



Centre for International Studies and Diplomacy

REINTRODUCING DISARMAMENT AND COOPERATIVE SECURITY TO THE TOOLBOX OF 21ST CENTURY LEADERS

EDITED BY DAN PLESCH, KEVIN MILETIC AND TARIQ RAUF

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.

GOVERNING BOARD

Sven-Olof Petersson, Chairman (Sweden) Dr Dewi Fortuna Anwar (Indonesia) Dr Vladimir Baranovsky (Russia) Ambassador Lakhdar Brahimi (Algeria) Ambassador Wolfgang Ischinger (Germany) Professor Mary Kaldor (United Kingdom) Dr Radha Kumar (India) The Director

DIRECTOR

Dan Smith (United Kingdom)



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

Reintroducing Disarmament and Cooperative Security to the Toolbox of 21st Century Leaders

EDITED BY DAN PLESCH, KEVIN MILETIC AND TARIQ RAUF



STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE





Acknowledgements

The editors express their sincere gratitude to the individuals who contributed to this volume: Maritza Chan, Sergio Duarte, Patricia Flor, Angela Kane, Paul Meyer, Abdul Samad Minty, Jenny Nielsen, Fred Tanner, Triyono Wibowo. Special appreciation is also owed to the SIPRI Editorial and Publications Department for its support.

Responsibility for the views set out in this collection of essays lies entirely with the various individual contributors. They do not necessarily represent SIPRI, CISD/SOAS or the organizations with which the authors and editors are affiliated.

Contents

Acknowledgements	iii
Introduction DAN PLESCH, KEVIN MILETIC AND TARIQ RAUF	1
PART I: REFLECTIONS ON THE CURRENT CONTEXT	
1. Rethinking Strategic Stability ANGELA KANE AND JENNY NIELSEN	7
2. Erosion of the Disarmament Architecture and the Consequences for the International Security System SERGIO DUARTE	13
3. Asymmetric Disarmament Duties, Obligations and Efforts ABDUL SAMAD MINTY	17
PART II: OPPORTUNITIES FOR COOPERATIVE SECURITY AND DISARMAMENT	
4. Cooperative Measures for International Cybersecurity PAUL MEYER	25
5. Reconciling Collective Defence and Nuclear Disarmament PATRICIA FLOR	31
6. Arms Control in Times of Crisis FRED TANNER	37
7. Prospects for Cooperative Security and Disarmament in South East and North East Asia TRIYONO WIBOWO	43
8. Establishing a Cooperative Security System that Works: The Costa Rica Experience MARITZA CHAN	51
About the Editors and Authors	59

Introduction

DAN PLESCH, KEVIN MILETIC AND TARIQ RAUF

To the vast majority of people, 'disarmament' may sound like an ancient practice developed by cold war rivals to maintain the balance of power. The concept itself has fallen into abeyance as it has failed to remain high on the agenda of policymakers. Now considered a second-class issue, disarmament affairs rarely attract society's attention. Senior officials usually prefer to put them on the back-burner and focus on issues deemed more pressing.

If the issue were only the current lack of political will to put diplomatic muscle behind action points, this would not be of great concern. A reluctance to constrain national armed forces and an aversion to changes that might affect national military capabilities have always been the main reasons for states to slow down, if not derail, any progress on disarmament. More worrying than the predictable and expected deadlock in disarmament affairs, however, is the fact that the international community seems to have engaged in a dangerous backwards slide.

Several of the disarmament mechanisms on which an international cooperative security framework was built have either ceased to function or become shaky at best. The United Nations Conference on Disarmament, which has the mandate to negotiate disarmament treaties, has been deadlocked for almost 20 years. Its most recent product is the Comprehensive Nuclear Test Ban Treaty negotiated in 1996, which has not yet entered into force. Russia has ceased its participation in the Joint Consultative Group within the framework of the Treaty on Conventional Armed Forces in Europe (CFE), which provided a platform for North Atlantic Treaty Organization (NATO) countries and Russia to discuss military issues. In the same vein, the United States and Russia have threatened to withdraw from the 1987 Treaty on Intermediate- and Shorter Range Nuclear Forces (INF) over allegations that the other side has violated the Treaty.

In addition to the disarmament and arms control architecture falling apart, the USA (see Arms Control Association's fact sheet) and Russia (see US Congressional Service Report) have both embarked on expensive conventional and nuclear weapons modernization programmes. Other regional powers such as China, India and the Gulf countries have not waited long before following suit (see the Stockholm International Peace Research Institute 2015 Fact Sheet).

This increasing investment in military capabilities and the development of new weapon systems is symptomatic of a more competitive conception of national security. As enhancing national security becomes increasingly understood as modernizing and building up military capabilities while testing each other's reaction capacities, the disarmament agenda has lost political ground and diplomatic traction. Short-sighted national security calculations have gained the upper hand over a more balanced, strategic approach to the long term and project a worrying shadow on to the future. Indeed, the conceptual fathers of the 'security dilemma' have long warned us that flexing muscles may make sense from a national perspective but is likely to result in an erosion of trust and further instability at the international level.

It is true that the cold-war dynamics of superpower confrontation no longer apply to the current international context and threats of major interstate wars have diminished as new threats have come to the fore. Nonetheless, the disappearance of major interstate wars cannot be taken for granted. From the South China Sea to Ukraine, regional tensions are increasing while major conventional weapon systems and weapons of mass destruction lurk in the background of policymaking.

There is certainly no point in adopting alarmist rhetoric or giving in to hysteria but it would not hurt to remember what history has taught us: the potential costs of overlooking these issues are too high to be ignored. A failure to honour disarmament commitments will not only put at risk the entire disarmament and arms control regime, but also deprive leaders of mechanisms designed to defuse tensions and foster dialogue on sensitive security issues. This reminds us that it is worth revisiting the common ground on which we stood in the past and which led to groundbreaking multilateral and bilateral treaties to eliminate biological and chemical weapons, reduce conventional forces in Europe, ban nuclear weapons testing, eliminate certain categories of non-strategic nuclear weapons and reduce strategic nuclear weapons.

Some argue that we are drifting back into a cold-war mentality, but with one major difference. During the cold war, dialogue on disarmament and arms control was prominent even though armament was the dominant practice. Today, armament remains the dominant practice but there is limited dialogue on confidence-building measures, arms control and disarmament between conflicting parties. In other words, there has been a disconnect between disarmament and arms control and their benefits for the enhancement of national security and international stability. This is particularly well captured by the low level of interest in opening dialogue with competing parties. The reason given is usually that current security conditions are not ripe for the pursuit of disarmament and arms control. By following this logic, however, we run the risk of being locked into a self-fulfilling prophecy whereby the absence of dialogue.

While the climate for any form of arms control and disarmament may appear bleak, keeping on doing business as usual will not improve the situation. It is rare to find a case where the militarization of international relations produces a more stable environment and more cooperative partners. This begs the question: 'Do we see a soft landing for regional and global crises without the introduction of a discussion on disarmament and cooperative security?' The Strategic Concept for Removal of Arms and Proliferation (SCRAP) project developed by the Centre for International Studies & Diplomacy at SOAS, University of London addresses this issue. SCRAP has been designed to expand the idea of what is possible in the field of disarmament. Its joint product with the UN Office for Disarmament Affairs, 'Rethinking General and Complete Disarmament in the 21st Century', provides a clear roadmap for the practical implementation of a set of comprehensive disarmament measures, thereby highlighting the technical feasibility of disarmament. It is equally important, however, to show that disarmament and arms control are a political necessity that make sense in terms of national security and conflict resolution.

Thus, it is essential to re-establish the linkages between security/stability and disarmament/arms control. It is especially important for current leaders to get reacquainted with arms control and disarmament. Leaders will be better equipped to face contemporary security challenges with such proven instruments in their toolbox.

With this in mind, the Centre for International Studies & Diplomacy at SOAS and the Stockholm International Peace Research Institute have developed a joint publication on disarmament and cooperative security. The rationale for this volume is to oppose conventional thinking that equates national security with the modernization and build-up of military capabilities; and to rehabilitate disarmament and arms control mechanisms as a cornerstone of national security and international stability.

This collective publication shows that a renewed emphasis on cooperation is badly needed to reverse potentially dangerous competitive security dynamics. It also aims to highlight how dialogue and disarmament diplomacy can contribute to responding to and accommodating national security interests.

In part I, the authors share their views on the current security context and how disarmament fits into this context. Kane and Nielsen analyse how strategic stability is heavily influenced by a way of thinking that is blind to disarmament, arguing that measures on cooperation and disarmament could be infused into strategic stability to make the concept less confrontational. Duarte provides an overview of the disarmament architecture and the risks associated with any erosion of this architecture for the security of nation states and the stability of the international system. Minty addresses the issue of double standards in the disarmament field, and the consequences of their perpetuation for the security of the international community.

Part II focuses on opportunities for cooperative security and disarmament in the current security context. Thematic analyses explore how disarmament can contribute to the resolution of various security issues. Meyer investigates how cooperative measures can help to preserve cyberspace for peaceful purposes. Flor examines the relevance of arms control and disarmament in collective defence policies. Taking NATO as an empirical example, she argues for a strong arms control and disarmament element in NATO's overall posture. Tanner focuses on the role of arms control in times of crisis and highlights the relevance of confidence-building measures in crisis management. Wibowo shares his perspective on the prospects for disarmament in East Asia, demonstrating that disarmament can play a positive role in regional security dynamics, especially regarding the South China Sea and North Korea. Chan shares her perspective on the cooperative system in place in Latin America and the Caribbean, and analyses how Costa Rica has managed to ensure its national security while relying uniquely on cooperative measures and disarmament.

PART I. REFLECTIONS ON THE CURRENT CONTEXT

1. Rethinking Strategic Stability ANGELA KANE AND JENNY NIELSEN

2. Erosion of the Disarmament Architecture and Consequences for the International Security System SERGIO DUARTE

3. Asymmetric Disarmament Duties, Obligations and Efforts ABDUL SAMAD MINTY

1. Rethinking Strategic Stability

ANGELA KANE AND JENNY NIELSEN*

Strategic stability in a complex and multipolar era

The concept of strategic stability based largely on bipolar nuclear deterrence inherited from the cold war has remained static. It has evolved neither conceptually nor operationally to adequately address the challenges and threats of a more complex, multipolar post-cold war era. An analysis of strategic stability in this second nuclear age highlights the challenge—and complexity—posed by a 'multiplicity of nuclear powers linked together by varying levels of cooperation and conflict'. It argues that while the United States and the Soviet Union 'eventually developed robust mechanisms for maintaining strategic stability, no such system exists [today] to include the other nuclear-armed states'.¹

A 2016 report by the International Security Advisory Board (ISAB)-a US Federal Advisory Committee established to provide the Department of State with advice and recommendations on a framework for strategic stability-concludes that the objective of strategic stability is 'to avoid the initiation of nuclear war and of developments that could lead in that direction'.² The ISAB report concludes that 'multi-national strategic stability is best thought of as the sum of stabilities between pairs of states possessing nuclear weapons'.³ However, given the widely varying understanding of the phrase 'strategic stability', the report recommends that this term should not be used in discussions with other states. ISAB recommends that 'the organizing principle for discussions should instead be "agreed characteristics and practices of states possessing nuclear weapons so as to reduce the risks of war, especially war with a risk of escalation to the potential use of nuclear weapons".⁴ In a situation where multiple complex deterrence relations exist between states in a multipolar nuclear era, 'most nuclearweapon states face threats from two or even more potential adversaries', giving rise to a 'security trilemma where actions taken by a state to defend against another state have the effect of making a third state feel insecure'.⁵ Further complicating matters, technological advances also pose challenges to strategic stability based on nuclear deterrence, as these developments 'have the potential to replicate, offset, or mitigate the strategic effects of nuclear weapons'.6

The need to re-conceptualize strategic stability

It has been argued that the outdated concept of global strategic stability should be reassessed, re-conceptualized and adapted to take account of the current challenges facing and future vulnerabilities of a global strategic stability that is based on existing nuclear weapon systems. Operating an outdated concept of strategic stability that relies ultimately on nuclear deterrence, the failure to reformulate the concept of strategic stability and the failure to adapt to emerging challenges and technological

¹ Koblentz, G. D., *Strategic Stability in the Second Nuclear Age*, Council Special Report no. 71 (Council on Foreign Relations Press: Washington, DC, Nov. 2014), p. 3, <<u>http://www.cfr.org/nonproliferation-arms-control-and-disarm</u> ament/strategic-stability-second-nuclear-age/p33809>.

² International Security Advisory Board (ISAB), *Report on the Nature of Multilateral Strategic Stability*, 27 Apr. 2016, http://www.state.gov/documents/organization/257667.pdf>.

³ ISAB (note 2).

⁴ ISAB (note 2).

⁵ ISAB (note 2).

⁶ ISAB (note 2).

^{*}The views expressed in this article are the authors' and do not necessarily represent SIPRI, CISD/SOAS or the organizations with which they are affiliated.

developments is counterproductive and could lead to increased instability. Even if it is widely agreed that there is a need to strengthen, reformulate and/or adapt the concept and operationalization of strategic stability, however, the extent to which such a reformulation constitutes a policy priority is open to question. How to implement this adaptation is equally uncertain in the light of the various complex relational dynamics between states and the challenges posed by technological advances.

The urgency of the need: the emerging challenges, threats and vulnerabilities of nuclear deterrence

The years since the end of the cold war have brought rapid technological advances that pose new challenges and expose new vulnerabilities in the security arena. These include, but are not limited to, emerging technologies, cyberwarfare, evolving conventional weapons, the emergence of plausible anti-submarine warfare (ASW) countermeasures, additive manufacturing, rapid advances in artificial intelligence, missile defence, anti-satellite weapons,⁷ and hypersonic boost-glide weapons.⁸

This non-exhaustive list of technological developments that could render existing nuclear deterrence systems vulnerable should be addressed by regional hegemons in the current multipolar system of states. Political will ultimately determines whether a cooperative dialogue on such developments among all the states that possess nuclear weapons would be feasible. If states prioritized these technological developments as a matter of urgency for their national defence and security, a cooperative dialogue on confidence- and trust-building mechanisms and even codes of conducts could be fostered. Dialogue on certain technologies such as hypersonic and anti-satellite weapons may be particularly difficult given their purpose, but would be key in the light of their ability to affect 'strategic stability' based on current systems which are included in traditional bilateral arms control discussions. An event or crisis that challenges the reliability of a security system based on nuclear deterrence might be needed to stimulate the political will and urgency to begin to discuss these challenges.

It is imperative to address these technological advances as they have the potential to magnify existing 'distrust and lead to potentially greater nuclear instability'.9 Andrew Futter notes that Moscow and Beijing may already be rightfully concerned about the various US technological advances, such as cyberattack capabilities, that could compromise their strategic nuclear systems.¹⁰ Futter argues that 'Russia already is acutely worried about the vulnerability of its strategic nuclear systems to cyber-interference and may even see cyberattacks as the greatest challenge at the strategic level, while China's limited nuclear arsenal and posture make it particularly susceptible to disablement through cyber means or otherwise'.¹¹ The uncertainty about innovations in technological capabilities is particularly challenging to strategic nuclear stability.¹² New capabilities and technologies could arguably 'force reconsideration of Beijing's no-first-use policy and create another incentive for China to build up and diversify its nuclear arsenal'.13

⁷ Koblentz (note 1).

⁸ Acton, J. M., 'The arms race goes hypersonic: why China's new ultrafast missile has Moscow and Washington scrambling', Foreign Policy, 30 Jan 2015, http://foreignpolicy.com/2014/01/30/the-arms-race-goes-hypersonic/ ⁹ Futter, A., 'The dangers of using cyberattacks to counternuclear threats', *Arms Control Today* (July/Aug. 2016), https://

 $www.arms control.org/ACT/2016_07/Features/The-Dangers-of-Using-Cyberattacks-to-Counter-Nuclear-Threats>.$ ¹⁰ Futter (note 9).

¹¹ Futter (note 9).

¹² Futter (note 9); and Austin, G., 'Costs of American cyber superiority', *China–US Focus*, 6 Aug. 2013, http://www.example.com chinausfocus.com/peace-security/costs-of-american-cyber-superiority/>.

¹³ Futter (note 9).

It is important to note, however, that strategic stability and nuclear deterrence are social constructs to which only some states—those that possess nuclear weapons and their allies under nuclear extended deterrence frameworks—ascribe value. The majority of the states parties to the 1968 Nuclear Non-Proliferation Treaty (NPT)—most of the non-nuclear weapon states (NNWS)—attribute no value to nuclear deterrence. These NNWS reject the notion that nuclear weapons should play any role in security and defence doctrines or global security frameworks.

Since 2010, an evolving initiative by states emphasizing human security and 'deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons'¹⁴ has aimed to shift the discourse on nuclear weapons policy. This originated from a humanitarian initiative that has gained momentum and consolidated efforts through various multilateral forums, such as the NPT review process, the United Nations General Assembly and the recent open-ended working group (OEWG) on nuclear disarmament, ¹⁵ to formally recommend the launch of negotiations on a legal instrument to ban nuclear weapons. This rejection of any legitimate value or role for nuclear weapons has implications for a common understanding of what constitutes national and global security and which frameworks and tools can provide global stability in a multipolar system of states.

Recent nuclear policy developments: the United Kingdom's Trident renewal and the Obama legacy vis-à-vis US nuclear policy

Two recent developments vis-à-vis nuclear policy in the United Kingdom and the USA allude to the need to reassess and reformulate strategic stability based on nuclear deterrence. The domestic debate and parliamentary vote on the renewal of the successor submarine fleet for the UK's Trident nuclear deterrent system aired concerns about the potential obsolescence and vulnerability of these replacement systems over their lifecycles. The debate exposed arguments about the uncertainty of future threats—nuclear and non-nuclear—and led to calls for the contemplation of future alternative deterrent systems and a 'search for a less destructive source of strategic stability'.¹⁶

Specifically relevant to the UK's nuclear deterrent system, which is based solely on ballistic missile submarines (SSBNs), studies on the emergence of plausible ASW countermeasures are already being carried out in academia—and without doubt also in national laboratories.¹⁷ In relation to the Trident replacement decision and investment in a new fleet of submarines, there were informed calls for 'an urgent review of the risks involved in relying upon a system that may not work within the next 20 years'.¹⁸

In the United States, the Obama administration's stated intention to take a series of executive actions to advance the nuclear disarmament agenda has prompted a debate on the future of nuclear deterrence and called into question the deal on nuclear modernization, which also affects US allies that live under the nuclear umbrella. In a July 2016 hearing before the House Armed Services Committee's strategic forces subcommittee, three Defence Department leaders¹⁹ testified that the USA needs a nuclear

¹⁴ Final Document of the 2010 NPT Review Conference, http://www.un.org/ga/search/view_doc. asp?symbol=NPT/CONF.2010/50%20%28VOL.%20II%29>.

¹⁵ United Nations Office at Geneva, Taking forward multilateral nuclear disarmament negotiations, Press release, <http://www.unog.ch/oewg-ndn>.

 $^{^{16}}$ Jenkins, P. 'Renewing Britain's nuclear deterrent', Lobe Log, 20 July 2016, <https://lobelog.com/renewing-britains-nuclear-deterrent/>.

¹⁷ Ingram, P., 'Will Trident still work in the future?' BASIC Policy Brief, 22 Jan. 2016, http://www.basicint.org/sites/default/files/Will-Trident-Work-Future-Jan2016.pdf>.

¹⁸ Ingram (note 17).

¹⁹ The heard testimony from Robert Scher, Assistant Secretary of Defence for Strategy, Plans and Capabilities, US Navy Admiral Cecil Haney, Commander of US Strategic Command, General Robin Rand, US Air Force Global Strike Command, as well as Lieutenant General Frank Klotz, Under Secretary for Nuclear Security and NNSA Administrator.

10 REFLECTIONS ON THE CURRENT CONTEXT

modernization and sustainment strategy to support national security and that of US allies.²⁰

In the Congressional hearing, Robert Scher argued that the Obama administration has consistently worked 'toward a world without nuclear weapons, and maintaining effective deterrence along the way'.²¹ In their arguments for the modernization and sustainment of the US nuclear triad system, the officials argued that the international system is becoming increasingly complex, and that nuclear weapons remain a critical aspect of US national security—and assurance for allies—in a dangerous world fraught with uncertainties.²² Scher stressed that the US triad system and dual-capable aircraft 'provide the credibility, flexibility and survivability to meet and adapt to the challenges of a dynamic security environment'.²³

Reports that President Obama was considering a possible change in US nuclear doctrine, through the adoption and announcement of a no-first-use policy on nuclear weapons, triggered huge debate in the USA and worldwide. Those US allies which rely on the security framework under extended nuclear deterrence—particularly those in North East Asia—reportedly expressed concern to US officials. Similar concerns were also reportedly voiced within the Obama administration.

Ways forward: sustainable strategic stability?

A thorough and balanced assessment of what could and should constitute the concept of strategic stability—given current challenges and plausible emerging threats and vulnerabilities to existing systems—is certainly timely. While strategic stability has centred on the uniquely destructive role and ascribed power of nuclear weapons—and thus placed nuclear weapons at its core—a sustainable and lower risk system of relations between nuclear states should be fostered. In trying to adapt—and even contemplating to attempt to shift away from—nuclear weapons as the core foundation for interstate relations, an assessment of sustainable strategic stability and sustainable security, based on the alternatives to nuclear deterrence, should be seriously contemplated.

Given the increasing level of discord in the NPT review process about the lack of progress on nuclear disarmament commitments, and the cross-regional consolidation and momentum for the launch of negotiations on a legal instrument to ban nuclear weapons, the five nuclear weapons states (NWS) could possibly be stimulated to begin a timely dialogue on cooperative measures for sustainable strategic security relations. The formalized momentum gained by the humanitarian initiative in the 2016 OEWG and the launch of negotiations on a legal instrument to prohibit nuclear weapons in 2017, as recommended in the OEWG report and subsequently mandated by UNGA Resolution 71/258, will put the NWS under increased pressure during the 2020 NPT review cycle to assuage the widespread discontent among the majority of NNWS and demonstrate progress with and commitment to their NPT nuclear disarmament commitments.²⁴

As neither the NWS nor the non-NPT nuclear possessors participated in the OEWG, a group of 24 states—mainly NATO member states and a few states under extended

²⁰ US Department of Defense, Full video testimony, Defence Leaders Describe Nuclear Deterrent Modernization Needs, Department of Defence Videos, 14 July 2016, http://www.defence.gov/Video?videoid=474930>.

²¹ Parrish, K., 'DoD Experts tell Congress nuclear modernization efforts "crucial", DoD News, 15 July 2016, http://www.defence.gov/News/Article/839087/dod-experts-tell-congress-nuclear-modernization-efforts-crucial.

²² Parrish (note 21); and US Department of Defense (note 20).

²³ Parrish (note 21); and US Department of Defense (note 20).

²⁴ United Nations Office in Geneva, Report of the Open-ended Working Group Taking Forward Multilateral Nuclear Disarmament Negotiations, <http://www.unog.ch/80256EDD006B8954/(httpAssets)/ B7F8C26BC8E15317C1258018003E1D71/\$file/Final+Report+of+the+OEWG,+as+submitted+to+GA+(clean).pdf>; and General Assembly, 71st session, A/RES/71/258, Resolution adopted by the General Assembly on 23 December 2016, 71/258, <http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/71/258>.

nuclear deterrence—were left to argue the continuing role of nuclear weapons in security and defence doctrines. These 24 states promoted a 'progressive' approach to nuclear disarmament commitments in line with the step-by-step approach of the P5 in the NPT review process.²⁵ An emphasis on human security and the humanitarian consequences of nuclear weapons, as well as close calls and the risk of inadvertent use could be useful for engaging in a dialogue with those concerned by command and control issues.

That said, a discussion on morality, legality and the ethics of nuclear weapons will not engender engagement and constructive dialogue with nuclear possessors at this time, or with those who firmly continue to value the role of nuclear weapons and nuclear deterrence in maintaining global security and stability. Whatever provisions might potentially be negotiated by the NNWS that participate in a 2017 conference to launch negotiations on a legal instrument, it is likely that the negotiations will focus on an interim, initial set of general prohibitions and obligations that would make the possession, use or threat of use of nuclear weapons illegal. However, without the participation of the NWS and nuclear weapons possessors, the negotiation of a ban would at the initial stage not include specific dismantlement schedules or verification provisions.

As none of the nine states that possess nuclear weapons are likely to engage with or participate in such a conference, this non-inclusive negotiation will be carried out within an enclave of like-minded NNWS. Although the delegitimization and stigmatization of nuclear weapons through a legally binding instrument might consolidate a norm supported by an enclave of NNWS, what impact such a normative precedent and legal instrument would have on nuclear weapons policy and the nuclear doctrines of possessors and their alliances remains open to question.

The systemic and fundamental challenge of the current approach to nonproliferation and disarmament, which is currently stove-piped to focus on distinct types of weapons, also needs to be addressed. Other capabilities beyond nuclear weapons—such as chemical and biological weapons, as well as emerging autonomous weapon systems—need to be taken into account when reassessing global security and any concept of strategic stability. This widens the gamut of actors—both state and non-state—that possess or are gaining access to these destructive capabilities. This also complicates further the challenges of reformulating strategic stability—or more ambitiously attempting to establish a viable system of broader sustainable security—in today's environment.

Whether an alternative approach to security is based on a combination of conventional systems to provide regional non-nuclear deterrence architectures or on a series of cooperative frameworks, including disarmament measures, should be assessed.²⁶ At present, analyses of strategic stability and nuclear deterrence appear to have concluded that there are no viable alternatives to nuclear weapons.²⁷

A new and focused assessment of sustainable strategic stability and sustainable security—based on alternatives to nuclear deterrence—should be seriously contemplated. Given the growing divide in the nuclear non-proliferation regime on pathways to disarmament, the P5 process could potentially take on this ambitious but necessary multilateral dialogue on options for sustainable strategic stability. Such a dialogue could explore options such as regional frameworks

²⁵ United Nations Office in Geneva, 'A progressive approach to a world free of nuclear weapons: revisiting the building blocks paradigm', A/AC.286/WP.9/Rev.2, Working paper submitted by Australia, Belgium, Bulgaria, Canada, Croatia, Estonia, Finland, Germany, Greece, Hungary, Italy, Japan, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Republic of Korea, Romania, Slovakia, Slovenia, Spain and Turkey.

²⁶ Roberts, B., The Case for US Nuclear Weapons in the 21st Century (Stanford University Press: Stanford, 2016).

²⁷ Roberts (note 26).

In parallel with discussions on frameworks for regional and global sustainable strategic stability and reassurance, the P5 could begin to engage in dialogue on 'multilateralizing' nuclear arms control. The prospects for future arms control and bilateral (US–Russian) nuclear reductions are dim. Russia has consistently argued that the next round of arms control beyond New START levels should be multilateral.²⁸ The broadening of arms control dialogue to include the other three NWS would be a significant step that the P5 process could embark on in an attempt to reduce tensions in nuclear non-proliferation and tensions between the USA and Russia. The P5 process could be a suitable forum for building on existing dialogue as its aim is to take 'steps to enhance multilateral transparency, dialogue, confidence-building, and mutual understanding to pave the way for future progress toward the verifiable elimination of nuclear weapons'.²⁹

Analysts have suggested options for multilateral arms control in the light of the deadlock on future bilateral reductions.³⁰ Experts on strategic stability and nuclear deterrence postures argue that once nuclear arsenals go below certain thresholds— and parity gets closer—arms control and reduction frameworks will need to include additional nuclear weapons possessors.³¹

Assessments of parity and force symmetry become more complex when the nuclear arsenals of Russia and the USA decrease to numbers that could potentially be matched by other NWS. Concerns over a possible 'sprint to parity' by China are sometimes raised in discussions on the future of arms control and nuclear deterrence.³²

Discussions on alternative frameworks for regional and global strategic stability and strategic reassurance must therefore be fostered. Constructive dialogue, increased transparency, and trust- and confidence-building measures need to be developed among nuclear weapons possessors if alternative frameworks to strategic stability are to be pragmatically constructed. To have any viability, such a dialogue should include political and technical considerations. If the conclusion is that no viable alternative frameworks beyond a reliance on nuclear deterrence and traditional nuclear weapon systems exist to sustain 'strategic stability', this will have grave implications for the future of nuclear disarmament and nuclear non-proliferation, and consequently for international peace and security.

²⁸ Pifer, S., *The future of US–Russian arms control*, Brookings Institution, 26 Feb. 2016, <https://www.brookings.edu/research/the-future-of-u-s-russian-arms-control/.

²⁹ Rose, F. A., Assistant Secretary, Bureau of Arms Control, Verification and Compliance, US Department of State, Remarks, United Nations General Assembly, First Committee, 3 Oct. 2016, <<u>http://www.state.gov/t/avc/rls/262715</u>. htm>.

³⁰ Pifer, S. and Tyson, J., *Third-Country Nuclear Forces and Possible Measures for Multilateral Arms Control*, Arms Control and Non-Proliferation Series, no. 12 (Brookings Institution, Washington, DC, Aug. 2016), https://www.brookings.edu/wp-content/uploads/2016/08/acnpi_20160824_multilateral_arms_control_01.pdf>.

³¹ Acton, J. M., *Low Numbers: A Practical Path to Deep Nuclear Reductions* (Carnegie Endowment for International Peace: Washington, DC, 2011), http://carnegieendowment.org/files/low_numbers.pdf.

³² Acton (note 31).

2. Erosion of the Disarmament Architecture and the Consequences for the International Security System

SERGIO DUARTE*

The Charter of the United Nations does not mention nuclear weapons, which started to proliferate 21 days after its signature. On 24 January 1946, the first Session of the General Assembly adopted Resolution no. 1, establishing a commission '...to deal with the problems raised by the discovery of atomic energy' and to make 'specific proposals for the elimination from national armaments of atomic weapons and all other weapons adaptable to mass destruction'. Two categories of weapons of mass destruction have been outlawed by multilateral treaties: chemical and bacteriological. Unfortunately, however, the problems raised by the discovery of atomic energy are still with us. Atomic weapons have not been eliminated from national armaments. Indeed, nine countries now possess them and do not seem willing to part with the power and privileges they provide.

Since the inception of the United Nations the international community has been quite busy trying to establish a framework of treaties and other agreements, including political commitments within and outside multilateral organizations, in an effort to prevent the proliferation of nuclear weapons and achieve complete nuclear disarmament. International security would be strengthened as a result. So far, however, these objectives have proved elusive. Frustration and disappointment over the erosion of the disarmament architecture continue to grow, with negative consequences for the security of every nation.

The international community has devoted considerable effort and resources to the establishment of a legal and institutional framework to deal with the emergence of the most destructive weapons ever devised by man. Some 30 multilateral, regional and bilateral treaties and other agreements in the field of arms control have been concluded, most of them about nuclear armaments. In the years immediately following the adoption of Resolution 1, rivalry and mistrust between the two major powers to emerge from World War II-the Soviet Union (Russia) and the United States-prevented comprehensive agreement on the use of nuclear energy. Attention shifted to 'partial measures', which were supposed to provide a basis for further progress. Meanwhile, those two countries embarked on a fierce competition to increase the number and destructive power of their nuclear weapons. Over the following decades, they succeeded in negotiating a series of agreements aimed at placing limitations on the size of their arsenals. Despite significant reductions in relation to the staggering number of atomic weapons that existed at the height of the cold war, these two countries still possess about 95 per cent of the estimated 15 000 nuclear weapons that today make up the nuclear forces of nine states.

None of the 30 multilateral and bilateral treaties and agreements mentioned above, however, deals specifically with nuclear disarmament, that is, the complete elimination of nuclear weapons under independent verification. Most effort has been directed towards preventing the acquisition of nuclear armaments by states other than those that already possess them. No nuclear weapon has ever been destroyed or dismantled as a result of a multilateral treaty. The elimination of all nuclear weapons and the means of their delivery remains a distant objective and a matter for general

^{*}The views expressed in this article are the author's and do not necessarily represent SIPRI, CISD/SOAS or the organizations with which the author is affiliated.

14 REFLECTIONS ON THE CURRENT CONTEXT

declarations of intent rather than the subject of specific legal commitments with clear timelines.

Non-proliferation initiatives prospered during the initial decades. Successful efforts led to the banning of nuclear weapons in places where they did not yet exist, through instruments such as the Antarctic Treaty (1961), the Outer Space Treaty (1967) and the Seabed Treaty (1972). Concern over the possibility that nations with relatively advanced nuclear industries might embark on programmes for the military application of atomic energy prompted the Latin American states to negotiate a treaty to prohibit nuclear weapons on their territories, an initiative later emulated by 113 states in four similar zones. By that time, however, five nations had already acquired nuclear weapons. In spite of their deep ideological and political differences, the two possessors of the largest nuclear arsenals cooperated in their common interests to prevent other states from following their example, and negotiated between themselves a draft treaty on the further proliferation of nuclear weapons. This joint text was debated at the Eighteenth Nation Disarmament Committee in Geneva from 1965 to 1967. It failed to achieve consensus in the Committee but was sent by its two co-chairmen to the General Assembly of the United Nations, which recommended its signature to its member states. On ratification by 40 signatories it entered into force in 1970 as the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Over the next 20 years, many states dropped their initial reservations and by the end of the 1990s the overwhelming majority had ratified it. The NPT is the main instrument in the field of nuclear arms control and was extended indefinitely in 1995. Only four states did not join, all of which have acquired nuclear weapons.

The NPT is credited with helping to keep nuclear proliferation to a minimum. However, deep differences of view continue to exist between the five states it recognizes as possessors of nuclear weapons and the remaining states parties. Five of the nine Review Conferences convened at five-yearly intervals ended without agreement on a final document. Dissatisfaction has flared up on many occasions over what many non-nuclear states parties see as a lack of interest on the part of the nuclear weapon states (NWS) in acting decisively to eliminate their arsenals in fulfilment of article 6 of the instrument. At times this has threatened an unravelling of the non-proliferation architecture.

A legally binding prohibition of nuclear explosive tests in the atmosphere was achieved among the United States, the Soviet Union and the United Kingdom in 1962. Almost 30 years later, when the most developed NWS had already mastered the technology for simulating tests, the Comprehensive Test-ban Treaty (CTBT) extended that prohibition to all environments, while permitting so-called subcritical experiments. Since 1998, a voluntary moratorium on underground tests has been observed by all the states that possess nuclear weapons, with the exception of the Democratic People's Republic of Korea (DPRK, North Korea). However, the CTBT, concluded in 1996, has still not entered into force due to the lack of the necessary signatures and/or ratifications of eight of the 44 states specifically mentioned in its article 14.

United Nations Security Council Resolution 2310, adopted on 23 September 2016, stressed the vital importance and urgency of achieving the entry into force of the CTBT. It remains to be seen, however, whether this resolution will have any practical consequences. The ongoing modernization and upgrading of atomic arsenals in the NWS gives rise to concerns that sooner or later underground testing might resume in order to ensure the safety and reliability of these arsenals, thereby posing a major challenge to the existing regime on nuclear tests. The absence of action by any of those 44 states to start or complete the internal requirements for signature or ratification could lead to a dangerous erosion of the commitments contained in the CTBT.

By and large, the non-proliferation regime contained in the NPT and related instruments can be considered quite effective. No non-nuclear state party to the NPT has acquired nuclear weapons or developed a nuclear explosive device. Episodes of actual or alleged lack of compliance with some of the stipulations of existing international legislation on the subject have been resolved by a combination of political and economic pressure, including sanctions by the United Nations Security Council, and diplomatic means.

One disturbing factor is the continuing inability of the multilateral machinery created by the first Special Session of the General Assembly on Disarmament (SSOD I) to fulfil the tasks entrusted to it. Since the mid-1990s, no consensus on substance has been reached in the deliberative multilateral organs of the United Nations; and the negotiating organ, the Conference on Disarmament, has been unable even to agree on a programme of work. Despite calls from members states, no progress has been achieved on the convening of a fourth Special Session of the General Assembly on Disarmament.

A new effort is under way to revitalize the disarmament machinery through the establishment by the General Assembly in 2015 of an open-ended working group (OEWG) charged with addressing the concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons. As a result of the work of that Group, the General Assembly voted overwhelmingly, in 2016, to begin negotiations in March 2017 on a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination. However, the opposition of the major nuclear-weapon states and many of their allies casts doubts on the effectiveness of the outcome of the negotiating process.

It must be acknowledged that despite deep differences of view on many aspects, the international community has been able to put together a network of multilateral and bilateral agreements on the reduction and control of armaments, and prevention of the proliferation of weapons of mass destruction. As noted above, the successful conclusion of the Chemical Weapons Convention and the Bacteriological (Biological) Weapons Convention was a major achievement. The former includes a vigorous system of verification of compliance by its states parties, and has been responsible for overseeing the destruction of over 90 per cent of chemical weapons arsenals, while no episodes of violation of the latter have been reported.

Although by no means perfect, the network of multilateral, regional and bilateral instruments developed over the past 70 years has been instrumental in supporting the international security system based on the Charter of the United Nations. However, while it is possible to point out that no major armed conflicts have erupted between the major powers since the end of World War II, episodes of aggression and breaches of the peace with the use of ever deadlier conventional armaments continue to cause death and destruction in many developing regions, provoking huge humanitarian crises and massive population movements that fuel xenophobic reactions in developed states.

Despite recurring tensions between the two major powers and between regional rivals, which threaten stability and the maintenance of international peace and security, the international community seems to place less stress on seeking cooperative arrangements that address the security of all states than on reinforcing dependence on ad hoc alliances based on nuclear deterrence. Nuclear-armed states adhere to military doctrines that contemplate the use of nuclear weapons in the circumstances they consider necessary to safeguard their own security, thereby endangering the security of the remainder of the international community. Despite assertions regarding a reduction of reliance on nuclear weapons, the erosion of confidence in the multilateral arms control and disarmament framework has in fact resulted in increased efforts to

produce new nuclear weapon systems that purportedly would make their use more 'credible' and 'acceptable'.

United Nations Security Council Resolution 1887, of 24 September 2009, reaffirms that the proliferation of weapons of mass destruction and their means of delivery constitutes a threat to international peace and security. No one disputes this statement, but it is obvious that it is not just the proliferation, but the very *existence* of such weapons that poses a major threat to peace and security. After all, proliferation did not start only after five nations were recognized by the NPT as NWS, but when the first experimental nuclear explosive device was detonated in the Nevada desert in July 1945. The use of nuclear weapons in war less than a month later inaugurated an era of insecurity not only for those that do not possess such armaments, but for mankind as a whole.

The existence of nuclear weapons and the possibility of their use or further proliferation changed the security perceptions of all nations without exception. A small number of them chose not to accept the restrictions imposed by the non-proliferation regime and went on to obtain their own nuclear capability, using the same reasoning and justification used by the original proliferators—to deter aggression and to ensure retaliatory capability vis-à-vis their real or prospective rivals. In a couple of non-nuclear weapon states, sections of public opinion openly advocate following this example of no longer entrusting their security to nuclear weapons controlled by third parties, but instead developing their own credible national nuclear deterrent.

A relatively recent phenomenon is the growth of sectarian terrorism and the possible use of weapons of mass destruction against large civilian populations by non-state actors, a prospect that arouses fear and uncertainty in the international community as a whole. Regardless of where a major attack using such weapons was perpetrated, its disastrous consequences would be felt all over the world. International relations in every sphere—political, economic, social and cultural—would be changed forever. The international security architecture as we know it would certainly be deeply affected. All states, not only those that might be the primary targets, have a duty to make every effort to avert such a blow to the normal interaction among nations and societies. A number of initiatives have been put forward at the United Nations and by groups of concerned states.

There is wide agreement on the urgent need to secure dangerous nuclear materials, but only a fraction of such materials has been addressed by the four meetings at the level of Heads of State held outside the framework of the United Nations. A current proposal at the Conference on Disarmament to prohibit the production of fissile materials for weapons purposes ignores the huge stocks held by those states that already possess nuclear weapons.

Since the 2010 NPT Review Conference a number of countries have promoted the need for serious reflection on the catastrophic consequences of any use of nuclear explosives. Three international conferences attended by experts and representatives of intergovernmental organizations, the Red Cross and Red Crescent movements, governments and civil society in 2012 and 2014 debated the humanitarian emergency and the risks associated with nuclear weapons, and concluded that no nation or group of nations would be able to deal effectively with the humanitarian impact of the use of nuclear weapons. These conferences found that such risks are far higher and graver than previously assumed, and that they should thus be at the centre of global efforts related to nuclear disarmament and non-proliferation. These warnings should be heeded by the international community as a whole since they also touch on vital questions of security for all human beings and the preservation of the environmental conditions that make life possible on our planet. Real security cannot be based on the threat of the destruction of civilization. The erosion of the disarmament architecture presents a grave threat to the security of all nations and to mankind as a whole.

3. Asymmetric Disarmament Duties, Obligations and Efforts

ABDUL SAMAD MINTY*

When the Nuclear Non-Proliferation Treaty (NPT) was signed in 1968 and entered into force in March 1970 it was hailed as a landmark development. It reflected a grand bargain by which nuclear weapon states (NWS) would initiate negotiations to eliminate their arsenals and not assist non-nuclear weapon states (NNWS) to acquire nuclear weapons. In exchange, the NNWS undertook not to acquire nuclear weapons and to place all their nuclear facilities under international safeguards.

No one doubts that the NPT is essentially a discriminatory treaty since it explicitly permits five countries—the United States, the United Kingdom, Russia, France and China—to produce and possess nuclear weapons but no other state to do so, albeit that these states are under a legal obligation pursuant to article VI of the Treaty to make good faith efforts to end the nuclear arms race and to achieve nuclear disarmament. The fact that the five states are also permanent members of the United Nations Security Council, which gives them a power to veto any measures referred to it that they deem unacceptable, underlines this discriminatory relationship. It should be recalled however that although the NPT is a discriminatory treaty, it is the only binding multilateral commitment to eliminate all nuclear weapons.

In addition to the original five NWS there are now four non-NPT Nuclear Weapon Possessor States: India, Pakistan and Israel as well as the Democratic People's Republic of Korea (DPRK, North Korea).

Committing to non-proliferation, neglecting disarmament

The international community recognizes that while the NPT's NNWS have essentially upheld their end of the grand bargain, by not developing nuclear weapons and placing the entirety of their nuclear activities under International Atomic Energy Agency (IAEA) safeguards to verify their exclusively peaceful uses, there has been virtually no progress on the part of the NWS with implementing their commitment to work for the elimination of nuclear weapons.

The NWS have from time to time entered into certain agreements and commitments to reduce their nuclear arsenals, either negotiated bilaterally or implemented unilaterally, but none of these constitute a commitment to nuclear disarmament as provided for in the NPT. Naturally, any reduction in the number of nuclear weapons is welcomed by the NNWS, but does not per se amount to nuclear disarmament in the context of the NPT. Such agreements are in fact decisions by certain NWS in a particular context and have nothing to do with the legal commitment in the NPT to eliminate all of their arsenals.

The preamble to the NPT is clear about the overall objective: 'to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament'. If the purpose of the reduction in nuclear weapons is nuclear disarmament it should at least be done in the context of the unequivocal undertaking to nuclear disarmament made at the 2000 NPT Review Conference and the subsequent affirmation by the NWS of this commitment. The objective would be for the NWS to accomplish the total elimination of their nuclear arsenals in a concrete, transparent, irreversible and verifiable manner in accordance with article VI of the NPT.

*The views expressed in this article are the author's and do not necessarily represent SIPRI, CISD/SOAS or the organizations with which the author is affiliated.

Indeed, when considered in a wider context in which the NWS are continuously developing more modern nuclear weapons and delivery systems, and extending the nuclear arena by placing various NNWS under their nuclear umbrella, we are in fact witnessing a special form of proliferation that is against the spirit of the NPT. This is certainly increasing the role and deployment of nuclear weapons, while most of the NNWS are taking substantial steps to implement the NPT by rapidly increasing the number and coverage of Nuclear Weapon Free Zones.

The 'peaceful uses of nuclear energy' pillar remains an integral component of the NPT and, given the need to promote economic growth, is expressly declared an 'inalienable right' of particular relevance to developing countries. In reality, however, only limited amounts of technical knowledge and information are shared with developing countries; and the promotional role of the IAEA, as provided for in article II of its Statute, cannot be fulfilled without substantial additional resources being provided to the Agency.

The NNWS have been under massive pressure to agree to various non-proliferation measures and have kept faithfully to their undertaking not to encourage or support proliferation.¹ Of all the provisions of the NPT, the NWS have over the decades prioritized the various non-proliferation measures imposed on the parties to the NPT while virtually ignoring the disarmament provisions and seriously neglecting their responsibility to promote the peaceful uses of nuclear energy. Nuclear weapon states: perpetuating the status quo

The NPT remains a Treaty of all its members and the decision of the 1995 Review and Extension Conference to extend it indefinitely was not intended to confer on the NWS a right to permanently possess nuclear weapons. However, none of the NWS have at any time disclosed any plans to eliminate their arsenals. Their reductions have not been part of any plan to promote global disarmament, but instead been accompanied by programmes to modernize or develop new nuclear weapons and delivery systems. All parties to the NPT are legally committed to all of its provisions and share a responsibility to implement them. The NWS and some of their allies, however, continue to treat it as a menu to select from according to their appetite; and they seem to be permanently addicted to nuclear weapons. The 1995 package for the indefinite extension of the NPT included specific commitments: that all states in the Middle East should accede to the NPT; and on the 'establishment of an effectively verifiable ME [Middle East] zone free of weapons of mass destruction'.²

This decision was considered seriously at the 2015 NPT Review Conference, but no agreement could be reached, mainly because of the opposition of the USA, resulting in the entire outcome document being rejected.

In 2009 a speech in Prague by US President Barack Obama focused attention on reducing and eliminating nuclear weapons, but not in his lifetime. This raised hopes all over the world that nuclear weapons could be renounced within a generation. This followed another significant call two years before by Sam Nunn, George Schultz, Henry Kissinger and William Perry for a global effort to reduce reliance on nuclear weapons, although two years later the four former senior officials backed away from their earlier position, stating that conditions were not yet conducive for global nuclear disarmament. These and other developments created a positive atmosphere for the 2010 NPT Review Conference. The Conference was considered a success. Its final outcome document contained an action plan of 64 points covering all three pillars of the

¹ Except for cases of non-compliance by a handful of states: the DPRK, Iran, Iraq, Libya, Syria and Taiwan (China), which had potential nuclear weapon development programmes; and Egypt and South Korea, which were non-compliant with regard to undeclared peaceful nuclear activities.

² NPT Review Conference, Resolution on the Middle East, NPT/CONF. 1995/32.

NPT as well as a commitment to implement the 1995 Resolution on the Middle East. There was in effect an action plan to implement over the next five years, including a clear commitment to implement the article on disarmament and to review progress in 2015.

This optimism was short-lived as the NWS began to describe the outcome document as a long-term plan with no requirement to achieve any of the objectives by 2015.

The 2010 outcome document reflected 'deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons'. New momentum was given to this aspect by three conferences on the subject in Oslo, Nayarit and Vienna. The Austrian Pledge, endorsed by over 100 countries, clearly stated that nuclear weapons should never be used again 'under any circumstances'.

The Conference on Disarmament in Geneva has been in deadlock for many years with no prospect of making any progress on disarmament. With the five NWS not participating in any meaningful nuclear disarmament negotiations, there has been no advance whatsoever on multilateral nuclear disarmament. The NWS' forum to work out a joint programme on nuclear disarmament, established at the 2010 NPT Review Conference, held seven conferences and worked on a glossary of nuclear terms but made no progress at all on reducing nuclear weapons.

Among the major reasons for the NWS not eliminating nuclear weapons is their claim that they need them to protect their security and to maintain effective deterrence. The majority of NNWS therefore expected that the group of five would discuss together nuclear weapons reductions and their security and other concerns, with a view to making some progress towards reducing tensions and promoting nuclear disarmament. It soon became clear, however, that there was no political will to take on this responsibility.

Breaking the deadlock: a South African perspective on cooperation through nuclear weapon-free zones and the IAEA

It is instructive to note that while the NWS have made no progress on disarmament the NNWS have maintained their commitment not to develop nuclear weapons and the apartheid regime of South Africa, which developed nuclear weapons, gave them up on the eve of the destruction of the apartheid system.

The apartheid regime, which enjoyed full and even privileged membership of the IAEA, also enjoyed close nuclear and other relations with all the major western powers as well as Israel. It used these relations to build its nuclear capacity and to develop its nuclear weapons. Numerous resolutions at the United Nations and the IAEA General Conference called for an end to all forms of nuclear collaboration with the apartheid regime. The major western powers and other allies of the regime claimed that their cooperation with South Africa was exclusively on the peaceful uses of nuclear energy, and that they had no evidence to indicate that the regime was developing nuclear weapons.

It was only in 1977, after years of campaigning by the Organization of African Unity (OAU), the African liberation movements and the international anti-apartheid movement, that South Africa was finally removed from the Board of the IAEA in the face of firm western opposition. In 1977 South Africa was urged by several western states not to detonate a nuclear device. On 22 September 1979 a mysterious event was detected in the South Atlantic by the US Vela satellite. Experts ascribed this to a nuclear test either by South Africa or jointly by Israel and South Africa.

African states agreed to establish an African nuclear weapon-free zone in the early 1960s, soon after the establishment of the OAU, but this could not be achieved until the

end of apartheid. Once it became clear that the apartheid regime would have to begin negotiations on a democratic transformation of South Africa, it also set in motion measures to dismantle its nuclear weapons and joined the NPT in 1991. In March 1993 President de Klerk announced that South Africa had dismantled and destroyed all its nuclear devices. It is clear that the apartheid regime decided to dispose of its nuclear weapons partly to ensure that the new democratic government would not inherit them. It is also true, however, that the liberation movement and other anti-apartheid elements did not believe that the retention of nuclear weapons would increase the security of a democratic South Africa. It would only have increased insecurity on the continent and in the world.

There are important questions to examine regarding the lack of interest on the part of the major western powers in ascertaining how South Africa managed to develop nuclear weapons and why no measures were taken by them in the UN or the IAEA to prevent it. It is important to know why the development of the apartheid bomb was not noticed by any of the major western powers, even though African states, the antiapartheid movement and others regularly highlighted considerable evidence of this great danger over many years. There was simply no political will to embark on any course of action that would embarrass the apartheid regime.

Limits to cooperation and uneven implementation

In December 2003 Libya declared that it had been involved in nuclear weapon-related activities. This led to the exposure of the so-called AQ Khan illicit network, which had apparently been operating in more than 30, mainly western, counties.

In September 2004 South Africa reported to the IAEA Board that an investigation was being undertaken of contraventions of South Africa's non-proliferation legislation. It sought the cooperation and assistance of the Agency and of individual governments. While the Agency cooperated fully, the assistance forthcoming from the affected countries was uneven. Some authorities cooperated fully but others ideally placed to provide evidence either provided limited assistance or declined to provide any assistance whatsoever.

The Agency subsequently received a report on prosecutions from one country, but none of the others provided any information to the IAEA Board despite repeated requests by South Africa that they should do so. The Director General of the IAEA, Mohamed El Baradei, stated that the illicit network presented a serious challenge to the NPT, but even that did not produce any meaningful action by the countries involved. This was one of the most blatant violations of the NPT involving over 30 countries, but the majority of the major powers showed no genuine inclination to take effective action against the violators or collective action to destroy the network.

Some important issues were taken up at the 2015 NPT Review Conference, but without any constructive outcome. One real problem is that the NWS believe, and act on the premise, that they have a permanent right to nuclear weapons. They are therefore not interested in discussing their basic claim: that only they need nuclear weapons to protect their security; whereas the NNWS do not need such weapons to protect theirs.

Conclusions

It is clear that the NNWS have gone well beyond their commitments and undertakings under the terms of the NPT grand bargain. The NWS and their allies, however, have concentrated on compelling others to agree to various so-called non-proliferation measures while modernizing their nuclear weapons and delivery systems, and expanding the number of their allies under their nuclear umbrellas. The duties and obligations, and efforts to implement global disarmament have in the main been discharged by the NNWS. There is a big gap between their actions and those of the NWS.

A variety of initiatives could be taken to promote global nuclear disarmament but the political will to do so just does not exist. The problem is not in working out the best mechanism for negotiations but in ensuring that the NWS feel an urgent need to embark on genuine negotiations to reduce their nuclear weapon stockpiles and work collectively to prepare an effective convention to outlaw all nuclear weapons.

In view of the tensions that exist between the NWS, as well as those between the non-NPT nuclear weapon possessors, and the growing dangers that exist, rising conflict and brinkmanship could easily give rise to serious confrontation. As long as nuclear weapons exist, we all face the real danger of a major nuclear disaster.

PART II: OPPORTUNITIES FOR COOPERATIVE SECURITY AND DISARMAMENT

4. Cooperative Measures for International Cyber Security PAUL MEYER

5. Reconciling Collective Defence and Nuclear Disarmament PATRICIA FLOR

6. Arms Control in Times of Crisis FRED TANNER

7. Prospects for Cooperative Security and Disarmament in South East and North East Asia TRIYONO WIBOWO

8. Establishing a Cooperative Security System that Works: The Costa Rica Experience MARITZA CHAN

4. Cooperative Measures for International Cybersecurity

PAUL MEYER*

Cooperative security today appears to be a tenet honoured more in the breach than the observance. This contrast is particularly striking in the new security environment of cyberspace. The special character of this space, a human creation that has grown exponentially in magnitude and utility for global society in the time span of a generation, might with sufficient political will have spared it from the forces of interstate conflict, but this has not been the case. The militarization of cyberspace is proceeding apace and those constituencies that might have prevented this trend and maintained a sanctuary status for this unique environment were too unaware or too unorganized to mount an effective defence.

According to a 2013 study by the United Nations Institute for Disarmament Research, 47 states with national cybersecurity policies assigned some role to their armed forces even though only six states had at that time published military cybersecurity strategies.¹ The United States has, as it so often is in international security matters, been a pace setter with respect to the military use of cyberspace. It created a distinct Cyber Command in 2009 with an initial budget allocation in fiscal year (FY) 2010 of US\$ 114 million. This funding level was quadrupled to US \$466 million for FY 2016. A parallel augmentation of personnel levels has occurred of the command's Cyber Mission Force. The number of cyber teams is currently 123, comprising 4990 people en route to a goal of over 6100 by FY 2018.²

Admiral Michael Rogers, the head of both US Cyber Command and the National Security Agency, has been explicit in Congressional testimony about the states that pose a cybersecurity threat to the United States—Russia, China, Iran and North Korea, in descending order of capability—and the need to generate a 'complete spectrum of capabilities', both offensive and defensive, to counter such threats. He has also advocated for the development of a 'cyber deterrence policy' for the USA, the absence of which would amount to a 'losing strategy' for the nation.³

While other states do not normally match the USA's high standards of transparency in military matters, it would appear that many armed services are establishing cybersecurity entities and developing their cybersecurity capabilities. This is particularly significant when 'offensive capabilities' are included in the mix, or the capability to engage in cyber operations with an extra-territorial disruptive, damaging or destructive effect. Admiral Rogers' affirmation that the USA will seek the same military supremacy in the cyber realm as it does in other operational domains will no doubt spur potential adversaries to try to counter this and in so doing contribute to a nascent cyber arms race.

Arguably, the first weaponization of cyberspace occurred some time in 2009–10 with the revelation that the so-called Stuxnet computer virus had been detected. This virus was a sophisticated cyber payload that targeted the computer-based control systems for the centrifuges used to enrich uranium at a nuclear facility in Iran. Stuxnet essentially caused the centrifuges to self-destruct, resulting in significant setbacks for

¹ United Nations Institute for Disarmament Research, *The Cyber Index: International Security Trends and Realities* (UNIDIR: Geneva, 2013), <www.unidir.org>.

² Statement by Admiral Michael S. Rogers, Commander, United States Cyber Command, before the Senate Armed Services Committee, 5 Apr. 2016, <www.armed-services.senate.gov>, p. 6.

³ Statement by Admiral Michael S. Rogers (note 2), during oral testimony.

^{*}The views expressed in this article are the author's and do not necessarily represent SIPRI, CISD/SOAS or the organizations with which the author is affiliated.

the Iranian nuclear programme. While there was never any formal acknowledgment of responsibility for the attack, media leaks have attributed it to the USA probably in partnership with Israel. Stuxnet represented the first use of what can be considered a cyber weapon: a payload that actually caused physical damage and destruction, or 'kinetic effects' in military parlance.

This move on the part of a leading state from cyber defence to cyber offence had major implications. In the words of General (ret) Michael Hayden, a former director of the National Security Agency and the Central Intelligence Agency: 'Somebody has used an entirely new class of weapon to effect destruction. Somebody's army has crossed the Rubicon, and we've got a legion on the other side of the river now, and it's not going back'.⁴ Hayden's view is clearly that cyber weapons and presumably cyberwar are irreversible realities the world must accept. His interviewer however observes that Caesar's action in crossing the Rubicon was in violation of Rome's law, and implies that legal restraints will be needed to avoid the devastation that unbridled cyberwar could bring in its wake.

A further challenge to maintaining a peaceful cyberspace is the linkage to outer space, an environment that has similar importance for society's well-being and is also vulnerable to deliberate acts of destruction. All space operations have a cyber dimension as the communications between the 1300 active satellites in orbit and their ground stations are conveyed via cyber systems. Such signals are vulnerable to jamming to deny functionality, or 'spoofing', which can allow attackers to take control of a satellite. There have been several reports of cyber attacks against operational satellites including alleged Chinese cyberattacks against US remote sensing and meteorological satellites, although the details are often cloaked in secrecy.⁵

These steps in the 'militarization' of cyberspace have not gone completely unchallenged, although it is evident that action on the military side has far outstripped that in the diplomatic arena. The potential for preventive diplomacy in the context of international cybersecurity has not been sufficiently acknowledged or acted on. As a New York Times editorial notes: 'Cyberwarfare has already done considerable damage and can lead to devastating consequences. The best way forward is to accelerate international efforts to negotiate limits on the cyberarms race, akin to the arms-control treaties of the Cold War'.6

Such a clear prescription has not been taken up to date, however, by the leading cyber powers that could energize efforts to establish 'rules of the road' for international cybersecurity. Although the call to develop 'norms of responsible state behavior in cyberspace' has been echoed many times since the Obama Administration first put this goal forward in its May 2011 International Strategy for Cyberspace,7 diplomatic progress to realize such norms has been sluggish. This may in part be due to the fact that while the USA was the first to articulate the need to forge a global consensus around such norms, it was Russia and China that were the first to formulate a set of norms and put it before the UN for consideration. The Sino-Russian draft 'International Code of Conduct for Information Security' of September 2011 had an ambitious provision for states 'not to use ICTs [information and communication technologies] including networks to carry out hostile activities or acts of aggression, pose threats

⁴ Cited in Bamford, J., 'What @Snowden told me about the NSA's cyberweapons', *Foreign Policy*, 29 Sep. 2015.

⁵ Robinson, J., 'Governance challenges at the intersection of space and cyber security', *Space Review*, 15 Feb. 2016. ⁶ New York Times, 'Arms Control for a Cyberage', 26 Feb. 2015.

⁷ White House, International Strategy for Cyberspace: Prosperity, Security and Openness in a Networked World (May 2011), <www.whitehouse.gov/sites/default/files/rss_viewer/international_strategy_for_cyberspace.pdf>.

to international peace and security or proliferate information weapons or related technologies'.⁸

This formulation proved problematic from a number of perspectives, not least the inherent ambiguity of terms such as 'hostile activities' or 'proliferate information weapons'. The Sino-Russian sponsors held sustained consultations at the UN on their draft set of norms, but the focus was more on domestic controls than arms control and it was based on a concept of 'information security' that was not universally shared. In January 2015 China and Russia circulated a revised version of their proposal. It dropped the arms control provision in favour of a more modest exhortation that states should refrain from activities 'which run counter to the task of maintaining international peace and security'.⁹

While the Code of Conduct proposal remains on the table, the principal focus of attention at the UN in recent years has been on a process involving a series of reports from the UN Group of Governmental Experts (GGE). This mechanism has involved groups of 15 to 25 government-nominated experts examining 'Developments in the field of Information and Communications Technology (ICT) in the context of international security'. These groups produced consensus reports in 2010, 2013 and 2015, the focus of which was increasingly on the development of norms for responsible state behaviour in cyberspace and the confidence-building measures that could accompany them.

The 2013 report had already flagged the risk to international peace and security represented by the lack of agreed norms for state behaviour in cyberspace. The 2015 report set out a bleaker depiction of the cybersecurity environment, which highlighted 'a dramatic increase in incidents involving the malicious use of ICTs by state and non-state actors'. It also recognized that 'a number of states are developing ICT capabilities for military purposes' and that 'The use of ICTs in future conflicts between States is becoming more likely'.

Against this darker threat assessment, the report emphasized the development of 'voluntary, non-binding norms for responsible State behaviour...that can reduce risks to international peace, security and stability'. Among the specific recommendations were that:

- 1. 'States should not knowingly allow their territory to be used for internationally wrongful acts using ICTs;
- 2. States must not use proxies to commit internationally wrongful acts using ICTs;
- 3. States should not conduct or knowingly support ICT activity contrary to its obligations under international law that intentionally damages critical infrastructure or otherwise impairs the use and operation of critical infrastructure to provide services to the public;
- 4. States should encourage responsible reporting of ICT vulnerabilities and share associated information on available remedies to such vulnerabilities.
- States should not conduct or knowingly support activity to harm the information systems of the authorized emergency response teams of another State. A State should not use authorized emergency response teams to engage in malicious international activity.^{'10}

⁸ United Nations, General Assembly, International Code of Conduct for Information Security, A/66/359, 14 Sep. 2011.

⁹ United Nations, General Assembly, International Code of Conduct for Information Security, A/69/723, 13 Jan. 2015.

 $^{^{10}\,}$ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security, A/70/174, 22 July 2015.

Although these measures are all voluntary and there is no multilateral capacity to monitor their implementation, it is evident that they reflect an effort to apply existing principles of international humanitarian law to state conduct in cyberspace. In particular, to preclude attacks against critical infrastructure vital for civilians and attacks by or against emergency response teams to computer emergencies or cyber incidents, there are moves to give such teams a 'protective status' akin to that accorded the Red Cross and other humanitarian agencies under the Geneva conventions.

The concept of state responsibility for actions committed on their territory was reaffirmed in the GGE report, which also called for cooperation in responding 'to requests from other states in investigating ICT-related crime or the use of ICTs for terrorist purposes or to mitigate malicious ICT activity emanating from their territory'. Given the challenge of attribution in cyberspace and the absence of any international system of monitoring, it could prove difficult to assess compliance with these norms in the months to come. Some recommendations of the 2015 GGE verge on the wishful thinking, such as the call to report on and share information regarding ICT vulnerabilities— the very thing that states exploit to carry out cyberattacks. Overall, however, the 2015 GGE made progress compared to its predecessors in specifying the nature of the confidence-building measures and norms for responsible state behaviour it wanted to see implemented.

While some at the UN admit to a degree of GGE fatigue, Russia and associated states were able to rally support for yet another GGE to get under way in 2016, with a reporting deadline of 2017. Although it may prove difficult for this GGE to add value to the findings of its predecessors, in the absence of any other authorized multilateral negotiating process on norms for responsible state behaviour, the UN GGEs with their broadly representative nature and consensus-based decision making will provide the international community with a credible vehicle for norm development.

This assessment of cybersecurity diplomacy has focused on the UN, and a technology as universal as the Internet certainly demands norms of global application, but there has also been some movement on cybersecurity cooperation at the regional level. The OSCE agreed an initial set of cyber confidence-building measures in December 2013. These voluntary measures dealt largely with information exchange and their degree of implementation is difficult to judge, although the OSCE did provide some institutional follow-up by establishing an Informal Working Group that will meet not less than three times per year to review the initial set of measures and consider the development of a second set. This envisaged second set has recently seen the light of day and reflects a general recognition of the need to make progress on cybersecurity norms despite the deterioration in East–West relations in the wake of Russia's intervention in Ukraine.

Other regional organizations, such as ASEAN, the ASEAN Regional Forum, the Organization of American States, the African Union and Asia Pacific Economic Cooperation, have also begun to consider interstate confidence-building measures on cyber activity, but they seem to be progressing more slowly and focusing more on cooperation in relation to countering cybercrime rather than governing interstate cybersecurity operations. The limited progress on establishing bilateral (US–Russian and US–Chinese) confidence-building measures or cybersecurity dialogues appears to be a function of their vulnerability to the vagaries of bilateral relationships. The US–Russian cybersecurity dialogue, for example, despite having generated an initial set of confidence-building measures, remains frozen.

China broke off participation in an embryonic bilateral cyber working group in the wake of the US Justice Department issuing indictments against five serving officers of the People's Liberation Army in May 2014 for allegedly undertaking cyber espionage
activities against US corporate entities. Chinese–US cybersecurity relations took a turn for the better after President Xi's state visit to Washington, DC, in September 2015 and the understandings reached then regarding limits to cyber-enabled economic espionage. A High-level Joint Dialogue on Cybercrime was established in the wake of the Xi–Obama meeting and met subsequently in December 2015 and June 2016. A related Senior Experts Group on international norms in cyberspace has also met. It is not clear how far these mechanisms have been able to address the military dimensions of cybersecurity or whether it will be possible to devise cooperative security measures to govern the cyber operations of the two powers. The fact that communication channels have been established is a positive sign and a necessary condition for embarking on more significant cooperation. The continued absence of a similar dialogue in the Russian–US context is disconcerting and may make it difficult to achieve broader cooperative security arrangements in cyberspace.

Conclusions

International cybersecurity policy is in an embryonic and hence fragile state. The vitally important realm of cyberspace has hitherto been essentially free of destructive state action. Stuxnet demonstrated that the weaponization of this unique environment is a real threat and that diplomatic efforts on cooperative security approaches have not kept pace with military capacity building. The recommendations on confidence-building measures from the UN GGEs require serious take-up by concerned states if they are to have any material impact on state conduct in cyberspace. Revitalized cybersecurity diplomacy is called for if cyberspace is ever to be preserved for peaceful purposes.

That revitalization will first and foremost require leadership on the part of one or more cyber powers. The USA, as noted above, arguably has the most at stake in providing for a cyberspace in which the threat of hostile action has been eliminated or mitigated. It will now be for a post-Obama administration to pursue with more vigour the forward-looking directions set out in the 2011 *International Strategy for Cyberspace* with its call for a global consensus to be forged on norms for responsible state action. This consensus might have to be built up incrementally through a set of arrangements worked out bilaterally between the leading cyber powers rather than through a comprehensive process at the universal level. Recent progress on the bilateral cybersecurity track between the USA and China augurs well in this regard.

Devoting the necessary political and diplomatic energy to making progress in regional security organizations is still highly desirable if common standards of state conduct in cyberspace are ever to be codified. An unheralded example of steady progress in hammering out such standards was the March 2016 decision by the OSCE to add a further five confidence-building measures to the initial set agreed on in 2013.¹¹ The new measures include facilitating exchanges on securing critical cyber-enabled infrastructure. This in turn could yield agreement on cooperative measures such as prohibitions on disrupting cyber communication links with satellites or other vulnerable critical infrastructure assets. The existence of an ongoing OSCE discussion on cyber confidence-building measures has also allowed for engagement with Russia and the USA at a time when bilateral channels of cooperation have largely been shut down.

A combination of self-restraint and self-interest on the part of the cyber powers may keep cyberspace from being transformed into simply another 'domain' of military conflict. The international community, including its billions of 'netizens', would no

¹¹ Organization for Security and Co-operation in Europe (OSCE), Confidence-building measures to reduce the risks of conflict stemming from the use of information and communication technologies, Decision no. 1202, PC.DEC/1202, 10 Mar. 2016.

doubt prefer a more solid and transparent basis for sustaining a peaceful cyberspace. It will require continued advocacy and activism to ensure that states really behave in cyberspace in the responsible manner they publicly espouse.

5. Reconciling Collective Defence and Nuclear Disarmament

PATRICIA FLOR*

The objective of reconciling collective defence and nuclear disarmament may seem comparable to the proverbial task of squaring the circle. The task is particularly challenging for states, such as Germany, that participate in NATO nuclear sharing arrangements. As a member of NATO, Germany acknowledges a role for nuclear weapons in contributing to the security of the Organization and its members. At the same time, Germany is a stalwart supporter of the objective of general and complete nuclear disarmament as provided for by article VI of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT). How can these two concepts be reconciled? This chapter argues that promoting disarmament need not be at odds with collective defence. The two concepts can constitute two sides of the same coin—provided that specific conditions, which are discussed below, are met; and if effective and credible measures are undertaken to create the conditions for achieving the goal of 'nuclear zero'.

Collective defence as a pillar of German security policy

The principle of collective defence is defined in the 2010 Strategic Concept as NATO's commitment to 'deter and defend against any threat of aggression, and against emerging security challenges where they threaten the fundamental security of individual Allies or the Alliance as a whole'. NATO regularly reaffirms that its greatest responsibility is to protect and defend its territory and populations against attack, as set out in article 5 of the Washington Treaty. Concurrently, Germany's 2016 White Paper states that NATO solidarity is a fundamental principle of German governance.

This commitment to collective defence, however, is not an end in itself, but the means to broader objectives: the prevention of conflict and the undiminished and broadest possible security for all members of NATO. NATO Heads of State and Government reiterated these principles at the 2016 Warsaw Summit, when they declared that the: 'fundamental purpose of NATO's nuclear capability is to preserve peace, prevent coercion and deter aggression'. How such fundamental security is best achieved must be constantly analysed and defined in the light of capabilities, the prevailing security environment and geopolitical developments. The tools available to policymakers to achieve the objective of maximized security can be broadly divided into two categories: détente and deterrence. The first includes dialogue in order to promote disarmament, arms control and confidence- and security-building measures; the latter means maintaining the necessary mix of capabilities and communicating the resolve to make use of these capabilities *in extremis* to influence the risk calculation of a potential aggressor and thus prevent conflict.

The illegal annexation of Crimea violated key principles of international law and unsettled the European security architecture. Large-scale snap exercises right on NATO's borders, the ongoing crisis in eastern Ukraine and the aggressive nuclear rhetoric of Russian officials have further increased concerns about regional stability and security. This is why—whether we like it or not—deterrence has moved to the centre of attention. The Warsaw Summit Communiqué defines deterrence as a core element of collective defence. Deterrence alone, however, will not suffice to achieve the objective of fundamental security, as there is a risk of unwanted escalation. We need to acknowledge that, although unwarranted, our defensive measures might be

*The views expressed in this article are the views of the author and do not necessarily represent official positions of the German Government. misinterpreted as a threat by states that believe security policy is a zero-sum game, that is, that consider that any gain in relative security by one state necessarily results in a loss of security by another state.

Therefore, if we are looking for a stable strategic balance, credible deterrence and defence need to be accompanied by the right mix of dialogue, arms control, and confidence and security building measures. Dialogue is what German Foreign Minister Frank-Walter Steinmeier called for when he argued for a reactivation of the NATO Russia Council (NRC) and when he advocated a relaunch of conventional arms control in Europe. The sessions of the NRC held in April 2016 and then again in July-just days after the NATO Summit in Warsaw-put an end to almost two years of effective silence, thus marking an important first step in starting a dialogue that can help reduce risk without returning to 'business as usual'. Dialogue with Russia in the NRC has focused on matters such as transparency and risk reduction, Ukraine and Afghanistan. Our expectation should be that after Warsaw, we will again conduct periodic, focused and meaningful dialogue with Russia as laid down in the Summit Communiqué, and that the agenda will be broadened to include topics such as disarmament and arms control. One of the more pressing issues in this regard is the large number of Russian non-strategic nuclear weapons. These tactical nuclear weapons by far outnumber NATO's nuclear capabilities. It is essential to liaise with Russia on what conditions will allow for reciprocal steps towards reducing the role of non-strategic nuclear weapons in Europe. Unfortunately Russia has so far declined to react to specific offers made by the United States on this issue, by President Obama in Prague in 2009 and in Berlin in 2013.

NATO's role in disarmament

Deterrence paired with the offer of dialogue has been part and parcel of NATO's DNA at least since the 1960s. Key documents such as the Harmel Report of 1967 are cases in point. In the heyday of the cold war, the Harmel doctrine stated that NATO was striving towards 'a more stable relationship [with the Soviet Union] in which the underlying political issues can be solved'. Pursuing stability through dialogue and engagement was thus at the centre of a dual-track strategy that was meant to pair credible defence and reassurance with the offer to build a rules-based order that conveyed security to members of both NATO and the Warsaw Pact. It is noteworthy that the Harmel Report acknowledges that a stable relationship might be sought even though underlying political issues remain unresolved. This determination is as valid today as it was then. It should act as a constant reminder to those who claim that dialogue with Russia should only be resumed once fundamental issues such as the illegal annexation of Crimea or the destabilization of eastern Ukraine have been resolved.

The dual-track approach has been NATO's Ariadne thread throughout the years. In its 2010 Strategic Concept NATO emphasizes the role of arms control, disarmament and non-proliferation as contributory factors to peace, security and stability. NATO has unilaterally reduced the size of its land-based nuclear weapons stockpile by over 95 per cent since the end of the cold war. In 2012 NATO extended its hand for additional reductions by stating its willingness to 'consider further reducing its requirement for non-strategic nuclear weapons assigned to the Alliance in the context of reciprocal steps by Russia' in its Deterrence and Defence Posture Review. As a traditional proponent of disarmament, Germany was one of the key advocates of such engagement with Russia. Germany was also one of the main promoters of the creation of the Arms Control, Disarmament and Non-Proliferation Committee at the Chicago Summit in 2012.

Challenges to asserting 'step-by-step' disarmament in the broader security context

Despite the track record of NATO and its member countries as proponents of disarmament and arms control, it regularly finds itself the subject of criticism. Part of this is based on the fact that NATO is not itself a party to the NPT, or to other arms control regimes. Such criticism is unfounded as the NPT can only be signed by states. However, all NATO members are parties to the NPT and have thus adhered to the principles of nuclear disarmament, including article VI of the Treaty.

Additional criticism comes from those who favour a new, multilateral approach to nuclear disarmament. A number of states in the Open-Ended working group (OEWG) convened in Geneva argue that the 'step-by-step' approach advocated by nuclear weapon states has failed to meet expectations. They are therefore calling for an immediate treaty to ban nuclear weapons. Rallying behind the UN Secretary-General's statement that 'there are no right hands for wrong weapons', they underscore the difficulties of properly addressing the catastrophic consequences of a nuclear weapon detonation, whether it occurs by accident, miscalculation or design.

Germany and all NATO member countries adhere without reservation to the longterm goal of a world free of nuclear weapons. This has been repeatedly affirmed by NATO, for example in paragraph 64 of the Warsaw Summit Communiqué. NATO itself remains committed to full implementation of the NPT, including its article VI. This is the reason why Germany and other members have been playing an active part in the OEWG, as well as in the three conferences organized on the impact of nuclear weapon detonations. The objective was to contribute to balanced results which reflect shared humanitarian concerns while, at the same time, acknowledging the view that an immediate nuclear ban without a verification mechanism and without the participation of nuclear weapon states will fail to bring the world closer to achieving the common goal of a nuclear weapon-free world.

Any movement that neither takes into account the prevailing security environment nor addresses essential verification and safeguarding issues will struggle with a credibility problem. We cannot overlook the fact that some states use their nuclear posture as a policy instrument of coercion. Russia's threat to identify Denmark as a target for nuclear attack should it contribute national assets to NATO's ballistic missile defence programme is just one case in point. Because of the violation of assurances given in the Budapest Memorandum (1994) in exchange for Ukraine relinquishing its nuclear arsenal, the conflict in Ukraine could reinforce the view that nuclear weapons are ultimately the only effective deterrent in the current security environment. Accepting this is difficult for supporters of nuclear disarmament. However, in view of the responsibility of each state to guarantee the security of its population, such challenges need to be addressed in an honest debate. A ban that does not address the question 'and what next?' in practical and realistic terms is not credible.

These concerns notwithstanding, there is no doubt that substantive disarmament progress is sorely needed and of the highest priority. It is also possible while maintaining collective defence. Nuclear weapon states and NATO as a nuclear alliance have a responsibility to develop concrete proposals for a 'step-by-step' approach towards nuclear zero. One creative new idea was the establishment of the International Partnership for Nuclear Disarmament Verification (IPNDV), which aims to combine expertise from nuclear and non-nuclear weapon states to address the complex challenges involved in the verification of nuclear disarmament. A follow-up agreement to the New START Treaty between the USA and Russia on strategic nuclear weapons could bring progress in terms of further reducing the numbers of nuclear weapons, since these two states still control more than 90 per cent of global stockpiles. Other concrete steps would be security assurances by nuclear weapon states to non-nuclear weapon states, beginning negotiations on a fissile material cut-off treaty and ratification of the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) by the so-called Annex II states—those states that must ratify the CTBT for the treaty to enter into force.

Eventually, it is possible to envisage how these individual 'building blocks' as well as substantive future steps towards nuclear disarmament could add up to a legal and political structure of sufficient stability to allow for a collective defence that need not rely on nuclear deterrence for undiminished security. This is a long-term objective. As President Obama made clear in his Prague speech in 2009, our generation might not live to see the day of a world without nuclear weapons. However, collective defence and complete nuclear disarmament can only be reconciled if disarmament of the last existing nuclear weapon does not come at the cost of diminished security. The risk of a resurgence of nuclear weapons elsewhere in the future must be avoided. A simple ban-treaty cannot achieve this objective. It would create more questions than it would answer. In their seminal article,¹George Shultz, William Perry, Henry Kissinger and Sam Nunn rightly point out that a world without nuclear weapons will not simply be 'today's world minus nuclear weapons'. A world without nuclear weapons will have to rely on sustainable and resilient mechanisms of cooperative security, including a robust verification system. Creating these mechanisms-one by one with perseverance and foresight—is the objective of supporters of the step-by-step approach such as Germany.

Ways forward for reconciling disarmament with collective defence

It has been demonstrated above that NATO has the concepts and structures for discussing disarmament issues, and a long-standing commitment to an active policy on arms control and disarmament. In principle, the 2014 military doctrine of the Russian Federation also mentions the relevance of existing disarmament treaties, as well as the need to conclude new ones.

It is thus not for a lack of understanding of the important role of disarmament as a means for achieving security that progress on disarmament seems to be at an impasse. Rather, NATO and Russia have different perceptions of the value and role of particular weapon systems in the current security environment. While NATO reduced its reliance on nuclear weapons after the end of the cold war, and has invested in advanced non-nuclear military technology to bolster its deterrence, the Russian Federation regards its nuclear posture as a hedge against a perceived conventional inferiority. Moreover, it could be argued that the traditional role of nuclear and non-nuclear deterrence has been somewhat blurred by technological advances. Tasks that were once associated with the nuclear deterrent, such as the threat of decapitating first strikes and denial of critical infrastructure, may in the future be partly replaced by non-nuclear capabilities, such as prompt global strike or large-scale cyberattacks.

Future talks on nuclear disarmament therefore need to take account of this asymmetry in threat perceptions, interests and capabilities. This does not mean that the role of nuclear weapons as purely political instruments should be watered down. To be very clear: nuclear weapons have always been and always will remain unique. That said, the prospects for future nuclear disarmament might be improved if the talks included the wider security context, that is, if the talks took into account the security

¹ Schultz et al., 'Deterrence in the age of nuclear proliferation', *Wall Street Journal*, 7 Mar. 2011.

concerns behind the deployment of a particular weapon system and not only its categorization as a nuclear or non-nuclear weapon.

The prospects for future disarmament talks will also depend on the settlement of compliance issues pertaining to existing disarmament treaties, most notably the Intermediate-Range Nuclear Forces Treaty (INF). Since 2014, the US administration has repeatedly determined Russia to be in violation of this landmark disarmament treaty which is also a cornerstone of the European security architecture. The INF marked an important step in meeting NPT article VI obligations by banning an entire category of ground-launched ballistic and cruise missiles from US and Russian arsenals. It is of paramount importance that compliance with the INF regime is preserved. Terminating the Treaty would fundamentally affect and change the European security environment. It would shake the foundations of trust and confidence necessary for future disarmament cooperation. Last but not least, it would seriously undermine the principle of 'irreversibility in nuclear disarmament', which was adopted in the Final Document of the 2000 NPT Review Conference. It is therefore essential that the USA and Russia engage in talks with a view to ensuring full and verifiable compliance with the INF Treaty.

Finally, our very perception of what disarmament is—and what it is not— needs to be reviewed. All too often disarmament is belittled as the domain of naive idealists or do-gooders. Ratification of the New Start Treaty by the US Senate was hindered by voices that considered any disarmament treaty to be a sign of inherent weakness. This is not the case. Disarmament and arms control treaties are stabilizing factors in an environment of strategic uncertainty. The widespread feeling in our societies that existing principles of order and stability have been lost is partly due to the current lack of generally accepted treaties and conventions, as well as the lack of compliance with existing agreements that act as reference points for our security policy. Such treaties give us confidence in our interactions with each other and lay the foundations for further security-building measures. In the end, however, success will depend on the political will and courage to actively engage in frank and open discussions on these important issues. In times of opposing views, dialogue on disarmament and arms control is essential if we are to achieve security for all in Europe.

6. Arms Control in Times of Crisis

FRED TANNER*

Introduction

The thinking on conventional arms control and its utility in ensuring national and international security has evolved since the 1980s when such agreements were actively negotiated in the Euro-Atlantic region. While arms control in the bipolar era was perceived as a stand-alone arrangement to help reduce the likelihood of war, in the aftermath of the cold war it has become an integral part of a broader political process to build an inclusive cooperative security environment in Europe.

The security landscape has changed dramatically in recent years, and arms control has been relegated to the back-burner of international politics. The use of armed force in Ukraine, as well as the sabre-rattling and dangerous snap exercises and war games on the borders between Russia and the NATO countries have given rise to a confrontational climate that risks reviving the arms race, with a remilitarization of Europe and a return to a cold-war climate.

At the same time, European multilateral arms control regimes that were designed to address such security challenges have been in decay for years: the Treaty on Conventional Armed Forces in Europe (CFE Treaty) is dysfunctional; and the Open Skies Treaty and the Vienna Document on Confidence- and Security-Building Measures have not been fully implemented and have been in dire need of modernization and adaptation for more than a decade. In an increasingly polarized security environment, a focus on revitalizing the prevention of military incidents by risk reduction, crisis management and military confidence building has become increasingly urgent.

This chapter examines the performance of multilateral arms control regimes and confidence- and security-building measures (CSBMs) in Europe during the crisis in Ukraine. It discusses the lessons learned and initiatives that could help to establish a new basis for risk reduction and confidence building. The chapter concludes by exploring whether there is a need for a new conventional arms control regime and how it might fit into a broader debate about avoiding armed conflicts and rebuilding European security.

Use of confidence- and security-building measures and arms control mechanisms during the crisis in and around Ukraine

The conflict in and around Ukraine has shown that arms control cannot only be a fair-weather instrument. As the crisis escalated early in 2014, a number of states took measures under the Vienna Document and the Open Skies Treaty. The primary purpose was to arrive at a diagnosis of the crisis situation, while raising the political ante with regard to the increasing troop concentrations at the border between Russia and Ukraine.

The Vienna Document and the Open Skies Treaty can be considered different sides of the same coin in times of crisis. The Vienna Document is composed of politically binding CSBMs designed to increase openness and transparency in the military dimension. Its main provisions are: an annual exchange of military information, consultation mechanisms in case of unusual military activities or hazardous incidents, notifications of certain military activities and their observation, and verification mechanisms through inspection and evaluation visits. In areas where inspectors have

*The views expressed in this article are those of the author and should not be attributed to the OSCE or any other organization. The author would like to thank Mr Juraj Nosal for his assistance during preparation of this contribution.

limited or no access, overflights under the provisions of the Open Skies Treaty can help to complete a picture of compliance. Numerous participating states in the Organization for Security and Co-operation in Europe also have access to National Technical Means (satellite imagery) in order to verify compliant behaviour.

The crisis in and around Ukraine led to an increased use by OSCE states of the Vienna Document and Open Skies regimes in both Ukraine and Russia, but also revealed the limits of their implementation. The Vienna Document was used primarily for risk reduction and transparency purposes. Under the provision on 'unusual military activities' OSCE states sent national military inspectors to both Ukraine and Russia. Between March 2014 and March 2015, 21 verification activities were carried out in Ukraine and 10 in Russia. During this period, 26 countries sent military inspectors to Ukraine (including Canada, Germany, France, Poland, Sweden, the United Kingdom and the United States) and 13 to Russia (including Belgium, France, Finland, Norway, Poland, Ukraine and the United States).¹ Coordinated use by some states parties to the Vienna Document led to an almost continuous presence of foreign military inspectors in Ukraine until late April 2014 when a German-led inspection team was abducted in the Donetsk area by militant separatists.

On the diplomatic stage, crisis measures were triggered in Vienna under the Vienna Document mechanism for consultation and cooperation on unusual military activities. This led to numerous requests by Ukraine for information on the concentration of Russian armed forces at the Russian–Ukrainian border. Canada, Estonia and the USA also requested information.² In total, 21 requests were made, leading to three joint meetings of the OSCE Permanent Council and the Forum for Security Co-operation during March and April 2014. However, according to Ian Anthony, 'Russia did not provide all of the requested information'. Nor did it attend all the meetings.³

Russia argued that its deployed military personnel, weapons and equipment on the Ukrainian border did not exceed the thresholds of the Vienna Document's requirement for notification or observation. In general terms, Russia justified its troop concentration by arguing that the Rostov region on the Russian side of the border had been shelled by Ukrainian heavy weapons, allegedly wounding or killing Russian citizens. Furthermore, Russia accused Ukraine of violating the Vienna Document because it had not provided notification of its partial military mobilizations, which were declared in 2014. Ukraine, in turn, accused Russia of violating its airspace using combat helicopters, unmanned aerial vehicles (UAVs) and intelligence aircraft. Some countries, such as the USA and Ukraine, produced photographic evidence and satellite imagery, but these were unable to contribute to any tangible outcomes from the crisis meetings.

The Open Skies Treaty was negotiated in 1992 with the purpose of promoting greater openness and transparency on military activities. The Treaty entitles each of its 34 signatory states to conduct a certain number of flights per year over the territory of other parties to the treaty. Observation flights can involve areas where Vienna Document inspectors have no access or situations in which military activities need to be monitored over time. The latter would include the build-up of heavy weapons and other equipment in border areas and the former the coverage of large areas of concern. An observation mission may be denied by a host country due to flight safety concerns but not for reasons of national security.

¹ Statistics from various presentations at the OSCE Security Days round table, 'Revitalizing Military Confidence-Building, Risk Reduction and Arms Control in Europe', Vienna, 3 Oct. 2016.

² Anthony, I., 'The application of European confidence-building measures and confidence- and security-building measures in Ukraine', *SIPRI Yearbook 2015: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2016), pp. 68–74.

³ Anthony (note 2), p. 69.

In Ukraine, the Open Skies Treaty was used by states to verify transparency measures and that Vienna Document commitments were upheld. Several overflights were made over both Ukraine and Russia throughout 2014. Sweden, the USA and Romania conducted overflights of Ukraine in early 2014, as the conflict began to escalate, while Ukraine, Germany and the USA conducted flights over Russia. However, overflights of the conflict zone have been compromised since the shooting down of passenger plane MH 17 in July 2014. A security guarantee by host states is a prerequisite for the conduct of Open Skies flights. In addition, constraining measures by host countries such as limiting the amount of time allowed over sensitive areas or a refusal of flights have limited the effectiveness of the Open Skies Treaty.⁴

Besides the Vienna Document and Open Skies Treaty, there was another effort to use an arms control framework to support crisis management issues in Ukraine in 2014. The OSCE attempted to support the fight against the illegal flow of small arms and light weapons (SALW) in Ukraine, which were readily available to volunteer units in eastern Ukraine. The OSCE Decision on Small Arms and Light Weapons of 2012 would have entitled Ukraine to ask for assistance and access to expertise on how to deal with the illegal flow of weapons in the conflict area, including assistance with the physical security and management of stockpiles of small arms. The OSCE established an Arms Control Fund and attempted, with the help of the Small Arms Survey, to conduct a baseline assessment of irregular groups, and their weapons and ammunition in eastern Ukraine. The rapid escalation of armed hostilities in the summer of 2014, however, meant that the project team was unable to follow up its information gathering activities beyond the autumn of 2014. In addition, certain ministries and other governmental stakeholders were reluctant or unable to cooperate with the Small Arms Survey. This experience clearly shows that while the creation of appropriate baselines on SALW as accountable items is essential, the OSCE Decision on SALW is primarily useful in post-conflict settings, such as in the Balkans after the wars in the 1990s.

Connecting the dots between confidence- and security-building measures and crisis management

The extent to which the cumulative effects of the numerous visits, inspections, evaluations and crisis meetings made a difference in constraining hostilities, or contributed to a reduction of risk and increased transparency on the military situation in and around eastern Ukraine remains unclear. Open Skies and the Vienna Document are both implemented by national agents and the reports are also national. The OSCE receives reports from national inspectors under the Vienna Document but not on activities based on the Open Skies Treaty.

With the CFE Treaty out of order and only a partial implementation of the Open Skies Treaty and the Vienna Document during the crisis in Ukraine, the web of postcold war arms control arrangements in Europe proved unable to provide sufficient transparency, predictability and confidence at a time of crisis. In particular, the high thresholds of the Vienna Document on information and observation and the low quota for on-site inspections prevented the full use of the various verification mechanisms during the escalation phase of the crisis. Furthermore, notification and information

⁴ However, it should be noted that such cases do not happen only in the context of the Ukraine crisis. For instance, in Feb. 2016 the Turkish authorities refused to allow an Open Skies flight path that was planned by Russia to take place over areas adjacent to Syria, as well as over NATO airbases in Turkey. See 'Turkey has denied a Russian Open Skies observation flight over its territory because it was near the Syrian border', *The Aviationist*, 10 Feb. 2016, https://theaviationist.com/2016/02/10/turkey-has-denied-a-russian-open-skies-observation-flight-over-its-territory-because-it-was-near-the-syrian-border/.

sharing in times of tension can be compromised, as they can be accompanied by hybrid warfare tactics and outright propaganda. In addition, ad hoc on-site restrictions, such as denial of entrance to Crimea in March 2014 or a 25-km 'security zone' implemented by Russia at the Russian–Ukrainian border, prevented inspectors from fully assessing compliance with Vienna Document commitments. There was a structured exchange among all parties throughout the crisis; but it has become painfully evident that the OSCE currently lacks the authority to take any additional investigative steps once the structured dialogue at the Hofburg is deadlocked.

A key problem is the fact that the link between the Vienna Document and crisis management is not clearly defined. The risk reduction measures in the Vienna Document look only at whether military activities exceed the thresholds that require prior notification. States can rely on several procedures to dispel concerns over non-compliance; but there are no mechanisms to link the agreed measures on military activities to the crisis instruments of the OSCE conflict cycle, which would include early warning, conflict prevention and post-conflict rehabilitation. In other words, in today's complex crisis situations, the Vienna Document in its current form is not well suited to serve as a crisis management tool.

Lessons must be learned from the operational track record of the OSCE in Ukraine. The monitoring of the OSCE Special Monitoring Mission to Ukraine (SMM)—its deployments of UAVs and sophisticated front line camera and sensor surveillance systems, its use of satellite imagery and its operational conduct in a high-risk environment—could inspire efforts to strengthen the verification instruments of the Vienna Document. Furthermore, the extensive experience of the SMM in dealing with non-recognized militant groups regarding disengagement of combat forces, the creation of weapon-free zones, and reporting and verification arrangements could enrich discussions about status-neutral CSBMs in areas of regional and protracted conflict. Status-neutral CSBMs and arms control measures in unresolved regional conflicts could lead to enhanced stability and provide essential breathing space for conflict resolution to take its course.

Another example from Ukraine that could be relevant for linking crisis management with CSBMs and risk reduction in the Vienna Document is the discussions that ensued with the creation of the Joint Centre for Control and Coordination (JCCC) in the context of the first ceasefire under the Minsk Agreement in the autumn of 2014. There was some debate about whether this new military control organ could be 'multilateralized' and positioned within the Vienna Document framework. This would have given this potentially important provider of military stability a sense of ownership by all the participating states in the Vienna Document regime. However, the JCCC remained a bilateral arrangement between Russia and Ukraine.

In view of the poor performance of the Vienna Document during the crisis in and around Ukraine, the German OSCE Chairperson-in-Office proposed strengthening the 'impartiality and effectiveness of CSBMs under the Vienna Document' and establishing a link to crisis management, with an emphasis on conflict prevention. Instruments that bridge arms control and crisis management would provide 'effective verification that is rapidly deployable, flexible and independent in times of crisis'.⁵ These could include the appointment of a special representative who would effectively act on behalf of the Chair or the Forum for Security Cooperation during high-risk military situations. Furthermore, the OSCE should have the ability to conduct 'third party' verifications and fact finding missions, carried out not by national inspectors but by experts from institutions such as the OSCE. Other organizations, such as the

⁵ Steinmeier, F-W., 'Mit Rüstungskontrolle Vertrauen schaffen' [Creating confidence with armament control], *Frankfurter Allgemeinen Zeitung*, 26 Aug. 2016.

International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons, have an established record of impartial monitoring and verification that could be a useful model for building a robust third party verification capacity. However, the NPT and the Chemical Weapons Convention provide a solid legal basis for intrusive verification by these organizations, and this is currently not the case with the OSCE.

A new arms control regime in Europe?

What is the place or role of conventional arms control in the current difficult European security landscape? Whereas the Vienna Document and the Open Skies Treaty are soft security instruments for providing transparency and confidence among all OSCE participating states, the CFE Treaty, designed as a legally binding cornerstone of European security, has become dysfunctional. There is a new political geography in Europe: the Warsaw Pact and the Soviet Union have disappeared as stakeholders. NATO has expanded eastwards, and subregional as well as protracted conflicts in the Caucasus, Balkans and Eastern Europe have created zones of fragmented security and long-term instability. The nature of armed conflict has changed from large-scale operations to asymmetrical and hybrid warfare with the use of new technologies such as UAVs and cyber operations. New generations of arms control regimes are more functionally oriented and do not necessarily address states' capacities to use force; they are primarily a response to the threats of nuclear terrorism or humanitarian concerns.⁶

In this context, it is questionable whether a modernized or reinvented CFE would still be relevant or a totally new regime is required. At its Warsaw Summit in July 2016, NATO, for instance, strongly endorsed the modernization of the Vienna Document 'to help close the loopholes that reduce military transparency', but it had no suggestions on the future for conventional arms control, or its possible format or process.⁷

Certain limitations on national levels may still be required, however, in order to prevent an arms race. The purpose of any substantial relaunch of conventional arms control should not just be stability and a return to a balance of forces. The era of standalone conventional arms control agreements in Europe may be over. The future could be geared towards a more flexible and comprehensive approach to security that would also include the use of arms control instruments and measures that are part of broader risk reduction and crisis management efforts. In this sense, for Europe and the OSCE area, any new conventional arms control arrangements should be based on a clear link between the sharing of threat perceptions, crisis response and arms control.

Due to the growing number of military incidents and close military encounters both at sea and in the air, risk reduction and conflict avoidance arrangements should be an important piece of the puzzle for any new European arms control regime. Between March 2014 and August 2015, the European Leadership Network registered more than 60 dangerous incidents in the Euro-Atlantic area—not just military-to-military but several close encounters with commercial aircraft.⁸

In view of these dangerous developments, discussions on enhanced military transparency, particularly in the Baltic and Black seas, and improved risk reduction measures have gained added urgency. There are proposals to draw on earlier military-to-military agreements such as the Incidents at Sea Agreement of 1972 or the

⁶ Examples include the Nuclear Security Summit process or the Convention on Certain Conventional Weapons (CCW) negotiations to ban autonomous weapons.

⁷ NATO, 'Warsaw Summit Communiqué', 9 July 2016, <http://www.nato.int/cps/en/natohq/official_texts_133169. htm>.

⁸ European Leadership Network, 'Avoiding war in Europe: how to reduce the risk of a military encounter between Russia and NATO', Aug. 2015, http://www.europeanleadershipnetwork.org/medialibrary/2015/08/18/2f868dfd/Task%20Force%20Position%20Paper%20III%20July%202015%20-%20English.pdf.

42 OPPORTUNITIES FOR COOPERATIVE SECURITY AND DISARMAMENT

Agreement on the Prevention of Dangerous Military Activities of 1989, which outline cooperative procedures to prevent and resolve peacetime incidents. The NATO–Russia Council met only once during the summer of 2016 to address the danger of hazardous incidents, and with no tangible results. One solution could be the creation of a new generation of bilateral incidents agreements between Russia and individual European Union and NATO member states.⁹ This could lead to a comprehensive NATO–Russia agreement that would subsume the existing bilateral agreements and create uniform rules governing the behaviour of the armed forces of all NATO countries and Russia. Furthermore, as a complementary measure to strengthen NATO–Russia bilateral agreements, the multilateral framework of the OSCE Vienna Document should be used as an inclusive military-to-military risk management forum on preventing hazardous military incidents and managing a crisis situation should an incident occur.¹⁰

Conclusions

Without modernization of the Vienna Document, Europe will not be able to rely on effective CSBMs in future times of crisis and military instability. The thresholds for prior notification of certain military activities need to be reduced and the quotas for inspection and evaluation visits need to be increased. CSBMs would have to include the sharing of threat perceptions, military doctrines and extensive military-to-military contacts. Moreover, the Vienna Document regime needs a robust and impartial verification mechanism and should become a framework for linking risk reduction to crisis management. Such arrangements would provide the OSCE with considerably enhanced abilities to deliver results in times of crisis.

Should there be the political will to revitalize a structured process on conventional arms limitations, possibly at the subregional level, then such a process could operate in parallel with the efforts to strengthen the CSBM regime in Europe. Arms control can only become more effective in times of crisis if there is a common political agenda between Russia and the West on how to prevent and, if necessary, manage military incidents. All such initiatives would have to be part of a broader structured political dialogue based on a vision of how to rebuild a cooperative security in Europe where conventional arms control will find its fitting place; and where the OSCE is empowered to deliver in times of crisis.

⁹ European Leadership Network, 'Avoiding Hazardous incidents in the Euro-Atlantic area: Post-workshop report', Oct. 2016, http://www.europeanleadershipnetwork.org/medialibrary/2016/10/19/40d67f87/Incidents_Post-workshop%20report_FINAL.pdf.

¹⁰ This would require an adjustment to Chapter III of the Vienna Document on Risk Reduction, on prompt notification and clarification of hazardous military incidents, as well as Chapter IX on compliance and verification, for third-party verification.

7. Prospects for Cooperative Security and Disarmament in South East and North East Asia

TRIYONO WIBOWO*

When the foreign ministers of the Association of South East Asian Nations (ASEAN) member states issued a joint 'Statement on the Maintenance of Peace, Security and Stability in the Region' during their meeting in Vientiane, Laos, in July 2016, they highlighted their anxiety or frustration concerning developments in the region. They recognized that if the current situation persists without a resolution it could escalate and possibly lead to open conflict. This anxiety is a consequence of the actions taken by various countries in connection with their ongoing territorial disputes in the South China Sea. The decision by the Permanent Court of Arbitration (PCA) on the Philippines–China dispute added an additional dynamic, and troubling developments continue on the Korean peninsula.

The decision by ASEAN foreign ministers to issue their statement should also be viewed as part of ASEAN's attempts to maintain and preserve peace and security in the region. It demonstrates ASEAN's frustration that the efforts made to reduce tensions over the territorial disputes in the South China Sea and the nuclear programme of the Democratic People's Republic of Korea (DPRK, North Korea) have so far not yielded positive results, and that, on the contrary, the situation is deteriorating.

Numerous efforts have been made and are being made at different levels to find a solution to these two problems. Instead of positive developments, however, the trend is for increasingly precarious actions to be taken by the various parties. China's intention to progressively broaden its control in the South China Sea, North Korea's continued provocations in launching ballistic missiles and the manoeuvres by parties within and beyond the region in reaction to these problems can be seen as dangerous developments that could threaten peace and security in the region.

Unstable peace

Interesting political and interstate relationships are developing among the countries of South East Asia and East Asia. There is a strong willingness, particularly among the ASEAN member states, China, Japan and the Republic of Korea (South Korea), to increase and strengthen their cooperative economic and trading relations. There is an acknowledgement that such cooperation is vitally important for economic growth and prosperity, particularly in the light of the current global economic situation. At the same time, however, political tensions and mistrust persist. The determination of China to extend its sovereignty in disputed areas has not lessened and is exacerbated by actions that could be regarded as endangering peace and security in the region. This inconsistent behaviour is dangerous and a slight miscalculation could have serious consequences. Unstable peace is thus the most appropriate term to characterize the current political and security situation in the South East Asia and East Asia regions.

South East Asia, including the South China Sea, plays a vital role in the economies and trade of countries globally. Around 50 per cent of the world's merchant fleet tonnage, with a value of around US\$ 5 trillion, passes through the region annually. Oil and gas imports are vital to the economies of the countries of the region. Around one-third of the world's crude oil and half the world's liquefied natural gas pass through the region. The discovery of huge oil and gas deposits in the South China Sea has added to its vital strategic importance, but at the same time added another source of tension

*The views expressed in this article are the views of the author and do not necessarily represent official positions of the Indonesian Government. and potential conflict. For these reasons, a peaceful region is in the interests of all the countries in the region, but also globally important. None of these countries want any disruption to their economic and trading relations or an interruption in the flows and passage of goods and commodities through the region.

Nonetheless, the territorial disputes between China and several ASEAN countries, Japan and South Korea have the potential to disrupt and threaten the peace and security of the region. If these disputes can be resolved peacefully, tensions can be reduced and conflict avoided. That said, the preservation of peace and security in the region cannot and should not wait until the territorial disputes are resolved. It is not necessary to resolve the territorial disputes in order to maintain peace and security in the region: efforts can be made in parallel. The disputes and tensions between China and several ASEAN member countries will persist while the efforts to establish a code of conduct on the South China Sea, as mandated in the Declaration of Conduct in the South China Sea (DOC) of 2002, are hampered by China's reluctance to conclude such an arrangement. Unfortunately, the DOC contains a formulation that allows China to drag its feet in the matter of the South China Sea.

The role of ASEAN

Resolution of the territorial disputes between China and several countries in the region will take time and it is uncertain when such resolutions will be achieved. At the same time, however, peace and security in the region cannot be undermined because these disputes have not been resolved. Parties to the disputes could opt to resolve them bilaterally based on the principles of international law, and they should be encouraged to find a solution. If a resolution cannot be found or proves difficult to reach, a third party or parties could become involved in order to assist. This is common practice in international conflict resolution.

The preservation of peace and security is the responsibility of all and can be pursued by anyone with a stake in the stability of the region. ASEAN has a legitimate interest in taking action. It does not need to obtain the approval of one of the parties to the territorial disputes in order to take the necessary steps to preserve peace and security in the region. The doctrine of the ASEAN Zone of Peace, Freedom and Neutrality provides the foundations and legitimacy for ASEAN to take immediate steps when necessary. The ASEAN Treaty of Amity and Cooperation (TAC) provides the basis for and obligations on all countries outside of ASEAN to support any initiative by ASEAN aimed at safeguarding and preserving stability, peace and security in the region. It should be underlined that the aim of ASEAN here is not to focus on the territorial disputes, but to establish a more effective and reliable regional security architecture to serve as rules of the game and a code of conduct for all countries in the region, and for countries outside the region that have an interest in stability, security, and easing tensions and avoiding conflict in South East Asia.

Barriers to achieving ASEAN's mission

The DOC may be a good foundation for safeguarding peace and security from potential conflicts due to territorial disputes, but the past 10 years has shown how the arrangements formulated in the DOC have been unable to de-escalate tensions. The parties, particularly China, have repeatedly stated their commitment to the DOC, but the reality on the ground contradicts this and essential points agreed in the DOC are not observed. The reclamation of reefs and the construction of artificial islands have now been completed. The question is now not whether China will furnish them with military hardware, but when and how it will do this. There is an urgent need to review the arguments that link the preservation of peace and security in the region with the resolution of territorial disputes in the South China Sea. Territorial disputes are not only a cause of tension, but also a symptom of political ambitions and military rivalries, and of the strategic competition between the major powers in the region.

It must also be acknowledged that the continuing problems in the region are partly caused by ASEAN's ambivalent judgement of and position on China. The economic interests of several ASEAN member states have left ASEAN unable to take a firm stance on actions taken by China that jeopardize the stability of the region. It has proved difficult for ASEAN to speak with one voice on the issue of the South China Sea. This has been shown in a number of ASEAN meetings in recent years. Such inconsistency has attracted criticism from many ASEAN partners. ASEAN needs to understand the risks if it continues to take such an approach. It runs the risk of losing its central role in or even becoming no longer relevant as the primary guardian of peace and security in the region. Such behaviour will also provide ample reasons for some ASEAN members with territorial disputes with China to turn to other parties outside the region. In this context it is understandable why Viet Nam and the Philippines might turn to countries outside the region, even though such a decision is bound to provoke a strong response from China-which could in turn exacerbate tensions in the region. ASEAN's statement issued in Laos in July signals that it is beginning to act more assertively over the actions or policies of any state that undermines or threatens the stability or peace and security in the region.

China has a big stake in regional stability and a great interest in maintaining good and friendly relations with ASEAN member countries. Its significant political, economic and trading interests require China to be more cautious and prudent in dealing with ASEAN. The need for ASEAN to be more assertive and direct towards China should not be interpreted as a challenge to China, but as a consequence of the need to preserve the stability and security of the region. At the same time, it will also be important to avoid the involvement of states from outside the region. ASEAN cannot afford to let 50 years of peace in the region be undermined by disputes and rivalries, and ASEAN should not let itself become a tool for power projection by major powers.

Call for action

ASEAN must take the initiative, without seeking the approval of other states, to take the necessary steps to preserve and maintain stability, peace and security in the region. Efforts to resolve territorial disputes in the South China Sea, including by means of the DOC, a code of conduct or other avenues, can continue within currently available mechanisms and formats or through any other avenues that can be agreed. At the same time, however, ASEAN urgently needs to establish a second track effort that involves all those with an interest in easing tensions in South East Asia and East Asia. This initiative could be introduced using an existing mechanism, such as the ASEAN Regional Forum (ARF), but it might also use new instruments to resolve the impasse in existing mechanisms. Once again, this initiative is not intended to resolve the territorial disputes in the South China Sea, but to establish rules of the game and a code of conduct to maintain stability, peace and security in South East Asia. A mechanism such as the East Asian Summit, in which all the big players in the Asia Pacific participate, could be used to discuss the security agenda in addition to its current standard agenda on the economy and trade. The Summit could discuss and formulate the new, effective and reliable regional security arrangement that is so urgently needed.

Such an initiative might be expected from any one of the ASEAN member states. Indonesia is in a position to lead this effort. As one of the largest countries in ASEAN, Indonesia is expected to show leadership not only in maintaining the cohesion of ASEAN, which is being increasingly threatened, but also in retaining ASEAN's role as an effective and relevant regional organization. ASEAN's ability to remain effective and relevant will determine the future stability of peace and security in the region. There are plenty of examples of a collapse of peace and security in a region as a result of a failure or inability of the regional organization to manage threats and conflicts.

The economic development and prosperity experienced by ASEAN member states today is a result of the peace and security that has existed for more than 40 years. ASEAN cannot afford to allow the situation in the region to be disrupted and threatened by political and military ambitions, territorial disputes or the competition between major powers. The success of ASEAN's founding fathers 50 years ago in uniting countries and establishing peace and security must be sustained. It will be a challenge for the new generation of ASEAN leaders to do what it takes to maintain stability and security in the region, which are now threatened. It is somewhat regrettable that there was no official statement on this particular challenge by the ASEAN leaders at the end of their Summit in Vientiane, Laos in September 2016. There were, however, less specific statements on the importance of maintaining peace and security in the region issued during subsequent meetings with ASEAN partners, including an agreement to establish a 'hotline' between ASEAN and China's Ministry of Foreign Affairs at the ASEAN-China Summit. The centrality of ASEAN to the maintenance of peace and security in the region will be severely questioned if ASEAN is unable to speak with one voice on the issue of the challenges facing the region, and formulate a clear strategy and roadmap to address them.

Outside players

While Japan and South Korea continue to try to settle their own territorial disputes with China, they are also taking an interest in the dynamics of the territorial disputes in the South China Sea. As noted above, the South China Sea is of great importance and strategic value to all the countries in the region. As countries that are heavily dependent on international trade, Japan and South Korea have a legitimate interest in the peace and security of the South China Sea, which is a lifeline for their exports and imports to and from Europe, the Middle East and elsewhere. Japan has approached a number of ASEAN countries to develop and strengthen economic and trading ties, and cooperation in areas such as development cooperation. For instance, the ASEAN-Japanese 10-Year Strategic Economic Cooperation Roadmap includes a proposal for a US \$200 billion Expanded Partnership for Quality Infrastructure. Japan has also conducted joint military exercises as well as other forms of cooperation with Viet Nam and the Philippines.

Japan's efforts could be seen in the context of a response to China's actions in the South China Sea, but they may also be viewed as an effort to balance and provide an alternative to ASEAN countries' economic dependence on China. ASEAN countries should therefore see this as a positive effort to maintain peace and security in the region, as economic dependence on one country will only result in an unbalanced relationship and prevent ASEAN from acting independently in determining its position and response to actions that threaten peace and security in the South China Sea.

US and Chinese naval forces are currently on a state of alert in the South China Sea. Both sides are watching each other's movements in patrolling the area. This illustrates the seriousness of the situation involving these two powers. The US Navy has been patrolling the Pacific and surrounding areas for decades, but intensified its patrols in the South China Sea after China started to construct artificial islands and—according to intelligence reports—build military facilities on them. China's determination to expand in and exert its control over the South China Sea is alarming many, including the USA, and has sparked strong reactions. This kind of 'contest' must be addressed seriously in order to avoid unnecessary problems and possibly dire consequences. The South China Sea issue is not only about overlapping claims between China and ASEAN countries. It is more complex, and involves competing agendas, different ambitions, historical rivalries and a struggle for influence between major powers.

North Korea

Another disturbing problem for the maintenance of peace and security in the region is the North Korea nuclear issue—a problem that needs to be resolved urgently before it becomes uncontainable and leads to the possibility of an open conflict in the region. A number of efforts have been made through multilateral forums such as the Six Party Talks and the UN Security Council, but so far none have borne fruit. Several resolutions and UN sanctions have not succeeded in deterring North Korea. It may be that alternative measures are needed for North Korea to come to terms with the international community.

North Korea maintains that it feels threatened by the USA and its allies, and needs to take the necessary action to defend itself, including the development of nuclear weapons. The presence of US forces in Japan and South Korea, the mutual defence agreements between these two countries and the USA and their regular military exercises are characterized by North Korea as a threat to its security and its survival. The recent decision by the USA and South Korea to deploy Terminal High Altitude Area Defense (THAAD) in South Korea in 2017, and the arrival of the US supersonic B-1B bomber in South Korea after North Korea's fifth nuclear test on 9 September 2016 will certainly provide further justification to North Korea.

Japan and South Korea in particular continue to exercise maximum restraint with regard to the various provocations by North Korea. The question is how long they can continue to do so if their national security continues to be threatened. The decision to deploy THAAD may be a response to North Korea's ballistic missile threat, but such actions can be used in turn by North Korea to give credence to its claims about the need to protect itself against threats. Peace and security in the Korean peninsula are linked to a game of cat and mouse. This situation is exacerbated by Russia's and China's complaints about the THAAD deployment. The situation is reminiscent of US and NATO plans to install missile defence systems in Poland and the Czech Republic, allegedly to counter Iran's nuclear weapons. It was difficult to interpret the deployment as anything other than an action directed at Russia.

In his 2016 report, the UN Human Rights Council's Special Rapporteur on the Situation of Human Rights in North Korea, Marzuki Darusman, suggested a peace agreement to end the Korean War to replace the ceasefire that has been in place since 1953. He noted that if such an agreement were possible, North Korea would no longer have any justification for claiming to feel threatened and hence would be more likely to agree to dialogue with the international community—in this context on the issue of human rights violations in North Korea. The idea of a peace agreement to end the Korean War was also raised by several countries at the ARF in Laos in July 2016. Dialogue and communication with North Korea will be essential to resolving North Korea's nuclear problem and could ease tensions, preserve security and promote disarmament. The Six Party Talks are practically dead and only an extraordinary effort will revive the process. North Korea has said that it is ready to resume them, but some doubt its sincerity. Only Kim Jong-un has the power to alter what can or cannot be done by North Korea. In this regard, meeting and speaking directly and personally with North Korea's leader would be worth considering to try to find a common solution to the problem of peace and security in the region, including North Korea's security concerns.

If such an option were to be considered, a number of leaders and individuals from the ASEAN countries might have the means to assist with or conduct such an effort. North Korea appears to be more comfortable liaising with ASEAN countries or China, even if it is not necessarily keen on hearing ASEAN's opinion. It is imperative to find someone capable of directly communicating a message to North Korea's leader. However, it must also be understood by those parties at odds with North Korea that reaching out to that country should not be perceived as appeasement or undermining efforts to isolate it. Such an action, particularly if it can be conducted at the highest possible level, would be expected to initiate dialogue and communication to resolve the current impasse, including the deadlock in the Six Party talks.

The six parties' decision to continue their current approach to North Korea is understandable, particularly in the light of the fifth nuclear test, but is tightening sanctions and the application of additional and stronger punitive measures likely eventually to change its behaviour? Sanctions and similar measures are already in place and do not seem to have affected North Korea's dangerous behaviour. Such approaches do not yield the intended results and tensions continue to rise, so there would be no harm in attempting an alternative approach. In this context, ASEAN may have the potential to contribute. There are regular dialogues and consultations in various ASEAN forums and mechanisms, such as ASEAN + 3, ASEAN + 1, the Post Ministerial Conference (PMC), the East Asia Summit, the ASEAN Defence Ministerial Meeting (ADMM) and so on. These could be used as an alternative to discuss solutions to regional security issues. Friendly relations have long existed between North Korea and several ASEAN member countries. Support among regional players for ASEAN's centrality to the maintenance of regional peace and security, and an acceptance of ASEAN Treaty of Amity and Cooperation principles on interstate relations could also be important factors that help defuse tensions and resolve the problems arising from North Korea's nuclear programme. ASEAN is not included in the Six Party Talks, but the stability of peace and security in North East Asia is of interest to ASEAN. ASEAN is also committed to nuclear disarmament by creating a nuclear weapon-free zone in South East Asia through the Bangkok Declaration of 1995, supportive of any international effort on the elimination of nuclear weapons and to create a nuclear weapon-free world and all its member countries are parties to the NPT and the CTBT. Taking note of the escalating tension in the region, the international community, in particular those at odds with North Korea, could benefit from trying a new approach. Initiating dialogue and communication with the leader of North Korea might be worth trying. To continue to isolate North Korea from the rest of the world one way or another could serve North Korea's calculated strategy of not opening up communications with others on its nuclear programme.

Conclusions

The threats to peace and stability in East, North East and South East Asia are real. There are ample reasons to believe that if the current regional instability is not managed properly and urgently, the situation could become uncontrollable and lead to open conflict.

We need to consider what might happen if North Korea continues to take provocative actions, ignore international condemnation and sanctions, and conducts another nuclear test. How will the USA, Japan and South Korea, as well as other countries, react? What will happen if North Korea continues to believe that the people of Japan and South Korea do not wish and are not prepared to go to war, and continues to provoke them without being afraid of retaliation?

We should also imagine what would happen if a US nuclear-armed bomber unintentionally or deliberately entered North Korean airspace. Do we think that North Korea would simply make a strong protest about such an incident? Do we think that North Korea is not really prepared to go to war with the USA for fear of losing such a war and eventually ceasing to exist? What would happen if North Korea believed that such a plane had entered its airspace on a mission to attack and destroy its nuclear facilities, and reacted by firing missiles to bring it down?

What would happen if Japan or South Korea felt that North Korea's threats could no longer be tolerated? Or if they concluded that their territorial disputes with China had reached a point that required them to act more firmly and forcefully? What would happen if such a condition provided a perfect excuse for the Japanese Parliament currently controlled by the Liberal Democratic Party—to agree to amend its constitution to allow its Self Defence Forces to alter the role and function they have played since the end of World War II? What would be the reaction of neighbouring countries still traumatized by Japan's militarism in World War II?

What will happen if China establishes an Air Defence Identification Zone (ADIZ) in the South China Sea, and countries such as the USA, Australia and India refuse to acknowledge it? What if instead they challenge such a decision and conduct their sea and air navigation activities as usual? What will happen if China, with a view to enforcing its ADIZ, takes steps to deploy military hardware and other facilities on the man-made islands in the South China Sea? How will the Philippines and Viet Nam as well as other countries in the region respond?

These are a number of frightening scenarios that could arise as a result of currently unstable regional dynamics. Miscalculation, aggression and reckless behaviour could have terrifying consequences. Restraint, rationality, statesmanship and leadership from all sides will be essential to avoid these dire scenarios. All the parties involved in maintaining regional peace and stability must urgently convene to establish a robust and effective instrument on regional security. We have a lot of experience and must learn from past lessons in order to avoid an unnecessary catastrophe.

8. Establishing a Cooperative Security System that Works: The Costa Rica Experience

MARITZA CHAN*

The new millennium saw a substantial shift in how states conceptualize and operationalize their national and international security. The end of the cold war triggered a significant movement away from the traditional political-military theory of peace and security towards a nascent development-, democracy- and human rights-oriented theory of peace and security.¹ In many ways Costa Rica was at the forefront of this movement. It has successfully established—and indeed flourished under—a multilateral and cooperative security system that embodies demilitarization, neutrality, economic and social development, and human rights.

This movement has faced significant challenges, including but not limited to the growth of the international arms trade, the increasing militarization of security in many Western countries, the development and use of increasingly high-tech weapon systems and the elevated role of nuclear weapons in the defence and security doctrines of the nuclear weapon states.

Costa Rica is unique insofar as its security system is not specifically tailored in response to a single security threat. Nor is it specifically responsive to any regional security conditions. Costa Rica has instead established a foreign policy based on the steadfast notions that it is possible to become strong without being armed, that it is possible to provide human welfare without being rich, and that it is possible to be a standard-bearer for international human rights and international law without the resources of an outsized diplomatic corps. As the former Foreign Minister of Costa Rica, Bruno Stagno-Ugarte, told the United Nations General Assembly in 2007: 'Security does not come from multiplying weapons—history has already proven this too many times. Security comes from remedying injustices, easing shortages, creating opportunities so that we can have collective prosperity on a par with collective security'.²

History of the establishment of non-militarization and neutrality

The story of how Costa Rica, 'an isolated territory of the vast Spanish Empire [that] was never considered to be pivotal',³ evolved out of a 1948 civil war into a peaceful standard bearer for human rights and human development was largely unanticipated: 'However, this small and forgotten country followed a unique development path that proved its worth by surpassing all of its neighbours in [gross domestic product] GDP per capita and in Human Development'.⁴

The 44-day civil war in March–April 1948 saw José Figueres-Ferrer raise an army against the newly elected government of President Teodoro Picado in response to allegations of election fraud. Figueres subsequently served as President of the governing

*The views expressed in this article are the author's and do not necessarily represent SIPRI, CISD/SOAS or the organizations with which the author is affiliated.

¹ MacFarlane, S. N. and Weiss, T. G., 'The United Nations, regional organizations and human security: building theory in Central America', *Third World Quarterly*, vol. 15, no. 2 (1994), p. 279.

² United Nations, General Assembly, Government of Costa Rica, Statement by H.E Bruno Stagno-Ugarte, Minister of Foreign Affairs and Worship of Republic of Costa Rica in the General Debate, 62nd Session, 2 Oct. 2007, http://www.un.org/webcast/ga/62/2007/pdfs/costarica-en.pdf. Emphasis added by the author.

³ von Feigenblatt, O. F., 'Costa Rica's neo-realist foreign policy: lifting the veil hiding the discursive co-optation of human rights, human security, and cosmopolitan official rhetoric', Proceedings of the International Journal of Arts and Sciences Conference, Orlando, USA, 2009, http://srn.com/abstract=1308290.

⁴ See Clark, M. A., *Gradual Economic Reform in Latin America: The Costa Rican Experience* (State University of New York Press: New York, 2001).

Junta Fundadora in 1948–1949.⁵ One of the most remarkable accomplishments of Figueres' tenure was the decision in December 1948 to abolish the country's military. Figueres discussed the decision in a 1985 interview:

The purpose of the [civil] war was to restore the integrity of the electoral system, which had been established for some time, but which had been violated during the 1940s. After the war, we founded the Second Republic and created an entirely new type of society... after the war we accepted the social changes that came with the 20th century: we adopted a social democratic economic and political system, and gave women the right to vote. All of the changes were achieved through legal means. We launched a vast programme aimed at establishing as perfect a democracy as was possible by creating the network of economic and social institutions that have characterized this country ever since.⁶

The decision to completely demilitarize has presented some significant challenges in maintaining peace and security. In the early 1980s, Costa Rica was confronted by substantial regional challenges to its policy of demilitarization. Despite increasing international pressure to become more actively involved in regional disputes, and to retain domestic security forces that may well have been put to use beyond the country's borders,⁷ Costa Rica was unwavering in its position that armed fighting is *antithetical* to its policy of democratic social justice. Indeed, in November 1983 the country strengthened its policy of demilitarization with a proclamation by President Luis Alberto Monge of 'perpetual neutrality, active and not armed':

- 1. Prevent Costa Rica from entering any armed conflict;
- 2. Do not allow the deployment of foreign troops;
- 3. Do not allow the constitution of guerrilla groups;
- 4. Disarm armed groups on Costa Rican soil;
- 5. Defend international efforts to solve political disputes peacefully;
- 6. Continue to have no armed forces as part of the Costa Rican state;
- 7. Defend the country within the limits of the international legal framework.⁸

This policy was openly opposed by regional powers and generally thought imprudent, if not untenable, by the wider international community:

Defenceless, surrounded by increasingly powerful and well-armed neighbours and fearful of the ideological wars sweeping across their Central American isthmus, Costa Rica has decided to take a leaf from the Swiss manual of political survival in a hostile world by proclaiming its neutrality. But unlike the Swiss who have backed up their neutrality over the centuries with a powerful, well-trained citizens' army, Costa Rica is hoping that it will be defended by its obvious military impotence and its calls to international morality.⁹

It would be easy to assume that the decision to demilitarize, and then to solidify that position 35 years later with a policy of 'perpetual neutrality, active and not armed', was the result of a relative lack of power to contest regional instabilities. Similarly, it would be easy to assume that the demilitarization process and its proclaimed neutrality were representative of Costa Rican core values and an identity that pre-dated contemporary circumstances. However, both decisions were heavily debated and contested at the

⁵ José Figueres-Ferrer also served as constitutional President in 1953–58 and 1970–74, and as president of Partido Liberación Nacional (the National Liberation Party).

⁶ Reding, A. et al., 'Voices from Costa Rica', *World Policy Journal*, vol. 3, no. 2 (1986), p. 318.

⁷ Costa Rica still maintains a well-trained police force and a gendarmerie or Fuerza Pública (Public Force).

⁸ Huhn, S, 'Contested Cornerstones of Nonviolent National Self-Perception in Costa Rica: A Historical Approach', GIGA Research Programme: Violence, Power and Security, no. 101 (2009), <https://www.files.ethz.ch/isn/100181/ wp101.pdf>, p. 18.

⁹ Jenkins, L., 'Costa Rica, with no armed forces, declares neutrality amid Central American Conflicts', *Washington Post*, 20 Dec. 1983, https://www.washingtonpost.com/archive/politics/1983/12/20/costa-rica-with-no-armed-forces-declares-neutrality-amid-central-american-conflicts/cd1c129a-02dc-4cda-91cf-104698c6lbff/>

time. An article in *La Prensa Libre* on 18 November 1983 reported 'non-existent unity in the proclamation of neutrality'.¹⁰

The establishment of an unarmed and neutral Costa Rica was highly contested. It has underpinned the country's regional and international security, but it was not a fait accompli. For example, in 2003 Costa Rica joined the US-led 'Coalition of the willing' to oust Iraq's Saddam Hussein from power—largely as an expression of the country's opposition to terrorism—but later had to ask to be removed from the list of coalition partners after a Costa Rican law student, Luis Roberto Zamora-Bolaños, challenged the legality of Costa Rica's participation. The Costa Rican Constitutional Court, a chamber of Costa Rica's Supreme Court, unanimously sided with Zamora, ruling that the inclusion of Costa Rica in the coalition 'was against the Constitution, Costa Rica's neutrality declaration, international law, and the United Nations system'.¹¹

This decision paved the way for another important ruling in 2014, when the Costa Rican Congress proclaimed peace to be a fundamental human right, perpetual neutrality in conflicts between and within states, and prohibited the establishment of any arms manufacturing industry within the country's borders.¹² By adopting non-militarization and neutrality as strategic national and foreign policy objectives, Costa Rica has become the antithesis to conventional thinking that equates national security with the expansion of military capabilities. Carving out such a 'regional niche' has allowed 'a small, vulnerable State' to 'do well by doing good',¹³ but this has been hard earned—and is an ongoing political process.

How does the establishment of such norms lead to a cooperative security system that works?

Costa Rica's policies of non-militarization and neutrality reinforce the country's multilateral and cooperative approaches to regional and international security. Costa Rica has enshrined responsible multilateralism as the foundation of its foreign policy; a foreign policy that reflects the principles of regional and international organizations on development, democracy and human rights in pursuit of peace and security. In modelling its core values on such norms, Costa Rica was able to formulate a future-positive role for itself at the Inter-American and United Nations systems, which allowed it to counter the obstacles faced by a small and relatively poor country and flourish as a regional and international role model.

Of course, Costa Rica may be a 'special case' to the extent that it is not realistic to expect that its regional neighbours will follow its example with regard to formally disarming and adopting neutrality.¹⁴ Indeed, peace scholar Johan Galtung 'cautions that the disarmament of Costa Rica should be seen in the light of the major use of the army in South America—for military coups, mainly to preserve the existing social order—which in Costa Rica is relatively egalitarian. Consequently, there is less need for military coups from above or below, and less need for an army'.¹⁵

¹⁰ See Huhn (note 8), p. 19.

¹¹ See Sala Constitucional de la Corte Suprema De Justicia, http://sitios.poder-judicial.go.cr/salaconstitucional/ Constitucion%20Politica/Sentencias/2004/04-09992.htm>, accessed 27 Oct. 2016 (in Spanish).

¹² See Proclamación de la Paz como derecho humano y de Costa Rica como país neutral, http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=79024&n-Valor3=99732&strTipM=TC, accessed 27 Oct. 2016 (in Spanish).

¹³ Brysk, A., 'Global good samaritans? Human rights foreign policy in Costa Rica', *Global Governance*, vol. 11, no. 4 (2005), p. 459.

¹⁴ Panama and Haiti have also demilitarized, with varying degrees of success.

¹⁵ Harris, G., 2004. 'Central American demilitarisation: a model for small countries?', ed. G. Harris, *The Case for Demilitarisation in sub-Saharan Africa: Cost Effective Alternatives to the Military* (Institute of Security Studies: Pretoria, 2004), p. 192.

However, Costa Rica's regional and international success stems not from the possibility that its regional neighbours will blindly replicate its demilitarization/neutrality polices, but from its ability to leverage the power of its domestic norms as its decisive source of influence: 'Costa Rica has made collective security work, so that multilateralism is seen as a source of security rather than a sacrifice of national self-determination'.¹⁶ While international norms are generally regarded as being constraining inasmuch as 'they enjoin an actor from behaving in a particular way',¹⁷ the 'argument can [also] be taken a step forward to a point in which they empower policy makers who have internalized those norms and who behave consistently with those norms'.¹⁸

Nowhere is this more evident than in the regional peace process undertaken by Costa Rica's President Oscar Arias during his first administration (1982–86), which led to the signing of the Esquipulas II Accords, or the Procedure to Establish a Firm and Lasting Peace in Central America, in 1987. That same year, Arias received the Nobel Peace Prize for his efforts to bring peace to Central America.

Costa Rica's multilateral and cooperative security is based firmly on Arias' idea that '[a]s long as nations do not feel protected by strong regional organizations [such as the Organization of American States (OAS)] with real power to act, they will continue to arm themselves at the expense of their people's development'.¹⁹ The remarkable lynchpin to Costa Rica's multilateral and cooperative security is that the country derives its 'real power to act' not from physical military strength, but by the strength of the Costa Rican example that small states with principled positions can make a difference. Indeed, Costa Rica leverages its multilateralism as a source of security on several fronts—most notably its participation in and leadership of the various international and regional processes surrounding arms control, disarmament and non-proliferation.

Costa Rica's diplomatic leadership at the regional and international levels

That Costa Rica's ability to leverage the power of its domestic norms is the pivotal source of its influence is evident at the regional level, where the country has been credited with the 'movement of the OAS and its member nations toward a mutual vision of shared security goals, promoted through a hemispheric collective security organization and realignment of nations' military forces'.²⁰ In particular, Costa Rica played a major role during the negotiation and adoption of the Inter-American Democratic Charter of 2001, and in the discussions on the new multidimensional security concept that led to the adoption of the Declaration of Multidimensional Security in the Americas, which was adopted at the OAS Special Conference on Security in 2003.²¹

In addition, 'Costa Rica has helped to construct the Inter-American Human Rights System, which is among the strongest regional regimes, and has served as an advocate for human rights treaties, institutions, and enforcement within that system'.²² In recognition of its commitment to human rights, Costa Rica is the seat of the Inter-American Court of Human Rights, the Inter-American Institute of Human Rights and the University for Peace.

¹⁶ Brysk (note 13), p. 460.

¹⁷ Raymond, G. A., 'Problems and prospects in the study of international norms', *Mershon International Studies Review*, vol. 41, no. 2 (1997), p. 214.

¹⁸ von Feigenblatt (note 3), p. 13.

¹⁹ Government of Costa Rica, 'The words that hold up this building', Statement by the President of Costa Rica, Oscar Arias Sanchez, 19 Nov. 2008.

²⁰ Fryer, W. A., 'Prospects for collective security in the western hemisphere', 31 Aug. 1993.

²¹ OAS, Special Conference on Security, Mexico City, 27–28 Oct. 2003, Declaration on Security in the Americas, https://www.oas.org/en/sms/docs/DECLARATION%20SECURITY%20AMERICAS%20REV%201%20-%20 28%200CT%202003%20CE00339.pdf>.

²² Brysk (note 13), p. 449.

As one of the 33 members of the Community of Latin American and Caribbean States (CELAC), Costa Rica strongly supported the formal proclamation of Latin America and the Caribbean as 'a Zone of Peace' during the Second CELAC Heads of State and Government Summit, held in Havana, Cuba, in January 2014.²³ CELAC's Zone of Peace Declaration builds on other regional and subregional collective security mechanisms,²⁴ and was welcomed by the UN Human Rights Council's Independent Expert on the Promotion of a Democratic and Equitable International Order, Alfred Maurice de Zayas, who noted that 'the establishment of zones of peace and cooperation in an increasing number of regions of the world will carry the commitment of governments towards a significant decrease in military budgets and spending'.²⁵

Costa Rica's leveraging of its multilateralism as a source of regional security is twofold: it is based, first, on Costa Rica's position that enhancing its citizens' security—or human security—is a stronger foundation for security than can be achieved by enhancing military strength; and, second, on the country's imperative to 'do business by other means' in the absence of a military that might otherwise do the talking.

Costa Rica's ability to leverage the power of its domestic norms as its pivotal source of international influence is evident at the international level, where the country has been at the forefront of UN efforts on arms control, disarmament and non-proliferation—all of which are explicitly recognized by the organization as a necessary precondition for international peace and security.

In 2006 Costa Rica, alongside Argentina, Australia, Finland, Japan, Kenya, and the United Kingdom, introduced United Nations Resolution 61/89, 'Towards an arms trade treaty: establishing common international standards for the import, export and transfer of conventional arms',²⁶ which laid the foundations for the Arms Trade Treaty negotiating conferences that took place in July 2012 and March 2013. The Arms Trade Treaty was adopted by a vote at the UN General Assembly on 2 April 2013, and Costa Rica had the honour of introducing the draft resolution.

During its 2008 presidency of the UN Security Council, Costa Rica introduced the Costa Rican Consensus, which was rooted in the idea that international lending institutions should reward countries that decrease arms spending and increase investment in education, health care, housing and the environment. In his statement, President Oscar Arias criticized 'the perverse logic that leads a poor nation to spend excessive sums on its armies, and not on its people'²⁷ as the antithesis of human security. The Costa Rica Consensus instead sought to reinforce 'ethical spending';²⁸ and to 'reward developing countries that divert fewer of their resources to the purchase of arms'.²⁹ Regrettably, the Costa Rican Consensus did not receive the support from international finance institutions that would have been necessary for its implementation.

²³ 'Proclama de América Latina y el Caribe como Zona de Paz', <http://celac.cubaminrex.cu/articulos/proclamation-latin-america-and-caribbean-zone-peace>, accessed 6 Jan. 2017 (in Spanish).

²⁴ Such regional and subregional collective security mechanisms include, but are not limited to, the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America (also known as the Treaty of Tlatelolco) (1967); the South Atlantic Peace and Cooperation Zone (1986); the Declaration of South America as a Zone of Peace and Cooperation (2002); and the Union of South American Nations (UNASUR)'s Heads of State and Government Declaration to consolidate South America as a Zone of Peace and Cooperation (2012).

²⁵ United Nations, Office of the United Nations High Commissioner for Human Rights, 'CELAC/ Zone of Peace: "A key step to countering the globalization of militarism", UN Expert', Press release, Geneva, 3 Feb. 2014, ">http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=14215&>.

²⁶ See 'Arms Trade Treaty', Reaching Critical Will, http://www.reachingcriticalwill.org/disarmament-fora/att. See also United Nations, General Assembly resolution 61/89 of 18 December 2006, ">http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/61/89&Lang=E>.

²⁷ Government of Costa Rica (note 19).

²⁸ United Nations, Government of Costa Rica, 'Towards the Costa Rica consensus: development as an ethical imperative', Concept Paper (version 2.0) presented at the High-Level Dialogue of the Economic and Social Council (ECOSOC) with the Bretton Woods Institutions, 16 Apr. 2007.

²⁹ Government of Costa Rica (note 19).

In 2007 Costa Rica and Malaysia presented the Model Nuclear Weapons Convention, which was followed by other working papers on this issue, to the Non-Proliferation Treaty (NPT) Review Conference.³⁰ Since 2010, Costa Rica has participated in three conferences on the Humanitarian Impact of Nuclear Weapons, held in Oslo, Nayarit, Mexico, and Vienna; and in the UN's 2013 High-level Meeting of the General Assembly on Nuclear Disarmament.

At the 2015 General Debate of the Review Conference of the Parties to the Non-Proliferation Treaty, Costa Rica leveraged its position as a non-militarized, neutral state to advocate that:

Human security should replace the traditional paradigm of States' security; an outdated paradigm that maintains 16 000 nuclear warheads in the world, many of which are on high alert status and susceptible even to cyber-attacks....At this center peace and security must be seen as a 'global public good'. This 'good' is not obtained by multiplying and modernizing nuclear weapons; nor is it achieved by unilateral or bilateral reductions that are not verifiable, transparent, and not under the watchful eye of the International Atomic Energy Agency (IAEA). Nor it is obtained by delaying the Conference on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction. Rather this global public good is obtained by preventing horizontal and vertical proliferation of weapons of mass destruction and by insisting on compliance with 'all' the obligations arising from relevant treaties, and not just 'some'. This 'good' requires us to implement our disarmament commitments under article VI of the NPT made at the 1995, 2000 and 2010 Review Conferences, and, in particular, steps 6, 8, and 9 of the 2000 Outcome Document and Action 5 of Action Plan of 2010.³¹

Costa Rica's participation in and discourse at these meetings have been crucial in building a case for banning nuclear weapons even without the participation of the nuclear-armed states.

Costa Rica has similarly assumed a leadership role at the forefront of negotiations held in 2013 and 2016 on a complete nuclear weapons ban as part of the UN's openended working group (OEWG) to advance negotiations on nuclear disarmament, which is mandated to 'substantively address concrete effective legal measures, legal provisions and norms that would need to be concluded to attain and maintain a world without nuclear weapons'.³²

Since the beginning of the 2016 session of the OEWG, Costa Rica has contributed to five documents pertaining to nuclear disarmament: (*a*) an analysis paper on how best to progress multilateral nuclear disarmament negotiations; (*b*) a model Nuclear Weapons convention; (*c*) an analysis paper on how best to develop and strengthen norms for attaining and maintaining a world without nuclear weapons; (*d*) a series of recommendations on nuclear disarmament from the perspective of a nuclear weapon-free country; and (*e*) an analysis of the 'legal gap' that stymies nuclear disarmament negotiations. In October 2016, the work of the OEWG reached a pinnacle with the adoption, by the First Committee of the General Assembly, of Resolution L.41, in which it was decided to convene negotiations in 2017 on a 'legally binding instrument to prohibit nuclear weapons, leading towards their total elimination'.³³

³⁰ United Nations, Working Paper NPT/CONF.2015/WP.30, 'Humanitarian impact of nuclear weapons', submitted by Austria, Chile, Costa Rica, Egypt, the Holy See, Indonesia, Ireland, Malaysia, Mexico, New Zealand, Nigeria, the Philippines, South Africa, Sweden and Switzerland, 2015, http://www.un.org/en/conf/npt/2015/working-papers. shtml>.

³¹ United Nations, General Debate 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Government of Costa Rica, Statement by H.E. Juan Carlos Mendoza, Ambassador, Permanent Representative of Costa Rica to the United Nations, 29 Apr. 2015, http://www.un.org/en/conf/npt/2015/statements/pdf/CR_en.pdf // 2015, http://www.un.org/en/conf/npt/2015/statements/pdf // 2015, http://www.un.org/en/conf/npt/2015/statements/pdf // 2015, <a href=

³² United Nations, A/AC.286/WP.8, 23 Feb. 2016, http://www.reachingcriticalwill.org/images/documents/ Disarmament-fora/OEWG/2016/Documents/WP.08.pdf>.

³³ United Nations, document A/C.1/71/L.41, 14 Oct. 2016, <http://reachingcriticalwill.org/images/documents/ Disarmament-fora/lcom/lcom16/resolutions/L41.pdf>.

Conclusions

As Otto von Feigenblatt notes,³⁴ realist logic dictates that Costa Rica could never exert any significant influence in the 'anarchic' international arena of independent nation states. How, then, to account for the country's ability to establish and lead a multilateral and cooperative security system that works? Costa Rica is an increasingly important advocate of 'Human Security as Regional/International Security' at the United Nations and in other forums; and is viewed as a credible voice in this regard precisely because of its strategic choice to be a non-militarized/neutral state.

Costa Rica has become the public face and the public voice of positive disarmament outcomes, and has successfully established—indeed flourished under—a multilateral and cooperative security system that embodies demilitarization, neutrality, economic and social development, international law and human rights as its political and diplomatic currency.

About the Editors



KEVIN MILETIC (Switzerland) is Project Manager of the Strategic Concept for Removal of Arms and Proliferation (SCRAP) and a PhD Candidate at the Centre for International Studies & Diplomacy, School of Oriental and African Studies (SOAS), University of London.



DAN PLESCH (United Kingdom) is Director of SCRAP and Director of the Centre for International Studies and Diplomacy at SOAS, University of London.



TARIQ RAUF (Canada) is Director of the Disarmament, Arms Control and Non-Proliferation Programme at the Stockholm International Peace Research Institute.

About the Authors



MARITZA CHAN (Costa Rica) is a Diplomat at the Ministry of Foreign Affairs, Costa Rica.



SERGIO DUARTE (Brazil) is a former UN High Representative for Disarmament Affairs, and a former Brazilian Ambassador.



PATRICIA FLOR (Germany) is Ambassador and Federal Government Commissioner for Disarmament and Arms Control, Federal Foreign Office of Germany.



ANGELA KANE (Germany) is a Senior Fellow at the Vienna Centre for Disarmament and Non-Proliferation, and a former UN High Representative for Disarmament Affairs.



PAUL MEYER (Canada) is a Senior Fellow at The Simons Foundation, a Fellow in International Security at Simon Fraser University and a former Canadian Ambassador for Disarmament.



ABDUL SAMAD MINTY (South Africa) is a former South African Ambassador and a former Deputy Director-General, Ambassador and Special Representative for Disarmament at the South African Department of International Relations and Cooperation.



JENNY NIELSEN (Denmark) is a Senior Research Associate at the Vienna Centre for Disarmament and Non-Proliferation.



Senior Adviser to the Secretary General of the Organization for Security and Co-operation in Europe (OSCE). Ambassador Tanner was at the OSCE at the time of writing his contribution. He is now at the Federal Department of Foreign Affairs of Switzerland.

FRED TANNER (Switzerland) is Ambassador and



TRIYONO WIBOWO (Indonesia) is Ambassador and Permanent Representative of Indonesia to the United Nations and Other International Organizations in Geneva, and a Former Vice-Minister of Foreign Affairs.



STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE Signalistgatan 9 SE-16972 Solna, Sweden Telephone: +46 8 655 97 00 Email: sipri@sipri.org Internet: www.sipri.org