Policy Brief No. 11 April 2014

Treaty Based Regimes as Stepping Stones to a Nuclear-Weapon-Free World

Ramesh Thakur

Summary

Last year, the problems of Syria's chemical weapons and of Iran's pursuit of nuclear breakout capability produced agreements within the frameworks of the Chemical Weapons Convention and the NPT, demonstrating the utility of treaty-based regimes for containing WMD threats. Although most nuclear weapons reductions have resulted from bilateral US-Russian arms control agreements, this paper looks at several treaty-based regimes as stepping stones to a nuclear-weapon-free world: the CPPNM, its amendment and ICSANT for assuring security of nuclear materials; nuclear-weapon-free zones in several regions of the world for making nonnuclear-weapon assurance doubly sure; the CTBT for ending nuclear testing; and the NPT as the mother-lode of all nuclear treaty regimes for having limited the spread of nuclear weapons while facilitating access to nuclear energy for peaceful uses. Acknowledging the immense security benefits of the NPT, the paper argues that its accumulating anomalies imply the search for a comprehensive and universal nuclear weapons convention to complete the NPT agenda of nuclear disarmament. In order not to jeopardize the NPT-centred security order, however, this has to be done delicately and carefully.

1. Last year, the United Nations Security Council unanimously adopted Resolution 2118 (27 September 2013) requiring the destruction of Syria's chemical weapons stockpiles in line with the 1997 Chemical Weapons Convention (CWC) under UN supervision and International Atomic Energy Agency (IAEA) verification. On 24 November, talks in Geneva resulted in an

interim deal whereby Iran agreed to scale back its weapon-sensitive material and activities under IAEA oversight in return for some sanctions relief. The two sets of enforcement measures reflect two multilateral arms control treaties: the CWC and the 1968 Nuclear Non-Proliferation Treaty (NPT), reaffirming the value, utility and continuing relevance of such arms control regimes. That there is life yet in multilateralism was also demonstrated with the adoption of the Arms Trade Treaty by the UN General Assembly on 2 April 2013 to regulate the estimated US \$70bn global arms commerce. The IAEA reported that Iran's stockpile of uranium enriched to just under 20 percent the threshold for highly enriched uranium (HEU) and just a short technical step away from weapon-grade HEU - had fallen from 196kg in November to 161kg in February and been halved by mid-April.1

2. This paper does not cover all weapons of mass destruction (WMD) regimes,² but is restricted to the challenge of nuclear weapons, and to treaty-based regimes, thus omitting initiatives, groups and joint enterprises like the Nuclear Security Summits, Nuclear Suppliers Group, and the Proliferation Security Initiative. The purpose is to examine the various treaty-based regimes as stepping stones to a nuclear-weapon-free world.

¹ Fredrik Dahl, "Iran's most sensitive uranium stockpile falls after nuclear deal," Reuters, 21 February 2014, http://www.reuters.com/article/2014/02/21/us-iran-nuclear-iaea-idUSBREA1K1B920140221); "UN: Iran cuts nuclear assets despite slow progress on uranium site," Global Security Newswire, 17 April 2014.

² Paper prepared for conference on "A Nuclear-Weapon-Free World: From Conception to Reality," Institute for Defence Studies and Analyses, New Delhi, 2–3 April 2014.

- 3. Two paradoxes set the context. First, the most substantial progress so far on dismantlement and destruction of nuclear weapons has occurred as a result of bilateral US and Soviet/Russian treaties, agreements and measures, most recently New START. But a nuclearweapon-free world will have to rest on a legally binding multilateral international instrument such as a nuclear weapons convention. Second, the existing treaty-based regimes have collectively anchored international security and can be credited with many major successes and significant accomplishments. But their accumulating anomalies, shortcomings and flaws suggest that they, or at least some of them, may have reached the limits of their success. The critical challenge therefore becomes how to manage the transition to their replacement for the post-nuclear order without undermining their achievements and jeopardizing the security of the existing nuclear orders.
- 4. This paper addresses this challenge for four specific multilateral treaty-based regimes: nuclear security, nuclear-weapon-free zones (NWFZ), the Comprehensive Nuclear Test Ban Treaty (CTBT), and the NPT. The context for all four is the reality that the global numbers of nuclear warheads have fallen dramatically from over 70,000 in the 1980s to fewer than 17,000 today, chiefly as a result of bilateral measures between Moscow and Washington. Most recently, Russia and the US negotiated, signed, ratified and have brought into force a new Strategic Arms Reduction Treaty (START) to cut back their nuclear arsenals by one-third, limiting each to 1550 deployable warheads. But New START left both US and Russian stockpiles intact, did not address the high-alert status for 2,000 of their warheads, and failed to weapons-modernization underway. Since then, in addition to the already existing discord over missile defence and conventional arms imbalances, the unexpected blow-up of a serious security crisis in Ukraine has further dampened prospects of an already bleak outlook for nuclear arms control.

Nuclear Security

5. The impetus to nuclear security emerging as a de facto fourth leg of the nuclear arms control agenda (the other three being disarmament, non-proliferation and peaceful uses of nuclear energy) owes much to the terrorist attacks of 11 September 2001. Nuclear security refers to measures designed to address the risks associ-

- ated with theft and trafficking in nuclear and radiological materials, sabotage of nuclear facilities, and the danger of terrorists acquiring and using a nuclear weapon. Because a major nuclear security incident anywhere would have far-reaching consequences, effective nuclear security must be a global concern.
- 6. The nuclear security regime (patterns of behaviour around which actor expectations converge) consists of a web of agreements, regulations, resolutions and guidelines. UN Security Council Resolution 1540 (28 April 2004) established for the first time binding obligations on all UN member states under Chapter 7 of the UN Charter to take and enforce effective measures against WMD proliferation, their means of delivery and related materials. Although it is about WMD in general, it has significant implications for nuclear security also. Further progress has been made in national implementation since leaders' level Nuclear Security Summits began in 2010. But nuclear security still lags behind the other nuclear regimes in safety, safeguards and arms control.
- 7. There are three main global treaties underpinning nuclear security. The Convention on the Physical Protection of Nuclear Materials (CPPNM), adopted in Vienna in 1979 and signed in Vienna and New York in 1980, entered into force in 1987. It establishes measures related to the physical protection of nuclear material during international transport and a general framework for cooperation among states in the protection, recovery and return of stolen nuclear material. A major amendment adopted by consensus in 2005 (but not yet in force) requires state parties to protect nuclear facilities and material in peaceful domestic use, storage and transport.
- 8. The International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) was adopted unanimously by the United Nations General Assembly on 13 April 2005. It was deliberately designed to have the broadest possible coverage in order to fill perceived CPPNM gaps in scope and enforcement. Its focus is on individual criminal responsibility of persons for specific acts of a terrorist nature; it does not take a position on the legality or otherwise of the use and threat of use of nuclear weapons. The convention's scope extends to a range of acts and potential targets, including nuclear power plants and reactors, and attempts or threats to commit terrorist acts or participate in them as accomplices.

Table 1: Status of CPPNM	. CPPNM Amendment.	and ICSANT	(31 March 2014)

	Date adopted	Entry into Force	Parties	Signed but not Parties	
CPPNM	26.10.1979	8.2.1987	149	1	
CPPNM Amendment	8.7.2005	_	74	N/A	
ICSANT	13.4.2005	7.7.2007	92	23	

Sources: http://www.iaea.org/Publications/Documents/Conventions/cppnm amend status.pdf; http://treaties.un.org/Pages/ViewDetailsIII.aspx?&src=TREATY&mtdsg no=XVIII~15&chapter=18 &Temp=mtdsg3&lang=en. All accessed 19 April 2014.

- 9. ICSANT seeks to do three things: to protect against attacks on a broad range of nuclear targets, punish the perpetrators through domestic criminalization of acts of nuclear terrorism, and promote international cooperation in the prevention and investigation of acts of nuclear terrorism and the prosecution or extradition of the alleged terrorists. To this end, parties are required to make the offences specified in the convention criminal offences under national law, and to provide stiff penalties appropriate to the gravity of the crimes. To facilitate the "prosecute or extradite" regime, these offences are explicitly described as "nonpolitical" so that the defence of any of these acts being a political offence is not available to anyone seeking to block extradition.
- 10. Their present status is shown in Table 1. The CPPNM has 149 state parties, which means that about one-quarter of the world's states have still not acceded to it. By late March 2014, only 74 of the 100 accessions needed for the 2005 amendment to enter into force had been received. ICSANT came into effect in 2007 but remains far from universal: a total of 115 nations have signed and 92 have ratified it.
- 11. The current nuclear security regime is reliant almost entirely on national protection and control systems in those countries that possess nuclear and radiological materials. It needs to be more comprehensive instead of incremental, covering all materials and all facilities at all times; integrated rather than disparate and piecemeal; and backed by global mechanisms and standards in order to make the regime both robust and resilient. It also needs effective

monitoring requirements, and authority, procedures and institutions for enforcing agreed commitments. Without these, accountability is lacking and states cannot have confidence in the international nuclear security system.

12. The remaining tasks are to build a unified and cohesive nuclear security regime that is robust, resilient and rugged; that prioritizes and emphasizes weapon-usable fissile material protection but also embraces radiological sources and security culture; and that nests nuclear security in the other nuclear regimes dealing with peaceful uses, non-proliferation and disarmament. Gaps in the existing national and multilateral machinery of nuclear security include lack of universality, binding standards, transparency and accountability mechanisms, compulsory IAEA oversight, and insufficient attention to nuclear weapons.3 It is necessary to structure incentives and disincentives in such a way as to shift the balance of standards, arrangements, understandings and practices towards threat elimination and risk minimization. The final key issue to consider is whether the IAEA should become the main focal point for nuclear security cooperation, with the resources to match.

http://www.internationalaffairs.org.au/australian outlook /hard-won-progress-at-the-nuclear-security-summits/.

³ See Ramesh Thakur, "The Global Governance Architecture of Nuclear Security," *Policy Analysis Brief* (Muscatine, Iowa: Stanley Foundation, March 2013); Tanya Ogilvie-White, "Hard-won progress at the Nuclear Security Summits," *Australian Outlook*, 4 April 2014,

Table 2: The World's Nuclear-Weapon-Free Zones

Zone	Opened for signature	Entry into Force	No. of State Parties
Latin America (Treaty of Tlatelolco)	14 Feb 1967	25 Apr 1969	33
South Pacific (Treaty of Rarotonga)	6 Aug 1985	11 Dec 1986	13
Southeast Asia (Treaty of Bangkok)	15 Dec 1995	27 Mar 1997	10
Africa (Treaty of Pelindaba)	11 Apr 1996	15 Jul 2009	37
Central Asia	8 Sep 2006	21 Mar 2009	5

Notes

The five NPT nuclear weapons states (NWS) have recognized Mongolia's self-declared national nuclear-weapon-free status and have provided Mongolia with negative security assurances and pledged to respect its nuclear-weapon-free status.

Other treaties that include denuclearization provisions are the Antarctic Treaty, the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement), and the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (Seabed Treaty).

Source: http://www.un.org/disarmament/WMD/Nuclear/NWFZ.shtml.

Nuclear-Weapon-Free Zones (NWFZ)

13. A NWFZ deepens and extends the scope of the NPT and embeds the non-nuclear weapon status of NPT state parties in additional treatybased arrangements.4 It denotes an area established by a group of states by a treaty which defines the status of total absence of nuclear weapons to which the zone shall be subject, and sets up a system of verification and control to ensure compliance. NWFZs are promoted by those anxious to disengage from the dangers of nuclearism of others, and in so doing help to relax military and political tension. The very fact of negotiating them successfully is a major confidence-building measure among regional states. The first NWFZ was established in (uninhabited) Antarctica in 1959. Since then, five more have been established in Latin America and the Caribbean, the South Pacific, Southeast Asia, Africa, and Central Asia (Table 2). Mongolia has also declared itself a national NWFZ in

14. A NWFZ is characterized by four "Noes": no testing, possession, deployment or use of nuclear weapons. Other attributes vary from one zone to another. NPT parties can accept the stationing of nuclear weapons on their territories, as long as they do not exercise jurisdiction and control over the weapons. A NWFZ prohibits such stationing. It can go beyond the NPT also in including protocols that commit the nuclear powers not to use nuclear weapons against zone members, although this remains incomplete in some key cases (Table 3).5 Thus a NWFZ seeks to insulate specific geographical regions from the spectre of future nuclear warfare. This is why NPT review conferences have repeatedly affirmed support for existing NWFZs and encouraged the development of additional NWFZs.

law. New NWFZs have been proposed for the Middle East, Northeast Asia and the Arctic.

⁴ See Ramesh Thakur, ed., *Nuclear Weapons-Free Zones* (New York: St. Martin's Pre ss, 1998).

⁵ On 2 May 2011, President Barack Obama did submit the protocols to the treaties of Rarotonga and Pelindaba to the US Senate for ratification – fifteen years after signature – but there is no indication of when, if at all, Senate ratification might be expected.

Table 3: Dates of NWS Ratification of NWFZ Treaty Protocols

	China	France	Russia	UK	USA
Tlatelolcoa					
Protocol I	N/A	24.8.1992	N/A	11.12.1969	23.11.1981
Protocol II	12.6.1974	22.3.1974	8.1.1979	11.12.1969	12.5.1971
Rarotonga ^b					
Protocol I	N/A	20.9.1996	N/A	19.9.1997	Not yet
Protocol II	21.10.1988	20.9.1996	21.4.1988	19.9.1997	Not yet
Protocol III	21.10.1988	20.9.1996	21.4.1988	19.9.1997	Not yet
Pelindaba ^c					
Protocol I	10.10.1997	20.9.1996	5.4.2011	12.3.2001	Not yet
Protocol II	10.10.1997	20.9.1996	5.4.2011	12.3.2001	Not yet
Protocol III	N/A	20.9.1996	N/A	N/A	N/A

Notes

- a. **Tlatelolco** (Latin American NWFZ): Parties to Protocol I agree to apply key provisions of the treaty to their territories within the zone. Parties to Protocol II agree to respect the treaty's aims and provisions and provide negative security assurances to state parties.
- b. **Rarotonga** (South Pacific NFZ): Parties to Protocol I agree to apply key provisions of the treaty to their territories within the zone (open to France, the UK and US). Parties to Protocol II agree to respect the treaty's aims and provisions and provide negative security assurances to state parties (open to the five NPT NWS). Parties to Protocol III agree not to conduct nuclear tests anywhere in the SPNFZ (open to the five NPT NWS).
- c. **Pelindaba** (African NWFZ): Parties to Protocol I agree to respect the treaty's aims and provisions and provide negative security assurances to state parties (open to the five NPT NWS). Parties to Protocol II agree not to conduct nuclear tests or assist or encourage nuclear testing anywhere in the African NWFZ (open to the five NPT NWS). Parties to Protocol III agree to apply key provisions of the treaty to their territories within the zone (open to France and Spain).

In addition:

Bangkok (Southeast Asian NWFZ): The treaty's one protocol is open to the five NPT NWS but has not yet been signed by any of them, chiefly due to NWS concerns about the treaty's geographical scope. As with other NWFZs, the parties to the protocol would agree to respect the treaty's aims and provide negative security assurances to state parties.

Central Asia: The treaty's one protocol is open to the five NPT NWS but has not yet been signed by any of them. A prominent concern for some NWS is that the treaty does not affect rights and obligations of the parties under international treaties concluded prior to entry into force of the CANWFZ, so may allow Russia to station nuclear weapons in Central Asia under the 1992 Tashkent Collective Security Treaty. As with other NWFZs, the parties to the protocol would agree to respect the treaty's aims and provide negative security assurances to state parties.

Source: http://www.un.org/disarmament/WMD/Nuclear/NWFZ.shtml.

15. The most substantial gap in relation to existing NWFZs is the failure of the relevant NWS to accede to the various protocols (Table 3). Additionally, there is the question of proposed new zones for regions such as Northeast Asia and the Middle East. The 2010 NPT Review Conference requested the UN Secretary-General, Russia, the UK and the US to convene a conference in 2012 on a Middle East WMD-Free Zone. Efforts to convene a conference in 2012 ultimately stalled in the face of growing regional instability and the absence of agreement on what the conference might reasonably be expected to achieve. All existing NWFZs have confirmed and consolidated the non-NWS status of regional countries. It is far from clear that new zones can be created as the means of achieving the denuclearization of an existing nuclear-armed state (North Korea, Israel). Circumstances are particularly unpropitious for a Middle East NWFZ where key states are in a formal state of war and/or non-recognition, convulsed in a brutal civil war, not NPT members, host to nuclear weapons of a NWS (NATO member Turkey), pursuing a breakout capability, (or in Northeast Asia have already conducted several nuclear tests), etc.6 Moreover, as an NPT non-state party, Israel is particularly wary of the proposal's origins in a document to which it did not subscribe and which singled out Israel for criticism.

Comprehensive Nuclear Test Ban Treaty (CTBT)

16. The requirement for the development and modernization of a large number of nuclear-weapons designs was justified during the Cold War by the need to maintain a technically credible deterrent posture. The justification became less persuasive after the Cold War and another vital element was added to the non-proliferation structure with a ban on nuclear testing that is comprehensive, universal and verifiable. As of 31 March 2014, 183 countries had signed and 162 had ratified the CTBT. This still leaves eight countries, out of the 44 with nuclear reactors listed in Annex 2 of the treaty, whose signatures (India, North Korea, Pakistan)

⁶ See Pierre Goldschmidt, "A Top-Down Approach to a Nuclear Weapons Free Zone in the Middle East," and Ariel Levite, "Reflections on "The Regional Security Environment and Basic Principles for the Relations of the Members of the Zone": papers presented at the EU Non-proliferation Consortium seminar, Brussels, 5–6 November 2012, http://carnegieendowment.org/2012/11/05/top-down-approach-to-nuclear-weapons-free-zone-in-middle-east/ece2 and www.non-proliferation.eu/documents/backgroundpapers/levite.pdf.

and ratifications (China, Egypt, Iran, Israel, USA) are needed to bring it into force. Since the treaty's adoption, just a handful of nuclear-weapon test explosions have been conducted, five by India and six by Pakistan in 1998, and three by North Korea in the past decade (one each in 2006, 2009 and 2013).

17. The US maintains a voluntary moratorium on nuclear test explosions but conducts "subcritical" tests of nuclear material.⁸ The US is also the largest single contributor to the CTBTO's budget and additionally makes a substantial voluntary contribution. However, the Senate rejected a request to ratify the treaty in 1999 and a substantial number of Senators remain firmly opposed to US ratification. A second rejection by the Senate could prove fatal.

18. China also maintains a voluntary moratorium on testing, supports the treaty's early entry into force in principle, participates in the work of the Preparatory Commission for the CTBT Organization (CTBTO) and has been preparing for national implementation of the treaty. The National People's Congress is said to be going through "the ratification formalities in accordance with the relevant constitutional procedure." The formal conclusion of this procedure would likely quickly follow US ratification, although Beijing does not acknowledge or imply any link to ratification by another state.

19. Similarly, it is not clear why India has not yet ratified the CTBT other than a difficult domestic political environment. There are no technical requirements for more tests within its professed doctrine of credible nuclear deterrence. A future nationalist government could break the test moratorium, invite signifi-

⁷ http://www.ctbto.org/the-treaty/.

⁸ Gaukhar Mukhatzhanova, *Implementation of the Conclusions And Recommendations for Follow-On Actions Adopted at the 2010 NPT Review Conference Disarmament Actions 1–22: Monitoring Report* (Monterey, CA: James Martin Center for Non-proliferation Studies, Monterey Institute of International Studies, April 2012), p. 48.

⁹ Viyyanna Sastry, "The Poor Prospects of the CTBT Entering Into Force," 9 January 2012, Institute for Defence Studies and Analyses,

http://www.idsa.in/idsacomments/ThePoorProspectsofth eCTBTEnteringIntoForce cvsastry 090112.

 $^{^{\}rm 10}$ Statement by Ambassador Zhang Yan to the Article XIV Conference, 4 September 2003,

http://ctbto.org/fileadmin/content/reference/article_xiv/2003/statements/0309_pm/0409_am/05_china_e.pdf.

cant international cost, yet gain no technical dividend. Why not foreclose an option, that simply does not compute, by ratifying the CTBT now?

20. A related treaty-based regime that does not yet exist but many deeply desire would prohibit additional production of fissile material for nuclear weapons use. Unfortunately, Pakistan has consistently blocked the adoption of any program of work in the Conference on Disarmament in Geneva because it will not agree to Fissile Material Cut-off Treaty (FMCT) negotiations in the absence of prior agreement to include existing stocks of weapon-grade fissile material, where it believes itself to be at a disadvantage vis-à-vis India.

Nuclear Non-Proliferation Treaty (NPT)

21. The NPT is the mother-lode of all nuclear treaty-based regimes, embraced by virtually the entire family of nations. Yet at the same time, the nuclear arsenals of the N5 (the five acknowledged NWS: China, France, Russia, UK, US) expanded enormously after the NPT was in force, peaked in the mid-1980s, and have been falling since.11 Despite this history and background, a surprising number of arms control experts focus solely on the non-proliferation side to demand denial of technology and material to all who refuse to sign and abide by the NPT, and punishment of any who cross the threshold. The symbiotic link between nonproliferation and disarmament is integral to the NPT. Most countries gave up the weapons option in return for a promise by the N5 to eliminate their nuclear weapons. It was expected that nuclear disarmament could take some time. Accordingly, unlike the non-proliferation obligations, the disarmament obligation was not brought under international monitoring and enforcement. A lack of progress on disarmament makes it more challenging to hold the line on non-proliferation, while any additional or suspected instance of proliferation makes progress on disarmament more difficult. All parties need to accept the interrelationship between all three NPT pillars.

¹¹ The two parts of the story are told well in Richard Rhodes, *Arsenals of Folly: The Making of the Nuclear Arms Race* (New York: Knopf, 2007) and Jonathan Schell, *The Seventh Decade: The New Shape of Nuclear Danger* (New York: Metropolitan, 2007). See also Paul Lettow, *Ronald Reagan and His Quest to Abolish Nuclear Weapons* (New York: Random House, 2005).

22. The most successful arms control agreement in history, the NPT has kept the nuclear nightmare at bay for over four decades while underpinning and facilitating the global trade in nuclear material for peaceful purposes. The number of countries with nuclear weapons is still in single figures. There has been substantial progress in reducing the numbers of nuclear warheads over the past quarter century. But the threat has far from disappeared. In fact it remains acute. In current stockpiles, 5,000 of the 17,000 warheads are launch-ready, with 2,000 of these held on high operational alert.

23. At the heart of the NPT lie three bargains involving nuclear energy, non-proliferation and disarmament:

- The non-NWS established a bargain among themselves never to acquire nuclear weapons.
- They entered into a deal with the nuclear powers whereby, in return for intrusive end-use control over nuclear and nuclearrelated technology and material, they were granted access to nuclear technology, components and material.
- They struck a second deal with the NWS that in return for the non-NWS forever forswearing the bomb, the NWS would pursue good faith negotiations for complete nuclear disarmament. Article 6 of the NPT is the only explicit multilateral disarmament commitment undertaken by all the NWS.
- 24. All three bargains are under strain. The problem is that there is a marked imbalance of obligations between the different bargains. The non-nuclear-weapon status was immediate, legally binding and internationally verifiable and enforceable. But there were no intrusive safeguards for the NWS in their roles as suppliers of critical technology and components. More importantly, their commitment to disarm was neither timetabled, precise nor binding. The disquieting trend of a widening circle of NPT-licit, NPT-noncompliant and extra-NPT nuclear weapons powers in turn has a self-generating effect in drawing other countries into the game of nuclear brinksmanship.
- 25. Problems inherent to the NPT have become clearer with time. Within the constraints of the NPT, a non-nuclear-weapon industrialized country like Japan can build the necessary infrastructure to provide it with the "surge" capacity to upgrade quickly to nuclear

weapons. By relying on the promise of signatories to use nuclear materials, facilities and technology for peaceful purposes only, it empowered them to operate dangerously close to a nuclear-weapons capability, as the world has discovered with Iran. It proscribed non-nuclear weapon states from acquiring nuclear weapons, but failed to design a strategy for dealing with non-signatory countries. It permits withdrawals much too easily as North Korea did in 2003. It is impossible to deal with non-NPT nucleararmed states from within the treaty. The odd result is that the five NPT-licit NWS are legally obligated to eliminate their nuclear weapons, but India, Israel and Pakistan have no such obligation. It also means that the non-NPT nuclear-armed states cannot be asked to join the NWFZ protocols, even if they are regionally relevant. And suggestions for NPT-equivalent disciplines to be applied to them have not gone very far to date.

26. There are other problems with the NPT. The definition of a nuclear weapon state is chronological – a country that manufactured and exploded a nuclear device before 1 January 1967. Israel, even though it is not an NPT signatory, will not openly admit to its nuclear weapons stockpiles. India and Pakistan have been accepted, more or less, as de facto nuclear weapons powers.

27. The NPT may be creaking even with respect to its nuclear energy bargain as the nexus of security, economic, energy and environmental imperatives can no longer be adequately nested within that one old regime. More countries are bumping against the nuclear weapons ceiling at the same time as the world energy crisis is encouraging a move to nuclear energy. The bulk of the international market is controlled by the N5 and their allies like Australia, Canada, Germany and Japan. There is interest in creating a new international market under the auspices of multilateral nuclear arrangements. 12 Internationalizing the nuclear fuel cycle and entrusting supply to a body like the IAEA would simultaneously ensure security of supply divorced from political hostilities, and eliminate the need for enrichment and reprocessing plants in countries interested in acquiring nuclear power for civilian use.13

28. The NPT anomalies and flaws mean that we need to look beyond and perhaps outside the treaty to realize the goal of nuclear elimination. But its very real, substantial and continuing contributions to international security mean that we must not jeopardize the regime until we are ready to replace it with a better regime. If the non-proliferation end of the NPT bargain collapses, the regime will become obsolete. If the Article 6 disarmament goal of the NPT is realized, the regime becomes redundant in its arms control aspects.

29. In the journey to a post-NPT world in which all nuclear weapons have been eliminated and their associated infrastructure has been destroyed under a universal and verifiable nuclear weapons convention, we have to guard against two critical risks. First, at present a significant number of countries (such as NATO members, as well as Australia, Japan, South Korea and others) shelter under the US nuclear umbrella to meet their perceived national security needs. With any hasty or premature dismantlement of the US nuclear stockpile, one or more of them could be tempted to break out and acquire an independent nuclear-weapons capability. Second, in moving towards a world without nuclear weapons, we have to make sure that we do not tip back into a world that is safe once again for major-power conventional wars like the First and Second World Wars.

Restoring the Centrality of Disarmament

30. That said, the logics of nuclear disarmament and non-proliferation are inseparable. Nuclear weapons were invented to pre-empt Germany, used to defeat Japan, and deployed most extensively against the Soviet Union. The emergence of new leaders in a range of nuclear policy-relevant countries, not the least the US, brought to power a post-Cold War generation less burdened by the rigid analytical and policy framework of the second half of the twentieth century. As the nuclear weapons' primary strategic rationale disappeared with the end of the Cold War, Washington's evolving nuclear policies acquired greater regional specificity. In East Asia, for example, continued US attach-

munity," APLN/CNND *Policy Brief* No. 4 (Canberra: Asia Pacific Leadership Network and Centre for Nuclear Non-Proliferation and Disarmament, June 2013); and John Thomson and Geoffrey Forden, "Multilateralism as a Dual-Use Technique: Encouraging Nuclear Energy and Avoiding Proliferation," *Policy Analysis Brief* (Muscatine, Iowa: Stanley Foundation, March 2008).

¹² Downstream agenda would have to include also the conversion of existing national facilities to international control while ensuring that new facilities being constructed are multinational from the start.

¹³ See John Carlson, "An Asia-Pacific Nuclear Energy Com-

ment to nuclear weapons and doctrines was seen as proof of a shift in stance - from deterrence to compellence and coercion - and provoked more assertive Chinese nuclear policies and nuclear brinksmanship by North Korea, which in turn produced self-vindication in Washington. 14 Conversely, even a cursory probing of the sources of instability that impel countries towards nuclear acquisition confirms the link between the denuclearization of individual states, security tensions in the regions in which they are located, and universal disarmament. Iran, for example, has hostile and potentially hostile nuclear weapons and troops of nuclear-armed powers all around it, in the east (India, Pakistan, US and NATO in Afghanistan), north (Russia), west (US in Iraq, Israel) and south (US naval forces). This explains why its national security strategy cannot be delinked from regional and global dynamics.

31. The most powerful stimulus to nuclear proliferation by others is the continuing possession of nuclear weapons by some. Tellingly, not one country that had the bomb in 1968 when the NPT was signed has given them up 46 years on. In addition, judging by their stockpiles, modernization/upgrade plans and programs, deployment practices, and doctrines, all nuclear-armed states are determined to retain their weapons status indefinitely. 15 To wouldbe proliferators, the lesson is clear: nuclear weapons are indispensable in today's world and for dealing with tomorrow's threats. It is difficult to convince others of the futility of nuclear weapons when all who have them prove their continuing utility by insisting on keeping them. Moreover, the threat to use nuclear weapons, whether to deter their use by others or to prevent proliferation, legitimizes their possession, deployment and use. That which is legitimate cannot be stopped from proliferating. Hence the axiom of non-proliferation: as long as any one has them, others, including terrorists, will try their best and worst to get

32. The Shultz *et al.* articles in the *Wall Street Journal* (2007–13), ¹⁶ have given "street credi-

bility" to the goal of nuclear disarmament within the US political process and political legitimacy to it worldwide. There is a gathering sense around the world that nuclear threats are intensifying and multiplying. There is a matching growing conviction that existing policies have failed to mute the threats. In the meantime, scientific and technological advancements since the NPT was signed in 1968 have greatly expanded our technical toolkit for monitoring and verifying weapons reduction and elimination. It is time to supplement and then supplant the sword-and-shield nuclear diplomacy of the US with the pen diplomacy of a multilaterally negotiated, non-discriminatory and universal nuclear weapons convention.

33. The problem is not nuclear proliferation, but nuclear weapons. They could not proliferate if they did not exist. Because they do, they will. The very fact of their existence in the arsenals of nine countries is sufficient guarantee of their proliferation to others and, some day again, use. Conversely, nuclear disarmament is necessary condition of nuclear nonproliferation. The policy implication of this logic is that the best guarantee of nuclear nonproliferation is nuclear disarmament. If we want non-proliferation, we must prepare for disarmament. The focus on non-proliferation to the neglect of disarmament ensures that we get neither. Nuclear weapons are the common enemy of humanity. Like chemical and biological weapons of mass destruction but much more destructive in firepower, nuclear weapons too cannot be dis-invented. But like them, nuclear weapons too can be controlled, regulated, restricted and outlawed under an international regime that ensures strict compliance through effective and credible inspection and verification.

34. Implementing Article 6 of the NPT instead of dusting it off occasionally as a rhetorical concession would dramatically transform the NPT into a prohibition regime. That is both its attraction and its fatal flaw. Because the NPT has become a de facto non-proliferation regime, the time has come to look beyond it to a cleaner alternative that gathers all the meritorious elements into one workable package in a universal, non-discriminatory, verifiable and enforceable nuclear weapons convention that

¹⁴ See Wade L. Huntley, "Nuclear Threat Reliance in East Asia," in Waheguru Pal Singh Sidhu and Ramesh Thakur, eds., Arms Control After Iraq: Normative and Operational Challenges (Tokyo: United Nations University Press, 2006), pp. 181–99

¹⁵ See Ramesh Thakur and Gareth Evans, eds., *Nuclear Weapons: The State of Play* (Canberra: Centre for Nuclear Non-Proliferation and Disarmament, 2013).

¹⁶ George P. Shultz, William J. Perry, Henry Kissinger, and Sam Nunn: "A World Free of Nuclear Weapons," 4 January

^{2007; &}quot;Toward a Nuclear Free World," 15 January 2008; "How to Protect Our Nuclear Deterrent," 19 January 2010; "Deterrence in the Age of Nuclear Proliferation," 7 March 2011; and "Next Steps in Reducing Nuclear Risks," 5 March 2013.

bans the possession, acquisition, deployment, testing, transfer and use of nuclear weapons by everyone. This will not self-materialize merely because we wish it so. Nuclear abolition is both desirable and feasible. But there are many technical, legal and political challenges to be overcome. However, nor will it ever eventuate if we always push it to a distant future. Serious preparatory work on it needs to be started now, with conviction and commitment.

35. We must make the transition from a world in which the role of nuclear weapons is seen as central to maintaining national and international security, to one where they become progressively marginal and eventually unnecessary. What we need is a multi-phased roadmap to abolition that prioritizes concrete immediate steps in the first few years, like introducing more robust firewalls to separate possession from use of nuclear weapons; further significant cuts in existing nuclear arsenals and a freeze on production of fissile materials for weapons use in the medium term; further constraints on the deployment of nuclear weapons on the territories of non-NWS, for example by means of regional NWFZs; the universalization of the ban on intermediate range nuclear forces; the incorporation of all nuclear-armed states into the nuclear arms reduction negotiations and treaties; and an enforceable new international convention that requires total and verified destruction of all nuclear stockpiles within our lifetime.

36. Critics of the zero option want to keep their bombs but deny them to others. They lack the intellectual honesty and courage to show how non-proliferation can be enforced without disarmament, to acknowledge that the price of keeping nuclear arsenals is further proliferation, and to argue why a world of cascading proliferation is better for national and international security than abolition. They refuse to openly acknowledge their preference for a world of proliferation cascade over total elimination for fear of well-deserved opprobrium for such a counsel of despair.

37. As part of a forward-looking agenda, Russia and the US could initiate negotiations for a new treaty to reduce stockpile numbers for all classes of weapons, significantly cut back on their 2,000 warheads held on high alert status, and embrace the principle of "no first use" in their nuclear doctrines. Washington could also address Chinese and Russian concerns about ballistic missile defence and prompt global strike capabilities. The US, China, India and Pakistan could move to rapid signature and/or ratification of the CTBT, with the last three not holding their ratification conditional to US. China, India and Pakistan could freeze their nuclear capabilities at present levels and Pakistan could helpfully lift its veto on negotiations for a FMCT. India and Pakistan should avoid destabilizing steps like the development of battlefield tactical nuclear weapons and missile defences. Finally, US allies could accept a significantly reduced role for nuclear weapons in their security protection, in particular by accepting and clearly stating support for the US declaring that so long as nuclear weapons exist, the "sole purpose" of its nuclear weapons is to deter their use by others. None of these steps would jeopardize the national security of the country concerned; each would make the world a little bit safer for all of us; all together collectively would make the whole world much safer for everyone.

The Author

RAMESH THAKUR is Director, Centre for Nuclear Non-Proliferation and Disarmament, and Professor in the Crawford School of Public Policy, The Australian National University; head of the Secretariat for the Asia–Pacific Leadership Network for Nuclear Non-Proliferation and Disarmament; and Editor-in-Chief of *Global Governance*.

APLN and CNND

The Asia Pacific Leadership Network (APLN) comprises some forty former senior political, diplomatic, military and other opinion leaders from fourteen countries around the region, including nuclear-weapons possessing states China, India and Pakistan. The objective of the group, convened by former Australian Foreign Minister and President Emeritus of the International Crisis Group Gareth Evans, is to inform and energize public opinion, and especially high-level policy-makers, to take seriously the very real threats posed by nuclear weapons, and do everything possible to achieve a world in which they are contained, diminished and ultimately eliminated. See further http://apln.anu.edu.au.

The Centre for Nuclear Non-Proliferation and Disarmament (CNND) contributes to worldwide efforts to minimize the risk of nuclear-weapons use, stop their spread and ultimately achieve their complete elimination. It works in partnership with the Geneva Centre for Security Policy (GCSP) and the Stockholm International Peace Research Institute (SIPRI), and acts as the Secretariat for APLN. The director of the Centre is Professor Ramesh Thakur, former UN Assistant Secretary-General, and it is assisted by a distinguished International Advisory Board chaired by Professor Gareth Evans. See further http://cnnd.anu.edu.au.

APLN/CNND Policy Briefs

These express the views of the authors, and do not necessarily reflect the views of APLN members or the CNND, or other organizations with which the authors may be associated. They are published to encourage debate on topics of policy interest and relevance regarding the existence and role of nuclear weapons.

Funding Support

APLN and CNND gratefully acknowledge the generous support of The Australian National University; the Government of Australia, in particular the Department of Defence and the Department of Foreign Affairs and Trade; the Nuclear Threat Initiative; and The Simons Foundation of Vancouver, Canada.

Contact Us

Centre for Nuclear Non-Proliferation and Disarmament Crawford School of Public Policy The Australian National University Canberra ACT 0200 AUSTRALIA Email: cnnd@anu.edu.au

Tel: +61 2 6125 0912; 0466 465 835 (cell)