

Enhancement in Nuclear Weapons Development and Its Military, Political and Economic Repercussions in North Korea

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A general assessment is that North Korea's belligerence expressed both externally and internally has been stronger than ever since the launch of the Kim Jong-un regime. Such belligerence is revealed not only through the reign of terror at home but also through military movements and statements towards the outside world. The following factors have been mentioned as the cause and background of the above: political instability of the Kim Jong-un regime or Kim Jong-un's personal disposition; a strategy to overcome North Korea's international isolation; a backlash against international criticism on North Korea's human rights issue; an expression of hostility to South Korea's North Korea policy and discussion on unification, etc.

On the one hand, however, there is a need to reexamine North Korea's behaviors and attitudes from the perspective of the sophistication of its weapon system centered on nuclear weapons. The process of the sophistication of nuclear weapons is closely associated with military

organization and strategy, understanding of the circumstances and ruling strategy based on the frame of "possession of nuclear weapons," and changes in the power politics and resource allocation system. The nuclear weapon system involves a broad range of political and economic processes and gets "tailored" to the society. That is, the nuclear weapon system needs to be seen as a more proactive actor that changes a state agency rather than an instrument.

This paper aims to look into military, political, and economic changes since the launch of the Kim Jong-un regime through the lens of the sophistication of nuclear weapon system. It also aims to analyze how the nuclear weapon system is associated with military strategy and internal ruling strategy in respect of system evolution. Eventually, this paper is intended to forecast and predict how the process of sophisticating the nuclear weapon system, meshed with changes in a state agency, can eventually surface in various aspects of behavior.

"Strengthening Various Branches of KPA Arms": Four-Point Strategic Line and Three Major Tasks for Reinforced Military Power

North Korea presented the thorough implementation of "Party's four-point strategic line and three major tasks for increasing military strength" as an agenda in its 2015 New Year's address. Among the "four-point strategic line and three major tasks" mentioned for the first time in late 2014,1 four points of the strategic line refer to ① making the Korean People's Army (KPA) politically and ideologically stronger, ② making the KPA morally stronger, ③ developing the KPA into an army of superb tactics, and ④ turning various branches of KPA arms into strong ones, while the three major tasks are known as ① (human factor) emphasizing the army armed with the political ideology, ② (weapons performance) developing science and

¹⁾ Kim Jong-un mentioned this for the first time when he visited the artillery unit 963 of the KPA on December 1, 2014.

technology, and ③ (operational capability) practical training.²⁾

The "four-point strategic line and three major tasks" differ from the military guidelines presented by Kim Il-sung and Kim Jong-il in the past,³⁾ in the sense that they are "strategic lines" aimed at bolstering overall military strength while underlining the tactical and organizational aspect that puts a stress on "warfare capability" and organic among units of services and arms, and the warfare aspect that encompasses human factors, weapons performance, operational capabilities, etc.

We should specifically focus on "strengthening various branches of KPA arms." "Various branches of the KPA arms" have been emphasized in military-related addresses and the coverage of Kim Jong-un's field guidance since 2014. It underscores the "joint operation among units of services, branches, and specialized fields" and the fostering of "multifunctional" combatants in "various KPA arms." This means that the KPA should prepare with systematic joint tactical system among all its branches, as well as the reinforced capability of each arm and the capability of combining various tactics including enhancement of firepower and maneuvering force in accordance with the requirements and trends of modern warfare. The recent proceedings under Kim Jong-un's guidance such as combined drills among different services and arms of the KPA and actual drills between two different units, 5) combat readiness inspection, unexpected visit by Kim Jong-un to military units, and training

²⁾ Kim Dong-yup, "North Korea's Dual Policy of Nuclear and Economic Development and Military Changes" (in Korean), *North Korean Studies Review*, Vol. 18, No. 2 (2015), p. 95.

³⁾ Kim Il-sung's five-point policy of military training includes indomitable revolutionary spirit, adroit tactics, steel-like physical strength, accurate marksmanship, and rock-solid discipline, and Kim Jong-il's four major principles for military training are principles of Juche character, political ideology, militant spirit, and scientific accuracy.

⁴⁾ Here, services refer to branch of the whole armed forces (KPA, in this case) such as the Army, Navy, and Air Force, and arms refer to personnel with different occupational specialties such as infantry, artillery, and engineer.

⁵⁾ Drill that involves two or more units with one side taking offense and the other taking defense assuming the situations of an actual warfare.

inspection are all viewed in this perspective.

In summary, it seems that "strengthening various branches of KPA arms" builds on the need for new strategies and tactics (hybrid operational art) that link the arms in a more systematic way, including the strategic force recently added to the fourth service joining the army, navy, air and anti-air forces. Moreover, this is in line with the reorganization after the first nuclear test in 2006 by integrating three levels of forward deployed capabilities to two level strike system, reducing the number of legions to six, and reshuffling the army with the offensive maneuver forces through increasing light infantry units. North Korea has reformed its traditional system among services and arms of the army in line with each phase of the sophistication of nuclear weapons, and it seems to be coordinating this based on the "warfare capability" since the Kim Jong-un regime came into power.

"KPA Services and Arms" and "Diversification": the establishment of "Strategic Force" and diversified nuclear deterrence

It was through the news coverage of Kim Jong-un inspecting "KPA Strategic Rocket Command" in March 2012 that the strategic force first officially surfaced in North Korea. The Strategic Rocket Command is an expanded and reorganized body of the existing Missile Guidance Bureau and was named the "Strategic Rocket Force" by Kim Jong-un at the formal military review on April 15, 2012. Following this, the North Korean media covered the news of Kim Jong-un guiding the training on the tactical rocket launches on May 29, 2014, using a new name of the "Strategic Force" to announce the creation of a new service. It took three steps from "Strategic Rocket Command" to "Strategic Rocket Force" to "Strategic Force" to finally settle into the fourth service. The rank of commander was also upgraded from major general (one-star) to colonel general (three-star).

The formation and systematization of the "Strategic Force" can been seen as part of efforts to unify the command system by integrating the short, intermediate, and long-range missile units and to increase diversified striking capability through the miniaturization and weight lightening of nuclear warheads. This is also in line with North Korea's argument that it will "push ahead with its nuclear deterrence at an increasing speed" in a more perfect manner centered on powerful strategic ground/air/water striking means.⁷⁾ In other words, the strategic force is a measure taken in the process of sophisticating nuclear weapons to strengthen the overall nuclear capability and has the effect of demonstrating that the "strategic force" has been organized as a regular force.

North Korea resumed scud missile launches and test-launched new tactical guided weapons under Kim Jong-un's leadership in June 2014 in five years after the expansion and reorganization of the strategic force. The number of missile launches unprecedentedly increased between 2014 and 2015 compared to the past six years is closely associated with the expansion and reorganization of the strategic force. The number increased three to four-fold in comparison to 2013.

The creation of the strategic force by North Korea is akin to the cases of the former Soviet Union and China in which they formed strategic rocket units at the military strategic level to diversify and effectively operate nuclear weapons. In the Soviet Union, Strategic Rocket Force was established in 1959, with new forms of services and arms created since the mid-1950 when nuclear missiles were widely introduced. In China, the "Second Artillery Force" was officially established in July 1966 after the development of strategic missiles in 1956 and the successful nuclear test in

⁶⁾ Its commander Kim Rak-gyom was entitled "colonel general" by the order of the Supreme Commander on February 15, 2014 and became the member of Party's Central Military Commission.

⁷⁾ Statement made by the spokesperson of the Policy Department of the National Defense Committee on May 20, 2015.

1964. It is under direct command and control of China's Central Military Commission, and there has been a great leap in nuclear technology since the mid-1980s.

Both the Soviet Union and China had focused on the improvement of nuclear deterrence and counterattack capabilities after the creation of strategic rocket units. They gained possession of intercontinental ballistic missiles (ICBM), submarine-launched ballistic missiles (SLBM), and multiple independent reentry vehicle (MIRV), in order. It should be noted that in both the Soviet Union and China, the state leadership (party), not the military, had direct control of strategic rocket units – a service separate from the army/navy/air force. This is the same with the case of North Korea where its strategic force is managed and controlled by the Party with the Central Military Commission (CMC) at the top. North Korea's strategic force can be evaluated as reflecting the changes in military strategies in line with the evolution of weapon systems including nuclear tests, ICBM capabilities, etc.

Sophisticated Nuclear Weapons and Party's Reinforced Power

The process of sophisticating nuclear weapons implies qualitative changes in the "songun (military-first)" politics. Each phase of sophisticating nuclear weapons involves the enhancement of nuclear weapons' strategic value and the expansion and reform of relevant organs to increase the nuclear capability. In this process, the Party's status as a core agency in charge of orchestrating overall affairs in nuclear force is consolidated, and its control over the military affairs expands. There has been an increase in the status of the Party as a main agent in developing, managing, and sophisticating nuclear weapons.

Currently, regarding North Korea's nuclear enhancement, the roles are divided as follows: the Korean Workers' Party (KWP) Secretary for Munitions (Kim Chun-sop) and KWP Machine Industry Department (Deputy Director Hong Yong-chil) take the

initiative in nuclear development policy according to the KWP CMC decision, the "Guidance Bureau 131," a subsidiary of the Machine Industry Department, supports the research, development, and production of nuclear weapons, the Second Economic Committee (Chairman Jo Chun-ryong, eight general bureaus, and Second Academy of Natural Sciences) under the National Defense Commission supports the development, production, finances, and supplies for nuclear weapons, and the Cabinet's Ministry of Atomic Energy Industry (formerly General Bureau of Atomic Energy, expanded and reformed in April 2013, Minister Ri Je-son) supports the nuclear research institutes. By combining "strategic force" with this, it can be commented that the axes of nuclear enhancement and sophistication have been organized at the military and technology levels.

The nuclear force solidifies the vertical hierarchy structure with the supreme leader at the apex. Frictions or conflicts of interest among services and arms take on a new frame as the traditional services and arms are reformed with the nuclear force - which is of high priority in terms of strategic values - at the center. This process is presented in the aspects of the concentration of power on the Party leading the strengthening of nuclear force, the Party tightening its grip on the military, and the supreme leader bolstering his direct control over the military.

The following indicators are examples that are perceived to be in the same context: in the DPRK Law on Consolidating the Position of Nuclear Weapons State for Self-Defense, it states, "The nuclear weapons of the DPRK can be used only by a final order of the Supreme Commander of the Korean People's Army"; the frequent reshuffling of officials in the chain of command of conventional weaponry, such as Chief of Staff and Minister of People's Armed Forces since Kim Jong-un came to power; the prohibition of the use of "command" in units of different levels except for the Army, Navy, Air and Anti-Air Force and the measure to degrade other units to "bureaus"; the strengthening of reporting system of legion commanders; transfer of trade companies subordinate to the military to the party organs. The use of power

centered on the Party may be closely associated with the use of nuclear force beyond simply restoring the power structure of the Kim Il-sung regime. It can be seen from the perspective of increasing Kim Jong-un's dominance over the military and combining military strategies and the state management system under the Party's flag.

The nuclear force can serve as a criterion for distinguishing between the military in the past and the future, and it can appear in the form of change in the status of the existing services and arms. In particular, there is a high possibility of the traditional services and arms based on conventional weapons constantly being in a relatively poor financial situation, while there are more financial investments in the nuclear weapons in accordance with each phase of the sophistication of nuclear weapons. There is also a possibility of frequent personnel changes in the chain of command of the existing forces which is based on the conventional forces and this phenomenon has extensively occurred since Kim Jong-un's rise to power. It can be said to be personnel replacement that takes place in the process of adjusting the status of nuclear forces and conventional forces and readjusting their mutual strategic linkage structure.

Nuclear Weapon System as a Ruling Strategy

Since its declaration as a nuclear weapons state in 2005, North Korea has conducted three nuclear tests and confirmed its possession of nuclear weapons as a fait accompli by specifying the "nuclear weapons state" in the amended constitution on April 13, 2012; adopting the "byungjin line of simultaneously developing nuclear weapons and the economy" at the plenary session of the Party Central Committee on March 31, 2013; and enacting the Law on Consolidating the Position of Nuclear Weapons State for Self-Defense on April 1, 2013.

Particularly, North Korea specified "to bolster up the nuclear deterrence and nuclear retaliatory strike power both in quality and quantity" (Article 3) and possessing nuclear weapons "until the world is denuclearized" (Article 2) in the law enacted on April 1, 2013, proclaiming its intention of de facto permanent possession of nuclear weapons. In addition, North Korea stated that "having built military power and created a strong autonomous economy with the nuclear force as the center" in the preface of "Ten Principles for the Establishment of the Unitary Leadership System" – the North Korean regime's ruling doctrine revised in June 2013 for the first time in 39 years.

The "possession of nuclear weapons" and "nuclear forces" have been explicitly specified in almost all accounts that serve as a basis for ruling such as the Party line, constitution, laws and Ten Principles since Kim Jong-un seized power. This indicates North Korea's nuclear weapon or nuclear armament has gone beyond functioning as an external showcase of its military/security arsenal to become a basis for ruling. It can be said that the existence of the Kim Jong-un regime is de facto rooted on the *suryong* system and a military state with nuclear weapons and missiles in its hand.

Sophisticating Nuclear Weapons and Deepening Dependence of State on the Market

Nuclear weapons are highly regarded as they secure strategic superiority at a relatively low cost compared to the cost incurred in maintaining conventional weapons from a medium- and long-term perspective. They, therefore, can be seen as an effective alternative to conventional weaponry. Proclaiming "byungjin line" in 2013, Pyongyang said that the line enables it to strengthen its defense capabilities without increasing defense expenditure, hence diverting resources to economic development and the improvement of people's living standards. However, the budget

proposal by the Supreme People's Assembly does not show any significant change in the defense spending.⁸⁾ Obviously, it is difficult to identify the accurate size of North Korea's defense budget, a large part of which is concealed.

The sophistication of the nuclear weapon system is accompanied by a continued increase in costs to a certain extent.⁹⁾ North Korea, which is isolated from military alliances and external economic relations, should cover the cost to develop nuclear weapons, relying solely on its entire internal resource capacity. A crucial problem with North Korea sophisticating its nuclear weapons lies in the constraints to securing resources required to develop, experiment, possess, and maintain them. It, therefore, ends up building a structure of extracting resources based on extensive and long-term sacrifices. Other crucial problems remain to build the said structure, such as readjusting the resource allocation system, overcoming resource constraints through the use of market, and strengthening the repressive rule to extract and mobilize resources.

Nuclear weapons are capable of doing things that cannot be done by conventional weapons in terms of force and destructive power but are not flexible. Although the generally known nuclear strategy or nuclear doctrine underscores the deterrent force and strategic value of nuclear weapons, nuclear weapons can hardly be said to have a deterrent effect as an alternative to conventional weapons in the case of North Korea, given the long-lasting military confrontation and the geopolitical nature that the divided system has. There is a point in which nuclear weapons cannot substitute for conventional weapons. Besides, effects of the substitution vary depending on the given external environment and conditions, internal resource

⁸⁾ The figures were 15.8% in 2010, 15.8% in 2011, 15.9% in 2012, 16% in 2013, and 15.9% in 2014 and considering North Korea's state budget it is estimated to be approximately USD 1.15 billion.

⁹⁾ South Korea's Ministry of National Defense and analysts predict that the cost for North Korea's nuclear development amounts to USD 2.8 billion at minimum and USD 8.5 billion at maximum. *The Korea Economic Daily*, December 12, 2012; *JoongAng Ilbo*, May 3, 2012.

capacity and allocation system, means of economic management, etc.

In fact, not only such strategic weapons as nuclear weapons and missiles but most of conventional weapons rely in large part on foreign currency earnings in the case of North Korea. It is known that most of foreign currency earnings are spent on importing equipment and parts required to sophisticate nuclear weapons while conventional weapons are barely maintained. With an increase in the cost to sophisticate nuclear weapons, it is actually impossible neither to see a substantial decrease in the defense budget, nor to put more money into the people's economy. Accordingly, the idea that the possession of nuclear weapons will reduce the conventional military expenditure is incongruous with North Korea's reality.

Nuclear weapons can be seen as having persistently placed structural and financial pressure on the economy in that the relevant costs have gradually increased in sophisticating nuclear weapons. It is noteworthy that there are a number of areas not converted into a cost, such as the state monopoly on domestic resources and mobilization of available labor force free of charge or at a low cost. Furthermore, its impact on the economy cannot be underestimated, given the embezzlement and leaks that occur in the course of the Party and military's monopoly on resources in the name of sophisticating nuclear weapons. Taking into consideration the opportunity cost incurred in investing money for sophisticating nuclear weapons, it is not very persuasive that the possession of nuclear weapons could lead to the effect of improving the people's economy.

How could the limits to investment in the people's economy be overcome? It is noticeable that the extensive approval of markets and the market-dependent management of the state economy have occurred since the launch of the Kim Jong-un regime. It can be said that the increased reliance of most state agencies and economic agents under the regime on external and internal markets, seen in terms of resource allocation, lies in the strategies where state revenue is offset

through the market economy and where the vulnerable people's economy is replaced by market economy after resources are prioritized for the purpose of strengthening nuclear strategies. Measures including "May 30 measures," granting management rights of foreign currency earning companies to regional municipal/county-level organs and state-owned enterprises (with more than 1,000 employees), ordering to establish a plan to attract capital by designating one to three special economic development zones for each province indicate that the regime bolsters its strategy of actively utilizing the market in economic management.

Future Prospects and Implications

Firstly, it is highly likely that technology development and the organized and strategic reform process in the military sector in keeping with the sophistication of nuclear weapons come in the form of military actions. Specifically, the possibility is high of periodic provocations at the level of hybrid warfare blending various services, arms, and tactics, as well as of nuclear weapon/missile launch tests and cyber attacks. Missile test-fires and nuclear tests are likely in terms of technological and political necessity and the vying for achievements after the generational changes of officials in the line of management and development of nuclear weapons and missiles and the chain of command for relatively weakened conventional weaponry would take the shape of provocations.

Secondly, a friendly atmosphere towards the Party leadership may be created among the people, filled with a sense of pride as a nuclear weapons state and expectations for economic growth following nuclear development, but it may act as political pressure for accomplishment. It refers to psychological pressure for having to demonstrate specific effects and actual benefits - acknowledgement by neighboring countries of North Korea as a nuclear weapons state, followed by the reset of external relations and normalization of relations in line with the status, improvement

of external economic relations, establishment of a medium— and long—term plan for economic development, etc. - as the regime puts more emphasis on its possession and sophistication of nuclear weapons. In the end, what can be an exit strategy becomes important as the miniaturization, weight lightening, and diversification of nuclear weapons are completed to a certain level and nuclear development reaches its marginal utility. There arises a possibility of North Korea using an appeasement strategy to promote economic development and the expansion of diplomatic relations. In the case the appeasement strategy does not lead to tangible benefits, however, a desire may grow to internally prove the utility of nuclear capability by creating a military tension. This may induce the qualitative and quantitative reinforcement of the ROK–U.S. alliance through military action to consolidate the legitimacy of possessing nuclear weapons in reverse.

Thirdly, the sophistication of nuclear capability will contribute to strengthening the vertical power structure with the supreme leader at its top in terms of power politics. It may come in the form of the "state management system" centered on the nuclear weapon system, which is the supreme leader's strategy as well as the Party-based military strategy managing and controlling nuclear weapons, unlike the military-first politics. On the other hand, however, it should also be taken into consideration the relaxation state in which officials' interests in the market spread horizontally as the dependence of the state power on the market deepens. Thus, what remains as a crucial matter is how to harmonize in a balanced way the bidirectional movements of maintaining the vertical power structure and horizontally expanding conflicts of interest in the market.

Fourthly, it is about whether *byungjin* line turns out to be a success. North Korea has yet to present the specific details of *byungjin* line. Although the nuclear force and economy originally conflict or confront with each other, it was through the political rhetoric that this was glamorized in terms of positive functions. The problem is that the more focus is on the use of internal ruling strategy while the possibility

is precluded of giving up nuclear weapons, the more likely power politics, national strategy, economy, etc. become subordinate to military strategies based on nuclear weapons. What is for sure is that North Korea will maintain its policy direction to strategically use the marketization itself to stabilize the regime for the sake of the sophistication of nuclear weapons. It seems likely that North Korea will strengthen the way of procuring resources of power from the market in the relevant process.

** 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).