

The 2022-2026 Mid-term Defense Plan for Successful Accomplishment of Defense Reform 2.0 and Building a Digitalized Strong Military

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The Republic of Korea Ministry of National Defense (ROK MND) announced its 2022-2026 Mid-term Defense Plan on August 2, 2021. To effectively respond to current and future threats and potential changes in security environments, the Mid-term Defense Plan details the financial investment plans for the maintenance and development of the ROK Armed Forces over the next five years. The plan set a total budget of KRW 315.2 trillion for the next five years (an average annual increase of 5.8 percent). Compared with the 2021-2025 Mid-term Defense Plan of the previous year, the plan saw a total increase of 14.5 trillion won (from 300.7 trillion won to 315.2 trillion won). Moreover, a total of KRW 106.7 trillion (with an annual average increase rate of 8.3%) will be invested toward force improvement programs (FIPs) expenses, aimed at strengthening state-of-the-art technology within the force. In addition, KRW 208.5 trillion (with an average annual increase of 4.5%) will be used for investing in force operation costs to create a safe and reliable work environment within the barracks.

Goals of 2022-2026 Mid-term Defense Plan

The first goal of the 2022-2026 Mid-term Defense Plan, the fourth mid-term plan from the current administration, is to successfully complete the ongoing Defense Reform 2. By completing Defense Reform 2.0, the ROK MND intends to solidify the foundation for building a strong military that protects people's security and lives. The second goal is to enable the ROK military to

proactively respond to the increasingly diverse non-traditional security threats (such as cyber threats, terrorism, infectious diseases, etc.) and the latest developments in science and technology (such as artificial intelligence and robotics), thereby revitalizing the military as a strong, future-oriented force based on advanced science and technology. For this goal, even if the number of standing troops is reduced to around 500,000, measures will be implemented to reorganize the military structure into a technology-intensive structure so that combat power can be strengthened despite the reduction in personnel and unit numbers.

Breakdown of FIPs

The force improvement programs (FIPs) emphasize enhancing the ROK armed forces as a strong future-oriented force, capable of proactive response to omnidirectional security threats. To achieve this, the FIPs expenses have been distributed to focus on: i) expanding omnidirectional deterrence capabilities, ii) securing operational response capabilities following the reorganization of military structure, iii) reinforcing response capabilities for non-traditional threats, iv) strengthening innovative research and development (R&D) and the indigenous defense industry.

First, in order to acquire the ROK military's independent surveillance and reconnaissance capabilities and precision strike capability against strategic targets, the programs will utilize military reconnaissance satellites, unmanned air vehicles (HUAV and MUAV), and Baekdu surveillance aircraft to consistently monitor important military targets. The programs also seek to expand surveillance and long-range strike capabilities by securing long-range air-to-ground missiles and new-type missiles. Moreover, in order to establish Korea Air and Missile Defense (KAMD, a Korean-style missile defense system) to counter ballistic missiles and long-range artillery, ballistic missile early warning radar systems and long-range surface-to-air missile (L-SAM) will be fielded. At the same time, the Patriot and Cheolmae-II will be upgraded to improve their ability to detect ballistic missiles and defend core facilities. The programs will also reinforce missile forces to secure dominant response capabilities.

Second, to secure core military capabilities related to the reorganization of the military structure, the programs will strengthen counterfire warfare performance, precision guided munitions, and communication capabilities, while also deploying 230mm class multiple launch rockets, wheeled armored vehicles, next-generation Aegis destroyers, Boramae (KF-X), and amphibious helicopters. These measures will seek qualitative and quantitative advancements in

ground, sea, and air operational capabilities.

Third, in order to respond to non-traditional threats such as COVID-19, the ROK military will continue to improve their capabilities in counterterrorism, disaster relief, and protection of overseas Korean nationals. The programs will strengthen special strike and day/night surveillance capabilities to ensure the effective performance of counterterrorism units and chemical/biological (CBRN) defense units. Accordingly, it plans to secure customized equipment and materials, such as angled (CornerShot) guns, explosive ordnance detection and disposal robots, and new-type CBRN reconnaissance vehicles. In addition, the ROK military plans to reinforce their relief efforts and protection of Korean civilians and overseas nationals in the event of a disaster by fielding helicopters and large transport ships for medical evacuation.

Lastly, in order to secure core defense technologies and vitalize the defense industry, intensive investments will be made in the following: acquisition of new 4th-Industrial-Revolution-era technologies in the defense field; basic research and development of the designated eight core defense strategic technologies¹ (such as autonomous technology and artificial intelligence); and improvement of infrastructure and restructuring of R&D institutions to ensure innovative research and development.

Breakdown of Force Operations

Force operations focus on the provision of operational stability and support, even during the reorganization of unit structures to incorporate advanced technology, and the establishment of a high-morale barracks culture. In line with these goals, force operation costs have been distributed for: i) strengthening force support and reinforcing vigilance capabilities, ii) securing response capabilities and support systems against non-traditional threats, iii) materializing “smart national defense” by incorporating 4th-Industrial-Revolution technology, iv) reorganizing the military structure to focus on combat efficiency, and v) significantly improving service conditions for military personnel to create a safe and reliable environment in the force.

¹ The eight key strategic technologies: autonomous/artificial intelligence-based surveillance and reconnaissance, hyper-connected/intelligent command and control, ultra-high-speed/high-power precision strike, futuristic propulsion and stealth-based platform, combined manned and unmanned combat, advanced technology-based personal combat system, active cyber response and future protection, futuristic advanced new technology.

First, to maintain warfighting capabilities through strengthened force support and vigilance, performance-based logistics (PBL) support strategies will be expanded to a greater amount of equipment. To maximize the operational capability of existing forces, follow-up logistical support will be enhanced for newly fielded weapons, such as mid-range surface-to-air missile (M-SAM), aerial refueling aircraft, MUAV, and UAV. Meanwhile, to reinforce vigilance, drones will be employed to supplement guarding at major facilities, including ammunition depots and air bases, and perimeter fencing facilities will be reinforced. Furthermore, "Warrior Platform" future combat system equipment and new bulletproof helmets will be supplied to all soldiers to improve individual combat capabilities and survivability.

Second, to ensure swift execution of missions, supplies, equipment, and training grounds necessary for counterterrorism and CBRN operations will be secured. In addition, response capabilities to infectious diseases will be strengthened. Related plans are to increase the nursing workforce responsible for patient treatment and expand procurement of medical supplies and equipment necessary for treatment and isolation, such as negative pressure patient isolation devices and mobile medical units.

Third, to enhance security of the cyberspace of national defense and strengthen cyber threat response capabilities, cyber threat detection and identification systems, along with defense certification systems, will be upgraded. In addition, cyber experts will be fostered, such as the training of elite cyber warriors (up to 1,000 personnel), and cyber training systems will be improved.

Fourth, to build a smart military force with greater efficiency in defense operations, new 4th-Industrial-Revolution-era technologies, such as AI, drone technology, and advanced robotics, will be proactively introduced in the defense field to lay the foundation for the continuous future advancement of a strong military. The plans for the creation of a super-intelligence and hyper-connected network-based defense infrastructure include measures such as the launching of the Army "smart unit" based on wireless networks, the Navy "smart battleship" that uses exclusive wireless networks within the ship, and the Air Force "smart wing" that focuses on modernizing the entire unit. In addition, in cooperation with the Ministry of Science and ICT, the MND plans to offer AI literacy education for all soldiers to enhance their understanding of AI, thereby simultaneously training 50,000 personnel as future leaders of key national industries for the next five years. To

nurture officers and staff with expertise in the field of information and communications, a specialized training course has been established in collaboration with the IA-specialized Graduate School, and around 1,000 personnel complete the course annually.

Fifth, plans are to apply the three major areas of the Korean New Deal (“Digital, Green, Human” New Deal), the core policy task of the current administration, to the defense field. In implementing the Digital New Deal, measures will be developed which converge military data and artificial intelligence technology, such as the AI-integrated coastal detection systems and multi-source video convergence systems. In addition, virtual reality/augmented reality (VR/AR) training systems will be introduced that allow soldiers to experience realistic battlefield environments free from time and spatial constraints. By having such a practical scientific training system, soldiers will be able to maintain their combat capabilities by acquiring proficiency within a short period of time. In addition, the Navy’s maintenance depots will be converted into smart factories utilizing big data and the Internet of Things (IoT), and the Army’s 2nd Supply Group will newly construct a smart logistics center, promoting the digitalization of maintenance and logistics operations.

Sixth, to meet the goal of reducing the number of standing troops to 500,000, the military unit structure will be refined into a technology-intensive structure. To ensure professionalism throughout the force, combat units are reinforced through leadership centered on officers and non-commissioned officers, whereas for non-combat units, personnel will be replaced by the civilian workforce, such as civilian employees. The rank structure of officers and staff will be reorganized into one that allows the implementation of “smaller acquisition, longer service,” and the number of officers and non-commissioned officers among the total force is planned to increase to 202,000 by 2026, or up to 40.5 percent of standing troops. Meanwhile, in order to minimize the impact of the reduction of troops, the reserve forces will be converted into a more elite force. Along with improving the training conditions and treatment of reserve forces, plans are to expand part-time reserve officers and reinforce the combat gear for mobilization-based units.

As can be observed, the 2022-2026 Mid-term Defense Plan covers the essential requirements in all areas of national defense to successfully complete Defense Reform 2.0 and lay the foundation for building a strong military. Through the latest Mid-term Defense Plan, the ROK Ministry of National Defense will achieve its vision of “strong security, proud military, and shared national defense” without any setbacks.