Online Series

North Korea's Nuclear Policy after its Third Nuclear Test: Analysis and Forecast

Cheon Seong Whun

Director, Center for North Korean Studies, KINU

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Success of the Third Nuclear Test

At 11:57am, on February 12, 2013, North Korea successfully conducted its third nuclear test at the underground nuclear test site in Punggye-ri, Hamgyeongbuk-do (province). The test is presumed to have been conducted at the very tunnel that the second test was conducted, at almost the same depth.¹) As shown below <Table 1>, there are a variety of estimates on the yield of the third nuclear test, depending on the detected magnitude and the destructive yield estimate method.

(Table 1) Estimates on the Yield	f of Nuclear Explosion	per Magnitude ²⁾
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Method of Yield Calculation Magnitude	KIGAM	СТВТО	Murpy (U.S.)	Ringdal (Russia)
4.9 Mb (KIGAM)	5.5kt	7.94kt	16.21kt	3.98kt
5.1Mb (The U.S. Geological Survey)	9.5kt	12.59kt	28.63kt	7.36kt

**Mb: The scale of artificial earthquake body wave (body wave magnitude)

¹⁾ Rachel Oswald, "North Korean nuclear test more than twice as powerful as last blast," *Global Security Newswire*, February 19, 2013.

²⁾ Exchange of opinions with Dr. Ham Hyong Pill, Korea Institute for Defense Analysis as well as experts at Korea Atomic Energy Research Institute, February 28, 2013. <Table 1> shows the destructive power of the nuclear warhead in terms of following yield calculation methods: Korea Institute of Geo-Science and Mineral Resources, Comprehensive Nuclear-Test-Ban Treaty Organization, Murpy emipirical method (U.S.), and Ringdal empirical method (Russia).

CO 13-08

Online Series 2013-03-

The yield of the first test was less than 1kt, and that of the second, 2-6kt. The magnitude of the third test is estimated to be 5-15kt, almost 2-3 times stronger than that of the second test. Such yield is estimated to be close to that of the highly enriched uranium (HEU) warhead which was dropped on Hiroshima, on August 6, 1945. The majority of experts agree that the magnitude of the third nuclear test is near 15kt. Since the start of this year, North Korea has strengthened its series of propaganda attacks to legitimize as well as maximize the effect its nuclear test. By means of Foreign Ministry Statement (January 23) \rightarrow National Defense Committee Statement (January 24) \rightarrow National Security and Foreign Policy Cabinet Meeting (January 26) \rightarrow The DPRK's Workers Party Central Military Commission Conference with Enlarged Membership (February 2), etc., North Korea has elated the atmosphere both inside and outside the country, thereby highlighting Kim Jong-un's leadership. North Korea's motivation regarding the third nuclear test can be analyzed as follows.

- To be acknowledged as a nuclear power by the international community
- For the successive regime to gain legitimacy through means of realizing 'the dying wishes' of Kim Jong-il
- For domestic ruling such as stabilization of the public sentiment and the regime stability
- To gain political leverage with regards to inter-Korean relations
- To overwhelm South Korea militarily
- To gain the ability to target the U.S. by installing miniaturized nuclear warheads on the intercontinental ballistic missiles (ICBM)
- To put a damper on the U.S.' will to protect South Korea and to incapacitate the U.S.-ROK alliance

Right after its third nuclear test, the North announced that it had successfully conducted a third 'underground nuclear test,' and alluded to the following technological successes.³)

- Successfully miniaturized and lightened the nuclear warhead ("conducted the test safely and perfectly using a nuclear warhead that is miniaturized and light-weighted but has significant explosive power")
- Completed nuclear warhead design ("all measurement results such as the operating characteristic and explosion power of the atomic bomb corresponded with the designed value")
- Used HEU instead of previously used plutonium ("the excellence of our diversified nuclear deterrence")
- Removed safety concerns regarding the border area between North Korea and China ("it had no negative impact on the surrounding ecological environment")

Meanwhile, the statement announced by the spokesperson of the North Korean Foreign Ministry, on the day of the nuclear test, emphasized that the third nuclear test was "a firm self-defensive measure against the hostile actions of the U.S." and was "a first responsive measure that has been taken with utmost self-restraint."⁴) Also, the North warned that if the U.S. hostile policy continues, "It has no choice but

^{3) &}quot;Successfully conducted a third underground nuclear test" *Chosun Central News Agency*, February 12, 2013.

to take consecutive responsive measures with higher intensity," showing its determination to respond to any additional sanctions to be imposed by the UN.

Forecast on North Korea's Nuclear Policy Hereafter

It can be predicted that, from now on, North Korea will try to gain the nuclear-weapon-state status through its nuclear capability. At the same time, the North will try to develop a new phase, i.e., negotiating with the U.S. and showing some flexibility (e.g., adjustment of speed and breadth of its nuclear development). In short, unfolding negotiations with the U.S. on the basis of its nuclear capability will be the framework of North Korea's nuclear policy hereafter.

In the short term, until the end of 2013, it can be predicted that, in the context of its threat to nullify the Korean Armistice Agreement, the North will take a series of physical measures to gain 'nuclear deterrence for self-defensive purposes'. In the face of the 60th anniversary of the Korean Armistice Agreement, the North is trying to kill two birds with one stone; nullifying the truce agreement on the one hand, and hardening nuclear deterrence on the other hand. For such purposes, it its highly likely that the North will conduct a fourth nuclear test or a nuclear-tipped missile test through means of mid-long range missiles such as the Nodong and KN-08, while using the UN's sanctions against the North Korea for its third nuclear test as an excuse.

In the mid to longer term, until the end of 2017, North Korea, on the basis of its nuclear capabilities, will propose arms reduction talks to the U.S. for both countries to mutually reduce their nuclear weapons, bringing the North Korean nuclear problem to the negotiation table. The major agenda for the talks will be reducing/dismantling the U.S. nuclear capability in Northeast Asia in response to North Korea's nuclear disarmament. Of course, the Kim Jong-un regime will not completely give up its nuclear weapons. We need to keep in mind that the ultimate goal of North Korea regarding mutual nuclear disarmament talks is withdrawal of the U.S. forces in Korea and the dissolution of the U.S.-ROK alliance. In this context, the statement about denuclearization of the Korean Peninsula that was announced at March 31, 2005, by the spokesperson of the North Korean Foreign Ministry needs to be closely examined. Below is the summary of the main content of the statement.⁵

- 1. "At this belated time, the U.S. is misleading the essence of the denuclearization of the Korean Peninsula by saying that it will be realized as soon as North Korea gives up its nuclear weapons, laying aside nuclear threats posed by the U.S. itself."
- 2. "If the Korean Peninsula is to be denuclearized, all U.S. nuclear weapons in South Korea should be removed and the possibility of nuclear South Korea should be rooted out...With this, the Korean Peninsula and the neighboring states should stop nuclear war simulations, eliminate any spaces subject to nuclear threat, and trust-based relationships should be built among neighboring countries, including North Korea and the U.S."

⁴⁾ Chosun Central News Agency, February 12, 2013.

⁵⁾ Chosun Central News Agency, March 31, 2005.

Online Series 2013-03-

3. "As North Korea is a nuclear power now, the six-party talks should be transformed to arms reduction talks, with concerned states solving problems on equal basis"

It can be predicted that North Korea will continue to try negotiating with the U.S. and at the same time, increase its nuclear capabilities, while maximizing its strategic ambiguity regarding its HEU program. The North might use the following cards for negotiating with the U.S.

- Freeze its nuclear capability at the current level
- Proclaim nonproliferation of nuclear technology and material
- Suspend Yongbyon plutonium plants and centrifuge facility that has been made public
- Accept IAEA's inspections on nuclear facilities at Yongbyon

Policy Implications

After the third nuclear test, there has been much introspection, both within and outside South Korea. Such introspections manifested the fact that the existing policy towards North Korea, which has persisted for the last twenty years, could not be sustained. The underlying assumption of the policy was that, if we comply with North Korea's wishes, the North will give up its nuclear weapons. Through the third nuclear test, it has been confirmed that the Kim jong-un regime has no intention of giving up its nuclear weapons and South Koreans are facing the reality of having to live with a nuclear-capable North Korea.

By the standards of international law, North Korea cannot and will not be recognized as a nuclear-weapon-state. However, in reality, the North is a nuclear-capable country. There is no room for dissent that North Korea's nuclear capability is the biggest security threat to South Korea since the Korean War in 1950. North Korea's threat against South Korea has continually intensified ever since it developed nuclear weapons. For instance, in 1994, when North Korea did not possess nukes, it threatened that it will turn Seoul into "a sea of fire." After its development of nukes, it has been threatening that it will turn Seoul into "a burning heap of ashes."

For South Korea to squarely confront North Korea's nuclear threat and ultimately to solve the North Korean nuclear problem, it needs to think outside its familiar box. In particular, South Korea needs to have the will, and act upon such will to play its role amidst the four great powers, rather than be led by its neighboring great powers. South Korea now has the capability to do so. Also, Seoul needs to think strategically. Based on the recognition that reunification of the Korean Peninsula is the ultimate solution to the North Korea's nuclear problem, it needs to link the reunification and resolution of North Korea's nuclear problem. (© KINU 2013)

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