



Online Series

2017. 09. 29. | CO 17-28

Possibility of North Korea's Nuclear Abandonment and Countermeasures

Oh Gyeong-Seob
(Research Fellow, North Korean Studies Division)

Nuclear Development Processes and Goals

According to William C. Potter, nuclear development consists of the following stages: 1) nuclear weapons technical Knowhow and manufacturing capability, 2) possession of research or power reactors, 3) access to non-safeguarded fissile materials, 4) bomb in the basement, 5) test atomic explosion, 6) stockpile of atomic weapons, 7) test thermonuclear explosion, and 8) secure C3 and second strike capability. North Korea openly conducted six nuclear tests in order to stockpile nuclear weapons, improve its nuclear weapon capabilities through the development of hydrogen bombs, and possess second strike capability through the development of an ICBM. North Korea has proven its boosted fission weapons and developed short, medium, and long-range ballistic missiles (SRBM · IRBM · ICBM). It has had at least 10 to 20 or 13 to 45 nuclear weapons as of January 2017.

North Korea has not developed an ICBM with a nuclear warhead mounted yet. Ballistic missile tests have so far failed to demonstrate ICBM

reentry technology and precision-guidance system. However, in the near future North Korea will deploy Nuclear Tipped ICBMs. In fact, some domestic and international research institutions and the Defense Intelligence Agency (DIA) of the US Department of Defense analyzed that North Korea could have a reliable nuclear-armed ICBM capable of carrying a nuclear warhead by sometime 2018.

The goal of North Korea's nuclear strategy is to acquire minimum deterrence against the US by securing second strike capability. The development of a Nuclear Tipped ICBM would be pointless if North Korea were to not take second strike capability against the US into consideration. It is uncertain whether North Korea will be able to possess a second strike capability to carry out minimum deterrence. This is because, considering the economic and military capabilities of North Korea, even if all available resources were mobilized, it would be difficult to reach the nuclear capability to carry out minimum deterrence. North Korea's military capability, in which even several nuclear weapons could withstand an initial US attack, should be able to penetrate the US missile defense system and hit a major US metropolis by second strike.

South Korea and the US face the challenge of accurately evaluating North Korea's minimum deterrence in advance. In fact, it is quite difficult to verify the exact number of Nuclear Tipped ICBMs. Furthermore, whether the US will be able to completely destroy North Korean nuclear weapons or shoot down all nuclear weapons with its missile defense system is still in question. Thus, North Korea seems to be convinced that even if it does not possess second strike capability and only possesses Nuclear Tipped ICBMs, it would still be able to deter a conventional US military attack.

Conditions for Nuclear Abandonment

Under what conditions will North Korea, which is a de facto nuclear state, choose nuclear abandonment? When the benefit of possessing a nuclear weapon

outweighs the cost of nuclear development, states will choose development. North Korea is willing to pay for the cost of nuclear development because of its immense expected advantages. In order for the international community to put pressure on North Korea's nuclear development, it is necessary to increase the cost of development. The international community should also determine ways to compensate countries for the cost of giving up nuclear weapons.

North Korea views nuclear armament as advantageous because it would ensure the security of its regime and its system. This is because nuclear weapons are a means of securing the system and regime against threats posed by the United States—threats that entail the use of conventional military weapons. In order for the international community to induce the North Korean regime into abandoning its nuclear weapons, it is important to warn North Korea that nuclear armament will lead to regime collapse while nuclear abandonment will result in sufficient compensation and guarantee of the regime. However, the international community, while dealing with the North Korean nuclear issue, failed to pose a serious threat towards the security of the North Korean regime, and also failed to reach consensus on how to guarantee the security of the regime. Attempts to reach North Korean nuclear abandonment have therefore failed with each endeavor.

It is unlikely that North Korea will surrender with the current level of sanctions on North Korea. The sanctions on North Korea will seriously impact the North Korean economy, but will not threaten the survival of the regime. It is unlikely that the North Korean regime will succumb to this level of sanctions and lay down its nuclear weapons which are a means of survival for the regime. Because of the nature of the North Korean regime, the current level of sanctions on North Korea will not trigger domestic political unrest threatening the Kim Jong Un regime. Because North Korea does not have opposition parties, opposition factions, a civil society with political opposition forces or alternative forces, even if economic unrest deepens, chances of political opposition or division occurring from the inside are low. For example, the North Korean regime did not collapse during the March of Suffering, when 600,000 to 1 million people starved to death.

Countermeasures

Countermeasures against North Korea's nuclear ambitions and advancement should enforce strict nuclear deterrence and strong sanctions against North Korea. The most important of these is building a nuclear deterrent system. When it comes to extended deterrence, improving reliability and performance is important. It is timely that the South Korean government demand to regularize the Extended Deterrence Strategy and Consultation Group (EDSGC) and the regular controlling of assets and their deployment in the Korean peninsula. It is necessary to regularly expand and improve deterrence assets, with assets such as a B-1B long-range strategic bomber, a B-2, B-52 long-range nuclear bomber, an Aegis-equipped ship, a nuclear propulsion submarine and a nuclear propelled aircraft carrier, scheduled to be deployed for the end of the year on the Korean peninsula.

We must build our own military response capabilities with urgency. For this, budget allocation and policy commitment are important. The government should allocate and support a budget to quickly establish a Korean-type missile defense system (KAMD), a kill chain, and a mass retaliation system. Above all, the key reconnaissance satellite project, which is the key asset of the kill chain, should proceed smoothly towards projected completion in 2023. Furthermore, a multi-layered defense system should be promptly built to increase the probability of intercepting North Korea's 1200 ballistic missiles of 13 types. The PAC-3 (Patriot missile), which is responsible for less than 40 km of low-level defense, should be fully deployed by next year and should be reviewed for additional deployment in the future. Ground-to-air missiles (M-SAM) and long-range surface-to-air missiles (L-SAM), which are responsible for medium and low defense, will be deployed by 2019, and three Aegis-equipped ships, equipped with SM-3's covering an intercept altitude of 500km, should perfect high altitude intercept capability.

Effectiveness of sanctions should increase with the reduction of North Korea-China trade. Because more than 90% of North Korea's economy depends on

foreign trade, if China were to cut trade with North Korea, the North Korean economy would be impacted greatly. The latest sanctions on North Korea will damage the North Korean economy because of the Chinese specifically toughened sanctions, and as a result, chances of North Korean nuclear dismantlement have now increased. The Chinese government chose to take measures to enact an overall embargo on the exportation of petroleum and North Korean fabrics. The Chinese government also announced that it would shut down Chinese companies established as private joint venture companies or joint stock companies with North Korean companies within 120 days. Through ROK-US cooperation, the South Korean government also closely monitors the size and details of trade in North Korea, the violation of sanctions by Chinese companies that trade with North Korea, the means of avoiding sanctions, and North Korea's public investments. The ROK government should share this information with the United Nations and related countries. And the level of implementation of sanctions imposed by China on North Korea should be increased.

The ROK government should strive to ensure that the United Nations monitors the sanctions on a regular basis at the UN level and implements measures to impose penalties on countries that violate sanctions. North Korean sanctions still have many loopholes. According to a panel report by the United Nations Security Council on sanctions against North Korea, North Korea is trying to avoid and bypass sanctions by exporting underground resources, smuggling and bartering, counterfeiting ships' nationalities, smuggling foreign workers, and smuggling diplomats. The South Korean government should monitor the violation of sanctions on North Korea by establishing a sanctions avoidance monitoring organization and sharing information with the international community. ©KINU 2017

※ The views expressed in this paper are entirely those of the author and are not to be construed as representing those of the Korea Institute for National Unification (KINU).