

# THE NORTH KOREAN NUCLEAR PROGRAM AND PEACE PROCESS

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## I. Introduction

The history of the first of North Korea's nuclear proliferation crises has received considerable attention and analysis. The regional implications of a nuclear North Korea were signaled clearly and repeatedly in 1993 and 1994, as the alarm bell rang in response to a head-on confrontation between the Democratic People's Republic of Korea (DPRK) and the International Atomic Energy Agency (IAEA) that was finally eased through a negotiated bilateral agreement between the United States and the DPRK: the Geneva Agreed Framework. However, the second crisis has revealed a stark divergence of views regarding the lessons learned from the first crisis and the policy prescriptions for solving the second North Korean nuclear crisis that began in October of 2002.<sup>1</sup> This paper will review the key elements of the North Korean program and how the handling and experience of the first North Korean nuclear crisis have influenced the current crisis, assess the current status of the North Korean program, posit a range of projections for the growth of the program through 2010, and discuss implications for a Korean peace process, which has been explicitly linked to the North Korean nuclear crisis through the latest diplomatic efforts to resolve the crisis, the Joint Statement of the Six-Party Talks issued on 19 September 2005.

## II. The First North Korean Crisis: Tacit Acquiescence to a Nuclear North Korea?

Coming off of the first Persian Gulf War and discoveries that Saddam Hussein's Iraq was further down the path of gaining a nuclear capacity than had been anticipated, the Clinton administration touted counterproliferation as the post-Cold War solution to global security, and the IAEA made North Korea the test case for setting a new international standard through demands for special inspections. This was not the loosely fitting, easygoing Nuclear Non-Proliferation Treaty (NPT) verification of peaceful nuclear energy facilities that the North Koreans had reluctantly signed up for, under Soviet pressure, in the mid-1980s. Owing to bureaucratic snafus, it was not until 1992 that the North Koreans finally accepted IAEA on-site verification of the North's program. The IAEA's effort to utilize more thoroughgoing inspection techniques following its embarrassment in Iraq was a critical factor that led to the focus on discrepancies between the DPRK's declared nuclear activities and the story told by a swipe of the glove box of an experimental 5 MWe graphite reactor at Yongbyon.

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1. The most authoritative of these accounts is Wit, Poneman, and Gallucci (2004), which expands on earlier work regarding North Korea's nuclear development efforts by Mazarr (1995), Hayes (1991), Oberdorfer (2001), Sigal (1998), and Moltz and Mansourov (2000). The accounts below of the first nuclear crisis draw the lessons most relevant for this paper from these accounts.

The North Koreans responded poorly to the IAEA's demands for special inspections, and they eventually chose to exercise their right to withdraw from the treaty rather than be exposed as violators. At the same time, the way the investigation was handled exacerbated North Korean paranoia since U.S. intelligence information passed to the IAEA played a role in stiffening the IAEA's position. In fact, the North Korean case was being used to set a new precedent through the use of special inspections in the wake of the IAEA's failures in Iraq. Following North Korea's announcement that it would leave the NPT in March of 1993, the matter was referred to the UN Security Council, which requested all interested parties to negotiate with the North Koreans to stay in the NPT. U.S. and North Korean delegations met in a last-ditch effort to keep the North Koreans in the regime in June of 1993, and only months later President Bill Clinton stood at the Demilitarized Zone and said that if the North Koreans were to acquire nuclear weapons, "it would be the end of their country."

Alarming media stories over the ensuing months highlighted the nuclear domino effect that would engulf Northeast Asia as Japan, South Korea, and Taiwan were all projected to go nuclear in response to North Korea's nuclear pursuits (McManus 1994, 1). After an extended crisis and more than 18 months of sporadic negotiations between North Korea and the United States, the two sides agreed on a process whereby the North Koreans would shut down and eventually dismantle their facilities capable of making weapons-grade plutonium in return for the supply of two light-water reactors (LWRs) by an international consortium and the promise of progress toward normalization with the United States. However, the issue of special inspections that had been at the heart of the crisis was kicked down the road and linked to the stage of completion "before the delivery of key nuclear components" of the LWRs under construction.<sup>2</sup>

The agreement itself would have achieved the objective of dismantling North Korea's nuclear weapons development program if it had been pursued to its completion by both sides. In this sense, the parties to the agreement could argue and the international community could accept that the North Korean nuclear program had been brought under control and that it was just a matter of time before North Korea was brought back into the NPT as a non-nuclear-weapons state.

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2. Section IV.3 of the Agreed Framework states: "When a significant portion of the LWR project is completed, but before delivery of key nuclear components, the DPRK will come into full compliance with its safeguards agreement with the IAEA (INFCIRC/403), including taking all steps that may be deemed necessary by the IAEA, following consultations with the Agency with regard to verifying the accuracy and completeness of the DPRK's initial report on all nuclear material in the DPRK." See [http://www2.law.columbia.edu/course\\_00S\\_L9436\\_001/North%20Korea%20materials/agreedframework.htm](http://www2.law.columbia.edu/course_00S_L9436_001/North%20Korea%20materials/agreedframework.htm), accessed on July 26, 2005.

But the terms of the agreement, in the absence of a sustained foundation of mutual trust and performance on the part of both sides, were not pursued to completion. Instead, the agreement was beset by delays and eventually broke down in October of 2002 with the discovery of and confrontation over North Korea's covert uranium enrichment efforts. Shortly thereafter, the Agreed Framework unraveled as the United States led a campaign to end the supply of heavy fuel oil via the Korean Peninsula Energy Development Organization (KEDO) to North Korea on grounds of the North's noncompliance with the Agreed Framework (in other words, the North's pursuit of an alternative uranium-based path to nuclear weapons status in direct contradiction with the spirit of the Agreed Framework). In response, the North Koreans kicked out IAEA inspectors and regained control of 8,000 fuel rods that had been stored in North Korea in anticipation of their removal from the country and North Korea's return to full compliance with its safeguards obligations under the NPT (Demick 2002, 1).

By taking these actions in late 2002 and early 2003, the North Koreans forced the international community to come to terms with a dirty little secret from 1994 that the international community—and especially North Korea's immediate neighbors—had chosen for the most part to ignore: North Korea had attained all the elements necessary to become a *de facto* nuclear weapons state as early as the mid-1990s.

By accepting an Agreed Framework that allowed North Korea's nuclear status to remain ambiguous until an unspecified date certain—the point at which the North would have to come into compliance with its safeguards obligations in return for the supply of critical nuclear components for the two LWRs constructed by KEDO—the United States and the international community had tacitly affirmed that they could live with the ambiguity that North Korea may indeed have become a nuclear weapons state. The U.S. intelligence community has assessed that the DPRK may have enough fissile material from plutonium produced prior to 1992 to build one to two nuclear weapons (CIA 2002). At the same time, all of North Korea's neighbors could sleep more easily knowing that North Korea's nuclear capacity had been capped and that there was a point in time that North Korea might be brought back fully into the NPT as a non-nuclear state.

One factor that may have made it easier to live with this ambiguity was the fact that the dispute over the amount of plutonium in question precluded the likelihood of a North Korean nuclear test because North Korea's available stock of plutonium was sufficient for only two bombs at most. Other factors were the slow-motion nature of the North Korean nuclear crisis and the delay of seven years, during which all of North Korea's neighbors were lulled into thinking that the North Korean nuclear program was under wraps through the existence of the Agreed Framework. The protracted nature of the crisis has given North Korea's neighbors time to get used to the idea of a North Korea that had some nuclear capabilities, even in a limited form.

This has become a particularly important factor as one considers the preferences of the various parties to the six-party talks in terms of what they might be able to live with, that is, the apparent willingness of North Korea's neighbors to accept a "gray" North Korea (Glosserman 2005).

### **III. Current Status of North Korea's Nuclear Program 2006 and Projections for 2010**

The current status and projected development of North Korea's nuclear weapons program can be roughly grouped into three stages or thresholds of development, each of which has progressively more serious implications for regional security in Northeast Asia. The first stage would be that North Korea might have a limited amount of nuclear material that possibly would be sufficient to make a bomb or two, but would not have enough nuclear material to be able to test without severely limiting additional future development of the program based on the resources at hand. This was the stage that culminated in the first North Korean nuclear crisis, as the Agreed Framework prevented the North Koreans from reprocessing spent fuel rods that would have moved the North Korean program beyond the first phase.

The second phase would be a situation in which North Korea has enough material on hand to test, but has not yet built its nuclear arsenal to the point that it could safely risk losing material or taking actions that might compromise North Korea's capacity as a nuclear weapons state. This is the stage that the international community is currently trying to manage.

The third phase would be the point at which the North Koreans might have accumulated enough material to make  $n + 1$  nuclear bombs (where  $n$  represents the minimum necessary nuclear weapons the leadership determines will satisfy North Korea's own national security needs, be it deterrence or a sufficiently robust response capability to exact a price from any potential adversary), that is, the point at which North Korea has enough nuclear material on hand to satisfy not only its own needs but also has enough to have the capacity to export material to others to use for their own purposes. If the North Korean program is left to continue to produce fissile material unchecked by the international community, it is likely that North Korea will cross the third threshold in its nuclear development by 2010, at which point an economically desperate North Korea might conceivably choose to export fissile material for the cash necessary to assure its survival.

The Agreed Framework froze North Korea's nuclear weapons development capability and placed fuel rods discharged from the 5 MWe reactor under international safeguards. Those fuel rods were placed in canisters and stored so as to stabilize the material. The rods remained under the watch of IAEA inspectors but were not physically

removed from North Korea. The ambiguities surrounding North Korea's nuclear capability related to any production of fissile material that the North Koreans might have undertaken prior to 1994 remained unresolved pending progress in the construction of LWRs in North Korea. **Table 1**, derived from estimates by Jon Wolfsthal of the Carnegie Endowment and David Albright and Paul Brannan of the Institute for Science and International Security, provides estimates of nuclear material acquired by North Korea during 2005 and 2006. The discrepancies between the North Korean declaration and analysis taken from IAEA inspections conducted in 1992 yield estimates of the material that the North Koreans may have gained from its pre-1994 efforts of about 6–10 kg of plutonium, or enough to make 1–2 nuclear weapons.

**Table 1: Estimates of North Korea's Possible Nuclear Stockpile, 1989–2006**

Year	Amount of plutonium discharged from 5mw reactor	Plutonium separation	Weapon equivalents estimate 5 kg of plutonium
1989	1–10 kg	0–10 kg in 1989–92	0–2
2002–03	27–29 kg	20–28 kg in 2003–04	4–7
2005	0–15 kg	0–15 kg in 2005–06	0–3
2006	5–7 kg	—	—
Total	43–61 kg	20–53 kg	4–13

Sources: Wolfsthal (2005), Albright and Brannan (2006, 10–11).

Note: For a comparative reference, see also CIA (2002).

The Agreed Framework provisions allowed North Korea to keep a sufficient unspecified amount of nuclear material for a certain period of time. This allowed North Korea to preserve ambiguity and serve as a deterrent by leaving potential adversaries unsure as to whether North Korea might actually have developed a nuclear weapon. However, the Agreed Framework also ensured that the upper limit of North Korea's potential plutonium reserves was probably not enough for North Korea to maintain a nuclear deterrent as well as test. Recent reports by a high-level defector from North Korea reinforce this claim, although such statements cannot necessarily be regarded as accurate (Fifield 2005, 10).<sup>3</sup>

The second stream of materials available for possible use in North Korea's nuclear weapons arsenal is derived from the 8,000 fuel rods that North Korea removed from its nuclear reactors in 1994. These rods are estimated to be able to produce 15–30 kg

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3. The defector is reported to have claimed that the North Koreans used 4 kg of plutonium to manufacture that bomb, and they are now working on miniaturization techniques.

of plutonium, or enough to produce an additional 3–6 nuclear weapons beyond the one or two weapons that the North Koreans are already assessed to have (Wolfsthal 2005; Albright and Brannan 2006). The rods had been under the watch of IAEA inspectors until the inspectors were kicked out by the North Koreans in December of 2002, and the DPRK claims to have reprocessed these rods in 2003.

The significance of North Korea's reported decision to reprocess the spent fuel rods lies in the fact that the reprocessing provides the North Korean leadership with access to sufficient fissile material that the country could afford to conduct a nuclear test and still retain a credible nuclear deterrence capability. During the first North Korean nuclear crisis, the Clinton administration drew its "red line" at the unloading of the 5 MWe reactor precisely because it was recognized that the plutonium contained in those fuel rods, after reprocessing, could be used to provide the North with sufficient material for North Korea to be able to conduct a nuclear test and thereby remove any ambiguity about its status as a nuclear weapons state. However, even with access to the spent fuel that was safely stored with the assistance of the U.S. Department of Energy and monitored by the IAEA for more than seven years, North Korea's access to plutonium would remain limited. In retrospect, it is clear that one big failing of the implementation of the Agreed Framework was that additional efforts were not made to remove the spent fuel rods from North Korean territory at an earlier stage in the process.

During the spring of 2005, the North Koreans announced that they had once again unloaded their 5 MWe reactor, removing the rods that had been loaded when the North Koreans restarted the reactor in early 2003. These 8,000 irradiated rods, if reprocessed, are estimated by the Institute for Science and International Security to be able to produce another 12–19 kg of plutonium. This plutonium could be used to produce another 3–5 nuclear weapons. The 5 MWe reactor can be continuously reloaded and operated to produce fuel for a nuclear weapons program at the rate of about 6 kg of plutonium per year, or enough material to add an average of a single nuclear weapon each year through the end of the decade (CIA 2002).

In addition to the plutonium produced by the 5 MWe experimental reactor at Yongbyon, there are two additional sources of fissile material that the North Koreans might be able to call upon to expand their access to fissile material for use in nuclear weapons. The first is the potential fissile material that North Korea might gain from its covert efforts to enrich uranium. No publicly available information confirms precisely the status of the development of that program, but some estimate that North Korea's attempts to acquire centrifuges and other equipment that can be used to enrich uranium to weapons-grade quality through the A. Q. Khan network could potentially provide the North Koreans with sufficient uranium to provide North Korea with an additional bomb per year once the program comes on line.



A second source of fissile material in North Korea could come from the construction of larger reactors that would produce exponentially more plutonium than the capacity of the 5 MWe experimental reactor at Yongbyon. North Korea recently announced that it would renew construction of its 50 MWe and 200 MWe reactors, construction of which was suspended in 1994 as part of the Agreed Framework. Although there are serious questions at this stage about whether the original foundation of the partially built reactors could be used to support new construction or whether it would be necessary to begin construction again, the prospect of any production of plutonium by larger reactors in North Korea is daunting. The CIA estimated in 2002 that, upon completion, those reactors could be used to produce up to 275 kg of plutonium annually, enough to build dozens of nuclear weapons each year.

Under the most conservative estimates of North Korean plutonium production, if the North Koreans utilized only the 5 MWe reactor to produce plutonium between now and 2010, they would have available 65–100 kg of plutonium, which would be sufficient for the DPRK to have a stockpile of 13–20 nuclear weapons by 2010. This might be enough plutonium to cross the threshold for the amount of plutonium that North Korea would need to secure in order to ensure its own deterrent and be willing to sell fissile material (although no state actor has ever chosen to export fissile material thus far) if it faced economic desperation.

If we add in uranium production from 2006 to 2010, the North Koreans might be able to produce an additional five nuclear weapons. With the completion of a 50 MWe or 200 MWe reactor, North Korean nuclear weapons production would rise exponentially once the reactor became operational. Even under the most conservative scenario, it is possible to imagine that if the North has available material to make 14–20 nuclear weapons, that amount would constitute a sufficient stockpile to both test and export nuclear materials in the event of regime-threatening economic hardship in North Korea.

One caveat to the assessment above is that despite considerable shared intelligence information on the status of North Korea's nuclear weapons program, there are apparent differences in the intelligence assessments of South Korea and China on the one hand and the assessments of the United States on the other. Under current conditions, South Korean intelligence assessments appear to judge that North Korea may have attained one to two nuclear weapons but that capacity to deliver such weapons remains in a primitive state, even following the series of North Korean missile tests that was carried out by North Korea on 5 July 2006. This assessment leads South Korea's political leadership to draw the conclusion that there is still time for negotiation and room for the possibility that North Korea may be willing to bargain away its nuclear program, while assessments in Washington increasingly are that North Korea has "crossed the Rubicon" and will never give away the nuclear capabilities that it has developed thus far. The differences in the South Korean and



U.S. intelligence assessments of the state of the North Korean nuclear program reveal an important underlying factor that has hampered effective policy coordination between the two countries in prioritizing the urgency and determining appropriate policy tools for addressing North Korea's ongoing nuclear weapons development efforts.<sup>4</sup>

#### **IV. North Korea as a Nuclear Weapons State: National Responses and Implications for Regional Security**

The first North Korean nuclear crisis served as a wake-up call for all of North Korea's neighbors, and by now they have had plenty of opportunity to consider the implications of a nuclear North Korea, both as a legacy of the first crisis and as the second crisis continues to unfold. The dimensions of the challenge remain the same as in the mid-1990s, although the second crisis has propelled the region into a more dangerous phase as the ambiguity surrounding North Korea's nuclear weapons status diminishes. Global terrorism has heightened concerns over nuclear weapons proliferation and has extended a special focus to the possible intersection of these two concerns in the form of possible acquisition of nuclear materials by nonstate actors. There have been changes in the preferred methods by which the United States pursues its nonproliferation objectives, but the fundamental concern with nuclear proliferation as the world's most dangerous security risk remains unchanged (McManus 1994; Efron 2003, 1).

The region's responses to the threat posed by North Korea's acquisition of fissile material in the first phase of the program as outlined above have focused primarily on a North Korea with an ambiguous status: as a state that may have acquired nuclear weapons material but that has not yet tested a nuclear device. While the idea of a prospective nuclear North Korea as the catalyst for a series of nuclear dominoes in the region might be a dramatic image, in fact the length and recurring nature of North Korea's nuclear crises have probably already stimulated its neighbors to take actions in response to the prospect of a nuclear North Korea. As ambiguity is removed from North Korea's capabilities and as demonstrated North Korean capacities become more concrete, all the states in the region have been forced to take various actions in response. One response that some countries have taken, no doubt partially catalyzed by uncertainties deriving from the North Korean nuclear weapons development effort, has been to hedge by enhancing their own response capacities and by laying the groundwork for their own potential nuclear development efforts.

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4. Source: Senior South Korean government official, who commented on these topics during a meeting in San Francisco, 15 September 2006.

It was belatedly revealed, for example, that the first North Korean nuclear crisis prompted an internal review conducted by the Japan Defense Agency on whether to develop nuclear weapons, an idea that was rejected at the time as not in the national interest (Asahi 2003). South Korean experiments with laser enrichment of uranium isotopes, although conducted sporadically on an experimental scale between 1982 and 2000, went unreported to the IAEA until the IAEA conducted inspections in 2004 that take advantage of more intrusive powers gained through South Korea's adherence to the Additional Protocol (IAEA 2004).<sup>5</sup> It is well known that both Japan and South Korea have the technological capacity, the know-how, and the necessary materials to go nuclear in a matter of weeks or months. Thus, as North Korea has entered the first phase of its nuclear development but has not crossed the threshold to the second stage by testing a nuclear weapon, Japan and South Korea have to a certain extent matched North Korea's nuclear ambiguity as states that have known technical capacities to develop nuclear weapons and have extensive experience with production of nuclear energy for peaceful purposes. As long as both states are allies of the United States and are therefore under the U.S. nuclear umbrella, however, there appears to be little likelihood under current circumstances that either Japan or South Korea would go nuclear.

A second influence of the North Korean nuclear challenge, in combination with ongoing North Korean long-range missile development efforts, has been to focus concerns on North Korea's WMD delivery capacity—the possibility that North Korea could deliver a weapon of mass destruction on the tip of a missile. The North Korean missile tests on 5 July 2006 catalyzed attention to North Korea's capacity to strike neighboring states. A stronger-than-expected response by the international community included the Japan-led passage of UN Security Council resolution 1695 condemning North Korea's missile tests and laying the groundwork for enhanced efforts to prevent North Korea from further nuclear or missile development efforts. A domestic debate stimulated by the North Korean missile tests over whether Japan might need preemptive-strike capabilities to defend itself from a prospective North Korean missile launch revealed a newfound sense of vulnerability derived from the reminder that North Korea had developed the capability to strike Japan militarily.

The North Korean missile tests also provoked long-standing South Korean sensitivities stemming from the colonial legacy of Japanese aggression as the debate in Japan brought to mind the idea that Japan might again use military force on the Korean peninsula. In light of the Roh Moo-hyun administration's low-key response to North

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5. The Additional Protocol is an additional inspections process that was created to enhance the IAEA's monitoring and verification capacity. It was developed partly in response to the special-inspections fiasco with North Korea in 1992–93.

Korea's missile tests, South Korea's sensitive response to Japan's reaction to North Korea's test seemed disproportionate and misplaced, but it is probably a good measure of the extraordinary sensitivity in South Korea to any Japanese efforts to build an offensive-strike capability. The rapidity of the international response to the North Korean missile tests and China's decision to join in support of a strong resolution condemning the tests suggested the emergence of a consensus that North Korea's missile tests, in tandem with its nuclear development efforts, were deemed a clear threat to regional stability.

It has only been in the last three years—through North Korea's reprocessing of the spent fuel rods formerly stored under the watch of IAEA inspectors—that North Korea has attained a nuclear stockpile big enough to allow the country's leaders to contemplate the possibility of a nuclear test, signaling a transition to phase two in the nuclear development path outlined above. Intelligence concerns about a possible North Korean nuclear test first surfaced publicly in a *New York Times* story on 6 May 2005 that indicated the seriousness with which the intelligence community was watching North Korea in anticipation of an imminent test of its nuclear weapons capability (Broad et al. 2005, 1; Sanger and Broad 2005, 1). That story highlighted the possibility of a test along with U.S. intelligence briefings to South Korea, Japan, and China.

There was a strong initial stiffening in Seoul, Beijing, and Tokyo as government officials reacted to the *New York Times* story and considered their respective responses to and the effect on regional security of a North Korean nuclear test. Whether the story itself was planned as a leak intended to brace U.S. allies with a dose of realism and catalyze a more serious response to the North Korean nuclear challenge, the story did stimulate reflection on the fact that a North Korean nuclear test would leave no one in the region with good policy options. As the respective national leaderships took their own assessments of intelligence regarding North Korea's preparations for a test, however, the net impact may possibly have been a negative one for the credibility of the U.S. intelligence community, as some governments appeared to conclude upon further examination that there was no imminent threat of a North Korean test (Sanger and Broad 2005, 1; Yi and Kim 2005). The regional reaction to reports of an imminent North Korean nuclear test is instructive as we examine the implications for regional security of a North Korea that is ready to cross the threshold into a second phase nuclear capacity.

For North Korea's neighbors, a North Korean nuclear test would benefit no one and arguably constitutes a paradigm shift in terms of regional responses to the North Korean nuclear challenge. This was reflected in the unusually harsh and overlapping public responses of both South Korean and Chinese officials, as representatives of the parties that are generally perceived as most willing to deny the seriousness of the North Korean nuclear program. A South Korean senior official was quoted as saying

that, in the event of a nuclear test, China would not tolerate a nuclear North Korea and would allow the issue to go before the UN Security Council, while the Chinese press noted South Korean Foreign Minister Ban Ki-moon's harsh comment that "if the DPRK makes hasty actions, such as conducting a nuclear test, it will isolate itself even further and bring itself onto a path with unpredictable future" (Jin 2005; Yonhap 2005). The Bush administration requested that China warn North Korea not to conduct a nuclear test, and senior Chinese Communist Party official Wang Jiarui is reported to have told Japanese lawmakers that the likelihood of a North Korean nuclear test is 50-50, suggesting that the Chinese senior leadership took the U.S. reports seriously and conveyed their own concerns and red lines to North Korea together with U.S. views (Kyodo 2005).

Following the North Korean missile tests in early July of 2006, a second round of rumors that North Korea might conduct a nuclear test evoked a similar set of public warnings to North Korea not to pursue this course of action. This time, a 17 August 2006 ABC News report of "suspicious vehicle movement" and the unreeling of large strands of cable triggered speculation that North Korea might be readying a nuclear test. These rumors were given added credibility by arguments among some analysts<sup>6</sup> that following the North Korean missile tests, a nuclear test might possibly be next on the list as North Korea climbed a "ladder of escalation" (Yonhap 2006a). In response to these reports, the question of whether North Korea might conduct a nuclear test was a subject of discussion during a 22 August telephone call between President George W. Bush and President Hu Jintao of China. Such concerns stimulated a public statement on the subject by ROK Foreign Minister Ban Ki-moon that "if North Korea conducts a nuclear test, it will lead to a more threatening situation, shaking the basis of the international community's nonproliferation system far more seriously than the missile issue." China's assistant foreign minister, Cui Tiankai, was reported on the same day to have indicated to a group of visiting Japanese politicians that China would suspend cooperation with North Korea if North Korea conducted a nuclear test (Yonhap 2006b; Yonhap 2006c; Kyodo 2006).

Despite unprecedented international convergence at the UN Security Council of regional and global views—including China's endorsement of a resolution that Japan took the initiative to introduce at a time of heightened Sino-Japanese rivalry on other UN-related issues—it is unclear to what extent a North Korean nuclear test would result in unified action by North Korea's neighbors. The passage of UN Security Council resolution 1718 in response to North Korea's 9 October 2006 nuclear test was unusually swift, but it remains to be seen whether China and South Korea, in

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6. Washington-based policy analysts, 13 July 2006.

particular, will “walk the walk” now that they have “talked the talk”—whether they will use their leverage with North Korea to ensure that the sanctions resolution against the North has sufficient teeth to drive Pyongyang back to dialogue and to a decision to give up its nuclear weapons pursuits.

It remains unclear whether the international community can achieve the unprecedented challenge of rolling back a national nuclear program following an actual test of a nuclear device. It is hard to imagine that China and South Korea would effectively enforce such a resolution or join into any action that might lead to military conflict or create a leadership vacuum in North Korea. In any event, the effectiveness of a unified international response vis-à-vis a North Korean nuclear test will eventually also require some form of management of the problem that includes participation by North Korean leaders themselves. Absent a voluntary action by the North Korean leadership to make a strategic decision and give up the country’s nuclear weapons and absent an atmosphere in which North Korea’s external security concerns are addressed in some form, internal divisions or instability in the North will only make the challenge of dealing with North Korea’s nuclear aspirations more intractable.

What are the prospects for North Korea reaching the third phase of the nuclear development path by 2010, and what will North Korea’s neighbors and the United States do to stop them from reaching the stage where North Korea has enough material to meet its own deterrence needs and to consider exporting fissile material to the highest bidder? First, it is important to recognize that most nuclear weapons states are focused on keeping their capacities safe from others rather than proliferating and running the risk of leveling the playing field. The A. Q. Khan network may pose a possible counterexample, however. In this case, a private individual with an undetermined level of support and complicity from state institutions in Pakistan was able to set up an active proliferation network. Some are concerned that with A. Q. Khan out of the picture and given North Korea’s past relationships with Iran, Syria, and others, North Korea could inherit and revive some parts of that network.

The UN Security Council has imposed new requirements on member states to report on nuclear proliferation-related activities through requirements under UN Security Resolution 1540, while the Proliferation Security Initiative attempts to build a coalition of the willing to take a more activist, bottom-up, norm-building role through promotion of enforcement of counterproliferation activities such as export controls and possible interdiction of suspected WMD shipments. These measures have global reach, and in some instances they have already had an impact on the DPRK’s ability to procure certain items that could be used as part of its WMD development efforts. However, there is no existing effort that can fully prevent the DPRK from relying on homegrown technology to manufacture materials that could be used to expand North Korea’s nuclear arsenal.

On the basis of the experience of regional actors in responding to phases one and two of North Korea's nuclear weapons development, several concerns mandate careful consideration going forward. First, each phase in North Korea's nuclear weapons development has been accompanied by crisis and by a North Korean willingness to challenge red lines laid down by outside actors (Yun 2006). Second, the extended nature of the periods of crisis with North Korea may work to North Korea's advantage, as the international community comes to accept the incremental gains that North Korea has made as it pursues its nuclear weapons development. Conversely, the reaction to a North Korean nuclear test may work in precisely the opposite way. North Korea's objective is to pursue the Pakistan model, in which North Korea tests but then survives a period of severe sanctions.

## V. Conclusion

As the North Korean nuclear crisis has worn on, and especially with the development of a second crisis following October of 2002, a certain level of fatigue has set in among all the actors in the region regarding the North Korean nuclear program and its implications for regional security. Certainly there is fatigue that derives from the diplomatic stalemate caused by the lack of diplomatic progress in the six-party process. Just as the North Korean humanitarian crisis unfolded over months, revealing a systemic failure among North Koreans to be able to feed their own people, so the North Korean nuclear challenge, well into its second decade, now appears to have been a creeping crisis, with all the regional partners gradually coming to accept discrete steps by North Korea that, in the end, add up to a North Korea that is nuclear capable and indeed has declared itself a nuclear weapons state. If the North Koreans are able to gradually expand their nuclear stockpile and weather the sanctions imposed by the international community following the 9 October 2006 nuclear test, the DPRK may indeed be able to expand the threat that it poses to the region without uniting the region in opposition to North Korea as a primary source of threat.

At the same time, to the extent that the United States is seen as either prematurely sounding the alarm or overreaching the willingness in the region to confront the threat, the United States may become an obstacle to a regional recognition that concerted action must be taken to address this problem. At this stage, the region still awaits U.S. leadership in addressing the North Korean manifestation of the global proliferation issue and is unwilling to take direct responsibility for the problem.

North Korea's nuclear pursuits may raise the ante by promoting an odd mixture of hedging and denial strategies in the region as it relates to nuclear proliferation. This mixture of strategies derives from uncertainties about both the future of the global nonproliferation regime and the future of U.S. leadership in Asia. In essence, there

remains a great deal of confusion and doubt in Asia about whether the core problem to be resolved is North Korea as a challenge to the global proliferation regime, North Korea as an obstacle to the spread of democracy and human freedom, North Korea as a pretext for maintaining regional U.S.-led hegemony, the unresolved historical legacy of Cold War confrontation that remains to be addressed by achieving a final end to the Korean War, or the enmity between the United States and North Korea.

This is all part of what needs to be sorted out, both inside Washington and in ongoing policy discussions among the participants in the six-party dialogue. Notwithstanding the hedging, denial, and avoidance of shared responsibility that are the primary dangers that accompany the risks inherent in a nuclear North Korea, the most hopeful possibility is that the challenge of a nuclear North Korea may finally prove to be big enough that it is a catalyst for regional cooperation and the promotion of international economic development. In this respect, the establishment of a six-party mechanism—and the convergence of a sense of shared responsibility among all the parties in the region in response to growing tensions—enhances U.S.-China cooperation (and preserves U.S.-Japan and U.S.-ROK alliance coordination) and unites all parties in practical pursuit of a nuclear-free Korean peninsula.



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