SETTING THE STAGE FOR PROGRESS TOWARDS NUCLEAR DISARMAMENT

TYTTI ERÄSTÖ, SIBYLLE BAUER, SHANNON N. KILE AND PETR TOPYCHKANOV

WORKING PAPER
April 2018

Setting the Stage for Progress Towards Nuclear Disarmament

TYTTI ERÄSTÖ, SIBYLLE BAUER, SHANNON N. KILE AND PETR TOPYCHKANOV

STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

HIROSHIMA PREFECTURE

STOCKHOLM INTERNATIONAL
PEACE RESEARCH INSTITUTE

SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

The Governing Board is not responsible for the views expressed in the publications of the Institute.

STOCKHOLM INTERNATIONAL
PEACE RESEARCH INSTITUTE

Signalistgatan 9
SE-169 72 Solna, Sweden
Telephone: +46 8 655 97 00
Email: sipri@sipri.org
Internet: www.sipri.org

Contents

Introduction

Since the 1995 Review Conference (RevCon) decided to indefinitely extend the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT), there has been a growing perception that the review process lacks accountability when it comes to implementation of the disarmament commitments made by the five NPT-recognized nuclear weapon states (NWS)—China, France, Russia, the United Kingdom and the United States. The 13 concrete disarmament steps adopted at the 2000 RevCon and the 64-point action plan adopted at the 2010 RevCon temporarily alleviated these concerns, but the subsequent lack of implementation of these commitments has increased the general sense of frustration among many non-nuclear weapon states (NNWS).[1]

Discontent with the slow pace of disarmament and the failure to follow through on the 2010 plan to implement the 1995 Middle East resolution were prominent at the most recent RevCon, in 2015. As the 2020 RevCon draws closer, the prospects for substantial progress towards nuclear disarmament remain bleak. Apart from the lack of any visible effort by the NWS to engage in the 'step-by-step' approach to disarmament or to promote a zone free of weapons of mass destruction (WMD) in the Middle East, tensions run high regarding the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW). This new treaty was negotiated by the majority of the NNWS in what they view as an attempt to promote nuclear disarmament and to reinforce the Charter of the United Nations and international humanitarian law. Most NWS see the TPNW as undermining the NPT-based international order.

At the same time, the international political context has become less favourable to nuclear arms control and disarmament. The bilateral arms control process between Russia and the USA remains stalled due to mutual recriminations over the 1987 Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty), as well as other points of contention between the two countries. More generally, all of the NWS have reaffirmed the central role of nuclear weapons in their national security strategies, and they are all either modernizing their nuclear weapon arsenals or have announced their intention to do so.

These trends and developments highlight the urgent need to strengthen the NPT's disarmament pillar and to revitalize global nuclear disarmament efforts. This working paper accordingly identifies 10 practical steps that could be taken in the short and medium term to promote progress towards these goals, while recognizing that achieving a world free of nuclear weapons remains a necessarily long-term vision. These steps can be summarized as:

1. Reaffirm the nuclear weapon states' commitment to NPT Article VI and the pursuit of a nuclear weapon-free world
2. Concretize the commitment to disarmament by linking it with specific interim steps
3. Make a multilateral declaration on preventing nuclear war
4. Uphold the existing framework: extend New START and preserve the INF Treaty
5. Reduce the risks of non-strategic nuclear weapons
6. Broaden the agenda of the Russian-US strategic stability talks and expand participation

[1] United Nations, 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Volume I, NPT/CONF.2000/28 (Parts I and II); and 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Volume I, Part I, NPT/CONF.2010/50 (Vol. I).

7. Operationalize the results of the work on nuclear disarmament verification
8. Issue negative security assurances to all members of the nuclear weapon-free zones
9. Promote regional arms control and security processes
10. Strengthen nuclear security to facilitate disarmament

These steps—which can be undertaken in any order, or in parallel with one another—give priority to identifying measures for strengthening the NPT's normative and legal foundations as a way to set the stage for more concrete disarmament steps to follow. In this regard, one overarching objective is to highlight the importance for the NWS and their partners to demonstrate the utility of a step-by-step approach to disarmament under the NPT by actually bringing some of these steps to a productive conclusion.

It should be stressed that this choice of disarmament steps—many of which are rather unambitious compared to the other recommendations that have been made over the years—does not make those previous recommendations any less urgent or important. However, given that these much-discussed steps—such as the entry into force of the 1996 Comprehensive Nuclear-Test-Ban Treaty and the formal opening of negotiations on a fissile material cut-off treaty—were not taken even in the previous political context, which was much more conducive to arms control and disarmament, this paper starts from the assumption that they may still not be among the most feasible steps in the current context.

The paper is based on discussions by a high-level expert working group convened by SIPRI in March 2018 as well as existing literature. It was commissioned by the Hiroshima Prefectural Government.

Setting the stage for progress towards nuclear disarmament

1. Reaffirm the nuclear weapon states' commitment to NPT Article VI and the pursuit of a nuclear weapon-free world

The consensus documents of the 2000 and 2010 NPT Review Conferences reaffirmed the binding nature of NPT Article VI, meaning that nuclear disarmament was accepted as an obligation by the NWS.[2] In 2010, the long-term goal of a world free of nuclear weapons was also endorsed in the nuclear postures of the USA and the North Atlantic Treaty Organization (NATO).[3] The 2010 US Nuclear Posture Review sought to demonstrate that the USA '[took] seriously our NPT obligation to pursue nuclear disarmament'. Since then, however, there have been increasing doubts about the seriousness of the commitment of the five legally recognized NWS under the NPT to pursue nuclear disarmament, most notably because of the lack of implementation of the disarmament steps agreed at the 2000 and 2010 RevCons.

In the circumstances, a first step for the NWS to bolster the credibility of the NPT would be to unambiguously reaffirm their commitment to 'pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control', in accordance with Article VI of the NPT. Ideally, this reaffirmation would take the form of a joint declaration. In addition to helping to increase faith in the NPT process, such a step might reduce

[2] United Nations (note 1).

[3] US Department of Defense, Nuclear Posture Review Report, Apr. 2010; and NATO, *Active Engagement: Modern Defence*, Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization, Nov. 2010.

polarization by reinforcing the sense of shared purpose and by shifting attention from disagreements over the details of the TPNW to highlight the long-term goal of disarmament—endorsed by both treaties.

In order to increase the symbolic significance of this declaration, it could be made in connection with a high-level meeting in Hiroshima (which the August 2017 Hiroshima Roundtable proposed be organized) involving both the NWS and the *hibakusha*—the survivors of the 1945 nuclear bombings of Hiroshima and Nagasaki. This declaration could possibly be made in connection with a declaration on preventing nuclear war (see step 3).

2. Concretize the commitment to disarmament by linking it with specific interim steps

A reaffirmed commitment to disarmament should not be an isolated declaration in the abstract. Instead, it should be consistently linked with discussion of the more concrete nuclear arms control and disarmament steps, by being mentioned as their overarching objective.

The long-term objective of the complete elimination of nuclear weapons could also be made concrete by setting specific time limits, for example based on the two-phased approach recommended in the 2009 report of the Evans–Kawaguchi Commission.[4] Recognizing the difficulty of the process of creating a nuclear weapon-free world, the Commission recommended that the time-bound goal in the first phase—pursued in the short-to-medium term—would be to achieve a 'minimization point', characterized by minimum deterrence, no-first-use doctrines and de-alerting. The second phase would aim for the long-term goal of elimination, the timing of which would be discussed during the first phase.

3. Make a multilateral declaration on preventing nuclear war

Given the current obstacles to bilateral arms control, Adam M. Scheinman, a former special representative of the US president for nuclear non-proliferation, recently suggested that the next best option for Russia and the USA would be to revive the now largely forgotten 1973 Soviet–US Agreement on the Prevention of Nuclear War.[5] The agreement called on the two states 'to remove the danger of nuclear war and of the use of nuclear weapons' and 'to prevent the development of situations capable of causing a dangerous exacerbation of their relations'.[6]

Reviving this bilateral cold war agreement would be far from a substitute for actual arms control. However, as Scheinman argues, Russia and the USA, as well as the other three NWS (China, France and the UK), could use the reaffirmed agreement as 'the basis for a new political understanding', which would include 'policy commitments, confidence-building measures, and structures for enhanced dialogue' related to their joint commitment to prevent nuclear war.[7] This or other similar measures could help lay the basis for dialogue and demonstrate the political will for much-needed risk-reduction and transparency measures regarding nuclear weapons.

The NWS should therefore issue a joint declaration on preventing nuclear war. This declaration could reference the 1973 Soviet–US agreement, while also recalling other

[4] Evans, G. and Kawaguchi, Y., *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers*, Report of the International Commission on Nuclear Non-Proliferation and Disarmament (International Commission on Nuclear Non-Proliferation and Disarmament: Canberra/Tokyo, 2009).

[5] Scheinman, A. M., 'To prevent nuclear war, borrow from 1973', *Bulletin of the Atomic Scientists*, 14 Mar. 2018.

[6] Agreement Between The United States of America and the Union of Soviet Socialist Republics on the Prevention of Nuclear War, signed and entered into force 22 June 1973.

[7] Scheinman (note 5).

relevant documents such as Article 2 of the UN Charter—especially Article 2.4, which mandates refraining from the threat or use of force—and the preamble of the NPT—which recognizes 'the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples'.

As with any declaration affirming the commitment of the NWS to Article VI, it should not be merely a symbolic action. Instead, the goal should be to use the declaration to increase the relevance of existing agreements, which all stress the need to prevent nuclear war, in order to provide a shared understanding and a firm basis for dialogue and undertaking concrete risk-reduction and transparency measures, both between Russia and the USA and among the other three NWS (see step 6).

4. Uphold the existing framework: extend New START and preserve the INF Treaty

While the level of ambition regarding multilateral nuclear disarmament should not be allowed to decrease in the current difficult circumstances, the most urgent step at the moment is to prevent backsliding. Two key achievements of past bilateral Russian/Soviet–US disarmament processes—the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) and the INF Treaty—are now in jeopardy. Priority should therefore be given to extending New START before its expiry in 2021 and to preventing the collapse of the INF Treaty.

New START has been implemented successfully by both Russia and the USA. The treaty—which limits the number of strategic nuclear warheads as well as associated strategic missiles, missile launchers and bombers deployed by the two parties—has provided a high level of transparency and predictability in their respective strategic forces. However, it is due to expire in February 2021 unless a decision is made to extend it for a further five years. A failure to agree on a New START extension, or to negotiate a new treaty to replace it, would remove all limits to Russian and US strategic forces. Such increased uncertainty about future developments of strategic forces would clearly not be in the interests of either Russia or the USA—or of international peace and security. A decision to preserve New START though a five-year extension, as allowed by the treaty, or agreement of a new treaty would uphold the existing limits on nuclear arsenals and related transparency measures.

Ideally, the parties would also decouple the relatively straightforward issue of New START extension from the much more complex process of resolving the dispute over the INF Treaty. After all, the former only requires a political decision by the Russian and US leaderships. Resolution of the INF Treaty controversy, in contrast, would probably not be possible without lengthy consultations and confidence-building measures—and, possibly, an amendment to the treaty. While the two issues are linked in the sense that the INF Treaty crisis has reduced the level of mutual trust, there is no legal linkage between the treaties, and trust in New START essentially builds on rigorous verification rather than amicable political relations.

In addition to renewing their efforts in consultations in the INF Treaty's Special Verification Commission and the existing strategic stability talks, Russia and the USA could also address the INF Treaty dispute in the context of a broadened strategic stability dialogue (see step 6) and also as part of an effort to increase transparency and reduce risks related to non-strategic nuclear weapons (see step 5).

5. Reduce the risks of non-strategic nuclear weapons

Given the post-cold war measures to reduce reliance on so-called theatre nuclear weapons, the recent increase in the role of low-yield, non-strategic nuclear weapons in the doctrines of some nuclear-weapon possessing states is a major backward step. These weapons are inherently destabilizing due to their lower threshold of use compared to strategic nuclear weapons. At the same time, the delivery vehicles for non-strategic nuclear weapons are frequently also used for conventional purposes, which increases the risk of miscalculation and blurs the line between conventional and nuclear capabilities.

There is considerable uncertainty about the potential scenarios in which Russia and the USA might resort to the use of non-strategic nuclear weapons. While some degree of ambiguity about the threshold of use is part of nuclear deterrence, confusion could lead to dangerous miscalculation and contribute to an unnecessary new arms race. To minimize the negative effects of ambiguity, Russia and the USA should initiate discussions to reduce the potential risks posed by non-strategic nuclear weapons. The discussion could take place in the context of bilateral Russian–US strategic stability talks—in either the existing format or the broadened version proposed in step 6. However, it could also be conducted on another track that would be open to NATO members, including the European countries in which US non-strategic (tactical) nuclear weapons are based.

In addition to transparency and confidence-building measures, the bilateral or multilateral discussion could explore two concrete proposals for limiting the nuclear weapons that are not covered by the Russia–USA New START and the INF Treaty. The first proposal—made in a 2017 UNIDIR report—is to codify into law the practice of keeping nuclear warheads apart from non-strategic delivery systems and verifiably locking them up in centralized storage facilities.[8] The second proposal for discussion—suggested by Sweden and Switzerland in 2006—would be the possibility of banning nuclear-armed cruise missiles.[9] It would be important to have India and Pakistan as two non-NPT participants engaged in both of these initiatives.

6. Broaden the agenda of the Russian-US strategic stability talks and expand participation

While the bilateral nuclear arms control process between Russia and the USA remains stalled, the two countries have been engaged in consultations known as strategic stability talks, held at the deputy foreign minister level in July and September 2017. The aim of the consultations has reportedly been to address ‘irritants’ in Russian–US relations.

At the time of writing there is no indication that any tangible progress has resulted from the consultations. However, their continuation is to be encouraged, as this seems a suitable avenue for tackling controversial issues in the current political atmosphere. Moreover, formalization and broadening of the agenda of the strategic stability talks could provide a more established forum for addressing relevant pressing issues. Insofar as any publicity would not undermine the discussions, communication of any progress and results to the rest of the NPT membership would make a tangible contribution to disarmament efforts in multilateral forums.

[8] Pavel, P. and Serrat, J., *Lock them Up: Zero-deployed Non-Strategic Nuclear Weapons in Europe* (Geneva: UNIDIR, 2017).

[9] United Nations, General Assembly, Open-ended Working Group taking forward multilateral nuclear disarmament negotiations, A/AC.286/WP.39, 10 May 2016.

At a minimum, such broadened dialogue could promote an understanding of differences and build awareness of the mutual Russian–US interest in preserving the existing arms control framework. The dialogue could also be used to lay the basis for future disarmament steps. The long-term objectives should be to remove security-related obstacles in the way of disarmament and to draw up the parameters for a comprehensive arms control agreement or framework of agreements. This would need to include not just non-strategic and strategic nuclear weapons but also missile defence, advanced conventional weapons, the militarization of space and cybersecurity, as such issues increasingly affect nuclear deterrence and strategic stability.

Given the complexity of the proposed agenda, the broadened strategic stability consultations could be arranged in a manner similar to the format of the 2009 Russian–US Bilateral Presidential Commission, which comprised several parallel working groups, each of which dealt with a particular topic. Issues relevant to strategic stability that such working groups might be tasked with would include:

- Promoting greater transparency in nuclear forces and doctrines
- Addressing instabilities related to perceived threats of pre-emptive attack and other risks arising from existing force postures
- Examining the relationship between strategic offensive and defensive forces, including advanced conventional weapon systems
- Assessing the impact of emerging technologies on strategic stability, with a particular focus on cybersecurity
- Examining the interconnections between the different issue areas

Over time, this diplomatic process should also be expanded by including China, France, the UK and other nuclear weapon-possessing states, depending on their interest and ability to contribute to discussions on particular issue areas. For example, while China would probably not be interested in nuclear weapon reductions for as long as its arsenal is significantly smaller than those of Russia and the USA, it shares Russian concerns over the USA's missile defence deployments, advanced long-range, precision-guided conventional strike systems, and the militarization of outer space.

7. Operationalize the results of the work on nuclear disarmament verification

Existing nuclear arms control agreements have focused on limiting delivery vehicles and the number of deployed warheads, but there is no precedent for the verified dismantlement of nuclear warheads. Regardless of how distant a goal one regards a nuclear weapon-free world to be, an enormous amount of work lies ahead in terms of tackling the related technical challenges. In addition to paving the way to complete disarmament, such work is needed to allow for the more gradual nuclear arms control steps involving cuts in warhead stockpiles, rather than just deployed nuclear weapons. Hence, nuclear disarmament verification work is an issue in which both NWS and NNWS have a shared interest.

Some work on nuclear disarmament verification, in particular on verifying the dismantlement of 'redundant' nuclear weapons, has already been done in connection with the Russian–US–International Atomic Energy Agency (IAEA) Trilateral Initiative, the British–US Non-Proliferation and Arms Control Technology programme, and the British–Norwegian Initiative on Nuclear Warhead Dismantlement Verification. The most extensive ongoing effort is the International Partnership for Nuclear Disarmament Verification (IPNDV). The IPNDV was launched in 2014 as a joint effort by

the US State Department and the Nuclear Threat Initiative (NTI), and over 25 countries have participated in its work.

To maintain the momentum on disarmament verification, it would be helpful to draw more attention to the work of the IPNDV, to effectively communicate its results, and to get countries more involved in this and similar undertakings. Countries should also establish a clear link between nuclear disarmament verification efforts and the long-term objective of a nuclear weapon-free world. More specifically, as disarmament verification work progresses, they should begin to think about how to apply the verification solutions and technologies to specific legal frameworks, with detailed measures for ensuring the verification and monitoring of irreversible disarmament.

This could take the form of adding verification protocols to the TPNW, or creating an alternative legal framework. As a number of experts have argued, the TPNW must ultimately be complemented by a verifiable, enforceable nuclear disarmament regime. The process of designing a 'prototype disarmament regime' will have to address questions not considered in the treaty negotiations, such as which activities, materials and facilities useful for developing and producing nuclear weapons must be prohibited, and how to manage and monitor nuclear activities with both military and civilian applications. This is where the IPNDV and other similar efforts could play a useful and important role.

8. Issue negative security assurances to all states in the nuclear weapon-free zones

One instrument that could make a significant contribution to disarmament and non-proliferation objectives in specific regions is negative security assurances (NSAs). By issuing NSAs, nuclear weapon-possessing states refrain from using or threatening to use nuclear weapons against NNWS. Thus far, NSAs have been given both in the form of non-binding unilateral pledges and as legally binding commitments in the protocols to treaties establishing regional nuclear weapon-free zones (NWFZs). China, France, the UK and the Soviet Union/Russia have given the latter type of NSA to the states parties to the 1967 Treaty of Tlatelolco (NWFZ in Latin America and the Caribbean), the 1985 Treaty of Rarotonga (South Pacific), the 1996 Treaty of Pelindaba (Africa) and the 2006 Treaty of Semipalatinsk (Central Asia). The USA has issued NSAs only to the parties to the Treaty of Tlatelolco. The 1995 Treaty of Bangkok (on a NWFZ in South East Asia) still lacks a protocol on NSAs. With the exception of China, all the NWS have attached reservations to their NSAs in connection with their unilateral pledges and the legally binding protocols to the NWFZs.

One challenge for NWFZs is the non-NPT nuclear weapon-possessing states: India, Israel, the Democratic People's Republic of Korea (DPRK, North Korea) and Pakistan. If these four countries signed the protocols of the NWFZ treaties, this would provide confirmation of the NWS status of non-NPT states. They are not generally regarded as having either the plans or the capabilities to use nuclear weapons beyond their regions, so for many NWFZs such NSAs would have symbolic, rather than practical, implications. However, the situation is changing particularly with regard to recent developments in North Korea. India's nuclear doctrine and its development of long-range delivery systems also highlight the possibility of nuclear retaliation for a major conventional attack or an attack with biological or chemical weapons.[10]

In order to promote regional arms control and disarmament, the five NWS should reaffirm their support for existing NWFZs and sign and ratify the relevant protocols

[10] Indian Ministry of External Affairs, 'The Cabinet Committee on Security reviews operationalization of India's nuclear doctrine', 4 Jan. 2003.

to treaties on NWFZs if they have not already done so. Given that the threat of nuclear weapon use is not a solution to any of the situations referred to in the reservations to the NWS' existing NSAs, ratification could be complemented by unilateral pledges of unconditional NSAs to all NNWS, or at least those that are members of a regional NWFZ. In addition, all non-NPT nuclear weapon-possessing states should provide NSAs to NNWS, particularly countries that are party to a NWFZ.

9. Promote regional arms control and security processes

The premise that disarmament requires a sufficient degree of global security is well-established among the NWS. However, a similar principle is not always applied to regional security and arms control. In the Middle East many states have long called for Israel's nuclear disarmament as a first step towards a broader regional security process. Similarly, in North East Asia the international community has demanded that North Korea give up its nuclear weapons or agree to the objective of denuclearization as a precondition for diplomacy.

To promote regional disarmament and the establishment of WMD-free zones therefore requires taking account of and addressing the security concerns that lie behind the decisions of nuclear weapon-possessing states to ground their security in nuclear deterrence. Confidence-building should be inclusive, meaning that equal importance should be placed on minimizing the security concerns of other states in the region, particularly as these might motivate them to acquire nuclear weapons of their own.

The Middle East

The persistent insecurity in the Middle East requires that the regional security culture should undergo a fundamental transformation, to which track II diplomacy, official dialogue and confidence-building measures can all contribute.[11] With this in mind, a process similar to the Arms Control and Regional Security (ACRS) talks—which were held as part of the Madrid peace process in 1991–95—could be launched, with the difference that the states that were not part of the ACRS would now be included, in particular Iran.

The process could begin in the form of track II consultations involving all interested states and covering a broad range of issues, possibly including the ongoing conflicts in Syria and Yemen, conventional arms, WMD, nuclear safety and security, and environmental threats. Given that sequencing has presented an obstacle to such dialogue in the past, all issues could be covered in parallel working groups.

Similarly, as some observers have proposed, the discussion on a WMD-free zone in the Middle East could be removed from the NPT review process and held in a separate forum. If successful, this process would still have a positive impact on the NPT over time. External actors could contribute to the process by supporting and facilitating the regional consultations. In addition, the five NWS could support regional arms control by issuing unconditional NSAs to all NNWS in the region—without linking such assurances to either NPT compliance or the potential establishment of a WMD-free zone.

While the dire situation in the Middle East may not seem conducive to such an effort, there have been positive developments. First, there have been recent initiatives to launch a Gulf regional security dialogue between Iran and some Arab states of the Gulf. Second, the WMD-free zone consultations prior to the 2015 NPT RevCon

[11] SIPRI Middle East Expert Group, *Towards a Regional Security Regime for The Middle East: Issues and Options*, new edn (SIPRI: Stockholm, Oct. 2011).

made some, albeit limited, progress.[12] Third, the concerns about a clandestine Iranian nuclear weapon programme have abated thanks to the 2015 Joint Comprehensive Plan of Action (JCPOA). That the future of the JCPOA now looks uncertain due to factors unrelated to the deal (which has verifiably been implemented by Iran) only highlights the need to develop regional confidence-building measures and arms control practices to minimize the negative effects of the potential collapse of the JCPOA.

North East Asia

The threat of war on the Korean peninsula increased in 2017 after North Korea's nuclear weapon and long-range missile tests during the year and the resulting escalation of tensions between North Korea and the USA. However, a conciliatory diplomatic process between North and South Korea began in early 2018 that could herald the beginning of a broader diplomatic process to reduce the risks of a conflict breaking out that could lead to a nuclear war.

This diplomatic process is to be encouraged and supported by all relevant parties, including Japan and China. Keeping in mind the deep distrust and the long history of conflict between North Korea and the USA, expectations regarding the prospects for denuclearizing the Korean peninsula should be realistic. The initial focus should be on confidence-building and incremental arms control measures involving North Korea and the USA. These could include an interim freeze on North Korean nuclear and missile tests in exchange for a freeze on, or a scaling back of, South Korean–US joint military exercises. Any bilateral North Korean–US agreement could be bolstered by regional mechanisms and arrangements to promote the peaceful de-escalation of current tensions. Above all, there is a need to establish new channels for dialogue and direct engagement between the states in the region in order to better understand their respective security concerns and strategies, especially those of North Korea regarding its nuclear weapons, with the aim of working toward the long-term goal of denuclearization.

South Asia

South Asia's political complexities and the continuing risk of military confrontation arguably make it more vulnerable to a possible nuclear conflict than any other region. Against this backdrop, some emerging trends in India–Pakistan relations leave room for optimism. At present, India and Pakistan are testing the political waters to gain a greater understanding of each other's nuclear agendas and military preparations. Each side is also adhering to its unilateral moratorium on nuclear testing. India and Pakistan have also signed agreements on confidence-building measures.

A number of steps to stabilize bilateral relations and prevent a nuclear conflict would further facilitate this process. For instance, both states, possibly together with China, could agree to partial transparency on their nuclear arsenals, specifically as it relates to their structure and deployment. In this context, they could sign a verifiable agreement on the non-deployment of nuclear forces in border zones. A mutual commitment not to deploy nuclear weapons on disputed territories would also help to lower the risk of nuclear confrontation. Other helpful steps would be to reduce missile combat readiness—that is, regularize the existing practice of storing delivery vehicles and nuclear warheads separately—and issue notifications of changes of the status of weapons before military training exercises.

[12] Report by the Facilitator to the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, NPT/CONF.2015/37, 30 Apr. 2015.

10. Strengthen nuclear security to facilitate disarmament

While often treated separately, nuclear security constitutes an important aspect of nuclear disarmament. This will increasingly be the case as work on disarmament verification progresses, and the verified dismantlement of nuclear warheads becomes a more concrete reality. According to Wyn Bowen and Lars van Dassen, 'as nuclear warheads are dismantled the most dangerous and, from a terrorist's perspective, the most attractive materials are in effect released from a protective enclosure'. As they argue, 'This calls for tremendous precaution and robust nuclear security measures before and in connection with a disarmament process.'[13]

Various steps have been taken to counter nuclear terrorism and increase the security of nuclear materials at the national, multilateral and global levels. In addition to the long-standing efforts of the IAEA Division of Nuclear Security, the most recent initiatives have included the 2005 International Convention for the Suppression of Acts of Nuclear Terrorism, the 2003 Global Initiative to Combat Nuclear Terrorism, the 2006 Proliferation Security Initiative, UN Security Council Resolution 1540 of 2004 and Resolution 1887 of 2009, and the Nuclear Security Summit (NSS) process launched by the USA in 2009.

However, despite the existence of dedicated forums on this issue, the momentum on nuclear security has considerably decreased since the ending of the NSS process in 2016. Significant differences also remain in national positions. Insufficient funding to implement agreed measures poses an additional challenge, which is also the case for a range of other multilateral initiatives and international organizations. Countries should strive to overcome these differences and financial challenges in order to be able to better rely on international efforts in this area. To ensure that nuclear security remains a priority for the international community, a series of high-level meetings—possibly based on the NSS model—could be organized in the near future. Given the absence of legally binding international instruments related to the security of radioactive sources and cybersecurity, the process could pay particular attention to these areas.

Conclusions

The 10 steps proposed in this paper include functional recommendations on a range of technical and policy issues that broadly frame the nuclear disarmament agenda today. Most concretely, the steps address 'old' risks and instabilities arising from existing nuclear force postures and doctrines. They also serve to highlight 'new' nuclear weapon-related risks arising from developments in conventional capabilities and from emerging technologies.

More fundamentally, the proposed steps are intended to help revitalize the NPT as a meaningful force for progress on nuclear disarmament and to restore a sense of common purpose among the NPT states parties. This will require, first and foremost, reaffirming the NPT's role as the principal normative and legal foundation of the global nuclear disarmament and non-proliferation regime while recognizing its inherent compatibility with other disarmament initiatives, most notably the TPNW. The steps proposed here are, admittedly, modest ones, but they serve to set the diplomatic stage for future concrete steps and initiatives to reduce the role and salience of nuclear weapons in national security strategies and military doctrines and to eventually eliminate them.

[13] Bowen, W., and van Dassen, L., 'Nuclear security and the three pillars of the NPT: identifying a lasting relationship', Proceedings of the International Conference on Nuclear Security: Enhancing Global Efforts (IAEA: Vienna, 2014).

sipri

STOCKHOLM INTERNATIONAL
PEACE RESEARCH INSTITUTE