

Nuclear-Weapon-Free Zones: Still a Useful Disarmament and Non-Proliferation Tool?

SCOTT PARRISH AND JEAN DU PREEZ

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Weapons of Mass Destruction Commission
Postal address: SE-103 33 Stockholm, Sweden
Visitors' address: Regeringsgatan 30–32
E-mail: secretariat@wmdcommission.org
Website: www.wmdcommission.org

Nuclear-Weapon-Free Zones: Still a Useful Disarmament and Nonproliferation Tool?

By

*Scott Parrish and Jean du Preez
Center for Nonproliferation Studies*

In the current international environment, when the global nonproliferation regime faces critical challenges on the Korean Peninsula and in the Middle East, and when progress toward nuclear disarmament appears to have stalled, some believe that traditional instruments of nonproliferation policy have lost their relevance. Many now question the effectiveness of multilateral treaties such as the NPT and regional Nuclear-Weapon-Free Zones (NWFZ). This attitude stands in marked contrast to the optimistic atmosphere that followed the end of the Cold War, when there was a period of enthusiasm for NWFZ, illustrated by the establishment in 1995 and 1996 of the South East Asian NWFZ and the African NWFZ, respectively.

Just as the optimism of the mid-1990s was inflated, so the pessimism of today is probably exaggerated. It is true, of course, that progress toward the establishment of further NWFZ has stalled since the late 1990s. The post-9/11 international situation, which accelerated a turn away from multilateral arms control and disarmament by the United States, has created an environment somewhat hostile to the creation of NWFZ. The difficulties faced by the states of Central Asia in their attempt since the late 1990s to establish a NWFZ are emblematic of this shift. Nevertheless, even in this new context, the four existing NWFZ and the concept of NWFZ more generally can still prove useful in addressing contemporary nonproliferation challenges. The members of existing NWFZ can increase the relevance of NWFZ to current problems by updating them to meet contemporary threats presented by nuclear terrorism, for example, and can also band together to press for greater progress on nuclear disarmament. At the same time, the NWFZ concept—if adequately broadened and deepened—could become a useful instrument in the effort to address the nonproliferation challenges in Korea and the Middle East.

If the members of the existing NWFZ and their supporters in the international community remain passive, the NWFZ concept may indeed become irrelevant to current problems. But this outcome is not predetermined. A concerted effort to make NWFZ relevant can succeed, and make a major contribution to the global nonproliferation regime and international security more broadly.

Past Effectiveness of NWFZ as Nonproliferation and Disarmament Tools

NWFZ were first conceptualized in the 1950s as a regional approach to nonproliferation, fencing off regions of the world from nuclear weapons. After the conclusion of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1968, NWFZ began to be viewed as a complementary element of the nonproliferation regime established by that treaty. From this perspective, NWFZ have allowed states in a region to address some shortcomings of the NPT regime, by totally excluding nuclear weapons and establishing greater transparency and stronger verification measures. NWFZ have also traditionally been viewed as an important disarmament measure, since one path to achieving the goal of nuclear disarmament expressed in Article VI of the NPT would be the gradual elimination of nuclear weapons region by region through NWFZ. At the moment, there are four existing NWFZ, covering Latin America and the Caribbean (Treaty of Tlatelolco, 1967); the South Pacific (Treaty of Rarotonga, 1985); Southeast Asia (Treaty of Bangkok, 1995); and Africa (Treaty of Pelindaba, 1996). The five states of former Soviet Central Asia have been negotiating the establishment of a NWFZ since 1997, but have not yet finalized a treaty.

NWFZ have traditionally been regarded as an effective nonproliferation tool because they effectively fence off entire regions of the world from nuclear weapons. In doing so, they close off a loophole in the NPT which (at least in the interpretation of the United States) allows the deployment in non-nuclear weapon states (NNWS) of nuclear weapons controlled by the nuclear weapons states (NWS). In this sense, NWFZ directly block the further deployment by NWS of their existing nuclear weapons, which stops at least one form of horizontal proliferation (or deployment). Historically, this consideration was the clear motive for the establishment of the Latin American NWFZ in the wake of the Cuban Missile Crisis.ⁱ This remains an important function of NWFZ; concern about precisely this issue has blocked the conclusion of the proposed NWFZ in Central Asia.ⁱⁱ

Historically, NWFZ have also been viewed as an effective means of preventing nuclear tests from being conducted in a region. In the era before the negotiation of the Comprehensive Test Ban Treaty (CTBT), this was an important purpose for NWFZ. Both the African NWFZ and the South Pacific NWFZ were motivated largely by the desire to put pressure on the NWS to end testing in those regions.ⁱⁱⁱ Coping with the legacy of Soviet nuclear testing is likewise a major objective of the proposed Central Asian NWFZ.^{iv} The short-run effectiveness of NWFZ in achieving this objective has been mixed. It was not until more than a decade after the conclusion of the South Pacific NWFZ, for example, that France stopped its nuclear testing in the region. Now that the CTBT has been concluded and a moratorium on nuclear tests has held since the 1998 nuclear tests by India and Pakistan, this function of NWFZ appears less significant. However, given the uncertainty regarding the entry-into-force of the CTBT and the possibility that nuclear testing could resume, NWFZ may again play a role in this area in the future.

NWFZ have also been seen as an effective means of building confidence among the countries of a region that their neighbors are not pursuing nuclear weapons. However,

their historical effectiveness in this regard has been uneven. For example, the Latin American NWFZ, although opened for signature in 1967, did not become practically effective until after Brazil and Argentina, the two leading regional powers, fully joined the treaty in the mid-1990s. Arguably their decision to join was driven by changes in their domestic politics (democratization) and bilateral relationship (improved relations), not inspired by the NWFZ.^v The African NWFZ, likewise, was originally proposed in part to isolate South Africa politically. The treaty establishing the zone was successfully negotiated only after South Africa made a decision to drop its nuclear program, which most analysts attribute to domestic political change.^{vi} Recent revelations that Libya actively pursued a nuclear weapons program until 2003, despite signing the African NWFZ treaty in 1996, suggest the limitations of NWFZ in this regard. In general, NWFZ have been concluded once the basic political groundwork for them in a region has already been set by the resolution of outstanding political and security issues. NWFZ have not yet been an effective instrument for resolving such conflicts, although they have the potential to play a constructive role in this regard, a possibility that is explored further below.

Another key role of NWFZ has been in building and maintaining nonproliferation norms. While the NPT has established an all-but universal norm against nuclear proliferation, the NWFZ serve a useful role as additional buttresses to the normative structure of the NPT. While all signatories of the NPT are bound by its norms and principles, those who have also signed NWFZ treaties have thus demonstrated an even higher level of commitment to nonproliferation. In an era in which the nuclear weapon states have been taking only fitful steps toward nuclear disarmament, the establishment and strengthening of NWFZ is one of the most practical steps that non-nuclear weapon states can help bolster the nonproliferation regime.

NWFZ can also play a positive role by helping foster broader regional cooperation. The African NWFZ was motivated partly by hopes that it would provide a framework to accelerate regional cooperation in the peaceful use of nuclear technology. The Central Asian states also hope that a NWFZ in their region will help them to deal with the environmental legacy of the Soviet nuclear weapons complex. While the hopes for these NWFZ have yet to be fully realized, they set an example that other regions may emulate in the future.

Can Effectiveness of Existing Zones Be Increased?

While the achievements of the existing NWFZ are significant, their effectiveness and influence on the global nonproliferation regime could be increased if a number of practical steps were taken. Most obviously, one of the four existing NWFZ treaties—the Treaty of Pelindaba establishing the African NWFZ—has not yet entered into force. Not enough African states have ratified the treaty, and progress in this respect has been disappointingly slow. Over eight years have now passed since the Pelindaba Treaty was opened for signature. Its practical and symbolic importance is undermined by the delay in its ratification. For example, once the treaty enters into force, all its members will be required to apply measures of physical protection equivalent to those provided for in the

Convention on Physical Protection of Nuclear Material and the IAEA recommendations in INFCIRC/225.^{vii} Given current concerns about the global threat of nuclear terrorism, this would be a welcome step. Similarly, states parties to the Pelindaba treaty are required to conclude comprehensive safeguard agreements with the IAEA – (which they are required to do as NPT state parties anyway), yet 18 of the 53 African states have not yet concluded such agreements with the IAEA.^{viii} Many of these same states, as well as a number of their neighbors, also have not yet ratified the Pelindaba Treaty. Of the 53-African states, only 17 have ratified Pelindaba, and 28 must do so before the treaty can enter into force. A concerted effort by the African Union to raise the priority of ratifying Pelindaba could help convince more African governments to take the necessary steps.^{ix} There are also a handful of member-states of other NWFZ who similarly have not yet concluded safeguards agreements with the IAEA and should be encouraged to do so.^x

A similar but lesser issue faces the Southeast Asian NWFZ, which has not been supported yet by any of the five NWS. As of 2004, none of them had signed the protocols pledging to respect this NWFZ. This outcome is largely the result of a dispute over the zone of application of the treaty. In a statement at the 2004 NPT PrepCom, China announced its intention to sign and ratify the relevant protocol to the Treaty of Bangkok, but it has not yet done so.^{xi} At the 2004 NPT PrepCom, states parties urged the Southeast Asian countries and the nuclear weapon states to continue their efforts to resolve this issue so that the Southeast Asian NWFZ could be implemented in practice.^{xii}

There are several other ways in which the effectiveness of the existing zones might be improved. The three other zones, for example, might consider adopting the physical protection provisions codified in the African NWFZ. Such a step would help protect nuclear materials throughout the Southern Hemisphere. Along these same lines, the existing zones might consider taking joint steps to strengthen their verification systems, which currently rely on the “classical” IAEA safeguards system, to require members to sign up to the Additional Protocol. In 2003, the UN General Assembly adopted a resolution entitled, “Nuclear Weapon Free Southern Hemisphere and Adjacent Areas.” In this resolution, the members of the existing NWFZ pledged to work together to “pursue common goals,” and “to explore and implement further ways and means of cooperation among themselves.”^{xiii} Improving safeguards and physical protection measures is a concrete step these states could take to implement such cooperation. This would set a strong nonproliferation example to the rest of the world. Another possibility, which has been suggested by Mexico and other members of the Organization for the Prohibition of Nuclear Weapons in Latin America (OPANAL), is for the members of the four existing zones to work together to put issues of common concern—including, but not limited to nuclear disarmament—on the international agenda. With over 100 states parties, the four existing NWFZ, if they worked together in a coordinated manner, could bring considerable political influence and attention to bear on key nonproliferation issues. At the 2003 UN General Assembly, Mexico introduced a draft resolution calling for an international conference of NWFZ member states to discuss cooperation. The resolution was withdrawn due to concerns over the cost implications of such an event, but is another sign that NWFZ members are searching for ways to collectively bolster the nonproliferation regime. As of 2004, OPANAL is continuing to work on building support

for such a conference.^{xiv} As one example of such possible future cooperation, the members of the existing NWFZ could offer more visible and practical support to the Central Asian states in their ongoing effort to establish the world's fifth NWFZ.

Can Additional Zones Be Created? Do They Need to Be Adapted to New International Conditions?

At first glance it is difficult to be optimistic about the prospects for establishing additional nuclear weapon free zones. Some analysts have suggested that all the “easy” areas of the world have now been included in existing NWFZ. There are no NWS in the existing zones, and they are located in parts of the world where the NWS are unlikely to want to deploy their nuclear weapons. Those regions of the world not yet included in NWFZ—South Asia, Northeast Asia, the Middle East, Central Asia, North America, and Europe—either include existing NWS or border with them. As a result, current political conditions in these regions present a challenge to the establishment of NWFZ. The NWS have important security interests in many of these remaining regions, and will be reluctant to support treaties which could restrict their freedom of action to defend those interests. The challenges facing the establishment of a NWFZ in Central Asia provide a good illustration. Russian and U.S. security concerns have complicated the negotiations and reduced the chance that the treaty establishing a Central Asian NWFZ will be signed.^{xv}

Beyond Central Asia, where a NWFZ may yet be established using a more or less traditional approach, it seems likely that a new model for NWFZ needs to be developed if additional zones are to be established. Most obviously, while existing NWFZ have just kept out nuclear weapons, NWFZ in areas like the Middle East or South Asia will need to be not just nonproliferation, but also disarmament agreements. While it is possible that new NWFZ could be formed in such regions following changes in political conditions that led NWS (de jure and de facto) to give up their nuclear weapons, it seems more likely that new zones will have to resemble arms control agreements as much as traditional NWFZ.

Should such zones be established, they will obviously require more intrusive verification measures than traditional NWFZ, so as to provide confidence that former NWS remain disarmed. Even if political conditions improve, for example, it is difficult to imagine the establishment of a NWS in the Middle East, without intrusive verification of countries like Israel, Iraq, and Iran. The existing NWFZ largely rely on IAEA safeguards as their verification mechanism, but even taking into account the more rigorous requirements of the Additional Protocol, such an arrangement is unlikely to be adequate in regions like the Middle East or South Asia. A more relevant analogy might be the Cold War-era INF Treaty, signed in 1987, which eliminated an entire class of missiles, and provided for long-term on-site monitoring of certain facilities in both the United States and the Soviet Union.

Nevertheless, although NWFZ in the more “difficult” parts of the world will face challenges, the NWFZ concept may help address some of the most vexing current nonproliferation challenges. One possible solution to the current nuclear crisis on the Korean Peninsula would be the establishment of a Northeast Asian NWFZ. Such a zone could include North Korea, South Korea, and possibly Japan. (If Japan were not a member of the NWFZ, then perhaps Tokyo might be a party to a protocol pledging to respect and support a Korean NWFZ. Other proposals have suggested including portions of Russia and China).^{xvi} As noted above, such a zone would need to have adequate verification provisions, considering not only the concerns of North Korea’s neighbors about its nuclear capabilities but also the concerns of North Korea about South Korea and Japan. The multilateral nature of such an NWFZ, however, might make it an attractive vehicle for resolving the security issues linked with the Korean Peninsula crisis. It could provide a forum for linking and addressing the concerns of a number of regional states. The possibility that the NWS would provide security assurances in a protocol to such a NWFZ could also address broader North Korean security concerns, which are widely viewed as one of the factors driving the current crisis. Thus a Northeast Asian NWFZ could help facilitate a “grand bargain” between North Korea, its neighbors, and other interested countries. It could also have a positive “demonstration effect” in other regions of the world.

These points demonstrate that although a superficial appraisal might conclude that NWFZ are a relic of traditional nonproliferation and no longer relevant in the post-9/11 international environment, that with appropriate adjustment and concerted multilateral effort, existing NWFZ can continue to make a major contribution to the nonproliferation regime. The NWFZ concept itself, with some modification, could also prove to be highly relevant to addressing some of the most pressing nonproliferation challenges.

Potential role of the Weapons of Mass Destruction Commission (WMDC)

Specific recommendations by the WMDC could make a major contribution to ensuring the continued relevance of NWFZs—existing and potential—as both nuclear nonproliferation and nuclear disarmament tools that strengthen the global nonproliferation regime. To this end, the WMDC could consider making the following recommendations:

- African States that have not yet done so should sign and ratify the African Nuclear-Weapon-Free Zone Treaty (Treaty of Pelindaba) as soon as possible so that it may enter into force without delay. Similarly, the NWS as well as the States contemplated in Protocol III that have not done so should be called upon to ratify the Protocols concerning them as soon as possible^{xvii};
- African States parties to the NPT that have not yet done so should conclude comprehensive safeguards agreements with the IAEA pursuant to the Treaty, thereby satisfying the requirements of article 9 (b) of and annex II to the Treaty of Pelindaba when it enters into force, and to conclude additional protocols to their

- safeguards agreements on the basis of the Model Protocol approved by the IAEA Board of Governors^{xviii},
- Southeast Asian states should build upon the momentum of China’s statement of support for the protocol to the Southeast Asian NWFZ at the 2004 NPT PrepCom. The NWS and Southeast Asian states should continue consultations, resolve outstanding concerns, and sign and ratify the protocol as soon as possible.
 - Central Asian states should likewise conclude consultations with the NWS, resolve any outstanding concerns regarding the draft treaty establishing a Central Asian NWFZ, and then open the treaty for signature and ratification as soon as possible;
 - All States directly concerned to consider seriously taking the practical and urgent steps required for the implementation of the proposal to establish a nuclear-weapon-free zone in the region of the Middle East in accordance with the relevant resolutions of the General Assembly, and, as a means of promoting this objective, invites the countries concerned to adhere to the NPT and pending the establishment of the zone, to place all nuclear activities not yet covered under IAEA safeguards;^{xix}
 - Pending the establishment of a nuclear-weapon-free zone in the region of the Middle East, States in the region are not to develop, produce, test or otherwise acquire nuclear weapons or permit the stationing on their territories, or territories under their control, of nuclear weapons or nuclear explosive devices;^{xx}
 - A Northeast Asian NWFZ should be considered as one possible piece of a “grand bargain” to resolve the nuclear crisis on the Korean Peninsula;
 - Reflecting the consensus expressed in UN General Assembly Resolution 58/49, existing NWFZ should take joint steps to improve the safeguards and physical protection to which their nuclear facilities and materials are subject. Possible steps include the existing NWFZ adopting the Additional Protocol and agreeing to meet the physical protection standards laid down in IAEA INFCIRC/225.

ⁱ See Jozef Goldblat, “Nuclear Weapon Free Zones: A History and Assessment,” *Nonproliferation Review* 4 (Spring-Summer 1997), p. 19.

ⁱⁱ Scott Parrish, “Central Asian States Achieve Breakthrough on Nuclear Weapon Free Zone Treaty,” CNS Research Story of the Week, September 30, 2002, < <http://cns.miis.edu/pubs/week/020930.htm>>.

ⁱⁱⁱ Goldblat, “Nuclear-Weapon-Free-Zones.”

^{iv} Scott Parrish, “Prospects for a Central Asian Nuclear Weapon Free Zone,” *Nonproliferation Review* 8 (Spring 2001), pp. 141-148.

^v Michael Barletta, “Argentine and Brazilian Nonproliferation: A Democratic Peace?” in Henry Sokolski and James M. Ludes, eds., *Twenty-first Century Weapons Proliferation* (Portland, OR: Frank Cass, 2001), pp. 148-167.

^{vi} Waldo Strumpf, “South Africa's Nuclear Weapons: From Deterrence to Dismantlement,” *Arms Control Today* 25 (1995/96), pp. 3-8.

^{vii} Sola Ogunbanwo, “Accelerate the Ratification of the Pelindaba Treaty,” *Nonproliferation Review* 10 (Spring 2003), pp. 132-36

^{viii} “IAEA Membership, Safeguards Agreements, and Additional Protocols,” in *Inventory of International Nonproliferation Regimes*, Monterey Institute of International Studies, updated May 2004, <<http://cns.miis.edu/pubs/inven/pdfs/apmiaea.pdf>>.

^{ix} Ogunbanwo, “Accelerate the Ratification of the Penindaba Treaty.”

^x “IAEA Membership, Safeguards Agreements, and Additional Protocols,” in *Inventory of International Nonproliferation Regimes*, Monterey Institute of International Studies, updated May 2004, <<http://cns.miis.edu/pubs/inven/pdfs/apmiaea.pdf>>.

^{xi} Press Release, Chinese Mission to the United Nations, “Statement by Ambassador Hu Xiaodi, Head of the Chinese Delegation at the 3rd Session of the PrepCom for the 2005 NPT Review Conference,” New York, April 26, 2004.

^{xii} “Draft Chairman’s Summary,” 3rd Session of the PrepCom for the 2005 NPT Review Conference, New York, May 6, 2004, paragraph 28, <<http://www.reachingcriticalwill.org/legal/npt/prepcom04/chair.html>>.

^{xiii} “Nuclear Weapon Free Southern Hemisphere and Adjacent Areas,” UN General Assembly Resolution 58/49, December 8, 2003.

^{xiv} Sarah Chankin-Gould, “Preventing Nuclear Proliferation in Latin America: The Treaty of Tlatelolco,” *FAS Public Interest Report 57* (Winter 2004), <<http://fas.org/faspir/2004/v57n1/tlatelolco.htm>>.

^{xv} Parrish, “Central Asian States Achieve Breakthrough.”

^{xvi} For a discussion of ongoing Track II efforts to promote a Limited Nuclear Weapon Free Zone in Northeast Asia, see “Ninth Expanded Panel on Limited Nuclear Weapon Free Zone in Northeast Asia, June 17-24, 2004,” Center for International Strategy, Technology, and Policy, Georgia Tech University, <http://www.cistp.gatech.edu/cistp/programs/nwfv_nea.html>. See also John Endicott, “A Limited Nuclear Weapon Free Zone in Northeast Asia: A Track II Initiative,” *Disarmament Diplomacy*, No. 35 (March 1999), <<http://www.acronym.org.uk/dd/dd35/35nwfv.htm>>.

^{xvii} Based on text from General Assembly resolution 58/30 “African Nuclear-Weapon-Free Zone Treaty”, adopted without a vote, December 8, 2003.

^{xviii} Ibid

^{xix} Based on text from General Assembly resolution 58/34 “Establishment of a nuclear-weapon-free zone in the region of the Middle East”

^{xx} Ibid

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