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**Negotiated Limits on North Korea Nuclear
Weapons Capabilities: A Path to
Favorably Managing Competition**

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By John K. Warden and Ankit Panda

Introduction

Negotiations between North Korean leader Kim Jong-un, and South Korean President Moon Jae-in and U.S. President Donald Trump have relieved pressure that was building toward a potential U.S.-North Korea military confrontation in the final months of 2017. Escalating bluster has given way to an ongoing diplomatic process, facilitated by a freeze of North Korean nuclear and missile tests, the suspension of major U.S.-South Korean military exercises, and other measures intended to build confidence. But the present thaw may not serve U.S. and allied interests if the two sides are unable to turn reciprocal tension-reduction gestures into durable agreements.

On the one hand, there is a real risk that failed diplomacy will lead to renewed confrontation. If the United States insists, as many senior officials have, on a maximalist outcome—“the final, fully verified denuclearization of the Korean Peninsula”—it is all but guaranteed to be disappointed. While an admirable long-term goal, unilateral North Korean disarmament is an unrealistic short-term demand; nothing in North Korean behavior during diplomatic negotiations nor the corpus of historical evidence about Pyongyang’s preferences suggests that Kim is willing to give up his nuclear-weapons capability anytime soon. If substantial progress toward unilateral disarmament is the standard for progress, both the United States (citing the growing North Korean nuclear threat) and North Korea (citing the lack of sanctions relief) are likely to grow impatient and return to browbeating.

Equally perilous is a second path, in which U.S. and South Korean leaders curate a mirage of North Korean denuclearization and agree to steadily increasing normalization of relations with North Korea without putting in place any real limits on North Korea’s nuclear weapons capabilities. North Korea is a *de facto* nuclear-armed power, capable of threatening regional and probably most U.S. homeland targets. Short of an immensely costly military campaign to disarm North Korea or internal calamity in the North, the Kim regime will remain in power and continue to expand the size and improve the sophistication of its nuclear arsenal. Left unchecked, North Korea will pose an increasingly significant threat to the United States, South Korea, Japan, and the nuclear nonproliferation regime.

Instead, the United States and its allies should choose a third path: an approach that aims to quantitatively and qualitatively limit, rather than eliminate, North Korea’s nuclear weapons capabilities while maintaining a long-term goal of working toward North Korean disarmament. Agreements designed to limit North Korea’s nuclear weapons

capabilities will be difficult to negotiate, but if properly conceived and carefully executed, they will serve U.S. and allied interests by favorably managing competition with North Korea.

North Korea's Nuclear Posture and Strategy

In 2017, North Korea successfully flight-tested two separate ballistic missile designs capable of delivering nuclear payloads to the contiguous United States. Following the test of the Hwasong-15, a large intercontinental ballistic missile (ICBM) capable of ranging the entirety of the United States, North Korean leader Kim Jong-un underlined that the “historic cause of completing the state nuclear force” had been realized, seemingly implying that he could stop testing his nuclear and missile capabilities, at least for the time being. As Kim noted in his New Year's Day 2018 address, it was time for North Korea to shift to the mass production of nuclear weapons capabilities. Although the region has recently been spared dramatic tests, North Korea continues to gradually build out a more formidable nuclear force during negotiations.

While Kim clearly values his nuclear weapons capability, calling it a “treasured sword,” there is uncertainty about the precise role that nuclear forces play in Pyongyang's strategy and plans today and in the future. Pyongyang has not released an authoritative document—nor has its leadership made any statement—outlining force structure plans or doctrine. In this light, analysts are left to assess North Korea's intent and capabilities based on imperfect available evidence. Insofar as nuclear doctrine is concerned, one helpful indicator is the country's 2013 law “consolidating the position of nuclear weapons.” This law, among other things, clarifies aspects of nuclear command and control, codifies a negative security assurance for nonnuclear states, and sets out aspirational objectives on nuclear security. The revision of North Korea's constitution, a panoply of additional statements in North Korean state media, and speeches by prominent members of the regime flesh out a more complete picture.

Broadly, the evidence suggests that North Korea will likely operationalize its nuclear forces around a concept in which Pyongyang will threaten to employ nuclear weapons to deter and, if necessary, defeat a U.S.-ROK invasion. North Korea has explicitly threatened to conduct theater nuclear strikes to prevent the United States from marshalling the forces required to conquer North Korea and has conducted exercises simulating strikes on the port of Busan in South Korea and U.S. military bases in Japan. North Korea's ICBMs, in theory and when Kim is confident in their survivability, would be held in reserve to coerce U.S. accommodation.

There are two plausible explanations for why North Korea would pursue this type of nuclear first-use strategy. Optimists argue that North Korea fears U.S.-led regime change and seeks nuclear weapons to deter invasion. They see North Korea's grand strategy as

defensive and status-quo oriented. On the other hand, pessimists argue that North Korea sees nuclear weapons as both invasion insurance and an enabler of military aggression against South Korea and Japan—using nuclear weapons as a shield for aggression, the way Pakistan is believed to do. They see North Korea as revisionist and opportunistic. If North Korea believes that it can deter the United States and South Korea from pursuing regime change in a conflict, then it may think it can pursue limited violent aggression against South Korea and Japan with impunity—especially if it doubts the willingness of the United States to take on significant risk to defend its allies.

The Case for Agreements to Limit North Korea’s Nuclear Weapons Capability

For the United States, South Korea, and Japan, the goal should be to prove the optimists right—even if only in retrospect—by encouraging North Korea to accept a nuclear force posture consistent with a narrow, defensive view of the utility of nuclear weapons. As North Korea’s nuclear capability increases in size and sophistication, the Kim regime will gain greater confidence that it can successfully execute nuclear strikes in a conflict with the United States while living to fight another day. As a result, North Korea may be tempted to initiate provocations, escalate crises, or even risk war, thinking that its nuclear capabilities would allow it to favorably manage an escalating conventional conflict if necessary.

There are a number of ways that the United States can encourage North Korean restraint. The United States and South Korea have successfully deterred North Korea in the decades since the end of the Korean War. Despite multiple near-misses and intermittent violent provocations, the Korean Peninsula has not seen a large-scale conflict since 1953, due largely to the formidable military capability of the U.S.-South Korea alliance. Going forward, Washington and Seoul should sustain this success by adapting their combined deterrence strategy to the changed situation. Sanctions, export controls, and counter-proliferation activities can help limit the growth of North Korea’s nuclear and conventional military capabilities. Investments in updated U.S., South Korean, and Japanese military capabilities can challenge North Korea’s confidence that it can carry out violent aggression and successfully execute nuclear coercion. Confidence-building measures can reduce tension and limit conflict flashpoints. And last but not least, formal and informal agreements can limit North Korea’s nuclear arsenal.

Even after the United States and its allies accept the reality of a nuclear-armed North Korea and shift their policy from insisting on unilateral disarmament to managing deterrence, they will nonetheless have an interest in limiting North Korea’s nuclear weapons capabilities. North Korea, like all nuclear powers, has to manage resource constraints as it builds out a nuclear force—and its constraints are particularly acute. While we can assume Pyongyang has a minimal requirement for what is necessary to deter, the question is how much further North Korea might look to go and how the United

States and its allies can limit its arsenal. Given limited resources and Kim's stated desire to channel greater resources toward the rejuvenation of North Korea's economy in the form of a "new strategic line," Pyongyang may consider limits on the expansion of its nuclear weapons capabilities in exchange for specific U.S. and allied concessions.

Any nuclear agreement that the United States and its allies reach with North Korea should contribute to four U.S. goals:

1. Deterring North Korea from using nuclear weapons during a conflict;
2. Deterring North Korea from initiating violent nonnuclear aggression against South Korea and Japan;
3. Reducing the consequences of a conventional or nuclear war should deterrence fail; and
4. Limiting North Korea's ability and willingness to transfer nuclear weapons-related capabilities and know-how to third parties.

To achieve the first three, the United States and its allies should attempt to limit the size and sophistication of North Korean nuclear forces. To achieve the fourth, they should condition any concessions on a requirement that the Kim regime end nuclear proliferation activities, while also attempting to limit North Korea's supply of special nuclear material to make transfers less attractive.

In shaping North Korea's nuclear posture, the United States and its allies cannot reasonably expect to completely negate the North Korean nuclear threat. Instead, they should seek an equilibrium where North Korea has enough nuclear capability that it is confident that it can deter preventive war, but not so much that it is confident that it can initiate conventional aggression and use nuclear coercion to control escalation. Broadly speaking, North Korea's nuclear program exists within this equilibrium today, which is why a cap would be in U.S. and allied interests.

Restraining North Korea's nuclear weapons capabilities would make an important contribution to deterrence by increasing likely U.S. and allied resolve in the face of North Korean aggression. While North Korea's ability to threaten to destroy a few U.S. cities, even with uncertain probability of success, is probably enough to deter the United States from initiating an unprovoked war to disarm North Korea or dislodge the Kim regime, it would likely not be sufficient to deter the United States from intervening to stop North Korea from invading South Korea or punishing North Korea conventionally if it engaged in nonnuclear aggression in the region. If North Korea initiated a conflict, the United States would have a greater stake and, therefore, would be willing to risk a small North Korean nuclear attack. If, however, North Korea could reliably threaten tens or even scores of U.S. cities, then the potential costs of U.S. intervention would be far higher, potentially changing the U.S. calculus. If North Korea perceives that the United States would be unwilling to take such a risk on behalf of an ally, it may be tempted to carry out violent military aggression. Independent of the United States, South Korea and, in

particular, Japan are likely to be more willing to stand against North Korean aggression if the nuclear threat against their territory remains limited.

Plausible Limitations on North Korea's Nuclear Weapons Capabilities

The United States and its allies should consider what mechanisms of restraint would effectively limit North Korea's nuclear arsenal and what concessions each category of limitation would be worth. This section explores different categories of nuclear limitation worthy of consideration. For each, the devil would be in the details. Whether an agreement serves the U.S. and allied interest would depend on the scope and rigidity of the limitation on North Korea's nuclear forces and the costs of the concessions required to secure the deal.

Limit nuclear weapons production and supply. Limiting North Korea's production of weapons-grade plutonium, highly enriched uranium, and tritium would limit its capacity to produce nuclear weapons. This would help to restrict the size and sophistication of North Korea's deployed nuclear arsenal and also make it less likely that North Korea would transfer special nuclear material to third parties. Past agreements to limit North Korea's nuclear production infrastructure, including the 1994 Agreed Framework and the 2012 Leap Day Deal, offer both a blueprint for what an agreement might look like and caution regarding the difficulty of verification and sustainable implementation. North Korea's history of violating agreements and hiding facilities will raise the level of verification required for the United States and its allies to accept an agreement. It may also be in the U.S. and allied interests to pursue an imbalanced agreement that focuses on limiting certain nuclear materials over others. An agreement that focuses on restricting plutonium and tritium production, for example, would limit North Korea's production and deployment of more advanced nuclear weapons designs, restricting Pyongyang to more rudimentary bomb designs of the kind seen mocked up in front of Kim Jong-un in photographs released in March 2016.

Limit the number of nuclear-armed delivery systems. Limiting the overall level of North Korea's nuclear force would reduce the nuclear threat to the United States and its allies. The history of U.S.-Soviet and U.S.-Russian arms control provides numerous examples of the types of limitations and verification agreements that could be applied to North Korea's nuclear arsenal. But in the North Korean case, the United States would not submit to reciprocal limitations on its own nuclear forces. Negotiating an asymmetric, yet equitable agreement would be more difficult, but not impossible. Particularly as an initial step, the United States and its allies might focus on limiting the deployment of particular weapons systems, like North Korea ICBMs and Hwasong-12 intermediate-range ballistic missiles. A more narrow limitation might be more tolerable to North Korea, while also requiring fewer U.S. and allied limited concessions. From the U.S. perspective, an agreement focused on ICBMs would likely be very attractive because it would reduce or

eliminate the direct nuclear threat to the contiguous United States. Allies might support such an agreement if they thought it increased the credibility of U.S. extended deterrence commitments but, depending on the specifics, may object to leaving North Korea with a robust regional nuclear strike capability.

Limit the development and production of nuclear-capable missiles and launchers. North Korea's existing regional missile force is robust, but constraints on further advancement and deployment of missiles should not be overlooked. Solid-fuel missiles, like the land- and submarine-launched Pukguksong series, should merit special consideration, given the survivability advantages they confer over liquid-fueled systems, like the Hwasong-12, Musudan, Nodong, and extended-range SCUD. Where possible, the United States should seek to freeze further testing and development of more advanced North Korean missiles of all ranges. In addition, even if the United States is unable to win a commitment from North Korea to dismantle its ICBMs, it should work to freeze North Korea's production of indigenously built ICBM transporter-erector launchers (TELs) for either the Hwasong-14 or the Hwasong-15. North Korea is thought to rely on an external supply of large TELs, but evidence of advanced industrial work on heavy vehicle design and manufacturing suggests that it may develop a domestic production capability for TELs or towed mobile erector-launchers (MELs). Alternatively, North Korea may explore alternate basing modes, including rail-mobile launchers. Given the dual-use nature of manufacturing technology, it is unlikely that North Korea will agree to a limitation on its industrial capacity. Pyongyang may, however, be willing to disavow or cap the deployment of certain launchers, which the United States could monitor with national technical means and targeted inspections.

Plausible U.S. and Allied Concessions

Limitations on North Korean nuclear force development will not come cheap. For Kim Jong-un to accept an agreement, he would have to calculate that the benefits of the concessions provided are more valuable than the additional coercive leverage that would come from a more expansive nuclear weapons arsenal. Such concessions may be difficult for the United States and its allies to swallow, but would be worth it for the right agreement.

In negotiations, the United States and its allies should remain clear-headed and ensure that any agreement provides a net advantage to the United States, South Korea, and Japan compared to the present unconstrained situation. The United States and its allies should only limit their military activities or enable limited North Korean economic growth if they secure significant restrictions on North Korea's nuclear forces, and thus a net improvement in U.S. and allied security. U.S. and allied concessions should also remain readily reversible in most cases, to ensure that North Korea clearly understands the cost

of noncompliance. With those provisos in mind, the following are categories of concessions that the United States and its allies should consider.

U.S. and allied security assurances. North Korea will be more likely to accept a reduced nuclear arsenal if it is less concerned that the United States and South Korea are pursuing what it has termed a “hostile policy” against the regime. To secure a nuclear deal with North Korea, the United States and South Korea will, at the very least, have to convince Kim Jong-un that they will not actively seek regime change if North Korea maintains only a small nuclear arsenal. In exchange for limitations, the United States and its allies should consider publicly and/or legally disavowing the pursuit of regime change by force as long as North Korea meets certain conditions, to include not employing nuclear weapons. They should also be amenable to declaring the end of the Korean War and gradually reopening diplomatic relations. The presence of U.S. Foreign Service personnel in Pyongyang would be an important assurance against a U.S. preventative attack and more regular dialogue would help prevent misperception of hostile intent on both sides. If negotiations proceed to significant limitations on North Korea’s nuclear arsenal, the United States and its allies should also consider negotiating a formal peace agreement. The United States and South Korea should make clear, however, that they will only consider an agreement that supports the continuation of the U.S.-ROK alliance, including the presence of some U.S. forces on the Korean peninsula.

Limitations on U.S. and allied military posture and activities. To make their security assurances credible, the United States and South Korea will likely have to commit to adjustments in their military posture and activities on and around the Korean peninsula. The United States and its allies should not relinquish capabilities and exercises that are needed to maintain readiness and deter potential North Korean aggression, but should take steps to make clear that U.S. and allied military posture and exercises are designed to be defensive. To that end, the United States should support efforts to reduce tension near the border, such as the recent agreements between Seoul and Pyongyang to establish buffer zones across the Military Demarcation Line (MDL) on land and on the Northern Limit Line (NLL) at sea and demilitarize the Joint Security Area (JSA). The United States and South Korea should also be open to modification or suspension of activities that North Korea interprets as provocative, such as certain U.S. bomber missions and U.S.-ROK exercises. Should the strategic situation adapt toward greater trust, officers of the Korean People’s Army could be invited to observe non-sensitive allied exercises to confirm their defensive nature. If negotiations proceed to the point where North Korea has accepted significant, verifiable limitations on its nuclear arsenal, the United States and South Korea should also explore more ambitious conventional force limitations similar to those in Treaty on Conventional Armed Forces in Europe (CFE). It is likely that conventional force limitations will occur in parallel to nuclear agreements, but there may be opportunities for cross-cutting deals that serve U.S. and allied interests.

Sanctions and economic investment. Kim's stated goal is to shift from investment in nuclear weapons to growing the North Korean economy. UN and U.S. sanctions are a major barrier to North Korean economic development, making sanctions relief a key carrot to trade for nuclear capabilities limitations. Even if negotiations progress well, it will remain in the U.S. and allied interests to keep many sanctions and export controls in place, particularly those designed to limit the expansion of North Korea's nuclear weapons program and other key military capabilities. Those concessions that the United States and its allies do agree to should be targeted—designed to hedge against North Korean cheating or a deterioration of ROK-DPRK relations and, where possible, structured to support the North Korean people, rather than the regime. Initial concessions should be small and easily reversible, such as the issuance of sanctions waivers for select investment projects. Only after the process develops and North Korea agrees to significant, difficult-to-reverse limitations on its nuclear program should concessions expand to allow more significant economic activity; the United States might, for example, support the repeal of certain sectoral sanctions. The existing United Nations Security Council sanctions resolutions will pose a challenge to this endeavor, but the United States should be open to a piecemeal reinterpretation and support limited sanctions rollback in exchange for significant, verifiable limitations on North Korea's nuclear force.

The Challenges of Reaching a Mutually Acceptable Agreement

Finding a mutually acceptable agreement with North Korea will be extremely challenging and, indeed, may prove impossible. But significant obstacles can, in theory, be overcome.

One challenge is finding the equilibrium where North Korea is satisfied with its ability to deter unprovoked invasion and the United States and its allies see North Korea's nuclear posture as restrained and defensive. From a vastly inferior military position, Pyongyang may inherently mistrust any force limitation the United States is willing to tolerate, rendering the prospect of a mutually agreeable win set impossible. While a formidable obstacle, this does not necessarily place the prospect of a successful agreement in a paradox and may be solvable with a phased process of step-by-step concessions. Particularly early in the process, both sides will no doubt continue to harbor significant suspicion. But for the right security and economic concessions, Pyongyang may see limitations on its nuclear weapons capabilities as worth the risk. Over time, successful agreements and continued diplomatic contact have the potential to reduce distrust and make more ambitious agreements possible.

Evolving U.S. military capabilities—particularly conventional counterforce and missile defense—will present another challenge. U.S. military development, procurement, and deployments may increase Kim's belief in the vulnerability of his nuclear arsenal. To some extent, this is unavoidable because of the diversity of missions and scenarios

driving U.S. development efforts and the other significant U.S. interests in the Asia-Pacific. The United States, therefore, should consider nuclear force limitation agreements that leave space for adjustments to North Korea's nuclear posture if North Korea has reasonable concern about the survivability of its limited second strike capability. It should also be open to connecting limitations on certain U.S. military deployments to verifiable limits on North Korea's nuclear arsenal. Abandoning the U.S. Ground-Based Midcourse Defense (GMD) system would be politically infeasible and strategically imprudent, but the United States should consider caps on the deployment of ground-based interceptors in the right deal. As long as North Korea poses the most significant ICBM threat to the United States outside of China and Russia, whose arsenals are not the measuring stick for GMD, the sizing of the U.S. GMD system can and should be linked to the number and sophistication of North Korea's deployed ICBMs.

An additional challenge is alliance coordination. An agreement will only support U.S. interests if it avoids weakening the U.S.-South Korea and U.S.-Japan alliances. Allies are rightly concerned with North Korea's nuclear development and, therefore, are likely to support verifiable limitations. But they may have different threat perceptions and priorities than the United States. Washington, for example, may be interested in beginning the process by pursuing a cap on North Korea's ICBM arsenal. Seoul and Tokyo, by contrast, may not be comfortable with an interim deal that leaves North Korea's theater-range nuclear-capable systems unchecked. In addition, Seoul and Tokyo are also likely to have different threat perceptions and negotiating priorities, requiring Washington to balance and coordinate between the two. These are not insurmountable obstacles, but will require sustained and serious consultations between the United States and each ally.

A final—and most critical—obstacle is verification and compliance. After decades of failed agreements and covert North Korean development, the United States will insist on agreements that can be clearly verified and have significant costs for noncompliance. North Korea, on the other hand, will be suspicious of U.S. motives and no doubt voice strong opposition to any intrusive on-site inspections—especially of sensitive military sites and missile operating bases. One solution could be to involve the International Atomic Energy Agency (IAEA); a multilateral body—especially one with extensive prior experience in North Korea—may be more acceptable to Pyongyang, and its conclusions about compliance would likely have greater international legitimacy. With or without the IAEA, overcoming mutual distrust will be a process, requiring progressively more ambitious limitations on North Korea's nuclear forces connected to progressively more significant U.S. and allied concessions. Initial limited agreements should be verified primarily by U.S. national technical means and connected to concessions that are limited in scope and can be easily revoked should North Korea fail to uphold its end of the bargain. If those agreements are successful, Pyongyang and Washington will be able to

pursue broader agreements that require more significant on-site inspections and more permanent U.S. and allied concessions.

Conclusion

Difficult as it may be, the United States and its allies must deal with North Korea as it is, not how we want it to be. In an ideal world, the Korean people would be united under a democratic government that protects freedom and prosperity of its citizens. But our reality is a Korean peninsula divided, with the North ruled by a brutal regime that has a dreadful human rights record and has directly violated countless international obligations in its quest to develop nuclear weapons.

With no realistic prospect for immediate North Korean disarmament or a fall of the Kim regime, the United States should—with appropriate sobriety—shift to a strategy that aims to manage North Korea through a combination of deterrence, pressure, and targeted engagement. The United States should continue to pressure the Kim regime to meet its obligations to the North Korean people and the international community and attempt to set the conditions for eventual disarmament and transformation of North Korea. But it should also pursue agreements designed to restrict North Korea’s nuclear weapons capability and thus reduce North Korea’s willingness to run nuclear risk in a crisis or conflict.

Finding a mutually acceptable agreement may not be possible overnight, but there is a plausible path by which sustained diplomacy and confidence-building can chip away at decades of mistrust and hostility. Moreover, even if U.S. pursuit of an agreement ultimately fails, it will still have been worth the effort. If the United States makes a good-faith attempt to find durable solutions and faces unreasonable North Korean opposition, Kim Jong-un will have revealed the hostile intent behind his nuclear strategy. As a result, the United States will be in a better position to lead a coalition of allies and partners to deter and contain North Korea.

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