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A Long Road to Denuclearisation
Challenges to Security-Based Diplomacy with North Korea

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Executive Summary

This study examines how mutual security-related steps could be undertaken in order to progress diplomacy related to limiting, rolling back and removing North Korea’s nuclear and missile capabilities.

Diplomacy with North Korea over its nuclear and missile programmes has historically been rocky, but 2018 has seen a reinvigorated attempt at engagement. In 2017, tensions reached a high point as a result of regular missile tests by North Korea – which included the first tests of an ICBM capability – and the testing of what was most likely a thermonuclear device. However, at the beginning of 2018, South Korean President Moon Jae-in leveraged his country’s hosting of the Pyeongchang Winter Olympic and Paralympic Games to initiate engagement with North Korea over its nuclear programme. This engagement was bolstered by the absence of North Korean nuclear and long-range-missile tests, and North Korea’s closure of its nuclear test site.

Thus far, ongoing diplomacy has comprised two tracks. The first track is an inter-Korean process, through which Seoul and Pyongyang have worked to address the security environment on the peninsula. This is a result of South Korea’s acknowledgement that in order to advance denuclearisation, the security environment must improve, and that the country must make an effort to improve its own security through reducing the threats from North Korea’s conventional military assets. The second track, between the US and North Korea, is primarily focused on the nuclear issue, but is yet to produce agreed steps to significantly limit, roll back or remove North Korea’s nuclear weapons.

The inter-Korean dialogue has yielded steps towards a reduction of conventional military risks on the peninsula. These steps have been aimed at reducing conventional threats with a view to improving security. Mostly detailed in the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain, both North and South Korea have agreed on a series of steps to improve the security environment and reduce military risks. These include jointly removing landmines from the demilitarised zone and implementing a series of no-fly zones near the Military Demarcation Line.

North Korea and the US have also taken independent steps to contribute to an improved security environment. North Korea has not tested a long-range missile or nuclear explosive device in 2018, and the US has announced and implemented the suspension of large-scale combined military exercises with South Korea.

Steps to improve the security environment and threat perceptions on the peninsula are vital if progress is to be made in limiting and rolling back North Korea’s nuclear weapons capabilities, as a way of reducing North Korea’s perception of an immediate military threat from the US – a threat perception that Pyongyang has used to justify its nuclear weapons. If serious efforts are
to be made in denuclearisation, the US and South Korea will need to address North Korea’s security concerns.

However, the denuclearisation track has so far failed to make progress by agreeing steps to concretely impact North Korea’s weapons capability. At present, steps do not include efforts to tangibly alter North Korea’s nuclear programme. Nor do they significantly reduce the conventional threat that US forces could pose to North Korea, and there is a risk that the process will stall.

As a result of the step-by-step approach taken in diplomacy with North Korea this time around, it seems unlikely that a grand bargain agreement on the nuclear issues – in which North Korea would agree to relinquish its entire nuclear stockpile and supporting infrastructure in exchange for sanctions relief – will be achieved. Yet, a grand bargain agreement seems to remain as a policy preference for Washington. Therefore, a fresh approach that extends the current step-by-step approach beyond efforts in the conventional military space is needed.

This paper proposes compartmentalising denuclearisation into steps that can be agreed upon and implemented separately, and do not need to form part of a comprehensive, grand bargain agreement.

Compartmentalising denuclearisation can be done in two main ways. In the first approach, the US and South Korea could take the individual components of denuclearisation that are considered most important, such as declarations or verification measures, and find ways to apply these to selected parts of the nuclear infrastructure. Because these components have high value, their acceptance by North Korea early on will be challenging, as a result of the level of vulnerability they necessitate. However, when applied at the lowest level, declarations and verification measures do not have to result in high levels of vulnerability. For example, satellite imagery analysis could be used to verify a cessation of uranium mining at North Korea’s open-pit uranium mines, which could limit future fissile material production and cap the growth of North Korea’s nuclear arsenal. A strategy could be taken of identifying aspects of these steps that would be more amenable to North Korea, such as satellite imagery verification as opposed to on-site inspections, and considering how they could be applied to North Korea’s nuclear activities early on. As progress is made, these components of denuclearisation could be expanded to more areas of North Korea’s nuclear capabilities, broadening steps to denuclearisation.

Second, the US and South Korea could approach denuclearisation not by considering the components of denuclearisation, but the capabilities of priority, such as uranium enrichment. This approach would be phased across a capability of concern, to increase the level of declaration and verification measures through to dismantlement as time progresses. This would mean addressing North Korea’s capabilities in siloed agreements. For uranium enrichment, the phasing could begin with a low-level declaration of the number of centrifuges used to produce weapons-grade uranium, without a disclosure of the number of sites where they are located. This approach would, over time, increase in the depth of the agreement on this specific capability, all the way through to dismantlement.
However, North Korea will probably not agree to any such steps without assuring its own gains. Any steps towards denuclearisation will need to be tied to ongoing conventional security steps taken by the US and South Korea, bringing the two tracks together more explicitly. Opportunities do exist for further military risk-reduction measures. However, given that the overarching threat from the US has not diminished for North Korea, and the imbalance of conventional forces between the US–South Korea alliance and North Korea, these steps will need to be appropriately balanced. The next steps should therefore consider how aspects of the inter-Korean dialogue could be expanded to the US–North Korean relationship. For example, given the close range to North Korea, the US and South Korea should consider ceasing live fire drills at the Rodriguez Live Fire Complex near the border region, expanding part of the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain beyond the inter-Korean process to include the US. Another option could be for the US to commit to not sending nuclear-capable bombers to the Korean peninsula outside military conflict, reducing the threat to North Korea and demonstrating commitment to the process. This could be balanced with North Korea’s cessation of uranium mining, verified through satellite imagery, as both measures are easily reversible and only constitute a small step to transforming the security environment and altering North Korea’s nuclear capabilities – but a step in the right direction nonetheless.

Security has been at the heart of the 2018 efforts of diplomatic engagement with North Korea. It will, however, be vital going forward that the conventional military risk-reduction measures to improve the security environment become explicitly linked to steps on denuclearisation. Without this, the two-track approach could result in North Korea having an improved security environment without experiencing an impact on its nuclear weapons capability. Furthermore, without progress on the nuclear file, there is a risk that diplomacy will stall and collapse.
A Long Road to Denuclearisation: Challenges to Security-Based Diplomacy with North Korea

Introduction

FOR DECADES NORTH Korea’s nuclear and missile programmes have been a challenge for its regional neighbours, and the international community. Historically, tools for responding to this have included economic sanctions, political isolation, diplomacy and military pressures. But, none have so far been successful in preventing North Korea from acquiring nuclear weapons nor reducing the risks that they pose.

At the beginning of 2018, diplomatic engagement on North Korea’s nuclear and missile programmes re-emerged with some distinct differences. South Korean President Moon Jae-in initiated bilateral engagement, leveraging the 2018 Pyeongchang Winter Olympic and Paralympic Games as an opportunity for his first summit with North Korean Chairman Kim Jong-un in Panmunjom in April 2018. In turn, Moon used his bilateral summit engagement with Kim to initiate a parallel bilateral initiative between US President Donald Trump and Kim. The documents which were produced after the Moon–Kim summit in Panmunjom and the Trump–Kim summit in Singapore both referenced peace and prosperity, and denuclearisation. However, each track of engagement has been procedurally separate, despite sharing a similar focus. The South Korean administration has prioritised broad peace and security of the Korean peninsula and economic cooperation. For the US, denuclearisation has remained the top priority.\(^1\) At the same time, relations between Kim and President Xi Jinping of China have warmed – Kim travelled to China three times between March and June 2018 to meet Xi. Such meetings seem to reverse, at least partially, China’s earlier efforts to distance itself politically from North Korea after Kim came to power in 2011.\(^2\) To a lesser extent, Pyongyang has also reached out

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1. This paper uses a broad, catch-all definition to bound ‘denuclearisation’, encompassing the process of capping, rolling back and removing North Korea’s nuclear weapons capabilities. Specific references to the denuclearisation of the Korean peninsula expand this definition to include US nuclear-capable assets in South Korea as well.
to Moscow, with Russian Foreign Minister Sergei Lavrov meeting counterpart Ri Yong-ho in Pyongyang in May 2018.3

The opportunity to engage has been driven by three key factors. First, in 2017 North Korea tested both an ICBM and a high-yield nuclear device, two aspects of a deterrent capability that it has long desired and which Kim has stated have now been sufficiently demonstrated.4 With the deterrent capability portrayed as established, Pyongyang is now ready to shift its focus towards its new strategic line of economic development,5 for which international engagement would be beneficial. In March 2013, just over a year after assuming power, Kim announced his two-track policy of byungjin. This strategic line asserts that North Korea will pursue both nuclear weapons and economic development. Given the progress made on the nuclear front during his tenure thus far, Kim declared that efforts to acquire ‘a powerful treasured sword for defending peace was successfully concluded’, and in 2018 shifted his guiding policy to prioritise the national economy.6 This is not a renunciation of nuclear weapons, but an acknowledgement that Kim is satisfied with the level of capability demonstrated through testing. It could be argued that Kim has taken a step back from overt nuclear and missile activities in response to the high military tensions on the peninsula in 2017, and to alleviate some of the economic pressures that sanctions have imposed. However, given the importance and high prioritisation of nuclear weapons in North Korean security, and Kim’s reluctance to engage until these capabilities were demonstrable, it is unlikely that this shift would have occurred without successful, albeit limited, ICBM tests and the likely thermonuclear test in 2017.

Second, changes in both the South Korean and US administrations are most likely to be contributing factors. The shift from conservative former President Park Geun-hye, who took a hard-line stance on North Korea, to left-leaning Moon, who campaigned on a policy of engagement with North Korea, has affected South Korea’s policy towards its northern neighbour as it now seeks to foster an environment that is conducive to diplomacy. From Pyongyang’s perspective, this also creates an opportunity to exploit change to either gain concessions or pursue a genuine desire for improved relations. The unconventional nature of the current US president, who substantially increased the publicly stated military threat to North Korea during 2017, has also overstated the significance of North Korea’s initial step of declaring an end to missile and nuclear tests. Trump has subsequently engaged with the North Korean leader on


4. In his 2018 New Year’s Address, Kim Jong-un announced that North Korea would move beyond testing associated with the research and development phase of nuclear and long-range missile acquisition, to ‘mass-produce warheads and ballistic missiles’. See National Committee on North Korea (NCNK), ‘Kim Jong Un’s 2018 New Year’s Address’, 1 January 2018, <https://www.ncnk.org/node/1427>, accessed 17 November 2018.


a more equal footing and has overlooked some of the political hurdles that have hindered US presidential engagement with North Korea in the past.

The third factor is sanctions. Sanctions against North Korea were significantly expanded following frequent missile launches through 2016 and 2017, along with three nuclear tests. Given the prospect of these biting, coupled with the progress in capabilities, North Korea is open to engaging once more. It is difficult to assess the exact economic impact of sanctions on North Korea because of Pyongyang’s strong evasion techniques and limited public reporting on trade data. However, 2017 saw China and Russia agree to the most stringent United Nations Security Council (UNSC) sanctions yet, which included targeting key North Korean export industries such as coal, ore and other minerals and imports of refined petroleum. It has been suggested that the prospect of these sanctions affecting North Korea resulted in Pyongyang scaling down its large winter military exercises to save on fuel. Given the heightened possibility of US military action on the peninsula, states friendly to North Korea increased the pressure on Pyongyang with the view of reigning in provocations. These sanctions not only bring the prospect of genuine harm to North Korea, but symbolised a possible deterioration in relations between Pyongyang and Beijing, and Pyongyang and Moscow, contributing also to increased political isolation. There is, of course, a difference between sanctions being formally passed and their implementation. Despite agreeing to the resolution in theory, governments, businesses and financial institutions do not always adopt practices that ensure robust adherence to the resolution. Nonetheless, the prospect of China, and to some extent Russia, hardening their stances towards North Korea probably caused concern in Pyongyang. Without the complicit assistance of these friendly states, North Korean illicit networks might begin to struggle to carry out their activities, which keep the regime afloat.

Now might once again be a good opportunity to pursue a diplomatic solution to the North Korean nuclear issue. This paper considers how security-centric steps could be used to leverage and balance diplomacy related to limiting, rolling back and removing North Korea’s nuclear and missile capabilities. ‘Security’ here is understood in a narrow sense, focusing on efforts that reduce the risk of military confrontation that could lead to the use of nuclear weapons. Although steps to improve political relations, economic engagement and humanitarian issues can also contribute to a reduction in military risk, explicit steps that focus on hard security are vital as they are considered a primary driver and justification of North Korea’s nuclear weapons. Although improved economic integration, for example, can also reduce the risk of military conflict, the desire for enhanced economic cooperation has not driven North Korea’s nuclear proliferation. Pyongyang’s perception of its security environment, however, has. This study principally considers the security of North Korea, South Korea and the US given the role

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these countries have as the primary interlocutors in the current diplomatic efforts over North Korea’s nuclear programme.

**Methodology**

The research for this paper began with a literature review, evaluating governmental statements and academic analysis to understand the different security perceptions of the US, South Korea and Japan in relation to the North Korean threat, as well as the threat perceptions of North Korea. The governmental statements included remarks made at the UNSC special sessions on North Korea; the UN General Assembly meeting in 2017; statements made and published by the relevant government ministries in the US, South Korea, Japan and North Korea; and prominent English-language media sources. The literature review specifically focused on reactions to the prospect of using the US’s regional military presence and combined exercises with South Korea as bargaining chips in negotiations with North Korea throughout 2017. The governmental statements and published documents were selected as sources because they demonstrate governmental priorities as expressed to the international community. The UNSC special sessions on North Korea were held as a result of the deteriorating security context on the Korean peninsula following multiple missile and nuclear tests, serving as a platform for states to clearly outline their specific concerns related to North Korea’s nuclear and missile programmes. The limitation of using these sources is that they were delivered in the context of high tensions and significant military risks, which could have resulted in exaggeration or an altering of priorities to address the threats that appeared most immediate and which would elicit international political traction. These sources were also selected for their accessibility and English-language availability. English-language media reporting was also used to supplement non-English governmental documents and statements where necessary, and to compare and contrast how the media portrayed security issues to domestic populations in this period, as this can be important in driving threat perceptions and consequent governmental reactions.

The literature review also assessed the scale and purpose of the US–South Korea combined military exercises. For this, statements and press releases from the US Department of Defense, the South Korean Ministry of National Defence, US Forces Korea (USFK) and UN Command were used. These sources were selected based on their official nature; media reports on the exercises were found to sometimes be speculative, especially in relation to the numbers of troops involved and military capabilities participating. This literature review was limited to English-language sources, and therefore gaps might exist.

This research has also been supported by 18 not-for-attribution semi-structured individual and group interviews with both governmental and non-governmental experts considering national perspectives and perceptions on the thinking of other states – three were held with US nationals, seven with South Korean nationals and eight with Japanese nationals. The interviewees were selected with the intention of achieving balance – both in terms of representing views across the political spectrum and in terms of considering both governmental and independent analytical views – where possible. This is most important when considering domestic politics and the role of opposition parties that may potentially block or hinder any agreements made. This balance
was necessary to ensure that the research was comprehensive in addressing threat perceptions and therefore providing feasible recommendations.

Interviewees were identified through pre-established contacts and snowballing methodology, whereby current contacts connected the research team with other interviewees with knowledge related to the subject area. A limitation of this methodology, however, is that it may inject a bias into the sample of interviewees, as contacts might be more inclined to refer the research team to others that they already know and whose views they broadly agree with, resulting in an echo chamber. An attempt to mitigate this was made by ensuring that initial contacts were politically diverse. However, a further weakness of this methodology is that the research team has less control over selecting interviewees. Despite this, this methodology was chosen as a result of a relatively small pool of contacts in the region and established contacts being unavailable at the time of planned research trips. The officials interviewed were from government ministries, offices and research bodies closely involved in the North Korean diplomatic process, and embassies with a working knowledge of the issues addressed in this research. The non-governmental interviewees included prominent independent academics, former officials and researchers with expertise relating to the subject of this study. The data gained from the interviews was analysed to identify commonalities and divergences in perceptions of South Korea, the US and Japan, and to establish preferences for engaging with North Korea on the nuclear issue.

North Korean Nuclear Threat

Since assuming power after the death of his father in 2011, Kim Jong-un has visibly increased efforts to expedite and improve North Korea's nuclear and missile programmes. During this period, North Korea conducted four nuclear tests and 86 missile tests, including the first tests of the Hwasong-14 and Hwasong-15 ICBM systems. State media has also released images of what are believed to be miniaturised nuclear explosive devices, demonstrating progress in developing a deliverable nuclear warhead.

North Korea has pursued both uranium enrichment and reprocessing to produce the material required for weapons production. Given the uncertainty over the fissile material production capacities in North Korea, the overall estimates of warhead numbers vary; some are as cautious

as 16 to 32 weapons,\textsuperscript{12} while others estimate an upper limit of 60.\textsuperscript{13} If not capped, these numbers could grow, making denuclearisation of the Korean peninsula less likely.

To deliver its nuclear warheads, North Korea has also been developing its missile capability through ground and launch tests. These tests have supported the development of a range of missiles capable of delivering a nuclear device, including medium, intermediate, intercontinental and submarine-launched ballistic missiles, as well as dual-use space-launch vehicles.

Recent developments in North Korea’s missile capability have increased missile range and have advanced other aspects of the stockpile. For example, North Korea has pursued a submarine-launched ballistic missile and land-based solid-fuel capability to supplement the mostly liquid-based systems, bolstering survivability.\textsuperscript{14} Despite these developments, questions remain over the accuracy and reliability of North Korea’s longer-range missiles, as North Korea has not proved its re-entry vehicle capabilities.\textsuperscript{15}

North Korea has primarily pursued nuclear weapons to guarantee its security and support its strategic goal of regime survival. Nuclear weapons serve this purpose in three ways: deterrence; coercive diplomacy; and prestige.\textsuperscript{16}

First, to support the survival of the regime, nuclear weapons acquisition has been a key part of North Korea’s deterrence. The primary focus of North Korean deterrence is to repel potential invaders, most notably the US, to underpin the longevity and survival of the Kim dynasty.\textsuperscript{17}

\textsuperscript{12} Siegfried S Hecker additionally notes the production capacity for an additional 6 to 7 bombs per year. See Siegfried S Hecker, ‘What We Really Know About North Korea’s Nuclear ‘Weapons’, \textit{Foreign Affairs}, 4 December 2017.


\textsuperscript{14} A shift towards solid-fuel capabilities shortens launch preparation times and, due to their more manoeuvrable nature, could be more survivable. See Ankit Panda, ‘North Korea Has Tested a New Solid-Fuel Missile Engine’, \textit{The Diplomat}, 25 October 2017.

\textsuperscript{15} Dave Majumdar, ‘North Korea’s Last ICBM Test Leaves Us With a Big Question’, \textit{National Interest}, 4 December 2017.


\textsuperscript{17} The US–South Korea large-scale joint military exercises have played a significant role in helping sustain and justify this perception.
Second, North Korea’s nuclear weapons are used as a tool of the country’s coercive diplomatic strategy. They are a shield for an emboldened foreign and military policy, especially for actions on the peninsula. By possessing nuclear weapons to deter military action that could overthrow the regime, North Korea can use low-level military activity to further the aims of its policy actions. Key examples of this include the 2010 shelling of Yeonpyeong Island and the sinking of the Cheonan, and the 2015 exchange of fire across the border. However, this does not currently explicitly feature in North Korea’s declaratory policy.¹⁸

Third, nuclear weapons help to bolster the prestige of the North Korean regime. This helps to ensure regime survival by reinforcing the link between advanced technological and military development and credibility. Given the imbalance in growth and modernisation between North and South following the Korean War, nuclear weapons can be used in propaganda to demonstrate the strength of the country. This enhances domestic prestige, which could help portray the strength of the Kim dynasty and contribute to the survival of the regime.

Given the regime’s strong attachment to security, North Korea’s nuclear weapons will almost certainly not be fully bargained away, especially without a fundamental change to the threat environment. Irrespective of diplomatic engagement throughout 2018, North Korea has continued to cite its nuclear weapons as the bedrock of its security, to both domestic and international audiences.¹⁹ Ultimately, this might mean that so long as the US poses a military threat to North Korea, has a military presence on the peninsula, and continues to maintain nuclear weapons, North Korea will choose to possess nuclear weapons.

However, North Korea’s nuclear and missile capabilities are still relatively limited and there is still value in discussions to bound and limit North Korea’s nuclear and missile programmes and roll back the opportunities for future expansion. Limiting North Korea’s nuclear capabilities and capping its arsenal at low numbers keeps the balance of power in favour of the US, which could bolster the deterrence of North Korea and reduce the risk of nuclear weapons use. Furthermore, agreements that provide transparency and address security threats can help bring stability and reduce the risk of war.

**Managing the North Korean Nuclear Threat Until 2018**

Previous engagement with North Korea has attempted to achieve denuclearisation without addressing the root causes of insecurity that have driven nuclear proliferation on the peninsula

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and justified nuclear weapons possession. Following the end of the Korean War, North Korea sought to rebuild its military assets to ensure adequate defence should war break out again. This fear was enhanced because the war ended with an armistice agreement, not a peace treaty. Nuclear weapons are a tool which North Korea can use to offset US and South Korean conventional military superiority. As the goal of reunification by force has become a lower priority, the goals of defence and deterrence have become more important.\(^{20}\) Given longstanding concern over the prospect of a US invasion to overthrow the regime, a concern substantiated by an increasing US military presence in South Korea, establishing a deterrent capability is perceived by the North Korea regime to be key to its survival. Other WMD capabilities are part of this deterrent, but nuclear weapons have taken priority.\(^{21}\)

Security and peace have become a central feature of the 2018 diplomatic engagement with North Korea. To bring about a successful process of denuclearisation, the current Blue House administration has gone beyond the efforts applied to previous engagement with North Korea. It believes that to effect the removal of North Korea’s nuclear weapons, action must be taken to address the threat perceptions that have led North Korea to pursue this capability. Diplomacy is also taking place in a context that is fundamentally different from that of past engagements. Since the Six Party Talks collapsed in 2009, North Korea’s capabilities have developed considerably. This demonstrates the failure of past engagements, which has in turn prompted a change in approach to manage the nuclear issue.

However, North Korea must take steps to limit and roll back at least part of its nuclear programme if peace and security are to be achieved and maintained. The US especially is engaged with this diplomatic effort with the aim of achieving at least some progress in limiting North Korea’s nuclear weapons production. If steps that satisfy the US are not achieved, it is hard to envisage Washington continuing with diplomatic engagement. North Korea perceives security threats from the US on the peninsula as a driver for its nuclear acquisition and maintenance. However, without steps to limit its nuclear capabilities, Washington will be unlikely to take further steps to reduce North Korea’s threat perception. This insecurity is driven by a clash in perceptions: North Korea’s perception that nuclear weapons ensure security from the US, and the perception of the US that these weapons pose a security risk.\(^{22}\) Without the current initiatives, including at least some limitations on North Korea’s nuclear weapons, current efforts could collapse, possibly resulting in a slide back to the uncertainty and tensions of recent years. Given the


\(^{21}\) For a discussion on North Korea’s other WMDs and deterrence, see Cristina Varriale, ‘North Korea’s Other Weapons of Mass Destruction’, *Arms Control Today* (Vol. 48, No. 7, September 2018).

\(^{22}\) This demonstrates a classic case of the security dilemma in international relations theory, whereby actions intended to improve one state’s security increase the insecurity of its adversary, driving the adversary to react in a way that is perceived to increase the insecurity of others. See Shiping Tang, ‘The Security Dilemma: A Conceptual Analysis’, *Security Studies* (Vol. 18, No. 3, 2009), pp. 587–623.
make-up of the current administration in Washington, this could mean that the military tool for dealing with North Korea’s nuclear and missiles programmes becomes more prominent again.

Furthermore, North Korea is the only country to have broken out from the Nuclear Non-Proliferation Treaty (NPT) to develop nuclear weapons. The NPT has been a cornerstone of international security for decades and any weakening of the treaty could impact global security and bring the non-proliferation norm to erode. If the non-proliferation regime is to be upheld, the US and South Korea cannot allow North Korea to maintain nuclear weapons and enjoy the benefits of rapprochement. The long-term damage this would cause to the NPT is not certain, but it is definitely a risk the US and South Korea should be aware of and seek to mitigate.

Although some efforts have been made in the past to at least acknowledge this with agreements on the nuclear programme referencing efforts to work towards peace and security on the Korean peninsula, detailed steps to address North Korean security concerns were non-existent and came secondary to economic development, rather than being central features of diplomacy and agreements.23

Former South Korean President Kim Dae-jung initiated previous attempts to leverage friendly relations with North Korea and improve North–South relations to address the nuclear question; the last liberal president before Moon, Roh Moo-hyun, continued these efforts. The Sunshine Policy, as it became known under Roh, primarily focused on improving inter-Korean relations through joint economic opportunities and development incentives, increased tourism opportunities and people-to-people contact.24 However, the Sunshine Policy failed to address the perception from Pyongyang that the Kim regime was at risk from US military action.

Past diplomatic efforts to address North Korea’s nuclear programme have fallen short, probably because of their approach of demanding security-based concessions from North Korea in exchange for economic aid and engagement. These concessions did not address the underlying causes of North Korean proliferation. The incentive for North Korea to continue to pursue nuclear weapons therefore remains, and could be interpreted to have increased as the US military presence in South Korea has grown in reaction to North Korean provocations. Since Kim Jong-un came to power, he has carried out 86 missile tests, compared with 16 under Kim


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Jong-il. This has correlated with an increase in US troop participation in the US–South Korean combined Key Resolve military exercises, with approximately 5,200 US forces participating in 2014, up to 12,800 in 2017, and media reporting on the exercises regularly citing them as the ‘largest ever’.

In July 2017 China and Russia released a joint statement that suggested a freeze-for-freeze agreement. This initiative built on Beijing’s ‘double freeze’ proposal which outlined that North Korea should suspend its nuclear and missile activities, without public detail on what this could entail, in exchange for the US and South Korea suspending the large-scale combined exercises. The joint China–Russia proposal recommends that North Korea refrain from missile and nuclear testing and that the US and South Korea freeze large-scale combined exercises, while both sides pursue dialogue and engagement to reduce tensions and move towards peace.

On the surface, this proposal was designed to ease military tensions in the region by solely focusing on security considerations.

Prior to the 2017 joint proposal, the idea of trading security concessions over North Korea’s nuclear and missile programmes had been referenced in previous agreements, with acknowledgements


27. See, for example, Julian Ryall, ‘Largest Ever US–South Korea Military Drill Planned as a “Warning to Pyongyang”’, The Telegraph, 22 February 2016; Christine Kim, ‘South Korea, U.S. Kick Off Largest Air Exercise Amid North Korean Warnings’, Reuters, 5 December 2017.


30. This joint statement references the Chinese idea of a ‘double freeze’ of nuclear and missile activities, which is broader than simply testing, but does not include areas of consideration for concession in this specific proposal. Early on, China had proposed a ‘double suspension’ whereby North Korea would suspend its nuclear and missile activities while the US and South Korea suspend large-scale military exercises. This initially excluded the detail on the suspension of North Korea’s nuclear and missile ‘activities’, and the joint China–Russia statement.

31. Some analysts, however, cite the security considerations as being beyond those of the Korean peninsula, and in support of a Chinese ‘expansionist agenda’. See Peter Roberts, ‘US Military Exercises in Korea: If You Want Peace, Don’t Listen to China’s Proposal’, RUSI Commentary, 31 August 2018.
that parties would work to improve relations and peace on the peninsula, but without explicit steps being included. The 1994 Agreed Framework froze North Korea’s graphite-moderated reactors and related facilities at Yongbyon, which were connected to the plutonium production programme – this arrangement lasted until 2002. In exchange for the plutonium programme freeze, the main reciprocal offer from the US and South Korea was the provision of two light water reactors to North Korea for energy purposes. The US and South Korea also offered an informal concession – one that was not officially included in the agreement – of pausing the *Team Spirit* combined exercises in 1992, and planning but not executing them for 1994–96.32

This shortcoming appears to be central to the approach adopted this time, with the Moon administration acknowledging North Korea’s threat perception. If efforts to limit, roll back or remove North Korea’s nuclear weapons are to bear any fruit, a change in security perceptions must also occur.33 New initiatives by Moon this year have shifted the focus of engagement with North Korea to ensure that security and peace on the peninsula are central.

### Managing the North Korean Nuclear Threat Beyond 2018

For Seoul, the clear focus has been on addressing conventional military threats and risks from both the northern and southern parts of the peninsula, and the current South Korean administration has prioritised establishing a peace regime that will underpin US–North Korea denuclearisation talks.34 Although denuclearisation is an aspect of this, it has not been central to the inter-Korean process. The diplomatic initiative which aims to set up a lasting peace regime broadly includes: ending the Korean War with a peace treaty to replace the armistice; putting in place the right conditions to induce steps towards denuclearisation; rolling back the security threats to Seoul through military confidence-building measures; and economic interdependence.

In considering North Korea’s nuclear weapons, interviewees for this study indicated that these capabilities do not threaten Seoul in a significantly different way from the more general military threats posed by North Korea.35 This perception does not downplay the threat posed by nuclear

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33. Author’s interviews with expert 8, Seoul, 31 July 2018. For many in Seoul, there is an understanding that North Korea’s threat perception of invasion is real; if denuclearisation is to be achieved that perception must change.


35. Author’s interviews with expert 5, expert 7 and expert 8, Seoul, 31 July 2018. Many of the Seoul-based experts interviewed noted that while the nuclear threat to South Korea is relevant, it is one element of a much broader threat picture from the North.
weapons, but it does heighten the South’s concerns with North Korea’s use of its conventional military assets (such as long-range artillery and special operations forces) to target Seoul. The special operations forces are well trained, organised and disciplined, and the long-range artillery could be used to deliver chemical and biological weapons. The current Moon administration has used this to justify its focus on establishing a peace and security regime to reduce this military threat, prior to pushing for more tangible nuclear and missile steps.

Following the first inter-Korean summit since 2007, the 2018 Panmunjom Declaration formally initiated this security-centred approach. The declaration specifically ties the denuclearisation process and disarmament to the alleviation of military tensions and to military confidence building. The declaration outlines steps that should be taken to ‘defuse the acute military tensions and to substantially remove the danger of a war on the Korean peninsula’, and provided a foundation for inter-Korean military-to-military engagement. The focus is on prioritising non-nuclear steps, and committing both South and North Korea to pursuing explicit military risk-reduction measures.

This approach, while necessary to underpin efforts to achieve denuclearisation, does not specifically contain measures which would seek to limit or roll back the nuclear portfolio. This focus on military risk reduction is only addressing a limited portion of the security concerns and not those that specifically have driven the high tensions and military risk throughout 2018. If broad peace and security are the goal, the process must also address North Korea’s nuclear and missile programmes. Without this, the process risks improving North Korea’s security environment without the country having to fundamentally alter its nuclear weapons capabilities.

The Panmunjom Summit was followed by the Singapore Summit, the first ever meeting between a sitting US president and North Korean leader, in June 2018. This led to the Singapore Summit statement, which although it contains little substance on specific steps to implement denuclearisation, does refer to the Panmunjom Declaration to reiterate North Korea’s commitment ‘to work toward complete denuclearization of the Korean Peninsula’. This therefore connects North Korean denuclearisation to the broader security and military features

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38. Ibid.

of the peninsula. The Singapore Summit statement, however, does not provide as strong a basis for steps forward on the nuclear profile as the Panmunjom Declaration does for the non-nuclear steps. This left the denuclearisation track weak and lacking a clear way forward.


In progressing denuclearisation, the US clearly prioritises on-the-ground access to relevant North Korean facilities. In the Pyongyang Declaration, North Korea committed to ‘permanently dismantle the Dongchang-ri missile engine test site and launch platform under the observation of experts from relevant countries’\footnote{South Korean Ministry of Unification, ‘Pyongyang Joint Declaration of September 2018’, press release, 19 September 2018, <http://www.unikorea.go.kr/eng_unikorea/news/releases?boardId=bbs_0000000000000034&mode=view&cntId=54193&category=&pageIndex>, accessed 6 November 2018.} The US State Department interpreted this as an announcement that the site would be dismantled ‘in the presence of U.S. and [International Atomic Energy Agency (IAEA)] inspectors as a step toward the final fully verified denuclearization of North Korea’.\footnote{US Department of State, ‘On the Outcome of Summit Meeting Between President Moon and Chairman Kim’, press statement, 19 September 2018, <https://www.state.gov/secretary/remarks/2018/09/286039.htm>, accessed 25 September 2018.} Irrespective of whether this is a genuine interpretation or a statement of preference, it clearly signals where US priorities lie. The US has also signalled its verification priorities in relation to the Yongbyon nuclear complex. At the Pyongyang Summit, Kim Jong-un expressed a willingness to ‘continue to take additional measures, such as the permanent dismantlement of the nuclear facilities in Yeongbyeon [Yongbyon] as the United States takes corresponding measures’.\footnote{South Korean Ministry of Unification, ‘Pyongyang Joint Declaration of September 2018’.
did not include a clear commitment to conduct these activities in the ‘presence of U.S. and IAEA inspectors’, as interpreted in US Secretary of State Michael Pompeo’s press statements.46

As verification is a priority, it can be assumed that the US is expecting, or working towards achieving, significant changes to the North Korean nuclear infrastructure. Although Washington did reference a timeline for achieving denuclearisation by 2021, to coincide with the end of Trump’s current term in office,47 the administration has since softened this approach.48

Washington has been broadly consistent in its position that sanctions regimes must stay in place until complete denuclearisation is achieved or at least considerably advanced. Relieving sanctions should not be a step that is offered in exchange for minor alterations to North Korea’s nuclear weapons programme, such as a cessation of nuclear testing, but could be attached to more significant steps, such as the dismantling of facilities at Yongbyon. Relieving sanctions early on risks damaging the nuclear non-proliferation regime by removing the mechanisms that were put in place to punish North Korea for its nuclear weapons proliferation prior to achieving their goal of reversing misconduct. Although North Korea has announced a cessation of nuclear testing, it is able to continue producing the material required for nuclear weapons production. Removing this punishment mechanism would grant North Korea space to act more freely. Early relief would also mean the US and South Korea would lose their leverage in coaxing North Korea to engage in further steps towards denuclearisation.

In taking steps to improve the security environment and push for denuclearisation, Washington should be conscious of secondary concerns, such as avoiding the perception of damage to extended deterrence arrangements. The US should consider how its priorities and actions impact extended deterrence commitments and security relationships both regionally and elsewhere. The US will therefore not lightly forgo the overarching military relationship with South Korea as a step to induce denuclearisation. Not only would this achieve North Korea’s aim of splitting the alliance, it would risk signalling to other allies and adversaries that support in Washington for extended deterrence commitments is weakening.49 To continue to demonstrate a commitment to extended deterrence, the US will probably have to continue to maintain a military presence in both South Korea and Japan through USFK and US Forces Japan. Without USFK, South Korean defence would be considerably weakened, and there is concern in Tokyo that this would move the first line of defence against China back to Japan.50 However, additional assets, such as

46. US Department of State, ‘On the Outcome of Summit Meeting Between President Moon and Chairman Kim’.
49. Author’s interview with expert 2, London, 5 June 2018.
50. Author’s interview with expert 14, Tokyo, 3 August 2018.
strategic air and naval assets visiting the region, could probably be at least reduced without impact on the immediate defence of Japan and South Korea.

So far, the US has contributed to improving the threat environment on the peninsula by suspending large-scale combined military exercises with South Korea. During the press conference following the Singapore Summit, Trump announced the suspension of the US–South Korea combined military exercises, suggesting this move would help to foster an improved atmosphere in which diplomacy can be pursued.⁵¹ The idea of using combined military exercises as a bargaining chip that could contribute to reducing tensions and creating opportunities for diplomatic resolutions has been proposed before by China and Russia, and frequently rejected by the US.⁵²

There is evidence that suggests North Korea is willing to undertake step-by-step engagement to alter aspects of its nuclear weapons programme.⁵³ As discussed above, there is only a small chance of North Korea relinquishing its full nuclear arsenal; limitations and roll back of some capabilities might be possible. Although the regime has been explicit in stating it is not committing to unilateral disarmament, a step-by-step approach might be feasible. For example, following the Singapore Summit, North Korea media reported that Kim and Trump agreed to ‘abide by the principle of step-by-step and simultaneous action in achieving peace, stability and denuclearization of the Korean Peninsula’.⁵⁴

Thus far, the security-based approach has led to a number of steps aimed at improving the security environment as an objective in itself. At the same time, it also offers a means to support the end goal of denuclearisation. North Korea has ended nuclear and long-range-missile tests, the US and South Korea have suspended large-scale combined military exercises, and the two Koreas have agreed on a number of steps to reduce tension and the risk of military confrontation on the peninsula.

⁵³. Kim has signed on to the Singapore Summit statement with Trump, as well as the Panmunjom Declaration and Pyongyang Declaration with Moon, all three of which reference denuclearisation as a phased or step-by-step process. Furthermore, Kim has offered dismantlement of the Sohae Satellite Launch Station as a measure to begin implementing these steps. Although this should not be mistaken as Kim’s willingness to completely relinquish all nuclear weapons and capabilities through this approach, it does signal that he is probably willing to take some small steps, should the incentives on offer be worth it.
On 21 November, US Defense Secretary James Mattis made brief comments to the press that the 2019 iteration of the combined US–South Korea field training exercise *Foal Eagle* (FE) will be reorganised ‘to keep it at a level that will not be harmful to diplomacy’.55 However, South Korea and the US will not be able to easily restart large-scale exercises now that the two countries are diplomatically engaging North Korea, so long as Pyongyang remains committed to its own nuclear and long-range-missile test cessation. North Korea would consider such a reversal confrontational. In response to the Korean Marine Exercise Program activities in early November, North Korean state media referred to drills as provocative and suggested they were not consistent with efforts to reduce military tensions.56 Further exercises could spur a more extreme reaction and cause Pyongyang to walk away from engagement, and possibly to restart provocations.

Although the decision is not quite this black and white, and other options exist (such as moving the exercises off-peninsula), the alternatives may be inadequate. Carrying out the exercises in a different location, for example in the continental US, would not allow the US military to gain the same level of familiarisation with the environment and experience of operating on the peninsula. It would also leave a vulnerability gap, as replicating the large-scale exercises off-peninsula would require many of the US personnel stationed in Korea to leave.57 Alternatively, the US and South Korea could decide to move forward with FE in 2019 on-peninsula, but in a scaled-down formulation. Alterations might include: the absence of strategic bombers or aircraft carriers, to reduce the appearance of the scale of the exercises; restricting activities to locations in the southern part of South Korea, or as far away from the demilitarised zone (DMZ) as possible,58 and scaling back aspects of the activities that are considered more provocative – such as conducting amphibious beach landings at Pohang, North Gyeongsang province, to maintain experience but without troops exiting vehicles and storming the beaches.

Being aware of this flexibility might be useful to the diplomatic process. Given the international community’s experience of engaging with North Korea, and the nature of the regime, at least some efforts to evade agreements or disrupt the process are likely. By exploring various possibilities for the scale of the exercises, the US and South Korea maintain options broader than the two that are often only presented: continue with diplomacy or walk away. However, this will not be easy to manage, and the baseline has been set at demanding suspension, not reductions. This means that any attempt to readjust will likely be considered as an upscaling of the exercises, from the North Korean perspective.

57. Author’s interview with expert 1, London, 15 June 2018.
58. This would include not conducting live-fire drills at locations such as the Rodriguez live-fire complex, which is approximately 25km from the DMZ.
The situation in which South Korea and the US now find themselves was characterised by one interviewee as ‘riding on a tiger’s back’: Seoul and Washington have embarked on a course of action that, if terminated now, would jeopardise the opportunity for a peaceful approach to the North Korean nuclear issue. Therefore, efforts will need to be made to tie explicit steps on denuclearisation to broader efforts to improve the security environment on the peninsula. The rest of this paper will assess the steps that have been taken so far, before outlining options for the future.

Changes to North Korea’s Nuclear and Missile Programmes in 2018

Under current diplomatic initiatives, North Korea has taken small steps to alter and self-limit activities associated with its nuclear and missile programmes. First, North Korea has not tested a nuclear explosive device or carried out long-range missile tests since the end of 2017. Second, Pyongyang invited foreign journalists to witness the collapsing of the entrance tunnels to its nuclear test site. Third, North Korea has taken steps to dismantle an engine test stand at the Sohae Satellite Launching Station.

One possible explanation of the cessation of testing is that Kim believes testing thus far has sufficiently demonstrated the possession of an adequate capability. At the beginning of 2018, Kim declared that North Korea has achieved a great accomplishment of ‘perfecting the national nuclear forces’ which are ‘capable of thwarting and countering any nuclear threats from the United States’ and deterring Washington from ‘starting an adventurous war’.

Following on from what North Korea deemed to be a technologically successful year for its nuclear and missile programmes, Pyongyang announced a new strategy in April 2018 at the Third Plenary Meeting of the Seventh Central Committee of the Workers’ Party of Korea. Previously adhering to the byungjin two-track policy of developing nuclear weapons and the economy, Kim Jong-un declared a shift to prioritise economic development, and formally announced the end of nuclear and long-range-missile testing. This strategic shift, along with the voluntary termination of testing, has helped form the basis for engagement to take place. Additionally, it is possible that this end to testing might represent the first step of a dual-freeze arrangement, as suggested by China and Russia, to initiate diplomatic engagement. Although it is not possible to identify Beijing’s precise influence on North Korean policy, the fact that Kim and Xi held three summits in quick succession alongside the steps North Korea has taken is noteworthy.

60. NCNK, ‘Kim Jong Un’s 2018 New Year’s Address’.
61. NCNK, ‘Third Plenary Meeting of the Seventh C.C., WPK Held in Presence of Kim Jong Un’. This should not be mistaken as an understanding that North Korea is willing to relinquish its nuclear weapons capability, but that this capability has been sufficiently developed and obtained such that the focus can now be on the economy.
Missile testing could be easily resumed given that the supporting infrastructure still exists. For example, North Korea has used transporter erector launchers to conduct many of its missile tests in recent years, and the suspension of launching has not been joined by the dismantling of these launch capabilities.

North Korea welcomed a number of foreign journalists to Punggye-ri in May 2018 to witness the destruction of entrance tunnels to the test site where all six nuclear tests occurred. In addition to detonating explosives in the tunnels, some support buildings around the site were also demolished. According to North Korean state media, the dismantlement occurred ‘in a way as to make all the tunnels of the test ground collapse by explosion and completely close the tunnel entrances, and at the same time, explode some guard facilities and observation posts on the site’.

Major questions remain over whether the impact of the demolitions at Punggye-ri can be reversed. The entrances to the tunnels have clearly been collapsed. However, the depth of the explosions is unknown. According to North Korea, the explosions to collapse the tunnels ran deeper than just the entrances. Images taken by journalists present show multiple explosive packages in the entrances, but the existence of further explosions deeper into the tunnels cannot be verified.

Even if the depth of the collapse does run a short way beyond the entry points, efforts to re-excavate the entrances and tunnels to the testing chambers could be quickly put in place. Additionally, North Korea’s mountainous terrain and numerous tunnels provide it with alternatives, allowing it to resume underground nuclear testing urgently if needed. Aside from the limited tangible impact on North Korea’s ability to test immediately at this site, following through on this concession does not concretely disadvantage North Korea’s nuclear arsenal.

The more likely explanation for North Korea’s willingness to collapse the tunnel entrances is that the country’s nuclear capabilities have already reached an advanced state. This step is therefore best characterised as a cessation of an activity, not the loss of a capability.

Nonetheless, as with the missile testing, nuclear testing was a driver of the cyclical process in which increasing tensions were followed by the imposition of sanctions against North Korea and growing military risk. In this respect, the termination of these activities should be welcomed. However, these actions do not demonstrate that North Korea has de-prioritised nuclear weapons in the country’s strategic thinking, nor do they alter its nuclear capability. As a result, fundamentally, the threat remains largely as it was.

64. To see where North Korea claimed it had placed deeper explosives and further analysis, see Frank V Pabian, Joseph S Bermudez Jr and Jack Liu, ‘More Potential Questions About the Punggye-ri Nuclear Test Site Destruction’, 38 North, 8 June 2018.
Had the North Korean nuclear programme been at an earlier stage of development, the tangible value of these concessions might have been greater – the country would have potentially lost both capability and knowledge, or at least progress would have been delayed given the lead time required to reverse the impact of such measures on development. However, because North Korea is moving beyond a R&D stage of its missile and nuclear programmes to a production and deployment phase, tacit experience gained through testing to improve capabilities is no longer as valuable. It can also be assumed that lower-level, laboratory-based activities are being used to maintain the tacit capabilities that allow the country to continue to produce and maintain already-acquired capabilities.

North Korea has also conducted some activities that appear consistent with the dismantling of an engine test stand at the Sohae Satellite Launching Station. This is reportedly a concession that Kim promised Trump verbally in Singapore.\(^\text{65}\) The Sohae Satellite Launching Station has been used by North Korea to test missile engines suitable for both long-range ballistic missiles and for launching satellites into space.\(^\text{66}\)

Given the role that the Sohae site has played in the development of North Korea’s missiles and space-launch vehicles, offering its dismantlement is not insignificant. First, it offers any agreement made the opportunity to avoid the loopholes and ambiguities that collapsed past agreements. In 2012, the Leap Day Deal collapsed after North Korea conducted what it claimed as a peaceful space launch, despite having agreed to a moratorium on long-range missile launches.\(^\text{67}\) If North Korea no longer maintains a space-launch facility, this risk is reduced. Second, the impact of dismantling the test stand on the future development of North Korea’s missile programme would be harder to reverse, but its impact on Pyongyang’s existing capability would not be significant. Some analysts disagree with such assessments, arguing that North Korea has not tested its long-range missile capability enough times to be confident of its reliability compared with that of other nuclear powers.\(^\text{68}\) However, in its domestic and international messaging, North Korea has chosen to state that its believes this capability is sufficient for its goals. Despite consistently increasing military (and to some extent economic) pressures and risk throughout 2016 and 2017, North Korea pushed ahead with its missile and nuclear testing. Only after demonstrating a capability that it could classify as the ultimate deterrent did North Korea choose to engage.

Most of the steps North Korea has enacted so far are symbolic, with little value to altering its nuclear capabilities. The end of nuclear and long-range-missile tests might assist in breaking

\(^{65}\) In his press conference after the Singapore Summit, Trump referred to North Korea blowing up its missile area. See White House, ‘Press Conference by President Trump’. For further details, see US Department of State, ‘Press Availability with Secretary of Defense James Mattis, Australian Foreign Minister Julie Bishop, and Australian Defense Minister Marise Payne’, 24 July 2018.


\(^{67}\) US Department of State, ‘U.S.-DPRK Bilateral Discussions’.

\(^{68}\) Kristensen and Norris, ‘North Korean Nuclear Capabilities, 2018’.
away from recent impasses in addressing North Korea’s nuclear and missile programmes. However, the material impact on the development of Pyongyang’s programmes is limited and the measures the country has taken which purportedly limit future development have, in fact, most likely occurred because the benefits that these facilities originally provided are now no longer required.

Suspension of the US–South Korean Large-Scale Combined Military Exercises

Following the Singapore Summit, Trump announced a suspension of the combined military exercises, calling them ‘provocative’ and ‘tremendously expensive’. The suspensions are not only limited to their execution, but also the pre-exercise planning that takes place. This is consistent with previous suspensions.

For decades the US and South Korea have participated in combined military exercises on the Korean peninsula. Since their inception, these exercises have evolved and now mostly consist of two large-scale exercises per year, *Foal Eagle*/Key Resolve (FE/KR) and *Ulchi-Freedom Guardian* (UFG), interspersed with smaller exercises.

KR has been running since 2008 and focuses on staff training. With a duration of approximately one week, KR does not typically involve large-scale field exercises. KR runs in conjunction with FE, a series of exercises designed to train field units. The purpose of FE is to rehearse military manoeuvres such as rear-area battle, amphibious operations and force-on-force operations for various scenarios.

UFG is a command-post exercise simulation focused on warfighting tasks. It is designed to enhance readiness and develop South Korean Joint Chief of Staff and USFK theatre operations.

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69. White House, ‘Press Conference by President Trump’.
command and execution capabilities to prepare for the transfer of operational control (OPCON) from the US in wartime.\textsuperscript{74}

**The Purpose of Combined Military Exercises**

From their inception, the purpose of the combined military exercises has been broadly threefold: defence and military readiness; deterrence; and (re)assurance of South Korea.

At a practical level, US officials and military personnel regularly cite the exercises as being essential to the military readiness of the alliance, necessary for the defence of South Korea and the broader region.\textsuperscript{75} Since the Korean War, the US has maintained wartime OPCON of the South Korean military, making strong communications between the two forces key for war planning and fighting. Such communication planning and execution has been deemed most vital for the combined military exercises.\textsuperscript{76}

The exercises were initiated to support collective defence as outlined in the 1953 Mutual Defense Treaty. In 1953, after the end of the Korean War, the US and South Korea signed a mutual defence pact, agreeing to 'maintain and develop appropriate means to deter armed attack and will take suitable measures ... to implement this Treaty'; and 'the right to dispose United States land, air and sea forces in and about the territory of the Republic of Korea as determined by mutual agreement'.\textsuperscript{77}

While the treaty did not explicitly mandate combined military exercises, such action was deemed relevant to develop ties and cooperation between Seoul, Washington and their respective militaries on the peninsula.\textsuperscript{78} The exercises were also intended to strengthen the South Korean military that had been heavily damaged during the Korean War and allow it to contribute to the defence of the peninsula – especially given that the Korean War did not formally end with a peace treaty.\textsuperscript{79} As the South Korean government regularly states, combined military exercises...

\textsuperscript{74} The US maintains wartime control of the South Korean military, initially agreed to by both parties to ensure the adequate defence of South Korea and strengthen its military abilities. This was first agreed in 1950, with the terms laid out in 1954. See Seoyeon Yoon, ‘South Korea’s Wartime Operational Control Transfer Debate: From an Organizational Perspective’, *Journal of International and Area Studies* (Vol. 22, No. 2, December 2015), p. 91. There have been longstanding efforts to transfer control back to Seoul, but timelines for this to take place have been repeatedly extended.


\textsuperscript{76} In author’s interviews with senior governmental and non-governmental experts on the joint military exercises, the role of developing and improving communications was frequently cited and highlighted as the top priority for the joint exercises.


\textsuperscript{78} Collins, ‘A Brief History of the US–ROK Combined Military Exercises’.

\textsuperscript{79} *Ibid.*
are designed to strengthen the combined mission capability, to be able to cope with a crisis on
the peninsula, and to improve defensive measures, as well as developing offensive abilities to
support the capacity to carry out a military response.

In addition to improving defence and military readiness on the peninsula, the demonstration of
this support is also intended to deter North Korea, as well as China and Russia. By continually
rehearsing combined military manoeuvres and demonstrating an increasingly strong combined
military capability and relationship, the credibility of deterrence, and therefore the chances
that the North would incur high costs in the event of war, increases.

Finally, the military exercises and relationship are a key way of demonstrating US commitment to
the defence of South Korea. For Washington, this bolsters its efforts to deter other adversaries
by demonstrating that the US has the political willingness to defend and support an ally.

**North Korean Responses to the Combined Military Exercises**

Both the US and South Korea have publicly stated that the exercises are purely defensive and
aimed at bolstering the region’s security. North Korea has a different interpretation and
constantly raises its concerns. The country is particularly sensitive to the use of stealthy or
nuclear-capable assets, naming systems such as the B-2s, B-52s and F-22s regularly in state
media publications against the exercises.

There are two key reasons for these reactions. First, as indicated earlier, North Korea perceives
a military threat which could overthrow the regime. As such, it probably does worry about the
presence of these capabilities. For instance, Pyongyang claims that these exercises allow the
US and South Korea to rehearse an allied invasion. Second, North Korea wants to justify its own
development of nuclear weapons – an effort that is supported by reiterating and exaggerating

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80. See, for example, Republic of Korea Ministry of National Defense, “’D-5’ U.S. LCS Participates in

81. USFK, ‘CFC Announces Start of Key Resolve and Foal Eagle 2016’, 160307-1, press release,
6 March 2016, <http://www.usfk.mil/Media/Press-Releases/Article/686836/cfc-announces-start-
of-key-resolve-and-foal-eagle-2016/>, accessed 25 September 2018; Terry Moon Cronk, ‘U.S.,
South Korea Launch Annual Foal Eagle Exercise’, US Department of Defense News, 3 March 2017,
<https://www.defense.gov/News/Article/Article/1102331/us-south-korea-launch-annual-foal-

82. For example, see Republic of Korea Ministry of National Defense, ‘Raised Actual Countermeasures
Assuming an Invasion from the North’, 30 March 2015; Lisa Ferdinando, ‘Exercise to Strengthen

83. For example, see KCNA, ‘U.S. Deploys B-2A on Guam for Preemptive Nuclear Strike at DPRK’, 10
August 2016; Rodong Sinmun, ‘Dangerous Arms-Buildup Aimed at Aggravating Tension’, 24 January
2018; Rodong Sinmun, ‘KCNA Blasts U.S. and S. Korea for Staging Large-Scale Military Drill Against
DPRK’, 17 May 2018.
the nuclear threat. The insecurity that these activities create for North Korea act as a catalyst for provocative reactions, including ballistic missile testing.\(^{84}\)

### Assessing the Concession: 2018 Limits and Suspension

The 2018 KR/FE exercises – which were postponed to allow for the Winter Olympic and Paralympic Games – were altered to facilitate reduced tensions and the diplomatic process, despite claims they were carried out on a similar scale.\(^{85}\) US attack submarines did not visit South Korean ports during the exercises and US strategic bombers did not conduct bomber assurance and deterrence flights – both activities have occurred in previous years.\(^{86}\) Exercise *Max Thunder* – an air exercise that is usually incorporated into FE – was separated from the larger process this year, making FE appear smaller. Naval aircraft carriers also did not join the FE 2018 exercise, having appeared in the 2015, 2016 and 2017 iterations. Publicity on this drill was also limited, with reports that the US administration had chosen not to release a public statement announcing the start of the drills to limit disruption to the ongoing summit process.\(^{87}\)

Based on the three main objectives of the combined military exercises outlined above – defence and military readiness, deterrence and the (re)assurance of South Korea – the concession granted by the US and South Korea in suspending the combined military exercises has both symbolic and practical value.

In considering the contribution of the combined military exercises to defence, the suspension of the exercises could have the potential to weaken the readiness of both militaries.\(^{88}\) A key part of the defensive aspect of the exercises is their role in improving communications between the two militaries, which is developed and maintained through UFG. Given personnel rotations,

\(^{84}\) For a detailed discussion on North Korean reactions to combined military exercises, see Andrea Berger, ‘A Downward Spiral, Joint Military Exercises on the Korean Peninsula’, *RUSI Journal* (Vol. 159, No. 1, March 2014), pp. 68–76.


\(^{87}\) Phil Stewart, ‘For Pentagon, South Korea Drills Became a Crucial but Quiet Endeavour’, *Reuters*, 16 May 2018. However, limited statements and media on the drills did not impact the North Korean reaction, which in line with its longstanding distaste for combined exercises on the peninsula cancelled a high-level meeting with South Korea that was scheduled for 16 May 2018. See *Yonhap News*, ‘N. Korea Cancels High-Level Talks With S. Korea Over Military Drill’, 16 May 2018.

\(^{88}\) Author’s interview with expert 1, London, 15 June 2018; author’s interview with expert 6, Seoul, 31 July 2018.
varied systems and the integration of new capabilities, the ability to conduct joint operations safely and effectively could be lost. Without large-scale exercises, the only other opportunity to run through these complete procedures and plans is in a wartime or crisis scenario, where the risks increase significantly.

To some extent, the timeframe in which this degradation of readiness will begin to occur depends on rotational postings of commanders and other US service members stationed in South Korea. Such degradation is likely to begin within a period of between six months and two years, after which capability degradation will severely impact the ability of the US and South Korea to quickly reverse the impacts of suspension and revert back to a high level of readiness. This will then increase the risks associated with military action on the peninsula; the US and South Korea would have degraded experience in cooperating and communicating with each other in the air, on the land and at sea. For example, given the limited airspace over South Korea, military aircraft and personnel benefit from being able to practise communications procedures in a wartime scenario to avoid accidental clashes and to practise synchronised manoeuvres. This has not been mitigated by the continuation of exercises outside the large-scale exercises – Vigilant Ace, an exercise designed to build interoperability between the US and South Korea, was cancelled in 2018. Without this experience, the risks associated with warfighting increase.

Although the larger KR/FE and UFG are interspersed with smaller exercises at the unit level that could still run under the current suspension, these are not likely to be able to sufficiently manage the demands of the large-scale communications that would be required in wartime. A more immediate and substantial loss of capability and readiness is mitigated through the continuation of unit-level trainings, such as the Korea Marine Exercise Program that went ahead in early November 2018. However, the large-scale exercises give the commander of USFK Combined Forces Command a full force picture, advanced planning and upfront access to the information that would be used to make decisions during war. This becomes even more pressing if the current South Korean administration is hoping to assume responsibility for wartime OPCON within this presidential term.

89. Ibid.
90. The 2017 iteration of Exercise Vigilant Ace included US F-22s and F-35s, both of which have been cited by North Korea as of major concern.
92. Author’s interview with expert 6, Seoul, 31 July 2018.
In the short term, a degradation of readiness could weaken the interoperability of the US and South Korean militaries. Without steps towards denuclearisation being taken by North Korea, this could result in the process being unbalanced. However, if the suspension of these exercises reduces the threat to North Korea and the risk of military confrontation on the peninsula, and allows diplomacy the space to progress, this degradation over time will become less relevant as the military threat they are designed to respond to is also diminished.

From a deterrence perspective, as long as a substantial US military presence remains in South Korea, the North will likely continue to be deterred from launching large-scale military action on the peninsula. However, despite this, deterrence could suffer in the long term if the suspension continues and contributes to the perception that the White House sees US alliances in a purely transactional manner, rather than prioritising security. This was first raised as a concern during Trump’s election campaign\(^94\) and during his presidency.\(^95\) This, however, would not be a direct result of the suspension of exercises, but part of a broader trend of deteriorating relations and preferences in Washington.

Considering the goal of assurance and alliance unity, the suspension of the combined military exercises has a potential benefit. Since the beginning of his administration in May 2017, Moon has been keen to seek out opportunities for reduced tensions and improved relations with the North. By joining South Korea in diplomatic initiatives with North Korea, the US could be seen to be continuing to tailor its efforts to its ally’s preferences. Given that the South Korean administration had taken the lead in delaying the KR/FE exercises due to the Winter Olympic and Paralympic Games\(^96\) and then for the alterations to be made when they did run, the unilateral suspension of the exercises by Trump was less politically damaging. Had it not been preceded by Seoul’s interest in using these exercises as leverage for obtaining concessions from North Korea, the impact on the alliance could have been much greater.

If KR/FE are to resume in spring 2019, the decision to commence the necessary six-month planning process must be made by the end of 2018.\(^97\) There is a risk that taking a decision to resume exercises would spark a diplomatic crisis and would result in North Korea resuming provocative action.

In a scenario where North Korea continues to cooperate, even only mildly, with the inter-Korean process, but does not take sufficient steps towards denuclearisation (according to the


\(^95\) Everett Rosenfeld, ‘Trump Tough on South Korea: Threatens to Terminate Free Trade Deal, Wants Payment for THAAD Missile Defense System’, *CNBC*, 27 April 2017.


\(^97\) Author’s interview with expert 9, Seoul, 1 August 2018. Since conducting the interviews as part of the research for this paper, South Korea and the US have publicly stated that it will make such a decision by 1 December 2018. See Song Sang-ho, ‘Allies to Decide on Next Year’s Combined Exercises Before Dec 1: Defense Minister’, *Yonhap News*, 1 November 2018.
US administration), risks of diplomatic failure emerge. This directly stems from the US and South Korea granting a high-value concession – the suspension of the military exercises – upfront, prior to negotiations with North Korea. Although North Korea has also taken steps to reduce military tensions on the peninsula, these steps have not fundamentally degraded its nuclear weapons capability.

Security Steps and Confidence-Building Measures Between South and North Korea

Thus far, security-focused confidence-building measures have mostly been led by Seoul, and have been explicitly focused on conventional military-based steps.\textsuperscript{98} This has been formalised by the desire to turn the DMZ into a ‘peace zone’, which has included measures such as replacing armed border guards with the Panmunjom Civil Police, removing landmines and establishing a no-fly zone over the Military Demarcation Line.\textsuperscript{99}

With Seoul prioritising conventional military risk reduction, the recent Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain can be seen as a tool to build confidence with North Korea, rather than address the specific North Korean capabilities that pose a threat to the South. The Agreement does, however, set out steps that both North and South Korea will take to improve the security environment. For example: it commits North and South Korea to cease all live-fire drills in the air, land and sea within designated boundaries stipulated in the Agreement;\textsuperscript{100} it stipulates that neither side will conduct live-fire artillery drills or field training exercises within 5km of the Military Demarcation Line; and it prohibits live-fire and maritime manoeuvre exercises within designated areas. In addition, there are agreed no-fly zones,\textsuperscript{101} which, when considered alongside the restrictions placed on live-fire drills, reduces the risk of potential clashes in support of an improved security environment. However, these measures do not reduce the threat of North Korean artillery to Seoul.

This suggests that Seoul is taking a longer-term approach, taking steps that are easily agreeable to both the North and the South to build the necessary foundations for progress. In the future, the aim will likely be for Seoul to use this foundation to address the more sensitive issues. The Panmunjom Agreement in the Military Domain has been prepared with this in mind, including a commitment to continue communication and develop steps to implement the Panmunjom and Pyongyang Declarations.\textsuperscript{102}

\textsuperscript{98} Although the US suspension of the large-scale exercises has contributed here, South Korea has continued to engage with North Korea in this manner and agree on further steps.


\textsuperscript{100} Annex 1 of the Panmunjom Declaration in the Military Domain details the agreement to Guard Posts (GP) within the DMZ.

\textsuperscript{101} NCNK, ‘Panmunjom Declaration in the Military Domain’, Article 1.

\textsuperscript{102} NCNK, ‘Panmunjom Declaration in the Military Domain’, Article 2.4.
Approaching Denuclearisation

The suspension of large-scale combined military exercises addresses one of North Korea’s most significant security concerns. Its impact will only become more entrenched over time as readiness weakens, although this could be mitigated by successful diplomacy. By itself, however, the suspension will not be enough to overcome the drivers that have encouraged North Korea to acquire nuclear weapons. Nonetheless, the US and South Korea should not be criticised for attempting to address these concerns. However, both Seoul and Washington must ensure that all sides take steps to adequately address each other’s security perceptions. If this is not the case, the process could stall as a result of one or more of the parties becoming vulnerable. As a result of this, the subject of denuclearisation must be included in future engagement that seeks to improve the security of the Korean peninsula. Reciprocal steps from North Korea on its nuclear weapons programme are currently lacking. The end of testing does not alter its nuclear and missile capabilities, and the decision could be very quickly reversed.

The risks associated with the current process are high. The military concessions have not been granted as a formalised, balanced exchange with North Korea, but have rather been offered in an effort to build a foundation for engagement. The longer the exercise suspension lasts, the more significant this concession will become, placing the US and South Korea in an increasingly weaker position as they wait for North Korea to make a move. If the diplomatic process collapses because North Korea fails to significantly alter its nuclear programme, the US and South Korea’s readiness could have degraded, diluting their combined military potential. At the same time, undoing the concession and resuming combined military exercises would also risk collapsing the diplomatic process and a return to high military tension. However, if the process is leveraged successfully, the suspension could be credited with initiating denuclearisation steps. Therefore, it is worthwhile considering how a security-based dialogue could be pursued.

The process that Moon has initiated seems to recognise that it is increasingly unlikely that a large, catch-all agreement on North Korea’s nuclear and missile programmes will be negotiated. Instead, it is more probable that certain concerns and capabilities will be addressed in phases. Working piece by piece to gain nuclear concessions, as opposed to trying to negotiate a fully comprehensive agreement, allows for progress to be made in some areas while it stalls in others. This can also help to build trust and confidence, possibly allowing for agreement on more sensitive matters to be pursued at a later stage.

The dual processes of confidence- and trust-building and addressing conventional military concerns on the one hand, and of managing North Korea’s nuclear programme on the other, need to become more joined up. Improving the security environment is necessary to initiate steps that reduce the threat from North Korea’s nuclear weapons. However, the current process does not seem to have a way forward in achieving irreversible changes to this capability. To maintain interest in the diplomatic process and to allow Washington to justify continued diplomacy with North Korea to domestic audiences, including all branches of government and regional allies, more substantial concessions from Pyongyang will be required.
Nuclear Steps

North Korea would probably not commit to, or fully implement, an agreement that committed it to relinquish all its nuclear weapons and associated infrastructure. Diplomatic efforts to limit and roll back these capabilities should still be pursued, but in a more creative, compartmentalised manner.

There are two possible approaches of note. Denuclearisation could be compartmentalised on a component basis, such as declarations or verification, or on a capability-by-capability basis, whereby different parts of the nuclear programme are managed individually, such as uranium mining or enrichment. Approaching denuclearisation in such a compartmentalised manner means that a point of contention in one area would not necessitate the collapse or hinder the progress of a deal in another. Figure 1 depicts a basic outline of a possible compartmentalisation approach.
Figure 1: Compartmentalised Denuclearisation

Example Capabilities

- Reprocessing
- Mining & milling
- Enrichment
- Fissile material
- Reprocessing

Example Components

- Declaration of capacity
- Declaration of locations
- Verification measures
- Declaration
- Verification
- Number of sites
- Locations declaration
- Operating capacities
- NTM verification
- OSI verification

Site dismantlement/shut down

Number of sites
- Locations declaration
- Operating capacities
- NTM verification
- OSI verification

Stockpile declaration
- Location declaration
- Verification measures
- Declaration
- Verification

Source: The author.
Component-Based Approach

The denuclearisation process has multiple components, the two most prominent being declarations and verification. One method of compartmentalisation could be to break denuclearisation down and establish steps based on these aspects. This could include pursuing declarations or verification measures across varying parts of the nuclear infrastructure, without explicitly tying them to other stages of denuclearisation or a grand bargain agreement. This could mean agreeing on and receiving declarations in absence of verification agreements, or agreements on verification measures for the cessation of specific activities without receiving an upfront declaration on past activities and material stockpiles.

Declarations and verification have been two aspects of denuclearisation given high importance by the US. The logic of prioritising a complete and comprehensive declaration is to build confidence through increased transparency and focus denuclearisation efforts; it is difficult to pursue adequate denuclearisation if the programme and capability is unknown. These demands are also driven by North Korea’s history of cheating agreements through maintaining undisclosed sites.103

However, such demands have been rigid and rely on historical approaches of engaging with North Korea. Typically, these involve making requests for concessions that North Korea will deem unfeasible or seeking to negotiate a comprehensive deal that immediately commits the North to relinquishing its nuclear weapons. This is also not in line with the style and process of the current diplomatic engagement. Considering how progress can be made in these areas without requiring both declarations and verification to be achieved in one grand bargain agreement could be worthwhile.

A North Korean declaration on its nuclear programme would undoubtedly be a high-value concession, especially if it could be verified. Such a declaration would permanently contribute to knowledge of North Korea’s nuclear capabilities. Moreover, although this commitment would not automatically alter North Korea’s nuclear capabilities, it would support the improvement of the security environment by reducing the ambiguity that can stimulate paranoia and threat perceptions.

However, achieving a full and verified declaration will be highly unlikely, if not impossible. It would lead to North Korea being more vulnerable through acknowledging the types of facilities and their locations, and require it to open itself to inspection by the international community. This would be a highly unbalanced request, without the US and South Korea making comparable concessions – although the suspension of military exercises will degrade their on-peninsula readiness, the US and South Korea maintain the hardware that would be able to target these sites once North Korea confirms their existence and locations.

This does not mean that such a concession should be disregarded in its entirety. Instead, sensitive concessions such as declarations and verification should form part of a compartmentalised and multi-pronged approach to denuclearisation. For example, this could include requesting declarations across all or some parts of the fuel cycle, but without initially attaching these to verification and monitoring requirements. This would contribute to building a better picture of North Korea’s nuclear programme and to reducing the ambiguities of limited information. It could also help build trust between parties and signify North Korea’s commitment to a step-by-step process. The declaration itself could also be broken down to cover different levels of declaration, such as stockpile numbers, declaration of sites, and declaration of site locations, at different stages of the process.

A similar approach could also be taken for verification efforts, with agreements pursued along the lines of monitoring and verification measures that could be acceptable to North Korea. Rather than begin with attempting to negotiate on a particular capability requiring verification that North Korea would not accept, the US and South Korea should consider the verification measures that North Korea might find plausible and look at how they could be applied in a way to advance denuclearisation. This could include verification methods that make North Korea less vulnerable, such as satellite imagery analysis as opposed to on-site inspections, being applied to the monitoring and capping of activities. On-site inspections are unlikely to be a tool that is immediately available to denuclearisation efforts. Starting with a cessation of activities that can be verified via satellite imagery analysis could again help develop trust and confidence and begin to limit North Korea’s nuclear capabilities.

One possible activity this could be applied to is uranium mining. National technical means, such as satellite imagery analysis, could be used to monitor areas such as uranium mining and tangibly reduce North Korea’s future weapons production capability. This should act as a starting point to ‘box in’ North Korea’s nuclear weapons programme. Uranium mining and milling are activities that are far removed, in terms of production processes, from stockpiled weapons. As such, by starting with these and working towards the more sensitive parts of the infrastructure, efforts can be made to limit and eventually roll back the North Korean nuclear weapons programme in phases.

North Korea’s declared uranium mines are open-pit, and so activity at these sites can be easily detected. An agreement by North Korea to cease all activities at its known uranium mining and milling facilities, to be monitored without on-site inspections initially, could be acceptable to Pyongyang. While such cessation could limit the future expansion of its nuclear arsenal, it does not require an up-front negotiation over its stockpiled nuclear weapons. Used as a starting point, this could then be phased to slowly close down the nuclear weapons production capabilities, building confidence and adding limitations to the North Korean nuclear weapons arsenal.

This, however, would not come without significant downsides. An agreement to cease activity at the known uranium mining and milling sites would not account for any unknown sites. It would also not limit the processing of any materials that have already been mined and milled for enrichment. This means that North Korea’s fissile material and weapons stockpile could still...
grow after implementation and without Pyongyang breaking the agreement. It would also not prevent North Korea from easily reversing the impact on its weapons programme, should it choose to, with material already mined and milled, but it could cause a delay in producing new material for further weapons.

**Capability-by-Capability Approach**

Taking the capability-by-capability approach, denuclearisation could address capabilities of concern in silos. An agreement could take a particular facility and gradually increase the depth of declaration, level of verification and dismantling activities for that part of the nuclear programme. This could then be replicated in individual agreements across different parts of the nuclear infrastructure. A phased agreement could also be applied to each activity or site of interest. For example, on agreeing to address enrichment facilities, with the aim of curtailing fissile material production, the initial step could be to request a basic declaration of the number of centrifuges North Korea operates, but without their corresponding locations, before moving to the more sensitive aspects of declarations and verification. Alternatively, a request could be made that North Korea provide a declaration of an initial estimated stockpile of fissile material, not including the associated facilities’ locations. This could be followed by a more detailed version, but with the aim of moving incrementally to address verification issues associated with this capability. This would allow for the North Korean nuclear weapons complex to be partitioned and dealt with compartmentally.

This would ensure that in the early stages of denuclearisation there is a focus on future production efforts rather than already-acquired weapons, while also making concrete gains. Taking a flexible approach such as this could limit the vulnerability felt by North Korea, while also directly impacting the North Korean nuclear programme. As trust and confidence between parties develop, this should be taken further to include a declaration of sites and locations, as well as defining the verification boundaries for suspending, capping and rolling back activities at these sites.

South Korea is also reluctant to enter this game of cat and mouse with North Korea. The Moon administration has a political interest in avoiding such an approach to increase the appearance of success. For example, if North Korean fissile-material accountancy is poor, or if a declaration does not match US intelligence assessments, there is a risk that Pyongyang will be accused of ill intentions, which would make it politically difficult for Seoul to continue engagement without backlash.

Given that the impact of the suspension of the combined exercises is initially incremental, considering a step-by-step denuclearisation process could be beneficial. These steps would not be negotiated upfront as part of one agreement, but treated as individual agreements in themselves that can be built upon. This should not be interpreted as pandering to North Korean

104. Author’s interview with expert 8, Seoul, 1 August 2018.
negotiating tactics or a desire to cheat agreements, but as being pragmatic and finding measures that manage and mitigate risks, based on the preferences of the engaged parties.

In both approaches, advanced verification will be a major challenge: on-site inspections are likely to form a large part of the demand, but North Korea will probably deem such measures to be unacceptable at an early stage in the process. This verification challenge should instead be viewed flexibly and begin with practices that do not require methodologies that are likely to be rejected by North Korea. Instead, policymakers should start with the tools and techniques that would be viewed as less challenging to North Korea and work backwards to ask which facilities and activities could be monitored in that way to gain concrete concessions on limiting nuclear activities.

Offering declarations or accepting verification measures could also be framed as mutual information exchanges. This could involve North Korea providing information on fissile-material stockpiles or specific nuclear sites in exchange for additional transparency on US military activities in South Korea.

In the short term, such an approach would have to accept risk as there will, by design, be gaps in the process. However, given these limiting factors, the corresponding security concessions offered by the US and South Korea could be equally imperfect and easily reversed. In a scenario where diplomacy continues, this step would be successful in impacting North Korea’s nuclear programme. If diplomacy fails, the US and South Korea will not have had to implement a concession that compromises their security.

**Sanctions**

Pressures from the enforcement of sanctions can also be a security risk. As previously discussed, North Korea’s strategic thinking prioritises regime survival, and economic development is an important way that this can be achieved. Having previously prioritised the nuclear branch of the byungjin policy, Kim has now shifted his domestic line to pursue economic development along with the safety of nuclear weapons.

Sanctions are part of the denuclearisation process. They have been implemented in response to provocations and developments in North Korea’s nuclear and missile programmes. Some relief would have to be provided if North Korea were to stop the activities and disband the capabilities that the sanctions sought to discipline. However, relief should not be granted without the guarantee of significant and irreversible changes to North Korea’s nuclear weapons programme.

Three major questions relating to the challenges of sanctions relief will need to be considered. First, at what point in the denuclearisation steps will sanctions relief become appropriate? Second, how will sanctions related to the nuclear and missile programmes be separated from
those applied to other areas, such as small arms and light weapons transfers?105 Third, how will the stringent implementation of non-waived sanctions be ensured? Following the Singapore Summit, and the apparent warming of relations between Trump and Kim – and Trump’s Twitter characterisation of the nuclear threat from North Korea as being over – reports have already emerged that implementation of the current sanctions regimes has weakened despite no changes to North Korea’s nuclear weapons stockpile.106 Maintaining support for the implementation of sanctions measures after North Korea takes steps to limit or roll back its nuclear programme will be difficult.

Non-Nuclear Steps

North Korea’s Military Exercises

Given the suspension of the US–South Korean large-scale combined military exercises, multiple interviewees placed emphasis on the role that North Korea’s own large-scale military exercises might have in concessions on conventional capabilities and confidence-building measures.107

Like those carried out by the US and South Korea, North Korea’s own large-scale exercises serve as an opportunity for the Korean People’s Army to prepare for combat and maintain readiness. Suspending these exercises could remove some of the imbalance that the US–South Korean suspension has produced in the process and close any perceived vulnerability gaps that could emerge. However, while this is a possible confidence-building measure, pursuing a concession related to the North’s military exercises to stimulate broader dialogue in the nuclear space should not be a high priority. Although a suspension of North Korean military exercises would probably decrease the readiness of the country’s military, it would not degrade the threat of the long-range artillery nor contribute to tangible changes to the nuclear programme, both of which have been recognised as more considerable security concerns.

North Korea’s Artillery

Seoul will likely continue to see the lack of efforts in relation to North Korea’s artillery as a gap. Reportedly, South Korea has proposed that North Korea move its long-range artillery 30 to 40km

105. For example, Security Council Resolution 2270 (2016), passed in response to North Korea’s January 2016 nuclear test, prohibits the direct or indirect supply, sale or transfer of ‘all arms … including small arms and light weapons and their related materiel’, as well as the associated financial transactions, training, manufacturing and maintenance of such arms. See UN Security Council Resolution 2270, 2 March 2016, S/RES/2270, para. 6.
107. Author’s interview with expert 17, Tokyo, 3 August 2018; author’s interview with expert 6, Seoul, 31 July 2018.
away from the Military Demarcation Line to reduce the direct risk to Seoul.\textsuperscript{108} This request, however, has not made it into the Panmunjom Agreement in the Military Domain, so the threat remains in place.\textsuperscript{109}

The exclusion of provisions that manage the threat from North Korea’s long-range artillery is probably a result of agreed confidence-building measures being outcomes of the inter-Korean process, and not including the US. The long-range artillery issue demonstrates clearly why the conventional military confidence-building measures and threat reductions are so important to any conversations on North Korea’s nuclear weapons. For Pyongyang, the long-range artillery stationed along the border region forms part of its deterrent capability against the US, as it offers the country a quick and flexible response to hold Seoul at risk. It is this quick response aspect that is likely to be preventing North Korea from agreeing to move these assets to a location that Seoul prefers. Pyongyang will be unlikely to do so until it perceives a further decrease in the US military threat. However, reductions to the US military presence in the region are likely contingent on North Korea granting credible concessions related to its nuclear programme.

In the short term, a continuation of efforts to improve the broader North–South relationship and security environment will help to reduce the associated risks of North Korea’s long-range artillery. However, given that the overarching threat from the US has not diminished for North Korea, and the imbalance of conventional forces between the US–South Korea alliance and North Korea, Pyongyang will be unlikely to relinquish its ability to hold Seoul at quick risk.

The next steps should therefore consider how the aspect of the inter-Korean dialogue could be expanded to the US–North Korean relationship, to help foster denuclearisation and address the long-range artillery issue.

\textit{Expanding the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain}

North Korea has reportedly asked the US, in keeping with what was discussed at the Singapore Summit, to take measures to help the denuclearisation process.\textsuperscript{110} These efforts will need to continue to focus on addressing North Korea’s threat perceptions to support nuclear limits and

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\textsuperscript{109} North Korea’s long-range artillery includes 170mm guns and 240mm multiple rocket launchers deployed along the DMZ, with ranges of 40–60km. From their current position, these capabilities are able to target Seoul, and could deliver chemical or biological weapons. Moving the artillery 30 to 40km away from South Korea would place the South Korean capital out of reach. See Office of the Secretary of Defense, ‘Military and Security Developments Involving the Democratic People’s Republic of Korea: Report to Congress’, December 2017, <https://fas.org/irp/world/dprk/dod-2017.pdf>, accessed 26 November 2018.

\textsuperscript{110} South Korean Ministry of Unification, ‘Report to the Nation by President Moon Jae-in on the 2018 Inter-Korean Summit Pyeongyang’.
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reductions. Rather than attempt to create new measures, this should build on what has already been achieved through engagement between the two Koreas.

One option for this could be that the US agrees to commit to aspects of the North–South bilateral measures outlined in the Panmunjom Agreement in the Military Domain. As part of this agreement, South Korea and North Korea have resolved to implement a variety of no-fly zones for military aircraft near the Military Demarcation Line. South Korea should encourage the US to commit to formally recognising this measure, or at a minimum allow Seoul to use the process underway between the two Koreas to inform Pyongyang of any US logistical air traffic in advance of the movement, to improve transparency.

More importantly, the US and South Korea could agree that US nuclear-capable bombers do not visit South Korea except during military conflict. As previously noted, the 2018 iterations of the KR/FE exercises did not include the participation of these assets, suggesting that their presence is not fundamental to meeting the goals of deterrence and assurance on the peninsula. Therefore, a commitment to also ensure their absence outside these exercises could help alleviate tensions and support diplomacy. This concession could help support military-based confidence-building measures necessary for denuclearisation. This should, however, be conditional on North Korea offering and implementing a concrete concession related to its nuclear programme. Given the ease of reversibility and the need to tie conventional risk reduction and nuclear steps together, an explicit link would be important here to first build confidence by making it more difficult for one side to reverse its commitment if the other is still implementing, and second, to tie efforts of broader peace and security on the peninsula directly to the nuclear issue.

For the US to agree to steps that would reduce its military presence on the peninsula, it would need to be clear that, especially in the early stages of implementation, the non-visitation of US nuclear bombers would not be region-wide or preclude participation in US–Japan bilateral exercises. In addition to achieving concrete changes to North Korea’s nuclear programme, maintaining a strong and capable USFK is important for Japanese security. While the suspension of the combined military exercises has not been perceived to have directly impacted Japanese security, this could change if the permanent US presence in South Korea was significantly altered. In 2018, although US nuclear-capable bombers did not participate in the US–South Korea combined KR/FE or associated air exercises, they did continue to participate in combined exercises with Japan.¹¹¹ Thus, such additional measures should not automatically extend to the US–Japan defence relationship.

The military domain agreement also includes a provision that commits North and South Korea to a cessation of live-firing drills within 5km of the Military Demarcation Line. As part of the combined military exercises and other military activities, the Rodriguez Live Fire Complex is one of the places in South Korea that the US conducts live fire training, located a mere 25km from the DMZ. Given the close range to North Korea, USFK and South Korea should consider adding this site to the cessation of live firing drills near the border region.

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¹¹¹ Gordon and Youssef, ‘U.S. Scrapped Training Exercise With South Korea Involving B-52s’.
**Ending the War with a Peace Treaty**

A discussion of the confidence-building measures and security-based dialogue with North Korea would not be complete without some consideration of the prospect of replacing the current armistice agreement with a permanent peace treaty. Until now, this offer has so far been used as a carrot to entice North Korea into dialogue, but has not explicitly been linked to denuclearisation. Following Moon’s return from the September Pyongyang Summit, he clearly stated in his subsequent press conference that ‘a peace treaty would be sealed ... after the North achieves complete denuclearization’.  

However, a peace treaty alone will not remove the threat of US or allied military action on Pyongyang. Any efforts to work towards formally ending the Korean War will have to be supported by tangible changes to North Korea’s threat perceptions.

Formally ending the Korean War by signing a peace treaty is also more than a symbolic political gesture and would change the security architecture of the region. For example, the formal ending of the war would result in the Northern Limit Line (NLL) being renegotiated and replaced by a mutually agreeable boundary, which could be informed by the UN Convention on the Law of the Sea, and possibly extend North Korean territory beyond the NLL. For security in South Korea, the biggest question that a peace treaty would raise is whether the UN Command would continue to have a role, and what this would mean for the formation of USFK.

This begins to raise long-term questions about regional security, especially in relation to US regional military alliances. For Japan, the removal or shrinking of USFK could impact the country’s security. For Tokyo, the ending of the war poses a serious concern as it could shift the first line of defence against China from the Korean peninsula to Japan. This concern would be greatly enhanced if the signing of a peace treaty brought with it a reformulation of USFK that did not protect Japanese interests.

**Conclusion**

Working to improve the security environment on the Korean peninsula is important. Not only has a negative security environment been a driver of North Korea’s proliferation, it has also resulted in a high risk of military confrontation. Diplomatic efforts with North Korea in 2018 have begun to address this. Thus far, steps have been taken to improve the security context on the Korean peninsula and reduce the risk of intentional or accidental military confrontation. Engagement between the two Koreas has produced concrete actions aimed at reducing the risk of conflict on the peninsula. To some extent, the US suspension of combined large-scale military exercises with

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113. Author’s interview with expert 11, Tokyo, 2 August 2018. For a more detailed discussion on the NLL, see John Barry Kotch and Michael Abbey, ‘Ending Naval Clashes on the Northern Limit Line and the Quest for a West Sea Peace Regime’, Asian Perspective (Vol. 27, No. 2, 2003), pp. 175–204.
114. Author’s interview with expert 14, Tokyo, 3 August 2018.
South Korea also makes a contribution. However, the process has not been sufficiently attached to steps in denuclearisation. North Korea has announced a cessation of nuclear and long-range-missile tests and demolished the entrance tunnels to its nuclear test site. But these steps do not substantively impact on its nuclear capability.

The imbalance between the steps taken by the parties in the processes is problematic because North Korea now enjoys an improved security environment while not having to take steps that impact its nuclear weapons capability. This could potentially damage the broader non-proliferation regime as well as impact regional security. This is especially relevant for US security relations with Japan. Given that reversing the suspension of combined exercises would be likely to close off the prospects of securing any nuclear concessions from North Korea, the only option is to find ways to manage a security-centric process.

Steps are needed to bring nuclear weapons into the process. North Korea will continue to have an interest in gaining security-based concessions from the US and South Korea, and because of the US’s alliance relationships in the region, this could also impact Japanese security. As a result, South Korea and the US need to increase efforts to link the two diplomatic tracks: broad peace and security on the peninsula and denuclearisation. This approach, however, needs to be flexible. Continuing to insist that North Korea relinquish nuclear weapons as the starting point is not the way forward; efforts to take a phased approach to box in North Korea’s nuclear weapons programme should be pursued instead.

This could be done through approaching denuclearisation in a compartmentalised manner. Focusing nuclear steps on either components of denuclearisation or on a capability-by-capability basis allows for the process to be broken down and approached in a more pragmatic manner that fits with the style of diplomatic engagement seen this year. Although this approach would not be without gaps or vulnerabilities, it presents a unique opportunity to manage the concerns created by North Korea’s nuclear weapons. It is highly unlikely that Pyongyang will be willing to relinquish its acquired nuclear weapons, and therefore limitation efforts should take priority.

At the same time, the US and South Korea must continue to take steps to improve the security environment on the peninsula and stimulate denuclearisation. One key step that the US could take would be to commit to certain elements of the Panmunjom Agreement in the Military Domain between North and South Korea to reduce military risks. A suitable step that would contribute to improving the security environment would be a moratorium on US nuclear-capable bombers visiting South Korea. The impact this would have on the security and defence of the US, South Korea and Japan would be minimal, and it offers both a demonstration of intent and a tangible security benefit to North Korea. However, this step should not be taken unless it is directly tied to specific nuclear steps taken by North Korea.

Steps to improve the security environment on the Korean peninsula have been vital to sustaining engagement with North Korea thus far, and will continue to be so if efforts to limit and roll back North Korea’s nuclear programme are to have any success this time.
About the Author

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