizing the advanced UAE facilities and equipment.

The ROK and the UAE have engaged in active exchanges and cooperation in many defense areas since the deployment of the Akh Unit. Delegations from the two countries' army, navy, and air forces have visited each other to participate in diverse programs, including special warfare training, thus helping further strengthen the military confidence between the two countries. The Akh Unit, the symbol of trust and cooperation between the ROK and the UAE, has contributed to the development of the two country's relationship into a special strategic partnership. The unit's major activities are summarized in [Chart 5-11].

[Chart 5-11] Akh Unit's Major Activities

As of November 2018

| | |
|---|--|
| 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 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 • Training activities to enhance survivability under harsh conditions (high temperatures above 50°C, desert) • Long-range firing exercise and High Altitude Low Opening(HALO) training |
| 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. Strengthening the Foundation for Peacekeeping Operations

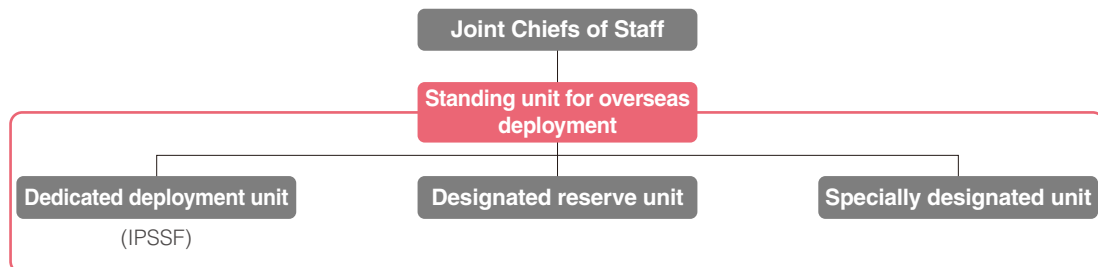
| Establishing a Legal Basis for Overseas Deployments | In January 2010, the ROK government legislated the “United Nations Peacekeeping Operations Participation Act” to establish the legal basis for deployment to UN peacekeeping operations. However, with the exception of UN peacekeeping operations, there is still no legal basis established for peace operations with multinational forces or defense exchanges/cooperation activities. The ROK government is currently pursuing the enactment of the “Act on the Armed Forces’ Participation in Overseas Deployment Activities” to establish a legal basis for various types of overseas deployment activities. The bill for the act specifies the requirements and procedures for the deployment of troops and the legal protection for deployed servicemembers as well as provisions related to the National Assembly’s democratic control over the deployment of troops, including the National Assembly’s right to request withdrawal of deployed troops, and the mandatory submission of performance reports after withdrawals. Once enacted, the act is expected to enhance the transparency and predictability of overseas deployment activities.

| Operation of a Standing Unit for Overseas Deployment | Since December 2009, the ROK Armed Forces operated a standing unit for overseas deployment consisting of some 3,000 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 some 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”⁶¹⁾ 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

⁶¹⁾ “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.

deployed. The structure of the standing unit for overseas deployment is shown in [Chart 5-12], and the number of deployed personnel is in [Chart 5-13].

[Chart 5-12] Structure of the Standing Unit for Overseas Deployment



* Specially designated unit : Engineering, medical, military police, guard (Marine Corps), transportation units of Navy and Air Force, UAV and helicopter units, etc.

[Chart 5-13] Number of Personnel Deployed from the Standing Unit

2010 - December 2018

| Dongmyeong Unit | Ashena Unit | Akh Unit | Hanbit Unit | Total |
|----------------------|---------------------|----------------------|----------------------|--------|
| 7,008 (21 rotations) | 1,745 (8 rotations) | 1,791 (14 rotations) | 2,874 (10 rotations) | 13,391 |

Reinforcing Functions of the PKO Center | The PKO Center was established as a dedicated educational institution for PKO preparation at the Joint Staff College in August 1995. In 2015, the MND adjusted the PKO Center’s affiliation to come under the Korea National Defense University based on the “Enforcement Decree of 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 officers 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 Peacekeeping Operations (DPKO), the UN Division at the Ministry of Foreign Affairs, the PKO centers of other countries, police PKO centers, and other relevant domestic organizations. When the deployed units or individually deployed personnel complete their missions, the PKO Center publishes and distributes the units’ booklet on the lessons learned from the deployment and the individual agents’ post-action reports to relevant offices. In November 2013, the PKO Center received an education certificate for its UN Staff Course from the UN DPKO and is currently

preparing to have the UN Military Specialist Course certified by the UN.

The PKO Center has been gradually expanding its functions and roles to systematically support research, education, and training for peacekeeping operations. The number of personnel who have been trained at the PKO Center is shown in [Chart 5-14]. In 2017, the PKO Center hosted the Training of Trainer 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 (AAPTC),⁶²⁾ developing into a leading PKO education institution.

[Chart 5-14] Number of Personnel Trained in the PKO Center

As of December 2018

| Total | UN PKO | Multinational Forces' Peace Operations | Others |
|--------------------|------------------|--|------------------|
| 1,216 in 7 courses | 994 in 3 courses | 47 in 2 courses | 175 in 2 courses |

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)⁶³⁾ along with Cambodia. In September 2014 and September 2015, the ROK hosted a meeting of the PKO EWG in Seoul to discuss practical ways of cooperation among the member states. In March 2016, as the co-chair of the PKO EWG, the ROK held a peacekeeping operations exercise in India,⁶⁴⁾ sharing the ROK's

⁶²⁾ The annual conference of the AAPTC 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

⁶³⁾ The Expert's Working Groups (EWGs) of the ADMM-Plus have been established to facilitate cooperation in the following areas: ①peacekeeping operations, ②counterterrorism, ③maritime security, ④military medicine, ⑤humanitarian aid and disaster relief (disaster relief and humanitarian assistance), ⑥humanitarian mine action, and ⑦cybersecurity. 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).

⁶⁴⁾ In March 2016, the first joint field training exercise on international peacekeeping operations and humanitarian mine action was held in Pune, India, with a total of 280 personnel from the 18 countries that participate in the ADMM-Plus. From the ROK, 31 instructors and training members of the ROK International Peace Supporting Standby Force, also known as Onnuri Unit, participated in training sessions for on-foot reconnaissance, checkpoint operation, escort operation, and search-and-interdiction operations.

outstanding capabilities in peacekeeping operations and gaining recognition as a leading country in peacekeeping operations in the international community.

The ROK is also co-chairing the ADMM-Plus EWG on Maritime Security with Singapore from 2017 to 2019. In May 2018, the ROK hosted a meeting of the EWG on Maritime Security in Seoul to discuss ways to build confidence in maritime fields. In the meeting, the ROK introduced its maritime security capabilities and multilateral cooperation activities, thus contributing to the promotion of the ROK's image as a nation that plays a leading role in maritime security as a responsible member of the international community.

| Promoting Cooperation through the Signing of MOUs on Peacekeeping Operations |

The ROK government is actively pursuing peacekeeping cooperation with Vietnam, a strategic cooperative partner. In September 2015, the ROK and Vietnam signed an MOU on peacekeeping cooperation. In December 2015 and September 2018, the ROK dispatched engineering specialists to Vietnam's PKO center, where they shared knowledge about PKO deployments and trained participants on base protection and survival skills in specific crisis scenarios.

Since September 2016, Vietnamese officers have been invited to attend a four-week UN Staff Course and Military Specialist Course at the PKO Center of the KNDU. The Course taught the Vietnamese officers about observation/surveillance, investigation/verification, negotiation/mediation, and contributed to strengthen the Vietnamese Armed Forces' PKO capabilities.

As the United Kingdom deployed an engineering unit to South Sudan in March 2017, the ROK and the United Kingdom signed an MOU in January 2018 for peacekeeping cooperation, laying the institutional foundation for further cooperation. The two countries' cooperative relationship now involves more than information sharing on peacekeeping operations, as one ROK officer has been accepted by the UK to undertake a UN staff course at its PKO Center.

Chapter 6

Instilling a High-Morale Military Culture Trusted by the People



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The ROK Armed Forces Day Event (October 2018)

Section 1 **Instilling a New Barracks Culture Trusted by the People**

The ROK Armed Forces has achieved significant outcomes by pursuing the innovation of the barracks culture, as evidenced by the reduced number of related incidents. However, servicemembers living in barracks still face unreasonable practices in which they are viewed as objects of control, not subjects capable of autonomous thinking. To build strong armed forces that answer the calls of our time, the ROK Armed Forces needs to improve the military culture, which has been less than welcoming toward changes, and each servicemember should be treated as an independent human being. The MND has taken various measures aimed at instilling a barracks culture that meets the people's expectations by protecting the autonomy and basic rights of servicemembers.

1. Fostering a Barracks Culture Driven by Autonomy and Responsibility

| Harmony between Autonomy and Responsibility | One of the key duties of the ROK Armed Forces is to maintain combat readiness at all times. To fulfill this duty, the ROK Armed Forces needs to instill a barracks culture where autonomy and responsibility exist in harmony based on proper discipline, and in which servicemembers focus on education and training during working hours, and are given time to pursue self-development activities and hobbies during off hours.

The MND has achieved significant outcomes through its barracks culture innovation efforts launched in 2014, as evidenced by the reduced number of related incidents, which has been positively received by the public. On the other hand, it has been pointed out that ROK servicemembers need to be instilled with a resolve for compliance with service rules and a sense of responsibility for their missions.

The MND will continue to foster a barracks culture in which servicemembers act autonomously with a sense of responsibility, and make their best efforts to comply with the prescribed rules and fulfill their responsibilities as “democratic citizens in military uniform.”

| Use of Personal Mobile Phones | To alleviate the sense of isolation felt by servicemembers, and help them pursue self-development and sound leisure activities, the ROK Armed Forces decided to allow enlisted servicemembers to use personal mobile phones after a pilot program in selected units and an opinion-gathering process from multiple sources. To facilitate communication with people outside the military, the ROK Armed Forces provided receive-only mobile phones for common use and public video telephones at barracks since 2015, which contributed to relieving the sense of isolation and anxiety felt by servicemembers and their parents.



Receive-only mobile phone for common use

The MND previously banned enlisted servicemembers from using personal mobile phones in barracks out of concern for security risks and the relaxation of military discipline. However, to facilitate communication with people outside the military, the MND plans to allow servicemembers to use personal mobile phones after working hours and during holidays. The MND will determine the timing of full implementation as it expands the scope of pilot operation gradually by phases.

| Promotion of Leave after Working Hours on Weekdays | To help servicemembers prepare for their missions by providing sufficient rest and autonomy to the possible extent, the MND developed several measures to promote the use of leave after working hours on weekdays by enlisted servicemembers, based on the consideration of the need to maintain the military readiness posture and the different conditions in individual units.

While enlisted servicemembers are allowed to take a leave after working hours on weekdays if required under the current regulations, only a small number of enlisted servicemembers actually take advantage of the leave.¹⁾ In the future, the MND plans to promote the use of leave after working hours under the approval of commanding officers for small-scale group activities,

1) MND, Unit Management Directive, Article 57(Distinction between Leave and Off-Post Visit) Paragraph 2: "Special leave and off-post visit refer to the leaves and off-post visits given as incentives on holidays or weekdays, including holidays, and the leaves and off-post visits individually permitted during or after working hours for special purposes including participation in off-post courses or rewards."



70th Armed Forces Day
ceremony

hospital visits, and meetings with family members, as long as they do not interfere with the readiness posture. The MND plans to hear the opinions from each service, and establish criteria for leave after working hours tailored to the different needs of forward units and rear units after the pilot operation. Then, the MND will fully implement the program starting in February 2019 within the scope that does not interfere with the proper performance of military missions.

| Protection of Privacy | To protect the basic rights of servicemembers under the Constitution to the greatest extent, the MND plans to look into the realities of privacy protection for servicemembers who are particularly vulnerable to invasion of privacy in barracks, and take active measures to improve on the areas that need to be addressed.

The ROK Armed Forces is striving to protect the privacy of enlisted servicemembers to the greatest extent by applying the “on-post commuting” concept and promoting the use of self-governing programs. However, the efforts still need improvements.

The MND plans to depart from the conventional perception that enlisted servicemembers should be managed and controlled around the clock, and instill the concept of on-post commuting and develop a code of conduct for officers and NCOs’ entry in barracks. In addition, the MND plans to foster awareness of the proper management of barracks life among officers and NCOs’, including the protection of privacy, by stressing the issue during officer training programs.



Self-governing committee of enlisted servicemembers

2. Eradication of Unreasonable Practices and Irrationalities

| Reinforced Activities to Eradicate Irrationalities | The ROK Armed Forces has been working toward building armed forces that the “people want to join and parents want to send their children” by promoting autonomy and instilling a sense of responsibility. On the other hand, the ROK Armed Forces has witnessed many cases where unreasonable practices and irrationalities turn small issues into accidents. In addition, some point out that servicemembers’ discontent with

the military mainly comes from unreasonable practices and inhumane treatments inside the military rather than from inconveniences in living conditions.

The MND will educate and supervise commanders, staffs, and other officers responsible for commanding and supervising unit management, select and give awards to units with outstanding results, and engage in other efforts to eradicate unreasonable practices and irrationalities.



Awards for units that showed outstanding results in abolishing unreasonable practices and irrationalities

| Prohibition of Giving Orders or Using Servicemembers for Personal Purpose | The Framework Act on Military Status and Service stipulates that even a superior officer may not issue any order unrelated to his/her duties or beyond his/her authority.²⁾ In keeping with this provision, the MND has been refining the relevant regulations to prohibit officers from giving orders to or using servicemembers for their personal purposes.

The nature of the military dictates a need to strictly maintain its hierarchy of command, in which the superiors give orders and the subordinates follow them. However, servicemembers do not have to obey orders that are unlawful or lie outside the public sphere. The ROK Armed Forces needs to instill a culture in which servicemembers can refuse unlawful orders and commands.

The MND has enacted and implemented an amendment to its Unit Management Directive, which prohibits officers from using or giving orders to servicemembers for personal purposes and prescribes punishments for violators. The regulations of each service also adopted relevant provisions. In addition, the MND discontinued the utilization of welfare support personnel for official residences, tennis courts, and golf ranges. In addition, personnel in noncombat positions, such as sales personnel at military supermarkets, will be gradually replaced with civilians.

| Replacement of Fatigue Duties of Enlisted Servicemembers | The MND plans to

²⁾ Framework Act on Military Status and Service, Article 24 (Duty of Command Originator) Paragraph 1: "No soldier shall issue any order, which is unrelated to his/her duties, contradicts any relevant laws, rules, or his/her superior's command or beyond his/her authority."

gradually reduce fatigue duties so that servicemembers can focus on their combat missions.

The ROK Armed Forces continues to take various efforts to help servicemembers focus on their rightful duties. For example, some units and facilities outsourced nonessential tasks, including cleaning, to civilian entities. However, servicemembers serving at some field units are still required to perform exhausting tasks that are not directly related to their combat missions, even when they are off-duty.

The MND plans to use civilian service providers for weeding and cleaning, starting with forward units and combat units, which the MND will expand to other units in the future, and continue to add new snow removal equipment.



Awards for outstanding weeding for vigilance operations

3. Fostering a Barracks Culture Driven by Respect for Human Dignity and Life

| Use of Proper Language | In keeping with the progressive changes toward respect for human rights and dignity, the MND is creating a culture based on communication, consideration toward others, and mutual respect among servicemembers by promoting the use of proper language that befits military personnel.

Many incidents at military posts involve verbal violence such as the use of abusive languages and swear words, and defamation of character. Verbal violence is a serious violation of human rights in itself and must be eliminated.

To promote the use of proper language among servicemembers, the MND published a guideline on language use in barracks and a comic book on the use of adequate language in barracks, and ran a special webtoon series on The Korea Defense Daily. Each year, the MND also selects the “Barracks Language Leading Unit” to facilitate the improvement of the language culture. In addition, in collaboration with the National Institute of Korean Language, the MND encourages servicemembers to take “Korean Language Culture



Comic book about the use of proper language in barracks

Outreach School” courses.

In the future, under the belief that “a positive barracks culture begins with languages that show respect and care for others,” the MND will continue to develop effective ways to ensure the use of proper language among servicemembers.

| Identifying and Resolving Difficulties | To ensure that our servicemembers complete their services with sound body and mind, the MND operates a variety of systems designed to identify and resolve the difficulties that they face in their life as military personnel. For servicemembers who are typically more accustomed to living in free environments, the relatively controlled environment and the forced group living may work as a source of difficulties or stress.



Counseling by a professional counselor for soldiers

As a proactive measure to control the factors that may interfere with adjustment to military service, the MND conducts periodical personality tests and operates various systems including professional counselors for soldiers and the Green Camp for psychological counseling and therapy; the National Defense Help Call Center, which provides counseling and receives reports 24/7; and various complaint management programs.

[Chart 6-1] Number of Daily Counseling Sessions at National Defense Help Call Center

(As of November 2018)

| Year | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----------------|------|------|------|------|------|
| No. of Sessions | 47 | 111 | 159 | 176 | 170 |

In the future, the MND plans to take a more preventive approach to the issue. For example, the MND will improve the reliability of the personality test, increase the number of professional counselors (to be assigned to not only regiment-level units, but also battalion-level units), and expand the counseling channels through the National Defense Help Call Center. The MND will also reinforce its collaboration with the professional research organization of the Korea Institute for Defense Analyses (KIDA) to help servicemembers adjust to military life and proactively prevent accidents.

[Chart 6-2] Increase in Number of Professional Counselors by Year

(As of December 2018, 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 | 660 |

| Reinforcing the Suicide Prevention Capabilities of All Servicemembers | Suicides by servicemembers undermine the combat power of the ROK Armed Forces and the people's trust toward them. To prevent servicemembers from taking their own lives, the MND is pursuing efforts to turn each servicemember into gatekeepers in charge of preventing suicides.³⁾

In addition, the MND trains and assigns instructors to battalion-level units, organizes suicide prevention classes for servicemembers at least once every six months, and operates a prevention system that consists of three phases: identification, management, and separation. As a result of these continued efforts, the number of suicides in the military is declining.

[Chart 6-3] Number of Suicide Prevention Instructors Trained by Year

(As of December 2018, unit: persons)

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------|------|-------|------|------|------|------|------|------|------|------|------|
| No. of Instructors | 824 | 1,601 | 540 | 434 | 550 | 534 | 653 | 664 | 668 | 822 | 650 |

Suicides continue to take place around us. In particular, in many cases, the deceased made the choice because their colleagues were not aware of or did not take note of the signs that they have shown.

The MND has outsourced the training to professional organizations in order to foster professional instructors for soldiers. Currently, the MND is pursuing the development of training contents tailored to the characteristics of each service. In addition, the MND is carrying out itinerant education by area for commanders, staff, and other officers in charge of commanding and supervising a unit by utilizing professional instructors.

The MND will continue to enhance the suicide prevention capabilities of all servicemembers

³⁾ Gatekeepers invest "continued interest" in looking for "signs" of suicide risks around them and "refer" those in need of assistance to various resources (institutions and experts).

by training professional instructors in each service and requiring commanders to attend suicide prevention classes with servicemembers.



Suicide prevention class at the Air Force Headquarters

4. Fostering a Barracks Culture That Respects Individuality and Cultural Diversity

The MND is working toward a barracks culture where servicemembers from culturally diverse families and other minorities can live with other members without being discriminated.

As evidenced by the fact that the number of registered foreigners increased from 850,000 in 2008 to around 1.17 million in 2017, the ROK is already transitioning into a culturally diverse society. The ROK Armed Forces needs to be properly aware of this change.

The MND will develop effective policies to review the current education systems and programs and rectify any shortfalls to ensure that servicemembers understand the diversity of individuals and cultures, and prevent discrimination and conflict among servicemembers resulting from misperception.

Section 2 Improving the Welfare and Working Environment for Servicemembers

Despite the continued efforts to improve the living environment and treatment of servicemembers in barracks, the level of welfare for servicemembers still needs improvement. To address this issue, the MND is exerting various efforts to radically improve the conditions of military service, including reasonable remunerations for fulfilling their duty of military service, and, ultimately, foster a barracks culture in which “people want to join the military and parents can send their children without worrying.”

1. Radical Improvement of Service Conditions

| Reasonable Remuneration for Military Service | To provide reasonable remunerations for those fulfilling their duty of military service and enhance the state’s responsibility in this matter, the MND raised the wages of enlisted servicemembers by 87.8% from the previous year as of January 2018. Thanks to the raise, enlisted servicemembers now have surplus money between KRW 40,000 and KRW 140,000 per month, depending on their ranks, even after deducting the essential expenses incurred by their lives in the barracks (KRW 259,000).

In connection with the raise, the MND worked toward expanding savings plans for the enlisted to help them save their earnings and use the money to propel themselves into the civilian society after discharge. In August 2018, the MND signed MOUs with 14 commercial banks to develop and launch the Soldiers Tomorrow Ready Savings for servicemembers, which provides high-interest

rates and tax exemptions, and allows servicemembers to deposit up to KRW 400,000 per month.

In addition, as a part of the remuneration for serving in the military, the MND plans to



MND launched the Soldiers Tomorrow Ready Savings for Servicemembers.

provide servicemembers with National Pension credits during their service periods. Currently, National Pension credits are provided only for six months of each service period.

| Rationalizing Disability Compensation Rates | Currently, disability compensations for enlisted servicemembers injured during their service are determined only based on the seriousness of their injuries, which has been a cause for continued demands for additional compensations for servicemembers injured during their service. To address this issue, the MND plans to enhance compensations for injuries sustained while performing high-risk tasks by greatly increasing the amount of compensations in each grade, and classifying the compensations into “combat injuries,” “injuries during special tasks,” and “general disability” depending on the cause of the injuries. Once the Whole Revision to the Military Pension Act and the bill for the Military Disaster Compensation Act are passed by the National Assembly, the range of disability compensations will expand from between KRW 5.69 and 17.06 million to between KRW 15.66 and 117.45 million.

| Improving the Quality of Uniforms and Other Gears | The MND continues to improve the combat gears to maintain their combat mission capabilities and improve their satisfaction with their lives in the barracks.

After replacing the previous Battle Dress Uniforms (BDUs) with digital pattern uniforms in 2011, the MND distributed additional summer BDUs in 2013, followed by the distribution of the BDUs with improved elasticity, comfort, and anti-infrared camouflage in 2018. In addition, in 2018, the MND began the distribution of lighter and warmer winter tops innerwear, and outerwear.

Starting in 2015, the MND improved the quality and standards of the clothes that servicemembers use and wear most frequently during their military life. The MND improved the quality of sneakers and gloves, and

Quality Improvement for Battle Dress Uniforms / Winter Tops



BDU tops

BDU pants



Winter tops outerwear

Winter tops innerwear

expanded the distribution of running shirts and drawers underwear in consideration of the preference of the servicemembers. In the future, the MND plans to improve other supplies that are close to the lives of servicemembers such as combat gloves and liquid detergents.

As for personal gears, to ensure that servicemembers in each battalion can exercise their combat power in full, the MND distributed bulletproof vests and helmets, personal tents, combat backpacks, combat vests, and other gears across all GOP divisions by 2015, and plans to supply them to all support units by 2020. In addition, starting in 2019, to protect the lives of servicemembers in the field, the MND will distribute bulletproof helmets and vests improved for protection and functionality.

The MND will continue its efforts to develop and improve clothes and personal gears in ways that reflect the changes in the battlefield, and contribute to improving the welfare for servicemembers. The MND will also raise the combat power of the military by distributing improved clothes and personal gears early on.

Quality Improvement for Clothes Close to the Lives



Improvement of sneakers



Improvement of running shirts



Drawers underwear



Battle gloves (Sample)

| Healthy and Safe Diet | The ROK Armed Forces provides safe, nutritious, and balanced meals designed to maintain health and combat power of servicemembers. As servicemembers are more active and consume more energy than others, meals are planned and provided based on a 3,000 kcal standard,⁴⁾ which is higher than the common standard at 2,600 kcal. In addition, the MND continues to raise the basic meal expenses⁵⁾ for servicemembers to provide them with high-quality meals preferred by the new generation of servicemembers.

⁴⁾ The MND established the "Nutrition Standards for Servicemembers" through a research project carried out by KIDA. The standards consider the physical conditions of servicemembers and the recent changes in military life.

⁵⁾ Expenses purely incurred by foods including main menus, side dishes, and desserts

[Chart 6-4] Increase of Daily Basic Meal Expenses per Person

| Year | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------|-------|-------|-------|-------|-------|-------|
| Unit price (KRW) | 6,432 | 6,848 | 7,190 | 7,334 | 7,481 | 7,855 |
| Rate of increase (%) | 4.5 | 6.5 | 5.0 | 2.0 | 2.0 | 5.0 |

In 2018, the MND began to exclusively use home-grown produce in meals provided in the military⁶⁾ and raised the quality of the meals by including new items such as hallabong (mandarin orange) and Kyoho grapes. Meals are planned based on servicemembers' preferences identified through annual satisfaction surveys. The MND increased the amount of foods preferred by servicemembers, such as Korean beef, ribs, abalones, and octopuses, and tested 16 new items including freshwater eels, grilled rib patties (tteokgalbi), and natural honey.⁷⁾

In addition, the MND ended the pilot phase of the positively received Meal Innovation Program and implemented it across the ROK Armed Forces.⁸⁾ The MND also plans to place civilian cooks in the kitchens of all platoon-level units by 2020. Civilian cooks have played a crucial role in improving the quality of meals for servicemembers.



- 6) With the exception of imported dried bracken, peeled balloon flower roots, pollack, and dried pollack, which can be used in limited amounts when homegrown alternatives are not readily available
- 7) Freshwater eels (boneless, coastal), octopuses (half-processed, coastal), tteokgalbi, chili shrimp, natural honey, ark clam meat (coastal), murex (coastal), chicken cutlet, pork bone soup (retort), chicken finger, fried egg, acorn jelly and sauce, spicy all-around seasoning, stewed fish, sweet and sour pork sauce, and oyster sauce
- 8) Each unit can provide brunches and multiple choices for menus as allowed by its circumstances.
* 2017 Meal Innovation Program Satisfaction Score: 4.1 out of 5 (Excellent)

[Chart 6-5] Current Status of Civilian Cooks in the ROK Armed Forces

| Year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| Total (No. of cooks) | 1,373 | 1,473 | 1,547 | 1,586 | 1,721 | 1,767 | 1,841 | 1,903 |
| Increase (No. of cooks) | 187 | 100 | 74 | 39 | 135 | 46 | 74 | 62 |
| Operating standard (No. of users) | 180 or more | 150 or more | 140 or more | 130 or more | 120 or more | 110 or more | 100 or more | 90 or more |

In 2014, the MND launched the Mothers' Monitoring Group, in which the mothers of servicemembers participate in joint hygiene inspections at the plants that manufacture foods supplied to the military and review the quality of the meals provided to their children. The program contributed to raising the standard of military meals.



Mothers' Monitoring Group visits the 10th Fighter Wing cafeteria

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 contracts to actual servings. Food contracts are preferentially awarded to companies with a Hazard Analysis Critical Control Point (HACCP) certification.⁹⁾ Military suppliers are subject to biannual hygiene inspections and nonscheduled inspections in summer, which are conducted in collaboration with the Ministry of Food and Drug Safety. In case of an issue with the food used in military meals, they are collected and

⁹⁾ A food safety management certification that verifies and assesses hazards in each manufacturing process to prevent the contamination of foods by hazardous materials

destroyed after reporting to the Ministry of Food and Drug Safety and the relevant local government. Also, the relevant suppliers at fault are excluded from future contracts. In addition, starting in 2015, the MND has been marking allergy-causing foods for enlisted servicemembers with food allergies.¹⁰⁾

The MND also operates meal distribution centers with advanced equipment for keeping foods fresh, and plans to improve meal safety and hygiene control practices in the future.



Jeolla Region Meal Distribution Center (Jangseong, 2012)



Chungcheong Region Meal Distribution Center (Daejeon, 2016)

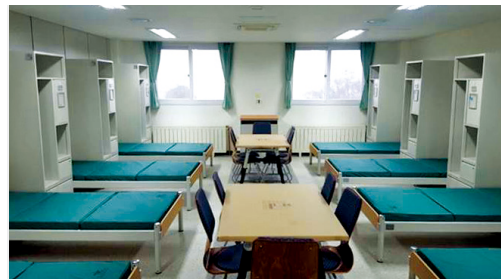


Gyeongsang Region Meal Distribution Center (Daegu, 2017)



Gyeonggi Region Meal Distribution Center (Byeollae, 2017)

Modernization of Military Barracks | Starting in 2003, the MND has been pursuing programs to modernize narrow and deteriorated military barracks to improve the living conditions of enlisted servicemembers and provide them with comfortable living environments. The MND replaced floor-type barracks shared by a platoon (30–50 members) with bed-type quarters shared by a squad (8–10 members), and expanded the living area per person from 2.3m² to 6.3m². The MND also modernized and integrated all sanitary and convenience facilities (washrooms, toilets, libraries, and gyms) into the barracks. The replacement of floor-type quarters with bed-type quarters is significant in that military barracks now serve as places of living rather than places for mere accommodation. The program will be completed in time with the completion



Barracks after modernization project

¹⁰⁾ Eggs, milk, buckwheat, peanuts, beans, wheat, mackerel, crab, shrimp, pork, peach, tomato, sulfurous acid, walnuts, chicken, beef, squid, and clams



Mothers' Monitoring Group visits the camp

of unit reorganization in 2026, under the yearly improvement plan linked with Defense Reform 2.0.

In addition, to improve the living conditions for servicemembers in summer, the MND installed 35,000 air-conditioning units across all military barracks so that servicemembers can rest in air-conditioned barracks.

For units that are not available for the modernization program due to disbandment or relocation, the MND sets up military community centers complete with libraries, cyber knowledge information facilities, karaoke, snack shops, and barbershops to help servicemembers enjoy sound pastime activities.

[Chart 6-6] 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 • (Officers) Company commander's room, company administration section | <ul style="list-style-type: none"> • (Enlisted) Barracks, sanitary, convenience facilities, etc • (Officers) Company commander's room, company administration section, office of battalion staff, etc |
| Space for enlisted | Barracks | <ul style="list-style-type: none"> • Platoon-sized (30-50 members) floor-type structure • 2.3 m² per person | <ul style="list-style-type: none"> • Squad-sized (8-10 members) bed-type structure • 6.3 m² per person |
| | Sanitary facilities | <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 |
| | Convenience facilities | <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 knowledge information facilities, fitness centers and other convenience facilities newly installed or expanded inside barracks • Kiosks inside barracks |
| Space for officers | Administration, operations and training facilities | <ul style="list-style-type: none"> • Only the company commander's room and company administration section are 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 |

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

| Raising the Proportion of Female Servicemembers |

To support the expansion of women's roles in the society and utilize potent female workforce in the military, the MND has been raising the proportion of female servicemembers. In 2017, the percentage of female servicemembers increased to 5.9% (officers: 7.4%; NCOs: 5.0%), thereby achieving the target percentage specified in the National Defense Reform Act before the target year of 2020 (officers: 7%; NCOs: 5%).



Female ROKA special forces NCO candidate participating in parachute landing fall training for basic airborne training (August 2018)

Then, in September 2017, the MND established the Plan for Female Workforce Expansion and Working Condition Improvement, which includes raising the percentage of female officers to 8.8% or higher by 2022. To this end, the MND will gradually increase the number of new female servicemembers.

| Improving Personnel Management Systems for Female Servicemembers |

To achieve gender equality in personnel management, the MND revised the National Defense Personnel Management Directive in January 2018. The new directive abolished the restriction of units and positions where female servicemembers can be assigned to. It also provided for the establishment of the common qualification standards for company, platoon, and squad commanders that apply to both male and female servicemembers, which ensures that female servicemembers can be assigned to any unit without discrimination. The MND also decided to expand the pool of substitute workforce for absences caused by childbirth or maternity leaves, and introduce new positions that provide counseling for servicemembers on leave and support the use of a substitute workforce. The MND will continuously improve the personnel management systems for female servicemembers to secure potent female workforce and allow them to focus on their missions under equal conditions.

| Support for Work–Life Balance |

The MND is fostering a family-friendly military culture

by supporting the work–life balance of servicemembers for both genders.

A pregnant female servicemember is exempted from night duties for up to a year after childbirth. Servicemembers raising children under the age of six years are given a two-hour leave for up to 24 months. Up to two days of childcare leave is allowed for servicemembers participating in the official school events of their children attending schools, which increases to three days for members with three or more children. In addition, the MND increased the length of spouse childbirth leave from 5 to 9 days to 10 days. Furthermore, when calculating a service period for promotion, servicemembers who took a childcare leave can have up to three years of leave included in their service period starting with their second children. Previously, only servicemembers with three or more children could have up to three years of their childcare leave included in their service period.

In addition, to attenuate the burden of childcare caused by frequent transfer and allocation to remote areas, the MND has set up and is operating military day care centers and cooperative childcare spaces. The MND plans to expand the number of military day care centers from 125 in 2017 to 164 in 2022 and that of cooperative childcare spaces, which replace day-care centers in areas where the latter are not available, from 22 in 2017 to 35 in 2022.

Starting in 2018, the MND will adopt the Family-Friendliness Certification Program, which is currently required for government and public institutions,¹¹⁾ to foster a family-friendly organizational culture based on an objective assessment of the current level of work–life balance in military units.

| Measures for Eliminating Sexual Violence | To foster safe working conditions free from sexual violence, the MND implements various measures including tailored sexual violence prevention education, site-oriented prevention systems, victim protection and support, and reinforced punishment for sexual offenders.

In September 2017, to eliminate sexual violence in the military, the MND announced the Plan for Reinforcing Measures for Elimination of Sexual Violence aimed at raising the awareness of

¹¹⁾ The program assesses institutions and issues a certification to those that offer high-quality childbirth, childcare, and education support programs (spouse childbirth leave, childcare leave, workplace childcare support, education support programs, and others); support programs for dependent family members; worker support programs, and flexible working hour programs.

servicemembers and requiring intensive actions. The MND also conducted small debate groups that consist of field-grade officers and higher, expanded the sexual violence prevention sessions taught by civilian instructors, and increased the number of civilian professional counselors.

In February 2018, in keeping with the MeToo movement that swept across the Korean society, the MND formed the Ministry of National Defense Task Force for Special Measures against Sexual Crimes that consists of civilian members, which operated for three months. Based on the institutional improvements identified through the operation of the task force, the MND is actively pursuing 17 improvement tasks including the inclusion of gender sensitivity items in officer recruitment and the reinforced screening of the contents taught by civilian instructors to raise the efficacy of sexual violence prevention education. The MND also reviewed the military culture and institutions from a gender equality perspective, and is working toward instilling a military culture safe from sexual violence, in which victims can file reports without fear of retaliation. In addition, the principle of zero tolerance for sexual criminals will be strictly applied to move toward eradication of sexual violence in the military.

| Expanding Convenience Facilities for Female Servicemembers | In response to the abolishment of position restrictions for female servicemembers and the increased number of female recruits, the MND continues to expand convenience facilities for women. The MND inspects all convenience facilities on a regular basis, and expands barracks, training ranges, and other facilities to accommodate the increased number of female recruits per year, service, and training institution. Going forward, the MND will continue to improve the working environment for female servicemembers by improving the National Defense and Military Facility Standards, installing women's restrooms at all units, and incorporating the need for women's convenience facilities in the medium-term national defense plans.

3. Advancing Residential Support Programs for Career Servicemembers

Guaranteeing a stable residential environment is a crucial element that affects the mission capabilities and morale of career servicemembers. To this end, under the Framework Act on Military Warfare, the MND has implemented various residential support policies, provided

military residences and officers' quarters while providing support for leasing civilian houses, and preferentially supplied civilian houses to servicemembers to raise the percentage of homeowners among career servicemembers. In 2017, for the comprehensive and systematic advancement of the residential support policies, the MND introduced the Comprehensive Development Plan for Military Residential Policies. The plan will allow the MND to minimize the burden on the national defense budget while radically improving the level of residential welfare for servicemembers.

| Tailored Residential Support | The MND plans to raise servicemembers' and their families' satisfaction with their residences, and solve the supply–demand imbalance in different areas with residential supports tailored to the needs of career servicemembers and their families. Previously, residential support policies were supplier-centered policies implemented under uniform criteria, which undermined the satisfaction of policy beneficiaries and the efficacy of budget spending. Going forward, the MND plans to establish residential support plans tailored to the needs of beneficiaries and the local characteristics of each region, and use the plans to provide tailored residential support to improve servicemembers' satisfaction with the residential policies.

| Diversification of Housing Supply | The MND plans to provide high-quality residential support by diversifying the supply of civilian houses. Previously, the houses for military servicemembers were supplied directly through construction, purchases, and Build–Transfer–Lease (BTL)¹² arrangements. These arrangements require massive financial resources and may result in rapid deterioration without proper maintenance. Going forward, the MND will diversify the supply of residential facilities through the deposit-based (jeonse) and monthly rent–based leases of civilian houses to expand the options for beneficiaries. To this end, it realized the amount of jeonse support and introduced the basis for providing monthly rent support, with more improvements on the jeonse lease system coming in the future.

¹²) BTL is one of the civilian investment methods in social infrastructure facilities. In a BTL arrangement, the project owner commits funds and “builds” infrastructure facilities, “transfers” its ownership to the state or a local government. In return, the project owner is granted the right to operate the facilities for a set period of time, and profit from leasing the facilities during the project period specified in MOUs with states and local interferences.

| Ensuring the Professional Management and Operation of Residential Facilities | The MND is taking measures to ensure the professional management and operation of residential facilities to maintain their qualities and ensure their long-term use. Military residential facilities deteriorate faster than civilian houses mainly because the facilities are managed by the servicemembers and civilian workers in each unit, which results in inefficient management. In recognition 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 will introduce integrated management of facilities in each region outsourced to civilian entities.

To this end, the MND launched a pilot program for residential facilities in the 1st Corps region in January 2018, and is currently expanding the scope of the program across all services with 2023 as the target year. In addition, to ensure the proper maintenance and repair of the facilities, the MND plans to clarify the distribution of repair responsibilities between the state and individuals, and implement long-term repair plans comparable to civilian housing to ensure timely and preventive maintenance.



Pilot outsourcing programs by region

4. Military Medical System Reform

Under the goal of “providing medical services trusted by servicemembers and the people,” the MND is pursuing Defense Reform 2.0 Military Medical System Reform. The key elements of the reform include the improvement of military medical services with a focus on patients, quality improvement for military medical service through “selection and concentration,” and the reinforcement of first aid capabilities within the “golden time.” The MND will continue to improve the quality of military medical services in ways that can actually be felt by servicemembers.

| Modernizing Military Medical Facilities | The MND plans to improve deteriorated medical corps at division-level units and below as well as support hospitals for forward corps to ensure that servicemembers can receive treatment in comfortable environments. The MND

plans to improve medical corps at division-level units and below by 2025 as well as improve support hospitals for forward corps by 2023 through new construction projects, remodeling, and renovation, selecting the method that best suits the conditions of each unit.

| Enhancing the Accessibility and Convenience of Medical Services | In the past, servicemembers had to obtain references from medical officers at military hospitals to use civilian hospitals. However, the MND plans to allow servicemembers to receive treatment at civilian hospitals by obtaining references from medical officers at medical corps at division-level units and below. In addition, for servicemembers who need to return to military hospitals for additional treatment, the MND will allow them to book hospital visits on their own and use public transportations to the hospitals without an officer's escort. The MND will also implement efforts to ensure convenient hospital visits by servicemembers and their family members and instill a patient-oriented hospital culture comparable to that of civilian hospitals, including streamlining entry procedures at military hospitals for servicemembers and visitors, and allowing them to freely enter military hospitals during opening hours.

| Expanding the Medical Expense Support for Career Servicemembers | In cases where a career servicemember is diseased or injured in the course of his/her official duty and decides to seek treatment at a civilian hospital, the servicemember had to pay for the entire medical expenses (contribution from the National Health Insurance Corporation and the servicemember).

However, starting in March 2018, under the amended Military Pension Act, the ROK government is liable for the contribution of the National Health Insurance Program (NHIP). This amendment is aimed at mitigating the burden on career servicemembers and guaranteeing their choice of medical services.

| Specializing and Enhancing the Efficiency of Military Hospitals | Despite the continued efforts to improve the medical capabilities of the military, military healthcare has not been able to match the speed of advancement in civilian healthcare. For this reason, servicemembers and the public still regard military healthcare with suspicion, and servicemembers still prefer civilian hospitals. To address this issue, the MND plans to improve the quality of military healthcare by “selecting and concentrating” on the specific functions of military hospitals as well as their efficiency by, for example, introducing hospitals that specialize in trauma treatment. It

also intends to maintain the military hospitals that directly support forward corps. However, the MND plans to merge 16 military hospitals in rear areas into 11 hospitals and reduce the hospitals that provide surgery to 4 hospitals per region through phased integration. The surgeons and equipment from the hospitals that lose surgery function under the reorganization will go to the “surgery-intensive hospitals.” Such transfer is aimed at improving and advancing the surgery capabilities of military personnel while turning other military hospitals into facilities that specialize in the stabilization, recuperation, and rehabilitation of patients or “outpatient examination centers” tasked with outpatient services for local residents and physical checkups for servicemembers.

In particular, the MND will establish the Armed Forces Trauma Center at the Armed Forces Capital Hospital by 2020 to provide medical services for injuries unique to, or frequently occurring in, the military such as trauma, gunshot wounds, and explosion wounds.

[Chart 6-7] Function Adjustment and Specialization of Military Hospitals

| Category | | Current | After Reform | Note |
|--------------------------------|-------------------------------|---------|--|--|
| Military hospitals | Total number | 16 | 11 | |
| | Armed Forces Capital Hospital | 1 | 1 | Set up the Armed Forces Trauma Center by 2020 |
| | Forward area hospitals | 7 | 5 (Goyang, Yangju, Pocheon, Chuncheon, and Hongcheon) | |
| | Rear area hospitals | 4 | 1 (Daejeon) | Surgery-intensive hospitals (4): Capital, Daejeon, Yangju, and Chuncheon |
| | Special purpose hospitals | 4 | 4 (Seoul, Aerospace Medical Center, Marine Medical Center, and Pohang) | |
| Outpatient examination centers | | - | 5 | Guri, Busan, Gangneung, Hampyeong, and Daegu |

| Expanding and Enhancing the Expertise of the Military Medical Workforce | To address the issue of medics without the required qualifications, the MND is expanding the number of professional medical support personnel and recruiting enlisted servicemembers with medical-related licenses and qualifications under the “Medical Specialist” program. In addition, to secure experienced medical doctors at military medical facilities, the MND will assign medical officers

in long-term services, preferably, to clinical positions in forward areas, to provide them with continuous sources of clinical experience. In addition, through thorough job analysis, positions at military hospitals will be assigned to civilian medical experts, save for essential positions to be filled by servicemembers, which are aimed at capitalizing on the capabilities and organizational culture of civilian hospitals. The servicemembers replaced by civilian experts, such as medical officers and NCOs, will be reassigned to forward units with limited access to medical services.

| Reinforcing a Medical Workforce at Field Units | One of the most fundamental responsibilities of military medicine is to save the lives of patients through rapid first aid on-site, and transfer those that require treatment at a higher medical facility to the most suitable institution within the “golden time.”¹³⁾ To this end, the MND carried out a pilot remote diagnosis program for units in remote areas with limited access to medical officers and civilian hospitals, and assigned medical NCOs with emergency medical technician licenses, and exerted other efforts to remove medical blind spots within the military. In the future, the MND will continue to enhance its emergency support capabilities by assigning an emergency medical workforce at remote and independent units in forward areas. To this end, the MND plans to assign additional medical officers at GOP regiments, and emergency medical technicians at the combat company-level units of standing divisions. The MND will also reinforce the training provided for emergency medical technicians to improve their field medical support capabilities.

| Improving Patient Evacuation Capabilities | The MND expanded and reorganized the Medical Operations Command Center of the Armed Forces Medical Command in 2015 and established the Medical Evacuation Air Service that specializes in the helicopter evacuation of emergency patients. The Medical Operations Command Center is currently building an emergency evacuation system capable of meeting the “golden time” by performing first aid on-site; mobilizing available assets, including ambulances and evacuation helicopters; and sharing the situation with military hospitals and civilian hospitals.

In particular, by 2020, the center plans to deploy eight medical evacuation helicopters capable

¹³⁾ The time (typically 1 hour or less) within which a patient who sustained lethal trauma should be transferred to an operation room for treatment to guarantee his/her survival

of long-range operations in areas, including the Northwest Islands, which will further improve the ROK Armed Forces' emergency evacuation capabilities. In addition, the center will continue to strengthen its cooperation with the National Fire Agency, and the Ministry of Health and Welfare to share evacuation helicopters.

| Contribution to Public Healthcare | The MND will continue to expand the contribution of the ROK Armed Forces to public healthcare. In the past, the ROK Armed Forces proactively assumed the role as a standing medical force for the ROK in the event of national infectious diseases such as the Severe Acute Respiratory Syndrome(SARS) and Middle East Respiratory Syndrome(MERS) outbreaks. In addition, military medical facilities in medically disadvantaged areas provide medical services to local residents to remove medical blind spots. The MND will enhance its cooperation with other relevant institutions including the Ministry of Health and Welfare and the Center for Disease Control to pursue a public-private partnership in public healthcare by expanding its contribution in many areas such as the monitoring and control of national epidemics, and response to health crises.

5. Wider Opportunities for Self-Development during military service

| Allowing Credit and License Acquisition during the Service | The MND helps servicemembers acquire college credits and licenses in various ways to mitigate their burden caused by the discontinuation of academic endeavors and careers during their service periods. Distance Learning Course means that servicemembers can take and earn credits from the official online courses of the universities that they attended before their service. The course was launched in 2007 with six universities including Kangwon National University and Chonbuk National University. As of 2018, the course is joined by 145 universities across the ROK including Seoul National University, Yonsei University, and Korea University. In addition, the MND provides biannual tests for 82 national technical qualification tests, and tests are provided all year round

for industrial engineering, information processing, and craftsman forklift truck operation.¹⁴⁾ Through these tests, around 20,000 servicemembers acquire national technical qualifications.

[Chart 6-8] Distance Learning Course and National Technical Qualification Year-On-Year Report

| Category | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|--------|--------|--------|--------|--------|--------|
| No. of universities with distance learning courses | 99 | 110 | 122 | 134 | 141 | 145 |
| No. of distance learning courses | 3,225 | 3,337 | 3,506 | 3,871 | 3,922 | 4,145 |
| No. of servicemembers acquiring national technical qualifications | 18,291 | 19,443 | 20,206 | 20,653 | 19,436 | 19,530 |

| Financial Support for Self-Development | The MND has been expanding the budget for subsidizing a part of the self-development expenses spent by servicemembers during their services. The MND also removed the fee for the use of the cyber knowledge information facility¹⁵⁾ in 2016 and subsidized distance learning course application fees in 2017, and is currently implementing the Self-Development Expense Subsidization Program. The beneficiaries of this program can receive a reimbursement of up to KRW 50,000 per year for spending on language and qualification tests and textbooks.

¹⁴⁾ The ROK Armed Forces organizes national technical qualification tests once in each half-year for 21 industrial engineering qualifications and 61 technical qualifications. However, due to their high demand, the tests for forklift and excavator operators are provided all year round (38 tests in 2018).

¹⁵⁾ Before 2016, servicemembers paid for their use of PCs at cyber knowledge information facilities and distance learning course application fees.

Section 3 Reinforcing the Human Rights Protection for Servicemembers

The MND carries out various policies aimed at seeking fundamental solutions for accidents and human rights violations in the barracks and establishing armed forces that is trusted by the people and is always with the people. It is also refining its human rights protection systems to ensure the meaningful protection of the constitutional and human rights of servicemembers. In addition to guaranteeing their right to stand trial, the MND is also implementing military justice reforms including the transfer of jurisdiction over appellate trials to civilian courts, and reinforcing the independence and fairness of military courts and prosecutors.

1. Improving the Human Rights Protection for Servicemembers

| Institutional Reforms for Probes into and Fundamental Resolution of Suspicious Deaths | The MND has been proactively suggesting solutions for accidents where the bereaved family members raised suspicion regarding the cause of death to resolve their suspicion and regain the trust of the people. In September 2017, it formed the Investigation and Institutional Reform Group for Suspicious Deaths in the Military to formulate measures at the MND level. The group has been working toward building a one-stop support system that combines reinvestigation, probe, and death on duty assessment. In addition, to improve the reliability of the initial investigation of deaths in the military, and lower the barrier for death on duty recognition and compensation, the MND amended the Enforcement Decree of the Military Personnel Management Act. In September 2018, the MND made notable improvements on the credibility of investigations on suspicious deaths by launching the Committee to Ascertain the Truth of Military Accidents Resulting in Death. Going forward, the MND will continue to exert efforts to expand the responsibilities of the state toward, and ensure the best treatment for, servicemembers who sacrificed their lives in the course of their service.

| Introduction of Alternative Service Program for Military Service Objectors Based on Religion and Other Reasons |

Between 2013 and 2017, 2,699 citizens refused to fulfill their military duty on account of religious belief and other reasons. Most of them were sentenced to imprisonment for one year and six months or longer.

On June 28, 2018, the Constitutional Court of Korea declared Article 5(1) of the Military Service Act unconstitutional for failing to provide alternative options for objectors, thereby violating their constitutional freedom of conscience. The Constitutional Court ruled that the provision remains effective until December 31, 2019.

Following the decision, the MND made efforts to develop reasonable alternative service programs that harmonize the duty of military service with the freedom of conscience through working-level action groups, advisory committees of civilian experts, public hearings, and surveys.

The MND assessed possible measures under the principle of “introducing strict restrictions designed to maintain the fairness of military service and prevent the abuse of alternative service as a means of evasion, while respecting the international laws to the full extent as long as it does not interfere with our national security.” Then, on December 28, 2018, the MND announced an alternative service program that includes, among others, living and serving at correctional facilities for 36 months.

The MND plans to present a government-proposed bill for the new program to the National Assembly in early 2019, after pre-announcement, consultation with relevant ministries, a review by the Ministry of Government Legislation, and cabinet meetings. Upon the completion of the amendment, it will enact and revise subordinate statutes, and form a review committee, as well as exert other efforts to facilitate the launch of the program in 2020.

| Introducing Military Human Rights Protection Officer |

As part of its plans for the improvement of human rights situations in the military by preventing human rights violations and providing meaningful remedies, the MND will offer its full cooperation with the introduction of military human rights protection officers at the National Human Rights Commission of Korea and fully support their activities. The MND will actively involve itself in the process for the required amendment of the National Human Rights Commission Act to ensure early amendment in collaboration with the other relevant institutions. In addition, to enhance the human rights protection for servicemembers, the MND will guarantee the authority of human

rights protection officers to visit units for investigations, and build a system of cooperation to remove potential interference with military command and security.

To ensure the independence, transparency, and reliability of human rights protection for servicemembers, the MND is currently working toward introducing human rights protection officers within the National Human Rights Commission of Korea. They will be given the authority to visit and investigate units, and attend investigations and interrogations by military investigators to probe incidents taking place within the military. To this end, the MND is currently discussing an amendment to the National Human Rights Commission Act with the commission itself.

| Reinforcing Human Rights Education for Military Personnel | The goal of human rights education in the military is to raise servicemembers' awareness of their rights and responsibilities as “citizens in uniforms,” and spread a barracks culture driven by respect for human rights. To this end, the MND established a medium-term plan (five years) on human rights education. In addition, the MND and each military service have been implementing systemic education policies under close cooperation. Specific policies include human rights education tailored to service cycles and local circumstances; invitational lectures by human rights experts for commanding officers; capability-building sessions for human rights workers and instructors in the healthcare, investigation, and correction sectors; the promotion of online human rights education; and the development and distribution of human rights education contents that involve participation of servicemembers. Through these efforts, the MND will foster a barracks culture that respects the dignity, honor, and rights of military personnel.

| Improving the Human Rights Protection System for Servicemembers |

In keeping with the changes in the human rights awareness of servicemembers, the MND has been reforming the related statutes while promoting cooperation with outside entities and improving the human rights protection system currently in place. To prevent the violation of servicemembers' human rights, it will reinforce the human rights impact assessment of related statutes and systems, systematize the human rights counseling



National Defense Human Rights Monitoring Group Conference (June 2018)

and complaint filing functions, eliminate human rights blind spots by operating the National Defense Human Rights Monitoring Group, and continue to conduct human rights surveys on servicemembers. The MND will also set up human rights advisory committees at the MND and the headquarters of each service to facilitate advices on human rights issues by outside experts, and place human rights advisory lawyers at division-level units. Going forward, the MND will continue to implement institutional improvements aimed at protecting servicemembers' human rights in keeping with changes in the human rights situation in Korea.

| Improving the Servicemember Disciplinary System | In response to the question regarding the constitutionality of confinement facilities in the military and its possible violation of the constitutional requirement of warrants,¹⁶⁾ and to protect the human rights of servicemembers, the MND is currently pursuing an amendment to the Military Personnel Management Act that replaces confinement facilities with disciplinary training and wage cuts. Upon the amendment, the MND plans to operate human rights programs based on the understanding of the unique characteristics of the military community, including compliance and human rights education as well as personal relationship capability training, which are expected to promote servicemembers' human rights while firmly establishing discipline.

[Chart 6-9] Comparison of Current and Proposed Disciplinary Measures

| Current | Revised | 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 change) |
| Probation | Probation | Same as before |
| | Reprimand | Newly inserted |

16) 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))

2. Improving the Military Justice System

| Building a Military Justice System That Guarantees Independence and Fairness | The MND is pursuing reforms for the military justice system to protect servicemembers' human rights and their right for fair trial, and improve the independence and fairness of military courts and prosecutors.

First, 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 directly report to the MND. The local military courts will be helmed by civilian legal practitioners. In addition, the MND decided to abolish the review by jurisdiction authorities¹⁷⁾ and the appointment of field officers as lay judges.¹⁸⁾ To ensure the independence of military judges, the MND will establish a personnel management committee for military judges to handle the recommendation for promotion and reappointment reviews, and prohibit military judges from taking other legal positions such as judge advocate or military prosecutor. These changes aimed at improving the military justice system will be implemented in the form of an amendment to the Military Court Act.

¹⁷⁾ Jurisdiction authorities are commanders of the units in which military courts are set up (Article 7, Military Court Act). They review the decisions of military courts and reduce stipulated sentences by up to one-third in cases where the accused committed the crimes in the course of actively performing their duties with due diligence (Article 379, Military Court Act).

¹⁸⁾ A unique feature of a military trial in which officers not qualified as judges are appointed as lay judges and try cases along with military judges

[Chart 6-10] Goals and Key Contents of Military Judicial Reform

Ensuring Fair Trial and Protecting Human Rights through

| 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 jurisdiction authorities' rights to review decisions and reduce sentences. • Prohibit military judges from taking other legal positions. • Protect the status of military judges. • Abolish lay judges. • Conduct circuit trials. • Introduce participatory trial with servicemembers. | <ul style="list-style-type: none"> • Set up a military prosecutor's office in each service. • Abolish the commanders' right to approve detention warrant requests. • Provide military prosecutors with the right to object. • Introduce specific 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 the police. • Provide the legal basis for the power of the military judicial police. • Ban the appointment of enlisted personnel as assistant military judicial police officers. • Introduce public defenders for victims of military crimes. |

Developing Transparent and Reasonable Investigation Practices | 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. The MND also decided to abolish the commanders' right to approve requests for detention warrants.¹⁹⁾ As for the expertise building for the military judicial police, the MND will separate the organizations and functions of the military police in charge of investigations and those in charge of military operations, provide the legal basis for the administrative police

¹⁹⁾ Under Article 238 (Detention) of the Military Court Act, a military prosecutor needs the approval of the head of the affiliated unit when requesting a detention warrant.

activities of the military police, and ban the appointment of enlisted personnel as assistant military judicial police officers.²⁰⁾

| Enhancing Human Rights Protection in Investigative Procedures | Starting in July 2018, the MND introduced measures for enhanced human rights protection within the military investigation procedures. The MND reinforced suspects' rights to defend themselves by allowing them to seek legal counsel, and required investigators to take caution to minimize the shock felt by the 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 at least for 10 minutes every two hours. In addition, the MND introduced the legal basis for allowing victims of military crimes to select and request public defenders for legal counsel.

²⁰⁾ The military judicial police is an investigative body under the Military Court Act who investigate crimes over which military courts have jurisdiction. The military judicial police consists of military judicial police officers and assistant military judicial police officers. Judicial police officers investigate crimes over which military courts have jurisdiction (Articles 43 and 44, Military Court Act), while assistant judicial police officers assist with officers' investigations in accordance with directions from military prosecutors or judicial police officers (Article 46, 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.

Section 4 Upholding Civilian Control of the Military and Corruption-Free National Defense Operation

To build the basis for civilian and democratic control of the military by the representatives elected by the people, and foster conditions that allow the military to focus on their rightful duties, the MND is pursuing efforts to establish its civilian control and political neutrality. In addition, to gain the people's trust in the military, the MND engages the people to participate in policymaking processes, develops anti-corruption measures jointly carried out by the military and civilian sectors, and carries out active policy PR activities, thereby opening the management of national defense to outside entities.

1. Active Efforts for Civilian Control of the MND

| Meaningful Pursuit of Civilian Control of the MND²¹⁾ | The MND is pursuing civilian control of the MND to establish the principle of civil control over national defense policies and create the conditions to allow the military to focus on its rightful missions. Civilian control over 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 its inauguration in 2017, the current administration has emphasized the need to reestablish 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 civil control and political neutrality. In recognition of the fact that the core of

21) 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.

Defense Reform 2.0 lies in the establishment of civil control and the balanced development of the three military services, the administration has been actively pursuing the establishment of civil control over the MND.

To this end, the MND assigned civilian officials to office heads at MND headquarters and appointed a female civilian spokesperson for the first time in its history. In addition, the MND assigned civilian officials to the Director General of Military Force Policy Bureau, which had been held by generals.

In the future, the MND will identify additional bureau and division head positions within MND headquarters that need to be filled by civilians. These changes are not merely aimed at expanding the percentage of civilians in the military; their purpose lies in gradually expanding the presence of civilian resources with the expertise in military knowledge and optimizing the essential positions that should be filled in by military personnel. In addition, to appoint civilians at key positions in education and research institutions, the MND appointed a civilian to lead KIDA in 2017 and plans to appoint civilians rather than military officers as the president of the Korea National Defense University. In particular, considering the fact that civilians are often appointed as ministers of national defense in key advanced countries, the MND will strengthen the assistance function in military for the Minister of National Defense in preparation for the possible appointment of civilians as the Minister of National Defense.

| Enhancing the Military Expertise of Civil Servants at the MND Headquarters | The MND plans to expand the percentage of civilians within the MND headquarters, and seeks the harmonized growth of both civilian officials with military expertise and career servicemembers so that they can assist the Minister of National Defense from a neutral and balanced perspective. Therefore, civil servants at the MND headquarters need to have military expertise to understand the position of each military service.

Civil servants require expertise in military matters and each policy area. The MND plans to upgrade their expertise by providing effective training, managing positions in each area, and establishing field-oriented practices.

Going forward, the MND will continue to take measures to ensure civil servants' expertise in military matters and policies early on.

2. Political Neutrality of the Armed Forces

| Establishing the Legal Basis for Ensuring Political Neutrality | The Armed Forces is tasked with keeping the nation and its people safe. To fulfill this mission, the MND will establish the legal basis for its political independence.

Currently, the Constitution and other laws provide the basis for the political neutrality of the Armed Forces. However, the current laws only punish military personnel for ordering political interventions and lack the legal obligation to clearly refuse such orders. To address this issue, the MND plans to introduce provisions punishing other public officials as well as the military personnel ordering political interventions, and institutionalize rewards for informants and the legal obligation to refuse orders on political intervention. In addition, the MND plans to improve the relevant statutes and regulations such as codes of conduct and detailed criteria in the Framework Act on Military Status and Service, the Military Criminal Act, and the Unit Management Directive.

The combat power of the Armed Forces comes from the people's trust, which is attained when the Armed Forces carries out its rightful duties. By ensuring its political neutrality, the Armed Forces will be able to focus on its duty to protect national territories and keep the people safe. This will be a foundation for building “strong forces that win every battle.”

| Training Democratic Citizens in Uniforms | The MND will reinforce education on the rule of law, political neutrality, and other values of free democracy to foster the basic qualities required of democratic citizens as well as a personality-friendly military culture that people want to join and parents want to send their children to, based on mutual respect and cooperation. To this end, the MND plans to reinforce humanities, history, and personality education, and expand opportunities to enjoy art and culture. Through these efforts, the MND plans to help servicemembers gain awareness of and act on the universal values of mankind, foster patriotism and pride in serving the nation, and focus on their duty to keep the nation safe.

3. Open Management of National Defense

| Enhancing Civil Participation in Policymaking Processes | The MND is innovating

national defense under the goal of “restoring public status through participation and trust.” In addition, in alignment with the ROK government’s innovation strategy for “participation and cooperation,” the MND is expanding opportunities for people to participate and express their opinions in key policymaking processes to increase transparency and trust in defense policies.

Since December 2017, the MND has been holding “National Defense NGO Forums”²²⁾ to discuss national defense issues with nongovernmental organizations (NGOs). The MND also discloses information regarding large-scale projects that affect people’s lives and attract their keen attention in advance, and expanded the scope of policy tasks subject to disclosure. To this end, the MND seeks to satisfy the people’s right to know and implement people-friendly policies.

In addition, the MND has formed and operated the National Defense Human Rights Monitoring Group, the People’s Participation Group in National Defense Information Disclosure, and the People’s Design Group.²³⁾ In 2018, the MND expanded the role of Mothers’ Meal Monitoring Group to the monitoring of uniforms so that people can oversee and evaluate the implementation of the related policies.

In January 2018, the MND held the People’s Proposal Contest for Defense Reform 2.0 to raise the people’s awareness and form a consensus on Defense Reform 2.0. The contest lasted for 40 days on topics of high interest, including welfare and human rights, and resulted in the selection of 613 ideas proposed by college students, citizens, and servicemembers.

The MND also held the People’s Grand Debate on National Defense Budget in May 2018 to ensure the people’s meaningful participation in the organization of the national defense budget. The debate saw citizens and servicemembers gathering to discuss the issues proposed by citizens online. Among the proposals discussed in the debate, the ROK government selected proposals that particularly attracted keen interest from the people and reflected them in the 2019 national defense budget.

The MND will continue to provide institutional support to help the people participate in the policymaking and implementation processes to voice out their opinions.

²²⁾ This forum brings MND and NGOs together to identify policy implications and expand consensus on security issues by sharing information and discussing the related matters.

²³⁾ This working group consists of policymakers, citizens, and service designers to develop and improve public services by employing service design methodologies across the policymaking processes.



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| Developing Anti-Corruption Measures Based on Civil–Military Partnership | The

MND is working toward anti-corruption measures, aimed at achieving corruption-free national defense, by expanding the people’s participation and monitoring of national defense policies and their implementations, and building an anti-corruption system based on civil–military partnership.

The MND will continue to build an anti-corruption system that engages the private sector, such as the “Integrity Ombudsman” program, where civilian experts monitor and recommend the correction of corruption in the military; the “Civil–Public Council for Corruption-Free National Defense,” where the civil society provides advices on anti-corruption measures in the military; and the Anti-Corruption Policy Monitoring Group that engages citizens, and create corruption-free MOUs with anti-corruption civil groups aimed at spreading a corruption-free culture. In addition, for the systematic implementation of anti-corruption policies, the MND will retain the services of experts to assess the current direction of the MND’s anti-corruption policies and reflect the findings in its medium-/long-term plans.

The MND also requires servicemembers across all services to receive anti-corruption education to raise their awareness of the value of corruption-free public service, and have servicemembers regard it as the basis for performing any duty. The MND has been refining the relevant regulations to protect whistle-blowers from personnel and financial retaliations, and requires all officers to take classes on whistle-blower protection. Violators will be subject to strict measures pursuant to the relevant statutes, including those who sought out whistle-blowers, disclosed their personal information, or imposed disadvantageous measures against them, and whistle-blowers will be rewarded for their contribution, if any, to the development of national defense.

| Promoting Policy PR Activities | To meet the people’s expectation for participation and

change, the MND is actively promoting its key policies, including Defense Reform 2.0, through various channels including the press, online spaces, and off-line activities.

In particular, the MND has developed online and mobile press release (PR) contents to capitalize on their ever-growing influence for mutual communication with the people. The MND created various online contents on tasks of Defense Reform 2.0 such as the 2018–2022 Framework Plan for Military Welfare, military medical reform, judicial reform, the 7th Seoul Defense Dialogue (SDD), the 70th ROK Armed Forces Day, and the 2018 International Fleet



A salute event during the “Thank You, Armed Forces” program (January 2017)

Review, and promoted them through the MND’s Facebook page and blog, and other online channels.

At the same time, the MND still promotes its policies through broadcasting media,²⁴⁾ the influence of which has not dwindled despite the rise of online media. These activities created the momentum for improving servicemembers’ lives in the barracks and raising the people’s trust in the external activities of the military. In particular, the contributions provided by the ROK Armed Forces in actively supporting the 2018 PyeongChang Winter Olympic Games were broadcasted through special Olympics programs.

The MND is carrying out “Love Servicemember Campaign” in diverse ways aimed at instilling a sense of pride in military personnel.

In 2017, the MND produced a “campaign song” with popular celebrities and servicemembers, and organized a singing contest for all citizens. In celebration of the ROK Armed Forces Day, it organized an off-line “Salute Event,” where citizens expressed their gratitude toward servicemembers. The event’s online video went viral among Korean citizens, exceeding 800,000 views on social media. In the ROK Armed Forces Artbook Project launched in 2017, the MND created an artbook expressing the expertise of the different positions within the military. The content was viewed more than 2.6 million times on Facebook and other online platforms and made into a calendar. The project raised the people’s interest in the military.

In 2018, the MND continued to organize various events including efforts for communication

²⁴⁾ The MND has planned and runs various programs such as *Improving Servicemembers’ Foods, Clothing, and Living for the Winter Season*(KBS) in July 2017, *Medical Specialist and Military Medical Services*(KBS) in December 2017, and *Hanbit Unit 5th Anniversary Documentary*(SBS) in April, 2018.

between the people and servicemembers, visits to the demilitarized zone (DMZ) and barracks cafeterias, and support events for servicemembers serving in Ulleungdo Island.

For these events, the MND won the Grand Prize in the Internet communication category of the 10th Internet Communication Award and the Best Government Institution award during the 14th Web Award Korea in December 2017.

To communicate with the people and reflect their voice into policies, the MND will promote its policies by engaging the citizens through various channels such as the Communication Expert Group²⁵⁾ consisting of journalists, PR experts, and social experts, as well as the Online Supporters (M-Friends)²⁶⁾ consisting of college students.

25) Launched in 2015 to identify PR ideas for national defense and utilize the expertise of experts (19 experts in 2017 ⇒ 22 experts in 2018)

26) An online press corps composed of young citizens launched in 2016 to reinforce the online promotion of key policies, with a focus on communication with the people(30 in 2017 ⇒ 52 in 2018)

Section 5 Ensuring Fair Enforcement of the Duty of Military Service and Enhancing the Benefits for the People

The MND is advancing its military service system to foster an environment for a fair and reasonable imposition of military duty, and to enhance the fairness of carrying out the military service. In addition, to eliminate inconveniences and promote the benefits enjoyed by the people, within a scope that does not interfere with military operations, the MND is implementing regulatory reforms while relocating military air bases and building military installations for shared growth with the local communities, and exerting efforts to build environment-friendly armed forces.

1. Ensuring Fair Enforcement of the Duty of Military Service and Improving Military Service Administration

| Stable Recruitment of Servicemembers | The MND has allowed for secondments and alternative services²⁷⁾ in lieu of military service as long as they do not interfere with the recruitment of the required number of servicemembers. However, with the number of potential servicemembers expected to plunge in early 2020 because of the low birth rate, the secondments and alternative services should be reduced and ultimately abolished. The MND is currently seeking the best solution through close cooperation with the relevant ministries, based on a comprehensive consideration of the need for national defense posture, the fairness of military

²⁷⁾ Secondment means allowing people required to enlist in the Armed Forces to serve in other capacities such as the police, the coast guard, or the fire agency. Alternative service means serving as civilians in positions such as public health doctors and skilled industrial personnel at organizations designated by the Military Manpower Administration for set periods in lieu of military service.

service, and the efficient use of talented human resources.

| Separate Management of Military Service Compliance by People of Keen Public Interest |

In the ROK, the duty of military service is a sacred obligation that cannot be replaced. Despite this special status, some high officials' and celebrities' failure to comply with this duty left the people feeling a sense of relative deprivation, and undermined the social value of military service.

It is for this reason that the Military Service Act was amended for the separate management of military service compliance by Grade 1 public officials and their children starting in June 2016. On September 22, 2017, the scope of the separate management was expanded to include Grade 4 public officials or higher and their children, athletes, entertainers, and high-income earners and their children. The Military Manpower Administration separately keeps and manages their military service compliance records of these groups of social interest until they complete their compulsory military services.

Through the separate management of military service compliance, the MND will ensure the transparent management of compliance by the relevant groups, prevent illegal evasion, and establish a fair and transparent military service culture.

| Prior Disclosure of Military Service Records for Confirmation Hearings |

Ever since the introduction of the service record disclosure system in 1999, public candidates²⁸⁾ who require the National Assembly's consent or appointment were required 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, Cabinet member candidates are also required to report and disclose their military service records upon the submission of the confirmation hearing requests to the National Assembly as of May 29, 2018. This requirement is expected to foster and spread voluntary compliance with military duty.

²⁸⁾ Public candidates requiring 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, Supreme Court Justices

Public candidates requiring National Assembly's appointment: Candidates for Constitutional Court Justices (3), National Election Commission Members (3)

| Improving the Physical Checkups for Military Service | The MND has been improving the physical checkups for military service to improve the fairness of military service classifications and secure talented resources. The MND has fielded advanced equipment and experts to carry out more accurate checkups, increased the number of clinical psychologists to carry out more accurate psychological evaluations, and adopted the comprehensive psychological evaluation. In addition, to promote the convenience of people receiving physical checkups, the MND informs individuals of their diseases and possible treatments after checkups, and tests them for latent tuberculosis to prevent the onset and spread of the disease by preventing carriers at military units.

2. Relocation of Military Air Bases

In accordance with the Special Act on The Relocation of Military Air Bases and Support Therefor enacted in 2013, the MND is pursuing the relocation of military airports in Daegu, Suwon, and Gwangju to resolve the issue of noise in areas surrounding military airports and address the resulting limitation of urban development in the area. The heads of respective local governments have been demanding the relocation of the airports.

As for Daegu Airport, two candidate sites were selected in March 2018: Ubo-myeon, Gunwi-gun, Gyeongsangbuk-do and surrounding areas; and Bian-myeon in Uiseong-gun and Sobomyeon in Gunwi-gun and surrounding areas. Currently, the MND and local governments are going through the procedures to select the relocation site.

As for Suwon Airport, the 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 a consensus on the relocation within the city.

The preliminary relocation candidate sites for Gwangju Airport will be determined after assessing the military operation fitness of potential relocation sites. In the future, preliminary relocation candidate site will be selected through consultation with the local residents.

In the future, for the smooth operation of the relocation projects, the MND plans to actively cooperate with central administrative agencies and local governments. The MND will resolve possible conflicts resulting from the relocation, and ensure the fair and transparent implementation of the projects by hearing the opinions of local governments and residents

through civil–public–military councils and conferences with local residents.

3. Military Installations for Shared Growth with Local Communities

| Removal of Coastal and Riverside Wire Fences | The ROK Armed Forces plans to remove barbed wire fences previously set up for vigilance operations in coastal areas and riversides as long as the removal does not interfere with military operations. Local governments have been continuously demanding the removal of barbed wire fences because they interfere with the development of tourism resources in the relevant areas. In the past, upon request from local governments, the ROK Armed Forces had removed fences or replaced them with surveillance equipment at the local governments' expense (or 50% subsidies from the national treasury) only in the sections approved through operability assessments. However, under Defense Reform 2.0, the MND decided to have the ROK Armed Forces remove fences or replace them with surveillance equipment as long as the removal does not interfere with military operations. [Chart 6-11] shows the results of the operability assessments of coastal and riverside wire fences in 2018.

The removal began in the second half of 2018 starting with sections available for immediate removal. As for the sections requiring surveillance equipment, the removal will begin in 2019 after determining the required budget through a commissioned design project.

The MND plans to complete the removal and replacement of coastal and riverside wire fences by 2020 to promote the benefits of the people and revitalize the local economy.

[Chart 6-11] Results of the Operability Assessments of Coastal and Riverside Wire Fences

(Unit: km)

| Category | Target | Sections Previously Approved for Removal | | | Operability Assessment Results | | | |
|------------------------------------|--------|--|----------|-------------|--------------------------------|---------------|--|--------------------|
| | | Total | Complete | In Progress | Total | Do Not Remove | Remove after Installing Surveillance Equipment | Remove Immediately |
| Total number | 413.3 | 114.62 | 69.3 | 45.32 | 298.68 | 129.08 | 34.67 | 134.93 |
| 1 st Field Army | 183.55 | 92.02 | 64.7 | 27.32 | 91.53 | 52.36 | 0.31 | 38.86 |
| 2 nd Operations Command | 51.23 | - | - | - | 51.23 | 26.88 | 10.12 | 14.23 |
| 3 rd Field Army | 178.52 | 22.6 | 4.6 | 18 | 155.92 | 49.84 | 24.24 | 81.84 |

| Systematic Removal of Unused and Abandoned Facilities | To minimize inconveniences for 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 facilities, there still exist facilities that fell to disuse because of advancements in scientific surveillance equipment and the reduction of military troops, or facilities for which the usage plans were abolished because of the disbandment or reduction of the relevant units. The abandoned facilities are not mere aesthetic nuisances; they pose risks of collapse, pollution from wastes therein, and interference with local development.

The MND conducted on-site inspections and operability assessments on all unused facilities in and outside military premises in 2018 for the systematic removal of the facilities. Based on the findings, by 2021, the MND plans to remove facilities that interfere with local development plans, long-abandoned facilities that damage the scenery, or facilities that pose risks of being turned into crime zones under medium- and long-term plans.

| Resolution of Private and Public Lands Occupied without Permission | The ROK Armed Forces inevitably occupied some private and public lands during the war and for emergency operations, thereby violating the rights of the property owners. In addition, the damages have not been properly compensated for. In recognition of the seriousness of the issue, to protect the people's property rights and improve the people's trust toward the military, the MND has been addressing the issue of the illegal occupation of private and public lands.

As of the end of 2017, out of the total private and public lands of 55,400,000 m², occupied and used by the ROK Armed Forces, 25,720,000 m² is being occupied unlawfully. The MND purchases the lands that the ROK Armed Forces still needs, leases the lands required for temporary use, and returns the lands not used because of the relocation of the relevant units after restitution, which includes removing facilities and eliminating soil contamination.

On another note, the MND measured the private and public lands occupied unlawfully between February and November 2018. It will use the findings to notify owners of the occupation, and provide compensation and restitution in accordance with due process. Going forward, the MND will continue to purchase, lease, and exchange lands to address the issue of unlawful occupation early on.

| Providing the Legal Basis to Support Areas Near Military Installations | Despite the inconvenience caused by noises from military operations and training, local residents lack the support and compensation for such damage, save for seeking damages through court decisions. To address this issue, the MND is currently developing a legal basis for implementing noise reduction projects and supporting local residents to reduce the violation of the rights of the people living near military installations, improve the welfare of residents, and improve the environments in the relevant areas.

The Act on Supporting Areas Near Military Installations (tentative title), which is being drafted by the MND for enactment, includes expanding the scope of applicable facilities²⁹⁾ and the legal ground for resident support projects. The MND will prepare the draft after consultation with financial authorities in 2019, and take active efforts to ensure that the act is approved by the National Assembly and takes effect early on.

| Promoting Shared Use between Civilians and the Military | The MND is opening more and more facilities to local residents for use as spaces for social functions.

The ROK Armed Forces is currently opening around 40 sports and cultural facilities to the general public. However, due to the insufficiency of public sports and welfare facilities in the local community, residents continue to demand the opening of more military installations. To open more military installations to the public, the MND is currently identifying the relevant legal basis and drafting detailed operation methods.

[Chart 6-12] Examples of Facilities Open to the Public: Air Force Academy

| Category | Description |
|--|--|
| Convenience for residents | <ul style="list-style-type: none"> • Open sports facilities (soccer field, baseball field, and archery range) to residents at all times. |
| Provision of venues for large local events | <ul style="list-style-type: none"> • Host large-scale local events such as the National Sports Festival, the National Junior Sports Festival, the World Firefighter Games, and paragliding events. |
| Provision of venues for civilian events | <ul style="list-style-type: none"> • Provide school facilities (stadium, gym, and sky park) for sports events and gatherings. • Rent a large auditorium (Ahn Jung-geun Hall) for concerts and other cultural events. |

²⁹⁾ The government-proposed bill submitted to the 18th and 19th National Assembly was only applicable to military airstrips and firing ranges. The new act will expand the scope to include military installations in general.

Starting in April 2018, the MND has been looking into the current status of public facilities such as sports facilities, parking lots, and conference rooms. The MND will select and open to the public facilities with high demands for opening, select the best practice cases, and take other actions to contribute to the local communities and residents' welfare.

4. National Defense Regulatory Reforms

| Regulatory Reforms in Various Areas | In line with the “redesigning of regulations for the public welfare and innovation,” which is one of the tasks set by the Moon Jae-in administration, the MND is currently reforming regulations in various areas, including new industries, military installations, and defense industries, to maximize the people's benefits within a scope that does not interfere with national security and the people's safety.

In 2017, the MND streamlined the selection process for the new construction technologies and products to be adopted into designing military installations,³⁰⁾ and held PR sessions for companies with new technologies and outstanding products to help them secure distribution channels. In addition, the MND improved the permission system for the manufacture and sale of military gears. Now, if a request for permission is not processed within 40 days, it is deemed to have been approved.

In 2018, to support new industries and technologies of the future that form the core of the Moon Jae-in administration's regulatory reform, the MND worked toward implementing a system for developing future technologies,³¹⁾ thereby forming a foundation for using unmanned robots, artificial intelligence (AI), and other new technologies in developing weapon systems. In addition, the MND introduced bills designed to streamline the pre-export procedures for

³⁰⁾ Reduce the burden caused by placing tenders for each project by selecting new and outstanding technologies to be used in all military facility projects in the relevant year.

³¹⁾ Under the current laws, national defense technologies may be developed only when the needs for such technologies exist, which made it difficult to develop weapons using the technologies. For this reason, the MND pursued the enactment of the National Defense Science and Technology Innovation Promotion Act (tentative title) that allows the development of future weapon systems regardless of their demands, using the core technologies of the Fourth Industrial Revolution (unmanned, robots, and AI).

national defense materials³²⁾ to reduce the time required for the procedures. It also pursues a wide variety of other efforts aimed at supporting the regulatory reform efforts³³⁾ across the government and addressing the inconveniences experienced by the people including the permission to fly agricultural drones in military-controlled airspaces and expanding the test flight airspace for industrial drones.

In addition, the MND Regulatory Innovation Review Committee determines the appropriateness of regulations newly introduced or reinforced under the statutes to prevent the creation of unnecessary regulations.

Going forward, through demand surveys at local governments and business sites, and the Regulatory Reform Sinmungo(Open Voice System), the MND will pursue regulatory improvements that can actually be felt by the people by actively identifying the people's inconveniences and developing solutions that are readily acceptable to the people.

| Rationalization of Regulations on Military Installation Protection Zones | The rapid urbanization of areas surrounding military installations has pushed the demand for deregulation such as lifting of military installation protection zone designations. The MND has been actively lifting and reducing protection zone designations as long as it does not interfere with military operations, to protect the people's rights and promote local residents' convenience.

[Chart 6-13] Current Status of Lifting and Reduction of Military Installation Protection Zone Designations
(Including the Lifting of Flight Safety Zone Designations)

(Unit: km²)

| Category | Total | 2009 and Before | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----------|----------|-----------------------|-------|-------|------|-------|-------|-------|-------|-------|--------|
| Released | 778.59 | 225.71 | 25.22 | 49.54 | 1.59 | 27.79 | 26.72 | 20.36 | 26.12 | 37.13 | 338.41 |
| Mitigated | 320.47 | 240.66 | 2.67 | 5.70 | 6.25 | 0.76 | 46.53 | 4.51 | 0.22 | 0 | 13.17 |
| Total | 1,099.06 | 466.37 | 27.89 | 55.24 | 7.84 | 28.55 | 73.25 | 24.87 | 26.34 | 37.13 | 351.58 |

32) Merged pre-export "preliminary export approval" and "approval for participation in international tenders" into "preliminary export approval"

33) National defense regulations identified by the Private–Public Regulation Advancement Task Force of the Office for Government Policy Coordination, and the New Industry Regulatory Innovation Committee.

In addition, the MND delegates the consultation regarding military installation protection zones to local governments,³⁴⁾ and continues to expand the scope of delegation to promote convenience for the people. In 2018, the MND delegated the consultation for additional 25.29km².

[Chart 6-14] Delegated Consultation Areas

(Unit: km²)

| Total | 2009 and Before | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------|-----------------------|--------|-------|-------|-------|-------|--------|------|------|-------|
| 1,543.64 | 643.33 | 230.06 | 55.24 | 40.56 | 93.49 | 46.65 | 344.17 | 57.2 | 7.65 | 25.29 |

Along with the lifting and reduction of military installation protection zone designations, the MND is addressing the difficulties experienced by the people through institutional improvements. In 2018, it amended the Enforcement Decree and the Enforcement Rules of the Protection of Military Bases and Installations Act to reduce the scope of the Armed Forces personnel to be consulted in case of changing the purpose of use for buildings, and the restrictions on construction activities in explosive protection zones,³⁵⁾ thereby decreasing the inconveniences affecting the people as well as the possibilities of violating the people's rights and interests.

Going forward, the MND will form civil-military consultative bodies with the local governments of adjacent areas to actively address opinions from nearby community including complaints from the people and local governments. With the changes in the operational environments,³⁶⁾ the MND plans to lift and reduce military installation protection zone designations as long as they do not interfere with military operations, and continue to lower the regulations that trouble the exercising of people's property rights.

| Adjustment of Safety Distance from Ammunitions | The MND designates and implements military installation protection zones within the minimum safe distance from ammunition

³⁴⁾ Local governments may approve the release from protection zone designations if the protection areas and agricultural complexes in the city have only a slight impact on military operations, and the development of the local community and the residents' convenience can be promoted

³⁵⁾ Revised Article 13(3)8 of the Enforcement Decree, revised Article 8(1), and removed Article 7(2) of the Enforcement Rules

³⁶⁾ Reduced number of troops, changes in weapon systems, and reorganization of unit structures, etc.

storages to protect the people's lives and properties. The designation of the protection zones limits the residents' exercise of their property rights and local development projects such as restriction on the construction or extension of buildings and public roads.

To address the restrictions on the local residents living near ammunition storages, the MND continued to reduce the safety distances restricting the residents' property rights and local development by replacing degraded ground-based ammunition storages (31% of all storages) with advanced igloo-type ammunition storages. In particular, in 2017, as a part of the endowment and concession project with Pocheon, the ROK Armed Forces built its first underground (tunnel) ammunition storage for the first time, which reduced the safety zone surrounding the ammunition unit by more than 70%, from 4.52 million m² to 1.33 million m², including 180,000 m² area in Songu-ri. The reduced safety zone greatly contributed to the development of the area and the exercise of the residents' property rights while ensuring the opening of the Guri–Pocheon Expressway as well as the branch line between Songu and Yangju.

In recognition of the potential of underground (tunnel) storages for the efficient use of national lands as well as the improvement of ammunition storage support capabilities, the MND launched a policy review in 2018. The MND will incorporate the construction of underground (tunnel) ammunition storages in its medium- and long-term plans in consideration of related matters, including the geological feasibility of the construction, to guarantee the people's safety and property rights.

5. Environment-Friendly Management of the ROK Armed Forces

| Expanding and Improving Pollution Prevention Facilities | To prevent water pollution by wastewater and sewage³⁷⁾ discharged from military installations, the MND has established and operates 2,973 sewage treatment stations and 1,344 wastewater treatment stations as of December 2017.

37) Sewage: Water contaminated by a mixture of liquid or solid created from daily lives and economic activities (Article 2, Sewerage Act)

Wastewater: Water containing liquid or solid pollutants and that cannot be used as is (Article 2, Water Environment Conservation Act)

To conserve the soil environment, the MND inspects 4,107 facilities subject to soil contamination control³⁸⁾ pursuant to the Soil Environment Conservation Act, and uses the findings for the restoration activities including decontamination projects. As for soil pollution prevention facilities, such as drum storage yards and tank dikes³⁹⁾ that prevent soil pollution caused by oil spillage and other accidents, the MND has set up 14,245 of the 17,595 facilities required by the year 2017, and another 294 facilities in 2018. The MND plans to build additional 3,056 facilities in the coming years.

| Implementing Environment-Friendly National Defense Facility Projects | The MND is currently repairing buildings containing asbestos, reducing radon emissions, and improving working sites with hazardous environments to protect servicemembers from being exposed to harmful materials including asbestos and radon.

Visual surveys conducted between October 2017 and January 2018 have confirmed 23,975 buildings containing asbestos.⁴⁰⁾ Among 16,181 buildings, excluding 7,794 buildings subject to other projects such as camp relocation or the removal of unused facilities, the MND removed asbestos from 262 buildings in 2018. Starting in 2019, the MND plans to inject more than double the budget to KRW 50 billion or more to reduce the time required for asbestos removal.

For radon reduction projects, the MND conducted surveys on military barracks between 2012 and 2015. Based on the survey, the MND completed reduction projects for 225 of the 408 building surveyed using soil depressurization and indoor ventilation.⁴¹⁾ The MND implemented reduction projects for 38 buildings in 2018 and intends to complete the projects for the remaining 145 buildings by 2019.

To improve the environment in hazardous working sites, the MND identifies facilities exceeding the environmental standards among the 2,500 facilities performing plating and maintenance

38) Facilities that are likely to cause significant soil contamination (Article 2, Soil Environment Conservation Act), which include oil storages with a capacity of 20,000ℓ or more

39) Tank dike: A bathtub-shaped structure that blocks oil spillage from ground oil tank

40) The Army, the Navy, and the Marine Corps had environment officers, and the Air Force had its own asbestos investigation team registered with the Ministry of Employment and Labor to conduct the surveys.

41) Soil depressurization: This method extracts the air in the soil beneath a building to outside (depressurizes the soil to prevent radon inflow into indoors)

Indoor ventilation: This method installs ventilation systems to extract indoor air to outdoors, and introduce outdoor air to indoors

works for ammunition storages by measuring working environments annually and conducting working environment surveys every five years. Local exhaust ventilation, ventilating systems, and dust collectors⁴²⁾ are installed in facilities that exceed the environmental standards to remove hazardous materials. The MND also provides special physical checkups to help substitute and hospitalize personnel identified to have health issues.

| Preventing Fine Dust and Implementing a Comprehensive Management Plan | Faced with the increase of high-density fine dust, the MND established the Comprehensive Fine Particle Management Plan to align its policies with those of the government and protect the health of servicemembers. The MND has identified 13 tasks in two areas—reduction of fine particle emission and unit management—which it plans to implement with focused efforts.

The key measures in the unit management area include the installation of air purifiers at the Army Training Center in 2018, and the installation of additional purifiers at the boot camps of each service, command and control cells, military barracks, and hospital rooms. In addition, the MND plans to increase the number of anti-fine particle masks supplied to each servicemember every year from 14 in 2018 to 18 in 2019.

As for the measures for the reduction of fine dust emission, the MND plans to replace all deteriorated diesel vehicles, including jeeps, buses and trucks, registered in 2005 or earlier by 2019. In addition, the MND headquarters and subordinate institutions will replace all of their vehicles for official use with environment-friendly vehicles by 2019. The respective military services have set the target percentage of environment-friendly cars to 50%, which is to be achieved by 2028. Compressed Natural Gas (CNG) and electric vehicles will be distributed after the pilot projects.

⁴²⁾ Local exhaust ventilation: processes dusts, gas, and vapors produced
Dust collector: collects and removes solid or liquid particles floating in the air

Section 6 Reinforcing Support for Discharged and Retiring Servicemembers, and Privileges for War Veterans

The MND exerts various efforts to support all servicemembers that leave the ROK Armed Forces in their efforts to find a place in the civilian world, including reinforced career transition education and employment support, and enhanced privileges for the sacrifices and endeavors of war veterans. In addition, the MND operates the military pension system to help career servicemembers enjoy stable post-retirement lives after years of dedication to their home country.

1. Reinforcing Employment Support for Discharged Servicemembers

| Employment Support for Servicemembers | The MND is currently implementing the Plan for Employment and Business Startup of Young Servicemembers (Young Servicemember SOS Project),⁴³⁾ which encompasses the entire cycle of military service from enlistment, service, and discharge.

The first phase of the plan involves providing education and counseling in order to reinforce employment capabilities and support for servicemembers. Since 2018, the MND has implemented outreach programs, sending civilian specialist counselor, for units in the field such as “Career Assistance Education” and “One-on-One Employment Counseling.” In response to requests from servicemembers, the MND refined and merged the barrack mentoring and educational tour programs into the Career Assistance Education program. The Career Assistance Education

⁴³⁾ This plan is aimed at facilitating the employment and business startup of young servicemembers. 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 enlisted servicemembers, and matches them with SMEs and venture companies. SOS: Soldiers on SMEs and Startups

program consists of the Career Instruction Course and the Employment Support Course, from which individuals can choose which course to take part in. Both courses provide education on career exploration and designing as well as the government's youth employment policies, followed by tailored education specific to each course. In 2018, the MND ran 350 courses for servicemembers at regiment-level units. By 2020, it plans to expand the program to cover 2,000 battalion-level units. One-on-One Employment Counseling matches servicemembers who completed the classes of the Employment Support Course with companies hiring new employees or refers them to the government's Youth Employment Projects. Around 5,000 servicemembers in 26 division-/brigade-level units across the three military services benefited from the counseling, and the MND plans to expand the beneficiaries to 30,000 servicemembers by 2020.

The second phase involves enhancing the employment capabilities of servicemembers through professional education courses. In collaboration with the Ministry of Employment and Labor, the MND plans to organize one- or two-day field visits to small and medium enterprises (SMEs), and work with the Ministry of SMEs and Startups to provide a professional employment capabilities course and a professional startup capabilities course for officers with technical specialties through the Small Business Training Institute (SBTI).

The third phase matches servicemembers who completed phases 1 and 2 with high-performing SMEs through the "job couple managers" at the Small & Medium Business Corporation. Moreover, the MND plans to refer soon-to-be-discharged servicemembers who completed the startup capabilities course to the short-term program provided by the Startup Academy of the Ministry of SMEs and Startups.

| Employment Support for Medium- and Long-Term Servicemembers | Most medium-/long-term servicemembers who served for five or more years are in their 30s and 40s, the period in life when spending peaks in most cases. For this reason, the MND supports their career transition in the form of extended transition periods and the career transition education system.⁴⁴⁾ In 2018, it merged the referral courses and the made-to-order courses previously

⁴⁴⁾ Career design → career course (two days) → basic course (five days) → consulting (online or five-day off-line course) → specialization-tailored course

provided by the MND into specialization-tailored courses,⁴⁵⁾ and expanded the course to meet the beneficiaries' needs.

To help medium-term servicemembers with five or more years in service decide their path and direction after service, the MND included career design in refresher training courses to help them make career choices early on, and take the career course and the basic course one or two years before their discharge. Since 2017, to help medium-term servicemembers find employment opportunities, the MND granted transition periods of one to three months depending on each servicemember's years in service. However, in response to feedback in which the period of one to three months is not sufficient for practical purposes, the MND plans to extend the transition period to between three and seven months.

Long-term servicemembers with 10 years or more in service take the career course two or three years before the beginning of their transition periods, and complete the basic course at the same time as the transition course. The transition periods range from 10 to 12 months depending on their years in service. In addition, the MND plans to foster the conditions that will help medium-/long-term servicemembers participate in employment courses, job events, recruitment events for overseas job opportunities, job academies, and other job-searching activities during their service. In 2019, the MND is considering the adoption of the "Transition Readiness Report Program," in which unit commanders should verify the transition readiness of soon-to-be-discharged servicemembers before their transition periods or six months before their discharge.

| Job Standardization Based on NCS⁴⁶⁾ | More and more public institutions and private enterprises have adopted competency-centered recruitment based on the National Competency Standards (NCS). Educational institutions are also reorganizing their curricula with NCS-based courses. Even though most of the jobs performed in the military are similar or identical to those covered by the NCS, the former has yet to be standardized. This issue caused difficulties to discharged servicemembers when they try to have their military career recognized outside the

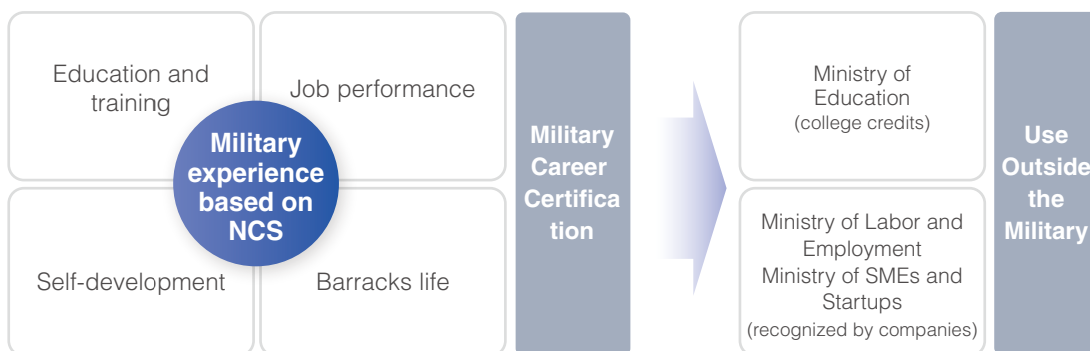
⁴⁵⁾ An education course aimed at helping servicemembers who completed the basic course and consulting improve their professional capabilities for employment; implemented in collaboration among the ROK Armed Forces, businesses, and organizations

⁴⁶⁾ NCS are 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.

military.

The MND plans to complete the standardization of jobs based on the NCS by 2022 so that discharged servicemembers can have their career and expertise recognized in similar areas outside the military. The MND will also incorporate the standardized jobs into the organizational charts and indicate the NCS-based job experiences on military career certificates⁴⁷⁾ to ensure that military careers are readily translated into college credits and work experiences recognized outside the military. To this end, the MND will establish a civil–public–military consultative body with the Ministry of Employment and Labor, the Human Resources Development Service of Korea, the Military Manpower Administration, and the academia for stable and effective promotion of the program.

[Chart 6-15] Promoting the Use of Military Career Certificates Outside the Military



| Securing Jobs for Retiring Servicemembers | The MND secures jobs for retiring servicemembers within the military by filling in positions in logistics, education, administration, and other noncombat areas with civilians, or designating the positions for civilian personnel as positions suitable for retired servicemembers.

As for jobs outside the military, the MND plans to consult with the relevant ministries to employ experienced military personnel and expand the criteria for military experiences so that

⁴⁷⁾ The military career certificate is issued under the Enforcement Rules of the Military Service Act (amended in January 2018) in lieu of the Discharge Certificate. It is expected to help servicemembers make the best out of their military service, expand their employment prospect after discharge, and incentivize enlisted members to commit themselves to their military service.

retired servicemembers can find jobs at public positions under the government's job creation roadmap as substitutes for conscripted coastal guards and firefighters, and police officers to fill in the vacancies created by the reduction of conscripted police officers.

The MND will also conclude MOUs with leading companies and organizations to provide discharged military servicemembers with special recruitment, exemption from document screening, and other benefits.

The SME Workforce Support Center of the Small and Medium Business Corporation matches job-seeking servicemembers with companies with high-quality job opportunities through AI-powered job matching and couple managers. In addition, the MND works with other related ministries to organize large-scale annual job fairs for servicemembers nearing their discharge. In addition, the MND plans to award plaques and express appreciation for those who contributed to promoting the employment of retired servicemembers during related events, such as the Korea SME Conference, and invite CEOs and HR managers for conferences to discuss cooperation for employment.



2018 job fair for soon-to-be-discharged servicemembers (March 2018)

2. Pension System That Reflects the Characteristics of Military Service

| Characteristics of the Military Pension System | The military pension system is aimed at fostering stable living conditions and improving the welfare benefits for career servicemembers and their families by providing proper monetary compensation in case of retirement after years of faithful service, passing away or retirement due to physical or mental disabilities, or convalescence due to diseases or injuries sustained on duty. Servicemembers perform duties that pose risks to their lives such as participating in battles and dangerous training exercises. Furthermore, most live and work in remote or forward areas under harsh working conditions that involve missions and long periods of standby duty. As they have to retire at the age set for each rank, most retire between the ages of 45 and 56, when the level of living expenses tends to be the highest. The military pension system, which reflects these 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 a stable livelihood for servicemembers retiring early and compensates those who sacrifice themselves for the country. The military pension has an important role in helping career servicemembers focus on their duties without having to worry about life after retirement. Developed countries provide more preferential benefits to military pension funds compared to other public pension programs in consideration of the specific characteristics of a military pension.

| Improving the Military Pension System | The Military Pension Act was amended on November 28, 2017, to allow servicemembers who retired and had their disability grade finalized on or before May 19, 2011, to apply for pensions for wounds. In addition, the MND submitted a bill to the National Assembly for a revision of the Military Pension Act in March 2018. The revision includes 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/her spouse's pension corresponding to the period during the latter's service in which the two have stayed married, if five years or more of their marriage overlaps with the latter's years in service. In addition, the revision includes a provision that discontinues the 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 funded by the state or a local government.

| Reinforcing Compensation for Accidents | Even though the compensation program for servicemembers affected by accidents differ from the Military Pension in terms of their purposes and financial sources, the two programs had been operated under the same roof ever since the enactment of the Military Pension Act in 1963. This issue undermined the state's ability to provide sufficient compensation for servicemembers affected by accidents in the course of their duties in a responsible manner. To address this issue by raising the level of compensation on par with the people's expectations and pursuing a practical advancement of the accident compensation program for servicemembers, the MND has been pursuing the enactment of the Military Disaster Compensation Act. The key elements of the proposed act provide enhanced compensations for servicemembers, including a substantial increase in the amount of disability compensations, and the rationalization of the compensations provided to bereaved families.

3. Reinforcing Privileges and Compensation for Military Service

| Recovering Korean War Remains⁴⁸⁾ | In 2007, the MND founded the MND Agency for Killed in Action Recovery and Identification (MAKRI), a special organization dedicated to recovering the remains of troops killed during the Korean War, paying tribute to these brave men who had sacrificed their lives for the country, all the while elevating their honor and addressing the bereaved families’ long-held wishes. Approximately 200 personnel are working in 5 divisions, including planning, investigation, recovery, identification, and international cooperation, with a total of eight recovery teams in action.

By 2018, a total of 11,551 sets⁴⁹⁾ of human remains were recovered, while DNA samples were taken from 44,428 bereaved family members. By additionally confirming the identities of KIAs, 131 sets of remains have been returned to bereaved families. To recover more remains while Korean War veterans and bereaved families are still alive, the MND has reinforced the organization and personnel, and is carrying out a systematic recovery project under the “Five-Year Plan for the Recovery of Remains.”

[Chart 6-16] Remains Recovery Status by Year (As of the end of December 2018; unit: no. of sets)

| Year | Total | 2000–2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|--------|-----------|-------|-------|-------|-------|------|------|------|------|------|------|
| Remains recovered | 11,551 | 2,875 | 1,284 | 1,440 | 1,387 | 1,041 | 736 | 913 | 622 | 429 | 448 | 376 |
| Korean military personnel and police officers | 10,204 | 2,233 | 1,143 | 1,328 | 1,300 | 989 | 671 | 809 | 561 | 387 | 420 | 362 |

* Cumulative total of remains discovered: 11,511 sets in total (10,204 from Korean military personnel and police officers, 18 from United Nations Force members, and 1,329 from the enemy); includes 65 bodies of Korean military personnel returned by the U.S. Defense Prisoner of War / Missing in Action Accounting Agency(DPAA)

- 48)** A national project to search for the unfound remains of about 130,000 troops who died during the Korean War to return them to their bereaved families.
- 49)** 10,204 from ROK Armed Forces and police officers, 18 from UN Command, 725 from Korean People’s Army, and 604 from China People’s Volunteer Army (PVA).



Remains of Korean KIAs in Hawaii returned to the home country after 68 years

[Chart 6-17] Status of DNA Sampling of Bereaved Families and Identification of Korean War KIAs

(As of the end of December 2018)

| Year | Total | 2000–2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------|--------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| DNA sampling | 44,428 | 3,378 | 2,282 | 4,524 | 3,388 | 4,252 | 4,765 | 4,005 | 2,645 | 2,921 | 4,041 | 4,072 | 4,155 |
| Identification | 131 | 31 | 13 | 11 | 6 | 7 | 11 | 5 | 17 | 8 | 9 | 9 | 4 |

In November 2015, at the 47th ROK–U.S. Security Consultative Meeting (SCM), the two countries discussed ways to cooperate on the recovery of Korean War remains. During the meeting, the MND and the U.S. Defense Prisoner of War/Missing in Action Accounting Agency (DPAA) signed a Memorandum of Agreement (MOA)⁵⁰⁾.

In June 2017, the two countries performed the return ceremony for the remains of Korean War KIAs of U.S. Forces, recovered in Yeongdong, North Chungcheong Province, in March 2017. In March 2018, the ROK returned 20 sets of remains of PVA members to China. On October 1, 2018, in celebration of the ROK Armed Forces Day, the ROK Vice Minister of National Defense visited Hawaii for the takeover of 64 sets of remains of the ROK KIAs during the Korean War recovered in North Korea and held a return ceremony presided by the President at Seoul Airport. The ceremony was held with utmost respect toward the heroes who sacrificed their lives for the home country, which demonstrated the government's dedication to take full responsibility to honor them.

As the experiences and techniques accumulated by the Korean War remains recovery project reached a globally recognized level, five representatives from the Vietnam National Supervisory Commission visited the ROK in September 2017 to discuss collaborations for remains recovery.⁵¹⁾ In October 2017, the Australian Minister and Vice Minister of Defense visited the ROK⁵²⁾ to learn from the knowledge in remains recovery, including identification, detection, excavation, and post-management, which the ROK accumulated through the remains recovery project.

⁵⁰⁾ The parties agreed to ①mutually provide policy support related to the recovery of remains, ②cooperate on the provision of data to locate Korean War KIAs and MIAs, ③conduct joint investigations and excavations, and ④hold annual meetings to discuss common interests and ensure cooperation.

⁵¹⁾ Five representatives of the Vietnamese Office of National Steering Board 1237 (Major General Tran Quoc Dung; September 11–15, 2017)

⁵²⁾ Nine representatives including Minister of Defense Marise Payne (October 12, 2017)

The circumstances of the Korean War remains recovery project are becoming increasingly challenging. The number of witnesses and informants has decreased year by year, while land development has resulted in geomorphic changes. Of the 10,204 sets of remains from military personnel and police officers recovered as of 2018, only 131 sets, or 1.3%, have been identified. With the number of surviving immediate family members of KIAs dwindling, participation from second-/third-generation postwar descendants and other citizens is desperately required for the identification of the remains. To this end, the MND is working with the other ministries through the Council of Relevant Ministries for Korean War KIA Remains Recovery.⁵³⁾ For example, the MND collaborated with other ministries to include questions regarding lost family members in the dwelling relocation report form and the questionnaire form for Statistics Korea's periodical demographic surveys. In addition, to ensure efficient management of the recovered remains as well as systematic and scientific identification, the MND is currently working toward the construction of an identification center with 2021 as the target year.

Verifying Participation of Nonmilitary Personnel in the Korean War | The MND takes various efforts to enhance the privileges of nonmilitary veterans for their sacrifices and endeavors, and honor the meritorious individuals who took part in the Korean War. It registers nonmilitary personnel who took part in the Korean War as meritorious individuals through the “deliberation committee for verification of participation in war.” Since 1995, the MND has issued confirmation letters of participation in the war to about 36,000 individuals.

[Chart 6-18] Nonmilitary Personnel War Participation Confirmation Letters Issuance Status

(As of October 2018, unit: persons)

| Year | Total | Student Volunteer Army | Laborer | National Guard | Civilian Component | Ranger | Volunteer Police | Railway Official | Ganghwa Youth Guerrilla | Youth Corps | Others |
|-------|--------|------------------------|---------|----------------|--------------------|--------|------------------|------------------|-------------------------|-------------|--------|
| Total | 36,190 | 1,188 | 4,215 | 1,594 | 1,534 | 8,578 | 6,466 | 6,036 | 2,405 | 576 | 3,598 |

The MND has built a database of more than 60,000 data accumulated since 1995 as well as

⁵³⁾ Launched in 2009 under Prime Minister Directive No. 647, this annual council brings together high-ranking officials from 12 ministries, including the Ministry of the Interior and Safety, for annual meetings (Chair: Vice Minister of National Defense).

the Nonmilitary Participation Search System⁵⁴⁾ to enhance efficiency in verifying participation in the Korean War. The MND also supports verified individuals to receive various benefits including honorary allowances for participating in the war, local government grants, placement in national cemeteries, and medical services at veterans' hospitals. Going forward, the MND will continue to work with related institutions, including the Ministry of Patriots and Veterans Affairs, to enhance the privileges of war veterans and honor their sacrifices.

| Compensation for KIAs of the Second Battle of Yeonpyeong | The KIAs of the Second Battle of Yeonpyeong, which took place on the West Sea on July 29, 2002, sacrificed their lives fighting in a fierce battle. However, the compensations for their sacrifice had to be determined under provisions applicable only to “deaths on duty” because the military did not have any provision regarding compensation for those killed in action in the Military Pension Act. This issue prompted the government to amend the Military Pension Act in 2004 to establish the criteria for compensation for KIAs. However, the KIAs of the Second Battle of Yeonpyeong did not benefit from the amendment.

In subsequent years, the need to provide additional compensations to the KIAs of the Second Battle of Yeonpyeong who did not receive what they deserve was continuously pointed out. Finally, a bill was submitted upon the opening of the 20th National Assembly and through the active efforts of the MND, the bill was approved in late 2017. The bill was enacted as the Special Act on the Compensation to Soldiers Killed in the Second Battle of Yeonpyeong on January 16, 2018.

The enactment was followed by the Enforcement Decree of the act, which stipulated the matters delegated by the act, including the calculation and payment procedure of compensations, which went into effect on July 17, 2018. On August 6, 2018, under the Act and the Enforcement Decree, the bereaved families received compensations ranging from KRW 140 million to KRW 180 million apart from the compensations provided in 2002. Going forward, the MND will continuously exert efforts to honor those who sacrificed their lives for the nation and fulfill its responsibility to the full extent.

54) A database system designed for immediate comparison and utilization of data on nonmilitary participation in the Korean War

Chapter 7

Military Assurance for the Establishment of a Peace Regime on the Korean Peninsula



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Signing ceremony for the agreement on the implementation of the Panmunjom Declaration (September 2018)

Section 1 Inter-Korean Military Confidence Building and Arms Control

Although the Cold War ended over a quarter century ago, military standoff has persisted, and peace has remained unstable on the Korean Peninsula. The ROK government is striving to build a peaceful Korean Peninsula without danger of war and nuclear weapons through the development of sustainable inter-Korean relations. The MND is actively taking steps to prevent accidental military clashes and ease tensions between the two Koreas while maintaining a robust defense posture. The MND will continue its efforts towards military confidence building and pursue arms control in parallel with the progress in denuclearization of the Korean Peninsula.

1. Easing Military Tensions and Confidence Building

| Policy Background | Although the Cold War ended over a quarter century ago, military standoff persisted, and peace remained unstable on the Korean Peninsula until 2017. Despite strong international sanctions and pressure, North Korea kept up its nuclear and missile provocations, threatening peace and security on the Korean Peninsula. On September 3, 2017, North Korea pushed ahead with its sixth nuclear test. Following a test launch of an Intercontinental Ballistic Missile (ICBM) on November 29, North Korea announced its “completion of nuclear capability.” Given the security situation, a fundamental strategy to enhance inter-Korean relations to establish permanent peace on the Korean Peninsula was required to overcome the vicious cycle of provocations and sanctions. Accordingly, on April 27, 2018, the leaders of South and North Korea declared the beginning of a “new era of peace” through the ‘Panmunjom Declaration.’

| Progress of the ROK Government’s North Korea Policy | Since its inauguration in May 2017, Moon Jae-in’s administration has accelerated its efforts to establish permanent peace on the Korean Peninsula and enhance inter-Korean relations in a comprehensive and groundbreaking manner against the backdrop of a strong and robust defense. In 2017, in spite of unrelenting provocations by North Korea, President Moon made an overture during a speech delivered

on June 24 at the opening ceremony of the WTF World Taekwondo Championships in Muju, requesting North Korea's participation in the PyeongChang Winter Olympic Games. In July, he announced the “Berlin Initiative,”¹⁾ and at several diplomatic events, including the keynote speech to the UN General Assembly in September, he repeatedly delivered the consistent message that “what we seek is only peace.”

North Korea began to favorably respond to the ROK government's proposals through the 2018 New Year's address by Kim Jong-un, chairman of the State Affairs Commission of the Democratic People's Republic of Korea (DPRK). Following the “Inter-Korean senior-level talks” on January 9, 2018, North Korea responded positively to the ROK government's desire to improve inter-Korean relations by



Tree-planting ceremony during the 2018 Inter-Korean Summit (April 2018)

sending a large delegation of athletes and officials, including a cheering squad and an art troupe, to the PyeongChang Winter Olympic Games. Finally, on April 27, an inter-Korean summit was held at the Peace House in Panmunjom for the first time in 11 years, where the ‘Panmunjom Declaration for Peace, Prosperity and Unification of the Korean Peninsula’ (hereinafter the “Panmunjom Declaration”)²⁾ was adopted. Through this declaration, the two leaders announced the beginning of “a new era of peace on the Korean Peninsula,” and pledged to facilitate a comprehensive and groundbreaking advancement in inter-Korean relations, alleviate military tensions and abide by the nonaggression agreement, and commit to the complete denuclearization of the peninsula and the establishment of a peace regime. The two leaders met again for another inter-Korean summit, this time held in Pyongyang from September 18 to 20, 2018, adopting the ‘Pyongyang

- 1) On July 6, 2017, during a speech at the Körber Foundation in Berlin, Germany, President Moon outlined the “five policy directions for the dismantlement of the Cold War and the realization of permanent peace on the Korean Peninsula.” To make the breakthrough necessary to steer toward these policy goals, President Moon presented four practical proposals to North Korea including the resumption of inter-Korean dialog and the reunions of separated families.
- 2) An agreement adopted between President Moon Jae-in and State Affairs Commission Chairman Kim Jong-un at the inter-Korean summit on April 27, 2018, held at the Peace House in Panmunjom. It includes the following issues: the realization of a nuclear-free Korean Peninsula, declaration of the end of the Korean War within the year, establishment of a joint liaison office in Gaesong, and resumption of reunions of separated families.

Joint Declaration,³⁾ which includes practical measures to expand and advance relations between the two Koreas based on trust built through the implementation of the ‘Panmunjom Declaration.’

| Efforts by The ROK Armed Forces |

By maintaining a robust security posture based on strong defense capabilities, the ROK Armed Forces provides military support for the ROK government’s current North Korea policy initiatives such as inter-Korean summits and the adoption of the ‘Panmunjom Declaration.’ In line with the ROK government’s efforts toward the advancement of inter-Korean relations, the



8th Inter-Korean General Officer-level Military Talks
(June 2018)

MND is undertaking active efforts to ease inter-Korean military tensions and build confidence. Following the announcement of the Berlin Initiative on July 17, 2017, the MND publicly proposed “Inter-Korean military talks” to cease hostile acts around the Military Demarcation Line (MDL). Although North Korea did not accept immediately, around the time of the inter-Korean summit in April 2018, both sides ceased the use of loudspeakers within the Demilitarized Zone (DMZ) and dismantled them in a symbolic gesture to end hostile acts against each other.⁴⁾

The Panmunjom Declaration signed by the leaders of both sides includes a series of substantive measures to alleviate military tensions and reduce the threat of war. They include: ceasing all hostile acts against each other; transformation of the DMZ into a peace zone; establishment of a maritime peace zone and preventing accidental military clashes in the areas around the Northern Limit Line (NLL) in the West Sea; and regularly holding inter-Korean military talks. In order to

3) A joint declaration adopted between President Moon and State Affairs Commission Chairman Kim Jong-un at the inter-Korean summit in Pyongyang on September 18–20, 2018, stressing the need for a thorough implementation of the Panmunjom Declaration, and that contains various practical methods of implementation.

4) As of 12:00 a.m. on April 23, 2018, the MND suspended propaganda broadcasts in the DMZ, and between May 1 and 4, dismantled the loudspeakers. North Korea also ceased broadcasts from April 24, and dismantled on May 1 and 2.



Military Agreement for
the Implementation of the
Historical Panmunjom
Declaration adopted



Inter-Korean general
officer-level military
talk resumed in
11 years

uphold the military commitments made in the ‘Panmunjom Declaration,’ the military authorities of South and North Korea met on June 14, 2018, for the “8th Inter-Korean General Officer-level Military Talks.” Consequently, the two sides agreed to restore the “June 4th Agreement”⁵⁾ on the prevention of accidental naval clashes in the West Sea, and agreed to fully restore the military communication lines in the Eastern and Western transportation corridors. Following this, the international vessel communication network, which had been out of use in the West Sea since May 2008, was normalized and became fully functional in July 1, 2018. Moreover, the military communication lines in the Western and Eastern transportation corridors were also fully restored, as of July 16 and August 15, respectively. On July 31, 2018, the “9th Inter-Korean General Officer-level Military Talks” was held to further discuss the implementation of the ‘Panmunjom Declaration’ in the military domain. The military authorities of both sides reached accord on the basic framework for the implementation plan for issues such as: transformation of the DMZ into a peace zone; establishment of a maritime peace zone around the NLL in the West Sea; and, providing military assurance for inter-Korean exchange and cooperation. The two sides decided to further discuss the concrete timeframe and the detailed method of implementation.

The military authorities of South and North Korea exchanged several drafts of an agreement that contains realistic measures to implement the ‘Panmunjom Declaration’ in the military domain. On September 13, 2018, the draft of the agreement was fine-tuned at the 40th Inter-Korean Working-level Military Talks. And finally, on September 19, 2018, in the presence of both summits, the defense ministers of South and North Korea signed the ‘Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain’ (also known as the “Comprehensive Military Agreement (CMA)”) as a supplementary agreement to the ‘Pyongyang Joint Declaration’. The CMA contains effective measures to ease inter-Korean military tensions, build confidence and reduce the danger of war such as: cessation of all hostile acts against each other; withdrawal of Guard Posts (GP) within the DMZ; demilitarization of the Joint Security Area (JSA) in Panmunjom; pilot inter-

5) 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 General Officer-level Military Talks. Provisions to prevent accidental naval clashes contained in this Agreement include ①the utilization of the international vessel communication network, ②establishing and using rules on signal flags and lights, ③exchange of information on illegal third country fishing boats, and ④the creation of a communication liaison office in the West Sea.



Demotion of GPs in the North Korea side of DMZ

Korean joint remains recovery; establishment of a maritime peace zone near the NLL in the West Sea; and joint utilization of the Han River Estuary (HRE). In order to ensure concrete implementation of the CMA, the two sides convened the “10th Inter-Korean General Officer-level Military Talks” on October 26, 2018, and assessed the interim status of implementation and discussed the way forward.

In accordance with the ‘Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain,’ the military authorities of South and North Korea ceased all hostile acts on land, sea and air as of November 1, 2018. South and North Korea, together with the United Nations Command (UNC), are making progress to demilitarize the JSA by holding three iterations of the “Trilateral Consultative Body.” Moreover, as a pilot project, the military authorities of the two Koreas withdrew firearms, equipment and personnel from 11 GPs within the DMZ, and on November 30, 2018, both sides completely dismantled and destroyed 10 GPs, with the exception of one preserved GP on each side. Following this, on December 12, 2018, soldiers from both sides crossed the MDL for the first time since the division of Korea to conduct a joint verification at the sites of the 11 GPs. In regard to the joint remains recovery project at Arrowhead Heights in DMZ, the recovery site was demined, and a road was connected between both sides ahead of the actual remains recovery operations set to begin in April 2019. In the HRE, a joint hydrographic survey was conducted from November 5 to December 9, 2018, to ensure freedom of navigation within the area for civilian vessels.

The MND will support the ROK government’s North Korea policy toward peace and prosperity on the Korean Peninsula by leading the effort for easing inter-Korean military tensions and confidence building through successful implementation of the agreed military measures.

2. Establishment of a Peace Regime on the Korean Peninsula and Arms Control

| Establishment of a Peace Regime⁶⁾ | With the Armistice Agreement maintained since 1953, both South and North Korea have steadily worked to enable a transition from armistice to peace.

⁶⁾ The state when the Armistice Agreement is replaced by a peace treaty and sufficient mutual trust exists to ensure permanent peace legally, institutionally, and realistically

Since its inauguration in May 2017, Moon Jae-in's administration has made continuous efforts to enable the denuclearization of the Korean Peninsula, establish permanent peace, and enhance U.S.-DPRK relations through advancement of inter-Korean relations. Notably, through the Berlin Initiative announced in July 2017, President Moon affirmed before the world his intent to sign a peace treaty along with complete denuclearization by taking a comprehensive approach towards the North Korean nuclear issue as well as peace establishment. North Korea favorably responded to the ROK government's commitment, which led both sides to pledge to "actively cooperate toward the establishment of a permanent and solid peace regime" through the 'Panmunjom Declaration' on April 27, 2018.

During the process of transition from armistice to peace, the MND plans to stably manage the inter-Korean military situation by maintaining the armistice system and a robust ROK-U.S. combined defense system. Furthermore, the MND will support the ROK government's effort in the military domain to cease hostile relations between the two Koreas and bring permanent peace to the Korean Peninsula through the "end-of-war declaration". As progress is made toward the denuclearization of the Korean Peninsula and the establishment of a peace regime, the MND will embark on arms control initiatives and, at the same time, embrace the effort of inter-Korean military confidence building. The denuclearization of the Korean Peninsula and the establishment of a peace regime will put an end to the long-standing division and confrontation, laying the stepping stones toward co-existence and mutual prosperity.

| Arms Control⁷⁾ | In the Panmunjom Declaration, South and North Korea agreed to carry out disarmament in a phased manner as military tensions are eased and progress is made in building confidence. The Panmunjom Declaration reaffirms the commitment towards building confidence expressed by their leaders in the Agreement on Reconciliation⁸⁾, Non-Aggression, and Exchanges and

⁷⁾ 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 the control of operation and structure (military forces, weapons) of military power and the imposition of sanctions against the violation of agreed-upon terms

⁸⁾ Article 12 of the Agreement on Reconciliation, Non-Aggression, and Exchanges and Cooperation between South and North Korea: The two sides shall discuss and carry out steps to build military confidence and realize arms reduction, including phased reductions in armaments including the elimination of weapons of mass destruction and attack capabilities, and verification thereof.

Cooperation between South and North Korea. As the military authorities of the two Koreas agreed to continue to discuss various practical measures to realize a phased disarmament in the 'Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain', they are presented for the first time with a chance to dramatically change the conventional military order of the Korean Peninsula by reaching a consensus on practical methods for preventing accidental clashes and building confidence through the control of each side's military forces. Above all, a turning point has been provided to transform the Korean Peninsula into a permanent peace zone by turning the DMZ and the West Sea, the symbols of conflict and confrontation, into a land and sea of peace. Going forward, the ROK government intends to discuss disarmament with North Korea in a phased manner by reflecting on the progress made in the practical military confidence building measures between South and North Korea for the establishment of a peace regime on the Korean Peninsula.

In keeping with the ROK government's position on this issue, the MND intends to prepare measures necessary for Operational Arms Control⁹⁾ and Structural Arms Control¹⁰⁾ by considering the shifts in the security environment surrounding the Korean Peninsula and the extent of the implementation of military confidence building measures. The MND will begin by actively undertaking measures to prevent accidental clashes and building military confidence agreed upon in the Panmunjom Declaration such as substantively transforming the DMZ into a peace zone, creating a maritime peace zone around the Northern Limit Line (NLL) in the West Sea, holding regular military talks, and establishing a direct communication line between the military authorities of South and North Korea. In addition, the MND will carry out operational arms control in a phased manner, commensurate with the degree of détente and confidence building, by restricting large-scale military activities and limiting or adjusting the deployment of military might, and push ahead with structural arms control to ensure peace on the Korean Peninsula according to the progress made in denuclearization of the Korean Peninsula and construction of a peace regime.

In this process, there will be no security issues, and the ROK government will maintain a robust security posture to prevent such concerns from arising.

9) Arms control measures to reduce the risks of, or prevent, war by placing constraints on the operations and deployment of military forces without changing their structure or size.

10) Any measures adopted to maintain the stability and balance of the military by structurally constraining or reducing military forces and weapons systems that are practical elements of forces including their composition and organization.

Section 2 Military Assurance for Inter-Korean Exchange and Cooperation and Resolution of the ROK POW Issue

The MND is providing military assurance for inter-Korean exchange and cooperation through various measures such as the military assurance for inter-Korean traffic and the operation of military communication lines. In addition, the MND is striving to resolve the ROK prisoners of war (POWS) issue from a humanitarian perspective. As inter-Korean traffic and contacts as well as cooperation activities are likely to increase in various fields in the implementation of the Panmunjom Declaration and the Pyongyang Joint Declaration in September 2018, the MND intends to actively undertake military assurance measures.

1. Military Assurance for Inter-Korean Exchange and Cooperation Projects

Overview | Through the Panmunjom Declaration, the two Koreas agreed to invigorate inter-Korean exchange and cooperation in wide-ranging fields and to encourage visits and contacts. Projects, such as the establishment of a joint liaison office and modernization of the Donghae & Gyeongui line railroads and roads are currently underway. The MND has fully restored and normalized the military communication lines in the Eastern and Western Transportation Corridors to facilitate inter-Korean traffic and communication, thereby assuring exchange and cooperation activities between both sides.

Military Assurance for Inter-Korean Traffic |

Direct traffic between the two Koreas is mostly by ground traffic, with sea and air routes used only occasionally. Roads and railway within the joint administrative area in the Eastern and Western Transportation Corridors are the main ground routes used by inter-Korean traffic. However, the railway



Ground vehicles escorted across the joint administrative area (Eastern Transportation Corridor)

was closed in December 2008. Ground traffic was mostly bound for the Gaesong Industrial Complex in the joint administrative area of the Western Transportation Corridor, but with the shutdown of the Gaesong Industrial Complex in February 2016, all ground traffic has been halted. However, the cross-border movement of personnel by ground transportation resumed with North Korean delegations of officials, athletes, and cheering squads traveling to the ROK via roads in the Western Transportation Corridor to participate in the PyeongChang Olympic and Paralympic Winter Games in February–March 2018. The ROK Armed Forces implements military assurance measures for ground traffic in consultation with the UNC and the Korean People’s Army, and provides the security and escort for the traffic within the DMZ.

Maritime cross-border traffic was suspended with the May 24 measures¹¹⁾ that banned North Korean vessels from using shipping lanes in South Korea. However, maritime passages resumed in February 2018 when the *Man Gyong Bong* 92 ferry departed from Wonsan Harbor, carrying a North Korean art troupe sent to participate in the PyeongChang Winter Games, was allowed to enter the port of Mukho. When maritime traffic is fully resumed, the ROK Armed Forces will take the necessary actions to guarantee the safety of vessels navigating across inter-Korean sea borders.

Air traffics are generally 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 art troupe visiting North Korea in March 2018 flew via a direct route over the West Sea. In January 2018, ROK athletes participating in the joint training program at the Masikryong Ski Resort in North Korea flew via a direct route temporarily opened over the East Sea, as ROK reporters covering the demolition of a North Korean nuclear testing site in May. Meanwhile, in July 2018, a ROK Air Force transport aircraft was provided for the ROK delegation participating in the inter-Korean friendly basketball game held in Pyongyang. ROK Air Force aircrafts were also provided to transport goods and supplies for the Pyongyang summit in September and to airlift Jeju-do tangerines to North Korea in return for the shipment of mushrooms from Pyongyang. In situations where it is necessary for a flight to be carried out via a direct route over the East Sea or West Sea, the ROK Armed Forces provides the military assurance for a safe flight.

11) 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 the prohibition of North Korean ships from sailing in ROK waters, halting of inter-Korean trade (excluding the Gaesong Industrial Complex), banning visits by the ROK citizens to North Korea, suspension of South Korean investment in North Korea, and all aid projects.

Operation of Inter-Korean Military Communication Lines | To support inter-Korean exchange and cooperation projects, South and North Korea have put a communication system in place within the joint administrative areas of the Eastern and Western Transportation Corridors. Following the agreement to install hotlines linking military situation rooms on September 17, 2002, a communication line was set up in the Western Transportation Corridor on September 24 and in the Eastern Transportation Corridor on December 5, 2003. However, the communication line in the Eastern Transportation Corridor was destroyed in a forest fire in November 2010. Since the shutdown of the Gaesong Industrial Complex, the military communication line between both sides was severed in February 2016 and closed for nearly 2 years as North Korea blocked it in the Western Transportation Corridor. On January 9, 2018, the two sides met for senior-level talks where they agreed to restore the military communication line. As a result, the communication line in the Western Transportation Corridor was reconnected. However, the line has only been operational for fixed-line communication because of problems such as obsolescence. Subsequently, on June 14, 2018, during the “8th Inter-Korean General Officer-level Military Talks,” the two sides agreed to reinstall the damaged line in the Eastern Transportation Corridor and fully restore the obsolete line in the Western Transportation Corridor. A working-level contact for communication was held on June 25 to discuss practical measures for the restoration of military communication lines.



Working-level contact for Inter-Korean communication channels (June 2018)

The military authorities of the two Koreas completed the restoration of the line in the Western Transportation Corridor on July 16, 2018, and the line in the Eastern Transportation Corridor on August 15, 2018.¹²⁾ These two lines have been normalized and are now fully functional. With the normalization of the military communication lines, the MND can provide support toward a large gamut of exchange and cooperation activities between the two Koreas including the establishment of a joint liaison office, reunions of separated families, and projects for modernizing inter-Korean

¹²⁾ As part of steps toward the normalization of military communication lines, the ROK government provided North Korea with necessary equipment and supplies, which was exceptionally approved by the UN Security Council (UNSC) Sanctions Committee on North Korea on July 14, 2018.

railways and roads. The normalization of the communication lines is expected to not only facilitate military assurance for inter-Korean exchange and cooperation but also effectively contribute 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 ROK POWs detained in North Korea titled the “Act on the Repatriation and Treatment of the Republic of Korea Armed Forces Prisoners of War” while preparing government-wide measures for their repatriation and support. Through inter-Korean dialogue, the ROK government has continuously urged North Korea to assist in its effort to determine the number of POWs 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.

Amid a standstill in diplomatic efforts, 80 ROK POWs escaped North Korea on their own from 1994 to 2018, as detailed in [Chart 7-1]. After 2011, there has been no return of ROK POWs because of aging and increased surveillance of North Korean authorities to prevent their escape. As of the end of December 2018, 27 repatriated POWs are still alive.

[Chart 7-1] Repatriated POWs

(As of December 2018, unit: persons)

| Year | Total | 1994 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 -2018 |
|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| POWs | 80 | 1 | 1 | 4 | 2 | 9 | 6 | 6 | 5 | 14 | 11 | 7 | 4 | 6 | 3 | 1 | - |

The ROK government is making its utmost effort to ensure the safe repatriation of POWs and their families who escaped 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 protections extended to citizens abroad and to ensure their speedy repatriation. In 2015, the ‘Act on the Repatriation and Treatment of the Republic of Korea Armed Forces Prisoners of War’ was amended to allow the government to assist in the repatriation of the remains of fallen POWs.

However, in the current situation where Pyongyang flatly denies even the existence of ROK POWs detained in North Korea, a fundamental solution remains elusive. Therefore, during the inter-Korean Ministerial Talks and Red Cross talks following the inter-Korean summit in June 2000, the two sides agreed to start discussing and seeking solutions for 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 when discussing 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. In 2014, following the 2013 agreement to hold family reunions, information on the matter of 20 POWs' life was confirmed. Until 2018, 56 POWs were identified on the matter of their life or death through family reunion events and among them, 18 were reunited with their families.

Supporting Resettlement of the Repatriated ROK POWs | Pursuant to the 'Act on the Repatriation and Treatment of the Republic of Korea Armed Forces Prisoners of War', the MND provides support to repatriated POWs to assist in their settlement process and guarantee stable living conditions. The repatriated family members of a POW who passed away in North Korea are granted a special status that makes them eligible for extra financial support per household apart from the economic assistance and benefits for general North Korean defectors.

Starting in 2012, private-sector firms with the appropriate specialties are contracted to assist with the settlement process of repatriated POWs. Through personalized approaches in the form of house calls and special events, practical demands of the repatriated POWs are being met. In 2013, the relevant law was amended to increase support for the settlement of repatriated POWs who are now provided with compensation payments in the form of pension, a rental housing unit, and medical expenses support from the ROK government.



A special event organized for repatriated POWs

The MND will continue its efforts to find a fundamental solution to the POW issue by identifying and repatriating those who are still alive. At the same time, the MND will also strengthen the cooperation system with third countries to ensure the safe repatriation of POWs and their families escaping from North Korea and lead government-wide efforts to improve the settlement support policy for them.