THE INTERNATIONAL COMMUNITY AND THE NORTH KOREAN NUCLEAR PROGRAMME

Sebastian Harnisch and David J. Roesch

ABSTRACT

The international community has employed different mechanisms to contain the North Korean nuclear programme over the last two decades, each animated by a different leadership model. Model 1, emerging in the 1993-94 crisis and forming the basis for the Agreed Framework, was characterised by US leadership, US-DPRK negotiations, and the provision of economic incentives. The breakdown of the Agreed Framework process in 2002 and 2003 made possible a second model, marked by a Chinese-led regional approach and the creation of a case-specific non-proliferation regime by the UNSC. This paper proceeds by outlining the development of the North Korean nuclear programmes and the measures the international community has taken to address them. We find that a fledgling model 3 approach, focused on preventing horizontal proliferation and led by a US-Chinese duopoly, might be in the making.

Key words: North Korea, Six Party Talks, United States, non-proliferation, IAEA, nuclear weapons.

1 INTRODUCTION

The North Korean[1] nuclear programme is among the gravest threats to the international nuclear order and world peace. North Korea not only left the Nuclear Non-proliferation Treaty (NPT) in 2003—becoming the first state to do so in the treaty's 40-year history—and tested nuclear devices in 2006 and 2009, but it has also repeatedly exported conventional weapons, missile and nuclear technology to states in South Asia and the Middle East. Furthermore, North Korea does not

[1] Following common usage, this article uses 'North Korea' and 'Democratic People's Republic of Korea' (DPRK) interchangeably. The same applies to 'Republic of Korea' (ROK) and 'South Korea'.

fully recognise the 1953 line of demarcation, particularly in the waters surrounding the Korean peninsula, and continues to question the status quo on the peninsula through targeted military provocations, including the sinking of the South Korean naval corvette *Cheonan* (Ch'ŏnan) in March 2010 and the shelling of Yŏnp'yŏng island in November 2010 (Bermudez Jr. 2011; Joint Civilian-Military Investigation Group 2010).

This paper argues that the international community's handling of the North Korean nuclear programme has been increasingly steered by a duopoly formed by the United States and China and has employed three distinct models to address the North Korean challenge. Model 1, which emerged in 1994 during the first nuclear crisis, emphasised delegation to the United Nations Security Council (UNSC) and US-DPRK bilateral co-operation with financial and political support from neighbouring US allies (Japan, ROK) through the Korean Energy Development Organisation (KEDO). Model 2 arose when the US under the Bush administration attempted to reconstruct the non-proliferation regime through retributive policies aimed at members of the 'axis of evil'. The key shift occurred when the UNSC failed to agree on sanctioning North Korea's NPT withdrawal and delegated diplomatic talks to the Three Party format under Chinese leadership. In this model, the People's Republic of China (PRC, China) attempted to build broad-based support for a diplomatic resolution, leaving the North Korean regime intact while reining in its proliferation behaviour. Through its resolutions and the imposition of sanctions since 2006, the UNSC has created a case-specific arms control regime for North Korea, in substitution for the faltering NPT-based disarmament regime.

Today, outlines of a third model are emerging in the face of North Korea's strategy of targeted provocations. Rooted in a minimal consensus between the five permanent members of the UNSC that they would acquiesce in a limited North Korean nuclear potential but bar horizontal proliferation (i.e. nuclear exports), it involves a tacit agreement to leave the containment of further military provocations to bilateral and plurilateral actions under US leadership. This US-China duopoly has thus established a stop-gap regime of sanctions and procedures to complement the existing nuclear non-proliferation regime and alleviate its flaws in the North Korean case. In the following sections, we provide an overview of the measures the international community and its bodies have taken to address the North Korean nuclear programme from its inception to the present day. These measures are

then critically evaluated. We find that while international efforts may have failed to prevent or even roll back North Korea's programmes, they have had some degree of success in managing North Korea's nuclear potential. A concluding section summarises our analysis and outlines its implications.

2 THE NORTH KOREAN NUCLEAR PROGRAMMES

There are two different ways of acquiring fissile material for nuclear weapons: separating plutonium from spent fuel rods, or processing and enriching uranium.[2] While North Korea's programme and the international efforts to contain it have focused on the plutonium route, the existence of an enrichment programme was disclosed in November 2010, confirming long-standing suspicions to that effect (Albright and Brannan 2010; Hecker 2010a, 2010b). The following paragraphs outline the DPRK's plutonium- and uranium-based programmes and its legal obligations.

The country's now probably dormant plutonium-based nuclear weapons programme was based on security considerations fostered inter alia by the US threat of using nuclear weapons in the Korean War, the Soviet stance in the Cuban missile crisis, and South Korean nuclear ambitions in the 1970s. Over the last two decades, however, North Korea has also used the offers of a 'freeze' and improved transparency concerning its nuclear programme as bargaining chips and a means to generate revenue in talks with South Korea and the US (Harnisch 2003; Mazarr 1995b). Lastly, the regime began to lay claim to the status of 'recognised nuclear-weapon state' after its first nuclear test in 2006. Hence, North Korea has clearly evidenced the three central motives for acquiring nuclear weapons: security, economic interests, and prestige (Hecker 2010c).

Technologically, the plutonium programme builds on Soviet technology, mainly a smaller research reactor dating to the 1960s and a 5-megawatt (MW) reactor at the Yŏngbyŏn site. These have allegedly been used to generate electricity and for medical and research purposes. Besides help from China and the Soviet Union, North Korea gained access to uranium enrichment technology through the Abdul

[2] Enrichment refers to increasing the share of Uranium-235, an isotope of which natural uranium contains less than 1 percent.

Quadeer Khan proliferation ring prior to its uncovering in 2004 (Chestnut 2007). It remains unclear what exactly North Korea received from Pakistan, but the then-president, Pervez Musharraf, disclosed in his autobiography that Pakistan had delivered two dozen P2-type centrifuges and hands-on training to the DPRK. Furthermore, in November 2010, North Korea gave the American scientist Siegfried S. Hecker a tour of a uranium enrichment site housed in the former fuel fabrication plant at the Yŏngbyŏn site. There is widespread agreement that North Korea could not have indigenously produced and assembled the roughly 2,000 centrifuges shown to Hecker, given, in particular, that the site was under surveillance by the International Atomic Energy Agency (IAEA) until April 2009. There seem to be two implications here: firstly, in spite of the sanctions put in place by three rounds of UN resolutions, North Korea continues to import sensitive technology, probably through Chinese middle men.[3] Secondly, it is 'highly likely' that further facilities like this one exist elsewhere in North Korea (Hecker 2010b). During Hecker's visit, the North also revealed that it had begun work on two light-water reactors (LWRs), also at the Yŏngbyŏn complex. Nonetheless, we would argue that it does not necessary follow from these recent developments that the DPRK is trying to produce enriched-uranium nuclear weapons; such a step would make little military sense.[4] Lastly, work on two reactors of 50 MW and 200 MW respectively, originally begun in the 1980s and frozen under the 1994 Agreed Framework, has not been completed, and they are thought to be in a sufficiently decrepit state to render them useless.

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[3] An estimated 50 percent of the DPRK's external trade is conducted through the three railway links with China. Furthermore, the Chinese port of Dalian plays a crucial role in North Korean trade. This seems to imply at the very least Chinese acquiescence, especially since there have been several cases of interdicted exports that originated in or transited though Dalian, for example, in 2009, chemical protective equipment bound for Syria was discovered in Pusan in South Korea; and in 2010, spare parts for tanks were intercepted in South Africa (Panel of Experts 2010: 22). In addition, it has long been known that the DPRK uses an intricate web of middlemen and front companies, among other places in China.

[4] Aside from the technical difficulty of weaponising enriched uranium, it would currently be considerably cheaper and more reliable for North Korea to reactivate its plutonium programme, which has a demonstrated capability. Further, it would make little sense for North Korea to disclose publicly the location of an enrichment facility serving military purposes. This leaves open the possibility of a North Korean Qom, i.e. a secret enrichment facility.

From a legal perspective, the DPRK is bound by its accession to the IAEA in 1974 and the NPT in 1985. With considerable delay, North Korea signed a comprehensive safeguards agreement in April 1992[5] and provided the IAEA with a first report on its nuclear production facilities and activities the following month (IISS 2004: 7). Ensuing IAEA inspections suggested stark discrepancies in the North Korean report: contrary to the claim that the reactor had been shut down only once to exchange damaged fuel rods, environmental sampling indicated it had been shut down three times since 1989. According to the inspectors, reprocessing campaigns between 1989 and 1991 could have yielded enough plutonium for one to four nuclear weapons (IISS 2004: 7), whereas North Korea maintained it had only extracted 100 grams of plutonium (Harnisch 2003: 151). Furthermore, US satellite imagery released to the IAEA in the fall of 1992 showed that the DPRK had covered up two nuclear waste sites at Yŏngbyŏn prior to the inspections (Fischer 1997).

3 MODEL 1: THE FIRST NUCLEAR CRISIS 1993-1994

The first North Korean nuclear crisis saw the development of what we call model 1, the attempt to rein in the nuclear programme through US-DPRK bilateral co-operation and the involvement of the UNSC. The eventual resolution and 'freeze' of the North Korean plutonium-based programme in exchange for economic incentives resulted mainly from US-DPRK negotiations and was to be monitored by the IAEA.

After futile attempts by the IAEA director, General Hans Blix, to resolve the open questions outlined above through regular inspections, the IAEA Board of Governors on 25 February 1993 demanded that North Korea accept special inspections within three months—a first in the IAEA's history (Mazarr 1995a: 95). 'Special inspections' go beyond the facilities declared by a country and are supposed to provide the Agency with on-demand access to suspicious undeclared sites. In a reversal of President Bush's cancellation of the 1993 'Team Spirit' joint and combined exercises with South Korea, the incoming president, Clinton, announced that the manoeuvres, held annually since

[5] An item-specific safeguards agreement (INFCIRC/252) had been signed on 20 July 1977, placing two research facilities at Yŏngbyŏn under safeguards.

1976, would go ahead in 1993. Against this backdrop, the North Korean leadership under Kim Il Sung rebutted IAEA demands not only by denying inspectors access, but also by, for the first time, declaring its intention to withdraw from the NPT on 12 March 1993. Accordingly, the Board of Governors found North Korea to be in breach of its safeguard obligations and forwarded the case to the UNSC (IAEA General Conference 2003; Sloss 1995: 861-75).

In its resolution 825 of 11 May 1993, the UNSC called upon the DPRK to reconsider its withdrawal and to admit IAEA inspectors into the country. Furthermore, with 13 votes and abstentions by China and Pakistan, the Council mandated bilateral negotiations aimed at resolving the crisis. The Council thereby underscored North Korea's treaty obligations while also providing for the possibility of a negotiated resolution as intended by article 33, chapter VI of the UN charter. It did not criticise North Korean behaviour, but merely referred to the IAEA's position; Russia, the United Kingdom and the US went further than the Council by questioning the validity of the reasons offered by North Korea. They did not, however, question the DPRK's right to withdraw under article X of the NPT as such (Perez 1994: 777).

Following negotiations with a US special envoy, Robert Gallucci, North Korea suspended its withdrawal on 11 June 1993—one day before it was to enter into force—without, however, retracting it altogether. In the US-DPRK joint statement signed on the same day, North Korea promised to fulfill its NPT obligations and to accept the 'impartial' application of full-scope safeguards. This, however, was made conditional on the continuation of negotiations. In exchange, the US provided assurances against the use of force, including the actual or threatened use of nuclear weapons. Following the joint statement, relations between the IAEA and North Korea deteriorated in the second half of 1993, with the DPRK claiming a 'special status' in the NPT and offering to maintain the continuity of inspections by changing batteries and film rolls. The IAEA, however, continued to push for unfettered access. The US for its part pressured the Agency to delay finding North Korea in breach of its safeguards agreement so as to make room for further negotiations before again appealing to the UNSC. Bilateral negotiations resulted in a 'memorandum of understanding' in December 1993, allowing for IAEA inspections of seven known sites, while leaving open the question of the alleged storage sites and taking swipe samples (Wit, Poneman and Gallucci 2004: 119-21).

IAEA inspections in March 1994 led to an escalation of tensions and the breakdown of negotiations. North Koreans prevented inspectors from taking swipe samples at the suspected sites, making it impossible to arrive at a complete picture of past reprocessing campaigns and creating serious doubts about the IAEA's ability to monitor and safeguard the upcoming refuelling of the reactor. The issue at stake here was accounting for the 1989 shutdown and the ensuing reprocessing campaigns. While the DPRK in its initial report to the IAEA maintained that it had separated only an insignificant amount of plutonium (about 100 g), the 1993 inspections painted a different picture. To assess fully the veracity of the North Korean report, the IAEA needed access to either the alleged fuel dumps revealed by US satellite imagery or the fuel rods due to be discharged from the 5-MW reactor in 1994. Without access to either of the two, it was virtually impossible for the IAEA to determine how much plutonium had been separated.

North Korea publicly threatened to reprocess the 8,000 fuel rods the 5-MW reactor contained and began unloading them in May 1994 without IAEA inspectors being present. Furthermore, it took deliberate measures to obscure further its nuclear history by, for example, not labelling fuel rods and mixing them up. On 27 May, Hans Blix explained in a letter to the UNSC that 60 percent of all fuel rods had been removed so far and that by failing to label and sort them, the North was making it impossible to reconstruct the operating history of the reactor in the future without resorting to (potentially manipulated) operating records. This resulted in another UNSC presidential statement—a resolution pushed by Western members and Russia had been blocked by China—on 30 May (President of the Security Council 1994), strongly urging North Korea to unload the 5-MW reactor in a manner compliant with IAEA requirements. But rather than allowing the IAEA to monitor the reactor's unloading, as demanded by the Agency, North Korea promptly rejected the demands on 2 June and accelerated the unloading of the reactor, preparing for the reprocessing and separation of plutonium.

With China's vote, the IAEA Board of Governors decided on 10 June to suspend all non-medical technical assistance to North Korea, whereupon North Korea declared its withdrawal from the Agency (13 June) and said it would consider any sanctions a 'declaration of war'. While the UNSC debated a US proposal for a wide-ranging sanctions regime and the US National Security Council seriously considered bombing the Yŏngbyŏn site, a private initiative of the former US

president, Jimmy Carter, eased tensions significantly. He met with North Korean leader Kim Il Sung in Pyongyang on 15 and 16 June 1994. Kim agreed to freeze the nuclear programme and place it under IAEA inspections in exchange for improved relations with the US and resumed high-level bilateral negotiations. Despite Kim Il Sung's death on 8 July 1994, the US and North Korea signed the 'Agreed Framework' in Geneva on 21 October 1994.

3.1 *Implementing the Agreed Framework: US leadership and the role of the UNSC and IAEA*

The Agreed Framework is—especially in its nuclear provisions—a complicated executive agreement (Agreed Framework between the United States of America and the Democratic People's Republic of Korea 1994). This section outlines the main provisions of the agreement and the IAEA's role in its implementation.

The Agreed Framework lays out a three-step process. First, the DPRK freezes its 'graphite moderated reactors and related programs' (section I, paragraph 3). This includes halting the construction of the two larger reactors, shutting down the 5-MW reactor, the fuel-fabrication and reprocessing plants, and securing the 8,000 fuel rods removed in May 1994. The IAEA monitors this and the DPRK remains a member of the NPT. Progress is rewarded by improved economic and diplomatic relations, for example, the establishment of liaison offices, US negative security assurances and the lifting of trade barriers and sanctions within three months (sections I and II). The US also arranges for the construction of two LWRs by a target date of 2003 (IISS 2004: 39). Lastly, 500,000 tons of heavy fuel oil (HFO) delivered annually compensate North Korea for the energy shortfall resulting from the freeze.

In the second phase, when 'a significant portion of the LWR project is completed, but before delivery of key nuclear components', the DPRK allows IAEA special inspections of the contentious waste sites in order to account for North Korea's pre-1992 nuclear record. Concurrently, all fuel rods are removed from North Korea. In the final phase, the second LWR is completed and the Yŏngbyŏn site dismantled (IISS 2004: 10-13, 39; Martin 1999: 37, 2002: 52-3; Stanley Foundation 2006: 3; Wit 1999: 60-61). To implement the delivery of fuel aid and the construction of the two LWRs, the Agreed Framework

stipulated that the 'U.S. will organize under its leadership an international consortium' (section I, article 1). This was realized on 9 March 1995, when the ROK, Japan and the US founded KEDO. Essentially, the Agreed Framework allowed North Korea to trade the gradual uncovering of its nuclear past, including its actual nuclear weapons capacities, for external aid in order to stabilise the regime, a basic bargain that was also to be at the heart of the Six Party Talks (SPT) begun in 2003.

On 4 November 1994, the UNSC tasked the IAEA with carrying out those inspections mandated by the Agreed Framework, which were then authorized by the IAEA Board of Governors on 11 November (President of the Security Council 1994). This de facto suspension of the IAEA's safeguards privileges was problematic, given that for the Agency, North Korea's safeguards obligations remained intact despite its unilateral and unaccepted withdrawal from the NPT and the IAEA.[6] Against the backdrop of the Iraq debacle, however, the Agency was able to strengthen significantly its role as an enforcer in the North Korean case. Not only were new methods of detection and analysis used successfully and the right to special inspections confirmed by the Board of Governors, but the practice of collecting and making use of information provided by third states was also established (Fischer 1997: 293-4). This was to become an essential element of the 1997 Additional Protocol, which relies heavily on the use of both open-source and intelligence material provided by member states. Should a state be found to be in violation of its safeguard agreements based on the newly-available information, the case could then be referred to the UNSC.

Nonetheless, it is crucial to note that the Agreed Framework reflects the fact that the key US concern was preventing further separation of plutonium through enforcing a freeze on existing North Korean facilities, rather than the accounting for past activities. Effectively, consideration of the second issue was postponed indefinitely, even though the Agency had for the first time made use of the 'special inspections' instrument. Significant questions remained as to how effective this tool was, given that the IAEA had to back down in the first

[6] This interpretation is shared by the UNSC (President of the Security Council 1994; UN Security Council 2006, passim). Interestingly, this reading hinges on the view that the DPRK is still party to the NPT, since North Korea's safeguard agreement stipulates that it remains in force only as long as the DPRK is a member of the NPT (IAEA 1992, article 26).

North Korean nuclear crisis and the apparent infeasibility of UN sanctions to back up IAEA findings of violations.

In spite of some technical process, the KEDO project quickly ground to a halt, with both North Korea and the US time and again trying to make meeting their obligations contingent on new and farther-reaching conditions. North Korea's offer to cease the export of delivery systems to trouble spots (South Asia, Middle East) and building activities in exchange for 'financial incentives' is a case in point. On the US side, Congress, now newly Republican, attempted to broaden significantly the North Korean agenda by introducing missile proliferation and human rights issues, and in turn making the Agreed Framework contingent on North Korean accommodation on these topics (Hathaway and Tama 2004; Martin 2002: 55-7). North Korean military provocations, such as the 1996 submarine infiltration incident off the east coast of South Korea and the 1998 intermediate-range Taepodong-1 missile tests, decreased the willingness among the KEDO states to follow through on the agreement. An attempt by the Clinton administration to revitalise the KEDO project by proffering a comprehensive solution, including the question of delivery systems exports, culminated in a series of high-level meetings in the fall of 2000, with North Korean Vice-Marshal Jo Myong Rok visiting the White House and Secretary of State Albright going to Pyongyang and meeting Kim Jong Il. However, despite this promising start, the initiative faltered in December 2000 and during the transition to the new US presidency, a result not least of the incoming administration's very different views on North Korea (Martin 2002).

In sum, the first nuclear crisis on the Korean peninsula was temporarily resolved through US-DPRK negotiations, which resulted in the Agreed Framework. It is hard to overstate the importance of US leadership during this period. While China did abstain in the UNSC vote on resolution 825 and voted in favour of the cessation of IAEA aid to North Korea, these votes must be seen largely as reactive. US initiatives were clearly the driving force throughout 1993 and 1994.

4 THE SECOND NUCLEAR CRISIS (2002-2004): WANING US LEADERSHIP AND PLURILATERAL CONFLICT MANAGEMENT WITHOUT THE UNSC

George W. Bush's administration oversaw a significant change of track in dealing with the DPRK. The KEDO project and the underlying arrangement quickly entered troubled waters, with voices opposing any co-operation with 'rogue states' quickly gaining the upper hand within the administration. After completing its North Korea policy review in June 2001, US policy-makers now demanded the 'complete, verifiable and irreversible dismantlement' (CVID) of nuclear facilities. Furthermore, after the 9/11 attacks the US president announced in January 2002 that his administration would proactively counter states of the so-called axis of evil, which included North Korea. The UNSC's failure to sanction the DPRK's withdrawal from the NPT further exacerbated US disillusionment with multilateral approaches.

In March 2002 then, the Bush administration for the first time refused to certify North Korean compliance with the Agreed Framework, a necessary precondition for Congressional authorisation of funds to meet US KEDO obligations. It claimed that from a legal perspective, North Korea was in 'anticipatory breach' of the Agreed Framework, which set the date for the first inspection concurrent with the delivery of the first critical components of the first LWR to the country (scheduled for mid-2005). Nonetheless, to keep the Agreed Framework from collapsing and to ensure heavy fuel oil shipments could continue, Bush waived the certification requirement (Office of the Press Secretary 2002). While Gallucci, the US chief negotiator of the agreement, and KEDO representatives vehemently criticised this interpretation, Asian allies of the US pushed for direct bilateral talks between the US and the DPRK. When these eventually took place in October 2002, the US delegation to Pyongyang confronted the North Koreans with intelligence suggesting that they were pursuing a secret uranium enrichment programme (Sanger 2002). While there has been considerable debate over the exact wording, the members of the delegation took North Korean statements as an admission of having such a

programme and claiming the DPRK had a right to develop nuclear weapons if it felt threatened.[7]

This caused a severe crisis. The US declared that North Korea did not comply with the Agreed Framework, with the contracts with KEDO, and with the inter-Korean denuclearisation agreement. The other KEDO states followed suit by suspending heavy fuel oil deliveries from November. North Korea ended the 1994 freeze by removing IAEA seals and surveillance equipment, eventually evicting all IAEA inspectors in the second half of December (Brooke 2002; IAEA Director General 2003: articles 7-10). The DPRK was thus in a position to reprocess over time the 8,000 fuel rods removed from the 5-MW reactor. On 10 January 2003, North Korea declared its withdrawal from the NPT 'with immediate effect', arguing that the three-month lead time stipulated by the NPT had passed between 12 March and 11 June 1993, after it had first announced its intention to withdraw (KCNA 2003).

Whether this immediate withdrawal is legal and effective remains doubtful. The majority of the international community and of the international organisations involved did not accept North Korea's original withdrawal (12 March 1993), the suspension thereof (11 June 1993), and the retraction of this suspension (10 January 2003) (Asada 2004).[8] In the aftermath, however, the UNSC was unable to arrive at a common position. Both Russia and China opposed potential measures. After a session on 9 April 2003, the Council's president reported merely that the Council supported further diplomatic efforts (du Preez and Potter 2003).

5 MODEL 2: REGIONALISATION OF THE CONFLICT, PRC LEADERSHIP AND SIX PARTY TALKS (2003-2008)

Several factors combined to create a window of opportunity for Chinese initiatives in late 2002 and 2003. These included the breakdown of the Agreed Framework and the increasing US unilateralism outlined above. Furthermore, the impasse in UNSC deliberations brought about by the Chinese position and the US invasion of Iraq made a

[7] For a first-hand account of the meeting and its aftermath, see Pritchard (2007: 34-40).

[8] See also footnote 6.

Chinese multilateral initiative possible, with a focus on multilateral talks to arrive at a regional, diplomatic solution of the conflict.[9] At the same time, the UNSC emerged as a much more active player during this phase, creating a case-specific non-proliferation regime to address the DPRK case. In our reading, this combination—increasing regionalisation of the conflict under Chinese leadership and the concurrent creation of a case-specific non-proliferation regime—marked a new approach towards the DPRK's nuclear programme, which we label model 2.

Pressured by China, North Korea in April 2003 agreed to three-way talks, which expanded into the Six Party Talks, with the US, the DPRK, China, Russia, the ROK and Japan participating. These talks were aimed at preventing—at least for the time being—any increase in the North Korean nuclear weapons potential. In the long run, however, they also aimed at the complete denuclearisation of the Korean peninsula (Harnisch and Wagener 2010). The first four rounds of talks saw only very limited progress, at one point adjourning for more than a year, while North Korea accelerated its nuclear activities and declared itself a nuclear power on 10 February 2005 (Nikitin 2009: 1). North Korea's neighbours, South Korea, Japan and China, therefore repeatedly pushed the Bush administration to drop its CVID precondition in favour of a step-by-step approach. This resulted in the joint statement of 19 September 2005, which provided for North Korea to give up all its nuclear weapons and programmes, return to the NPT at an early time, and comply with its safeguards obligations. In exchange, the US reaffirmed that it had neither nuclear weapons in South Korea nor any aggressive intentions against the North. South Korea confirmed it possessed no nuclear weapons and that, in accord with the 1992 'Joint declaration on the denuclearization of the Korean peninsula', it would not strive for them. All participants accepted North Korea's declaration that it had the right to peaceful uses of nuclear energy. Furthermore, they promised to discuss the delivery of LWRs (and thus the de facto resumption of the KEDO process) 'at an appropriate time' (Huntley 2007: 471).

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[9] Against the background of heavy bureaucratic infighting in the Bush administration, US Secretary of State Colin Powell was instrumental in suggesting the format and Beijing's role as the host of the preliminary trilateral talks in April 2003 (see Pritchard 2007: 62).

However, the ink on the paper had not dried before different interpretations of the document became evident (Chinoy 2008: 249-51; Pritchard 2007: 102-27). The US negotiator Christopher Hill had to read out a statement drafted by Vice-President Cheney's office, which made further negotiations contingent on conventional disarmament and progress on human rights (Rozman 2007: 610). Then, on 15 September 2005, i.e. during the fourth round of negotiations, administration hawks passed financial sanctions against the Macao-based Banco Delta Asia (BDA), which held North Korean accounts worth $25 million (Bechtol 2009: 31). None of the charges levelled against the DPRK, including money-laundering, counterfeiting and other illicit activities, were new, so the timing indicated the hawks' reassertion of control (Pritchard 2007: 131). These financial sanctions were the main obstacle to further talks after the DPRK had sounded out the unchanged US position in the first session of the fifth round in November 2005 (Moore 2008: 13). Facing stiffened US sanctions and the refusal to provide economic aid in exchange for a freeze, North Korea escalated the conflict again throughout 2006. After testing its Taepodong-2 missile on 4 July, the US national holiday, and several other missiles the day after, the DPRK announced on 3 October that it would shortly test a nuclear device; and on 9 October 2006 it detonated a small nuclear device yielding less than one kiloton (see CNS 2006).

This time around, North Korean provocations gradually galvanised international criticism, as reflected by the UNSC's reaction, which was prompt and increasingly in unison. In reaction to the missile test, the UNSC—albeit after considerable internal controversies pitting the US and Japan against Russia and China—passed resolution 1695 on 15 July 2006. It called on North Korea to suspend all missile-related activities, including production, export and tests, and called for its return to the NPT, the IAEA safeguards system, and the Six Party Talks. The resolution further mandated the cessation of all trade related to missile technology and weapons of mass destruction with North Korea.[10]

North Korea's announcement on 3 October of an imminent nuclear test further closed the ranks. On 6 October, the UNSC president declared that the test would pose 'a clear threat to international peace

[10] The operational sections, however, were not based on chapter VII (Lee 2007).

and security', indicating the Council's willingness and ability[11] to act under chapter VII of the UN Charter (President of the Security Council 2006).[12] In response to the 9 October test itself, the Council unanimously and with no abstentions passed resolution 1718. Explicitly acting under chapter VII (article 41), it created a comprehensive and legally binding sanctions regime in order to contain and roll back the North Korean nuclear weapons programmes, beyond the NPT and IAEA obligations no longer observed by the country.

With resolution 1718, the Council broke new ground. Acting under chapter VII, it demanded that North Korea 'return to the Treaty on the Non-Proliferation of Nuclear Weapons and International Atomic Energy Agency (IAEA) safeguards', while simultaneously putting targeted economic sanctions in place. Demanding North Korea's return is, however, legally dubious, given that the NPT's depository nations and the Security Council never accepted North Korea's withdrawal in the first place (Damrosch 2009: 182). Still, the Council demanded and decided that North Korea should completely, verifiably and irreversibly abandon all nuclear weapons and programmes relating to nuclear weapons, weapons of mass destruction, and missiles. Further, resolution 1718 demands that North Korea

> provide the IAEA transparency measures extending beyond these [NPT and INFCIRC/403 safeguards] requirements, including such access to individuals, documentation, equipments and facilities as may be required and deemed necessary by the IAEA (paragraph 6, UNSC Res. 1718).

Effectively, the Council created a case-specific non-proliferation regime for a country demonstrably in violation of its safeguards obligations and the NPT,[13] from which it had unilaterally withdrawn. What the Council did not do, however, is equally important. It did not impose comprehensive sanctions targeting the North Korean economy as a whole, which allowed South Korea and China to continue their ex-

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[11] As opposed to resolutions, presidential statements are not voted on and thus usually reflect consensus opinions (Aust 2010: 194; Talmon 2003: 431-35).

[12] Chapter VII stipulates that the UNSC, having determined that there exists a threat to the peace, breach of the peace, or an act of aggression under article 39, can impose sanctions (article 41) or use military means (article 42) 'to maintain or restore international peace and security' (article 39). Crucially, actions taken under chapter VII are legally binding for all UN member states (article 48).

[13] By testing a nuclear device as a non-nuclear-weapons state and exporting nuclear technology.

tensive trade and investment activities. This position also led President Ahmadinejad of Iran to claim that similar sanctions would not stall Iranian uranium enrichment 'even for a second' (cited in Kittrie 2007: 387). In addition, the Council did not specify deadlines or behaviour that would trigger further sanctions.

Thus, after the first nuclear test and intensive deliberations, the Security Council did not pursue a retributive strategy aimed at deterring other states from similar behaviour. Rather, it set its sights at containing the negative impact of North Korean proliferation activities on other regions and the future rollback of nuclear activities through the Six Party Talks.

5.1 *Six Party Talks: from enthusiasm to rejection*

The impetus for taking up the Six Party Talks again was a change in US North Korea policy in the fall of 2006. The unexpected loss of both houses of Congress to the Democrats in the November mid-term elections turned Bush into a lame duck over night. Encouraged by the Democrats' victory, Bill Richardson, governor of New Mexico, attacked the administration's 'out-sourcing' of DPRK policy to China and called for direct talks with North Korea (ICG 2006: 14). The shifting power relations forced a number of pivotal hawks on North Korea to leave the administration. Secretary of Defense Donald Rumsfeld went on 18 December, UN ambassador John Bolton resigned, expecting his recess appointment would not be confirmed, and Robert Joseph, Under-Secretary of State for Arms Control and International Security, left in late January 2007 (Giacomo 2007; Martin 2007: 21).

Late 2006 saw an 'abrupt about-face in North Korean policy' (Kim 2008: 3), with the US agreeing to secret bilateral negotiations in Berlin in January 2007. At the talks, US negotiator Christopher Hill and his North Korean counterpart agreed on the outlines of a 'denuclearisation action plan' intended to implement the 2005 joint statement. Making several significant concessions, the Bush administration reached a legally non-binding agreement with North Korea at the end of the third session of the sixth round, which in its immediate provisions largely resembled the Agreed Framework. Within 60 days, North Korea would freeze the Yŏngbyŏn facilities and allows IAEA inspectors to verify this. In exchange, the DPRK would receive 50,000 tons of HFO from South Korea. Additionally, the US would initiate

the process of removing North Korea from the list of state sponsors of terrorism, exempt it from the Trading with the Enemy Act, and release the BDA funds within 30 days. The US administration not only eased its financial sanctions aimed at the DPRK, it also stopped making the removal of North Korea from the list of state sponsors of terrorism contingent on the complete, irreversible and verifiable dismantlement of the Yŏngbyŏn facilities.

Table 1 Overview and results of the Six Party Talks

Round	Duration	Results
1	27-29.08.03	
2	25-28.02.04	Chairman's statement
3	23-26.06.04	Chairman's statement
4	26.07-07.08.05 (1st session) 13-19.09.05 (2nd session)	Joint declaration 19.09.05: DPRK promises dismantlement of nuclear facilities in exchange for incentives, US promises future normalisation of relations
5	09-11.11.05 (1st session) 18-22.12.06 (2nd session) 08-13.02.07 (3rd session)	US imposes financial sanctions after nuclear test; Initial actions for the implementation of the joint statement, 13.02.07
6	19-22.03.07 and 18-20.07.07 (1st session) 27-30.09.07 (2nd session) 10-12.07.08 (3rd session) 23.07.08 (informal meeting in Singapore) 08-11.12.08 (4th session)	Second-phase actions for the implementation of the joint statement, 03.10.07: DPRK promises freeze, verification and eventual dismantlement of its plutonium facilities in exchange for being removed from the US list of state sponsors of terrorism

Source: Authors' compilation.

2007 and 2008 brought some promising developments. In June 2007, the BDA funds were unfrozen and transferred indirectly to North Korea, the Yŏngbyŏn shutdown was verified by the IAEA in June and July (Choe 2007a, 2007b; Cody 2007), and an agreement on how to proceed in dismantling the Yŏngbyŏn facilities was reached in October 2007. Eventually, the US even lifted the sanctions under the Trading with the Enemy Act. Such positive moves culminated most

graphically in North Korea blowing up the cooling tower of the 5-MW reactor in Yŏngbyŏn in May 2008, an image that went around the globe. Nevertheless, implementation ground to a halt later in 2008, with verification measures emerging as a potential deal-breaker as the Bush administration proposed an extensive and intrusive regime in July 2008, demanding access to facilities all over North Korea (Kessler 2008b; Nikitin 2010: 19). The DPRK rejected the draft, arguing that only the 15 facilities named in the nuclear declaration should be subject to inspections. On 11 August, President Bush decided not to remove North Korea from the list of state sponsors of terrorism pending progress on the verification regime. The DPRK reacted by halting disablement and on 18 September announced it would recommence reprocessing (Kessler 2008a, 2008b), asking inspectors to remove monitoring equipment and seals on 22 September (IAEA Director General 2009). Christopher Hill's trip to Pyongyang in early October resulted in an unknown inspection agreement, which led Bush to remove North Korea from the list of state sponsors of terrorism on 11 October (Niksch 2009). Even though North Korea resumed disablement activities and allowed the re-installation of monitoring equipment, the remaining months of the Bush tenure were marred by controversy over the exact content of the verification deal, especially concerning environmental sampling, which the DPRK refused to permit.

Against a background of what is thought to have been a serious illness for Kim Jong Il and the concomitant rumours over his succession, the crisis escalated once more in the spring of 2009. In quick succession, the DPRK declared all political and military agreements with the ROK and the Northern Limit Line void—in the case of the 1953 armistice, for the fifth time since 1994 (Oh and Hassig 2010: 92). On 5 April 2009, it claimed to have launched a satellite into space on a long-range missile and reacted sharply when the UNSC's president criticised this as a violation of resolution 1718, declaring its intention to pursue uranium enrichment repeatedly in April, June and September (KCNA 2009a, 2009b, 2009c, 2009d). North Korea conducted a second, more sizeable nuclear test on 25 May 2009 (ICG 2009) and medium-range missile tests on 4 July.

6 LIMITING THE DAMAGE: THE UNSC AND CONTROL OF THE NORTH KOREAN POTENTIAL

The second nuclear test resulted in the tightening of the existing sanctions regime through UNSC resolution 1874 (Nikitin, Chanlett-Avery and Nanto 2010; Roy 2010: 5), which prohibits all exports of North Korean weapons and authorises all states to board and inspect suspicious vessels. This amounts de facto to a multilateralisation of the US-led Proliferation Security Initiative (PSI) of 2003 (Newman and Williams 2005), without, however, creating new grounds for inspections. The resolution explicitly refers to existing international law and makes inspection contingent on 'convincing reasons' on the part of the inspecting state, and on the assent of the state under whose flag the ship is registered or in whose waters the inspection is to occur (Padilla n.d.).

The will of North Korea's neighbours to provide convincing reasons and their ability to force suspicious vessels into ports will be decisive for the resolution's implementation. While India and Pakistan, both important transit states, have co-operated, China's implementation of the resolution remains less certain, as is underscored by the burgeoning trade between the two countries, which has been unaffected by sanctions (Haggard and Noland 2010: 541, 557; Noland 2008). North Korea's use of cargo aircraft further complicates interdiction, as these cannot be inspected after takeoff, and some modern aeroplanes could reach Iran, for instance, without refuelling. It is during refuelling stops that weapons deliveries have previously been intercepted, as, for example, in Bangkok on 11 December 2009 (Nikitin, Chanlett-Avery and Nanto 2010: 6-8). The problem is further exacerbated by the likelihood of North Korea transporting high-value cargo by air rather than sea (Panel of Experts 2010: 21-3).

After resolutions 1718 and 1874 entered into force, a growing number of shipments of conventional weapons were intercepted in the United Arab Emirates, South Korea, South Africa and Thailand (ICG 2010; Panel of Experts 2010: 26). North Korea's long-standing co-operative relations with various states in the Middle East (Iran, Syria, Libya, Yemen) and Asia (Pakistan, Burma) in the field of missile and nuclear technology indicate, however, that it is willing and able to circumvent existing sanctions and to sell or barter its know-how and technology to other actors (Chestnut 2007; Hecker and Liou 2007).

The DPRK is suspected of having exported nuclear technology to, inter alia, Syria, Iran and maybe Burma during its NPT membership up until January 2003. These states then used it in undeclared facilities, that is, without the safeguards mandated by the NPT (Albright et al. 2010; Htut 2010; Lin 2008). If this is the case, North Korea has violated article III, paragraph 2 of the NPT. If one is of the opinion that North Korean membership in the NPT did not end in 2003, the since proven co-operation with Syria on its Al-Kibar reactor would be a further violation of the NPT. At the very latest, however, UNSC resolution 1718 (14 October 2006) forms a legally binding prohibition of the export of nuclear technology and material by North Korea (Joyner 2008).

The Security Council has to date not directly addressed the co-operation between North Korea and Syria. The Al-Kibar case thus far rests with the IAEA. Nonetheless, the Council did react indirectly by acquiescing in the Israeli preventive strike on the facility on 6 September 2007, as did the majority of the international community. Legally speaking, the Council thus accepts that a nuclear-weapon state outside of the NPT (Israel) takes military action against a non-nuclear-weapon state within the NPT (Syria) that has probably violated its safeguards agreements (Spector and Cohen 2008). Political considerations, especially signalling to Iran, may have led the Council to accept this illegal behaviour (Asharq Alawsat 2008).

Nevertheless, the Security Council would probably not condone unauthorised military actions against safeguards violators. Neither Israel nor the US has charged Syria with wanting to build nuclear weapons, let alone attack Israel in the near future. That North Korea reaffirmed its promise not to export nuclear material, technology or know-how as part of the agreement of 3 October 2007 can only partially cover up the fact that the Council lets third states (Israel) enforce its legally binding resolutions when it is internally divided (Weitz 2008).

The Council is also divided over the question of whether, and if so how, it should respond to the sinking of the South Korean corvette *Cheonan* on 26 March 2010. The South Korean government accuses the DPRK of having torpedoed and sunk the vessel, which was close to the Northern Limit Line during a manoeuvre at the time; the North Korean military summarily denies this (KCNA 2010; Joint Civilian-Military Investigation Group 2010). South Korea maintains that the Six Party Talks should be suspended for the time being and the UNSC

involved. Just as it did in the case of enforcing the sanctions enshrined in UNSC Resolutions 1718 and 1874, China advocates a policy of restraint and rejects further sanctions (Global Security Newswire 2010).

7 North Korea and the international nuclear order: a time to break down, and a time to build up?

In terms of both policy-making and academic studies, there is a growing trend of considering the nuclear non-proliferation regime, stretching to the UNSC as its ultimate guardian, significantly weakened. This diagnosis is underscored by the North Korean case, where the interplay of the IAEA, the UNSC, and bilateral and multilateral negotiations has not prevented the DPRK's emergence as the ninth de facto nuclear weapon state. Nonetheless, the non-proliferation regime's tools and mechanisms have been employed and have delayed the North Korean nuclear programme and limited its extent. The regime has thus regulated, but not prevented, North Korea's nuclear weapons programme.

In this article, we have suggested that the international community's efforts to address the North Korean nuclear programme are best understood in terms of two different models. Model 1, employed in the first nuclear crisis and underlying the Agreed Framework, was based on US leadership and US-DPRK diplomacy. It entailed the freeze of the DPRK's plutonium programme in exchange for economic incentives. With the breakdown of the Agreed Framework in 2002 and increasing US disenchantment with multilateralism, a window of opportunity for a Chinese multilateral initiative emerged. Accordingly, model 2 saw both the regionalisation of international efforts under Chinese leadership in the Three Party and Six Party Talks, and the creation of a case-specific non-proliferation regime by the UNSC. The Security Council has thus taken on important tasks to uphold the NPT in 1993-94 and since 2006, for example, by establishing an independent sanctions regime. With North Korea having acquired nuclear weapons, the Council's measures now aim at containing nuclear proliferation by North Korea by tightening export controls and intensifying inspections, especially on the sea lanes linking North Korea with South Asia and the Middle East (Schulte 2010).

We would argue that this acquiescence in North Korea's vertical proliferation can be traced back to a tentative agreement between

China and the US. For the Republican Bush administration, a military engagement at the height of the Iraq conflict was politically and militarily impossible, although the Clinton administration had given serious thought to a preventive strike in a similar situation in summer 1994. For the PRC, a nuclear North Korea with a limited potential and moderated behaviour is obviously much more acceptable than any further destabilisation of the regime and/or Korean reunification (potentially leading to US forces on the Chinese border). It remains to be seen whether we are currently witnessing a renewed North Korean focus on extricating material concessions from South Korea, and the emergence of a model 3 built around the case-specific non-proliferation regime and a US-Chinese agreement to tolerate vertical, but not horizontal proliferation by North Korea (Byman and Lind 2010: 64-6). The DPRK's strategy of highlighting its nuclear potential to make the international community pay for a freeze or inspections has been relatively unsuccessful since the breakdown of the Six Party Talks, as can be seen from the still suspended talks and their lack of resumption after the 2009 nuclear test. That North Korea's disclosure of a uranium enrichment plant will result in another Agreed Framework-style deal seems highly unlikely at the time of writing. The recent conventional provocations aimed at South Korea—the shelling of Yŏnp'yŏng and the sinking of the *Cheonan*—could indicate an attempt to make South Korea the new patron, stepping in for the US-led group that delivered heavy fuel oil under KEDO and the 2007 deal.

By defining rules and what constitutes a violation, the Security Council has only partially succeeded in plugging the holes in the non-proliferation regime that the North Korean case has laid open. It has now begun to sketch in how it interprets withdrawal from the NPT in relation to its crucial task of securing peace and international security. This blurry notion, which should focus on establishing a link between the violation of IAEA safeguards and the NPT's criteria for non-compliance, might have to become much more detailed and precise in the near future, for instance, in the Iranian and Syrian cases. As for Israel's airstrike against the Syrian nuclear facility, the Council—albeit with the tentative agreement of the better part of the non-proliferation regime's members—even accepted a blatant violation of international law.

Should such acquiescence in preventive strikes against the (potential) violators of safeguards become part of the common practice of states, it could lead to unintended proliferation effects. If regime mem-

bers themselves no longer trust in the non-proliferation regime's ability to enforce its rules and bank on third states to enforce them, rational proliferators will no longer invest in the tedious process of building nuclear facilities, but rather try to buy ready-to-use weapons systems. It is only plausible to assume that this is what the North Korean regime took away from the US preventive war against Iraq. Needless to say, the world would be better off if as few states as possible heeded this North Korean lesson.

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