

The establishment of internationally recognized nuclear-weapon-free zones (NWFZs) by relevant countries on the basis of voluntary agreement is one of the most important and effective ways to advance nuclear nonproliferation and disarmament. It is beneficial to regional and world peace, stability, and security. Learning from the experiences of the existing NWFZs will assist future efforts to establish a Nuclear-Weapon-Free Zone for Northeast Asia (NWFZ-NEA). Since 1991, the Center for International Strategy, Technology, and Policy (CISTP) at the Georgia Institute of Technology has been exploring the possibility of establishing such a zone in Northeast Asia, covering Japan, North Korea, South Korea, and Mongolia. Since 1995, second-track consultations sponsored by the Center have made some progress.

At present, the positive factors for establishing the NWFZ-NEA outweigh the negative ones. States in the region have demonstrated their willingness to participate in bilateral and multilateral nonproliferation agreements, and nuclear weapon states have not deployed nuclear weapons on the territory of these states. However, North Korea's failure to participate in CISTP's second-track consultations, as well as the extended deterrence strategy adopted by the United States, are cause for continued concern.

This viewpoint attempts to apply the lessons of existing NWFZs towards advancing nonproliferation in Northeast Asia. It will first review the advantages NWFZs offer beyond existing multilateral nonproliferation agreements. It will then describe the current nuclear proliferation scenario in Northeast Asia and the progress to date of efforts to establish a NWFZ in the region. After detailing both the positive and negative factors affecting efforts to establish such a zone, the viewpoint will conclude by making specific recommendations on how NWFZ-NEA negotiations should proceed, based on the experiences of existing NWFZs.

NWFZS AND NUCLEAR NONPROLIFERATION

The progress of NWFZs has been bringing us nearer and nearer to the ultimate realization of a nuclear-weapon-free world. There are currently four populated NWFZs, created by the Treaty for Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco), the South Pacific Nuclear-Free Zone Treaty (Treaty of Rarotonga), the African Nuclear-Weapon-Free Zone Treaty (Treaty of Pelindaba), and the Southeast Asia Nuclear-Weapon-Free Zone Treaty (Treaty of Bangkok). In addition, the Antarctic Treaty demilitarizes the Antarctic Continent. Some lessons for international nuclear nonproliferation drawn from these experiences follow.

Most importantly, the international community should pay more attention to the role of NWFZs in nuclear nonproliferation. NWFZs have made great progress in recent years. Thus far, 108 non-nuclear weapon states (NNWS) have signed the four existing populated NWFZ treaties, and 70 of them have ratified the treaties. The combined areas of the zones created by the Antarctic, Tlatelolco, Rarotonga, Pelindaba, and Bangkok treaties constitute about 45 percent of the earth's surface. With the entry-into-force of the Pelindaba Treaty, virtually all of the southern hemisphere and parts of the northern hemisphere will be covered by NWFZs.¹ The five

VIEWPOINT:
**NUCLEAR-WEAPON-FREE
ZONES: LESSONS FOR
NONPROLIFERATION IN
NORTHEAST ASIA**

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nuclear weapon states (NWS), namely the United States, Russia, Britain, France, and China, have signed the relevant protocols of the Tlatelolco, Rarotonga, and Pelindaba Treaties, committing themselves not to use or threaten to use nuclear weapons against regional states parties. Such progress demonstrates that regional nuclear nonproliferation mechanisms based on NWFZs have been playing roles as important as—and in some cases, even more important than—global nuclear nonproliferation mechanisms. NWFZs add to other nonproliferation efforts in several ways:

(1) The scope of the verification regimes of NWFZs goes beyond the full application of International Atomic Energy Agency (IAEA) safeguards. Although all four existing NWFZs rely on IAEA safeguards to ensure compliance and verification, the IAEA system does not cover all verification functions required by NWFZs. For example, the IAEA safeguard system is geared towards ensuring that non-nuclear weapon states do not divert nuclear material to build nuclear explosives. It does not monitor other possible violation of a NWFZ, such as clandestine import of nuclear weapons by a party, or the use of territory within the zone by an extra-regional country for the manufacture or test of nuclear weapons.²

(2) Regional control mechanisms created by NWFZs, such as the Organization for the Prohibition of Nuclear Weapons in Latin America (OPANAL), the Consultative Committee of the South Pacific Nuclear-Free Zone, the Commission for the Southeast Asia Nuclear-Weapon-Free Zone and its subsidiary organ, the Executive Committee, and the African Commission on Nuclear Energy, not only oversee and review the application of the IAEA safeguards system (including challenge inspections authorized by them, but carried out by IAEA inspectors) within their respective zones, but also provide for a number of additional control measures. For example, the South Pacific Zone's verification regime includes, in addition to IAEA safeguards, reports and information exchange, consultations, and a complaints procedure.³

(3) A NWFZ may require each party to undertake to declare any capability it has for the manufacture of nuclear explosives; to dismantle and destroy any nuclear explosive device that it had manufactured prior to the coming into force of the NWFZ treaty; to destroy facilities for the manufacture and testing of nuclear explosive devices or, where possible, to convert them to peaceful uses; and to permit the IAEA to

verify the processes of dismantling and destruction of the nuclear explosive devices, as well as the destruction or conversion of the facilities for their production and testing.⁴ These measures will return nuclear threshold states or de facto nuclear weapon states to the status of non-nuclear weapon states, and prevent them from going nuclear again—South Africa and the Pelindaba Treaty is a successful example.⁵

(4) The NWFZ requirement to keep all nuclear weapons out of the territory of states parties can preclude deployments by NWS of nuclear weapons that they retain possession and control of. This could reassure states that a potential adversary with a nuclear-armed ally will not allow tactical nuclear weapons to be stationed on its soil by that ally.

NWFZs and global nuclear nonproliferation mechanisms should be more closely integrated. They are like two legs for the international nonproliferation regime. They supplement each other. For example, all four existing NWFZs rely mainly on IAEA safeguards to ensure compliance and verification, but each also has its own mechanism to oversee and review the application of the IAEA safeguards system, and to provide for a number of additional control measures. Until now, however, US nuclear nonproliferation policy has focused on *global* nonproliferation. This is like “walking with one leg.” The Comprehensive Nuclear-Test-Ban Treaty (CTBT)'s failure to prevent India from launching nuclear tests has shown that global nonproliferation mechanisms may not be sufficient. The international community should adopt a policy of “walking with two legs” to stop the spread of nuclear weapons.

Thus, the international community should continue to work to strengthen global nuclear nonproliferation mechanisms, including efforts to make the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) truly universal, to speed the entry-into-force of the CTBT, and to conclude a universal and verifiable Fissile Material Cut-off Treaty as soon as possible. At the same time, however, the international community should speed up the process of establishing NWFZs, and link this process more closely with global nuclear nonproliferation mechanisms.

Nuclear weapon states, in particular, should take a more positive attitude towards the establishment of NWFZs, while also speeding up the process of nuclear disarmament. The United States and Russia, which pos-

sess the largest nuclear arsenals, should effectively implement the nuclear reduction treaties they have signed and continue to substantially cut down their respective nuclear arsenals, thereby paving the way for the other NWS to participate in the multilateral nuclear disarmament process. The progress of nuclear disarmament by nuclear weapon states will spur the vigor of NNWS to establish NWFZs and greatly reduce the possibility that nuclear threshold states resist the creation of NWFZs on the excuse of a stalemate in international nuclear reduction. At the same time, NWS should, as soon as possible, undertake unconditionally and in a legally binding manner not to be the first to use nuclear weapons or to use nuclear weapons against non-nuclear weapon states. Moreover, NWS should not deploy nuclear weapons on the territory of other countries and should withdraw all existing nuclear weapons from the territory of other countries.

Non-nuclear weapon states should also attach more importance to the establishment of NWFZs, which are beneficial to protecting their security interests. The security assurances for regional states parties provided by nuclear weapon states in the relevant protocols of the NWFZ treaties are legally binding, thus creating an important barrier against the danger of nuclear attacks against those NNWS.

The international community should make cooperative efforts to relax tensions in regions and subregions so as to create favorable conditions for the establishment of NWFZs. In turn, NWFZs can serve as important regional confidence-building measures, further accelerating regional stability and security.

THE CURRENT NUCLEAR PROLIFERATION SCENARIO IN NORTHEAST ASIA

There is a risk of nuclear proliferation in Northeast Asia. Japan, Taiwan, and North and South Korea all have the technical expertise to be considered virtual nuclear powers which could acquire nuclear weapons in a relatively short period of time, although so far all have chosen—or have been coerced or persuaded—not to do so. How to prevent nuclear weapons from spreading will continue to be one of the important security problems in the subregion for a long time.

Although Japan has not had the strategic intention to develop nuclear warheads due to political and military restrictions, it has resources sufficient for developing

nuclear weapons. There is a danger that Japan may abandon its Three Non-Nuclear Principles.⁶ If it does so, the international regime of nuclear nonproliferation will be in peril. Japan has developed fast-breeder reactors. It has been developing technologies for complete nuclear fuel recycling and increasing its domestic nuclear reprocessing capability. As of December 1995, the total inventory of separated plutonium managed by Japan was 16.1 tons, with 4.7 tons in Japan and 11.4 tons in Europe.⁷ Although this plutonium is not weapons-grade, it would not be difficult for Japan to transform it into weapons-grade. Consider the fact that five to ten kilograms of plutonium is enough to forge a single 20-kiloton nuclear warhead. This means that Japan's 16.1 tons of plutonium could be used to make well over 1,000 Hiroshima-size bombs, if Japan were to withdraw from the NPT. Given Japan's highly developed electrical, electronic, and aerospace industries, it is one of the few countries that could be armed with superb nuclear forces and superior command and control systems.⁸ Japan already has strongly powered rockets capable of launching satellites into orbit around the earth and of being transformed into ballistic missiles.

Taiwan began its nuclear weapon research program in 1966. In 1983, Taiwanese authorities admitted that they had the technological capability to manufacture nuclear weapons. Taiwan had constructed a nuclear facility that could produce weapons-grade plutonium, which was closed in 1988 due to pressure from the United States. It was reported that Taiwan had planned eventually to fit a nuclear warhead on its Skyhorse ballistic missile, which has a range of 1,000 kilometers.⁹ Although the United States and the IAEA have created a powerful set of constraints on Taiwan's nuclear program, lessons drawn from Iraq's nuclear program, as well as those drawn from Taiwan's nuclear activities during the 1980s, suggest that it would be difficult for them to verify all nuclear activities by Taiwan.

North Korea began its nuclear energy program in the early 1960s. According to a report by North Korea to the IAEA in May 1992, there are 14 nuclear facilities in North Korea, including five nuclear reactors (three completed, two under construction). North Korea joined the NPT in 1985, and agreed to comply with NPT safeguards in January 1992. Based on the results of its sixth inspection, in early 1993, the IAEA concluded that the possibility of concealing nuclear reprocessing by North Korea could not be ruled out and asked for special in-

spections of two nuclear facilities in Yongbyon. That made North Korea's nuclear weapons program the focus of intense international concern.¹⁰ Under the common efforts of the international community, and after a series of difficult negotiations, the United States and North Korea (in October 1994) signed the Agreed Framework. It set up a process to eliminate North Korea's capability to make nuclear weapons and move the nation toward normal political and economic relations with the United States.¹¹ This was an important step in finally resolving North Korea's nuclear problem. However, there is still a long way to go in achieving that goal, and there have been many difficulties in implementing the agreement.

South Korea began its nuclear weapon research program in the early 1970s. Although it suspended the program later under pressure from the United States, South Korea's advanced level of technology could enable it to make rapid progress in its nuclear program if it decided to develop nuclear weapons again in the future.¹²

EFFORTS TO ESTABLISH A NUCLEAR-WEAPON-FREE ZONE IN NORTHEAST ASIA

In order to resolve the North Korean nuclear problem finally and forever and to prevent nuclear proliferation in Northeast Asia, the creation of the Nuclear-Weapon-Free Zone for Northeast Asia will be necessary. Although the idea of a nuclear-weapon-free zone in Northeast Asia was put forward a long time ago, it was not seriously addressed until recently. In 1991, CISTP launched the concept of the Limited Nuclear-Weapon-Free Zone for Northeast Asia (LNWFZ-NEA). Originally the "limited" here meant either that the zone could include parts of the territories of NWS, or that it could contain some kinds of nuclear weapons. However, the concept has undergone significant adjustment over its seven-year life. Now the meaning of the concept accepted by all sides of the LNWFZ-NEA Expanded Senior Panel is that the zone should include four of the non-nuclear weapon states in Northeast Asia, namely Japan, North Korea, South Korea, and Mongolia, but not necessarily all Northeast Asian states.

Since 1995, under the leadership of Dr. John E. Endicott, CISTP has sponsored a series of meetings of the Expanded Senior Panel on the LNWFZ-NEA to examine the concept of a Limited Nuclear-Weapon-Free Zone in Northeast Asia.¹³ The meetings are second-track (i.e., non-governmental) consultations. Specialists from

China, Japan, Mongolia (since 1998), the Republic of Korea (ROK), Russia, and the United States have participated in the meetings. Official observers from the ROK, the Russian Federation, Japan, and the United States, and guest delegates from Argentina (since 1996), Finland (since 1998), and France (since 1997) have also attended the meetings.

During the February 1995 meeting, the Senior Panel discussed several methods of delimiting the zone in which an agreement might be implemented,¹⁴ including:

- Circle Zone: A zone in which the center is placed at the center of the DMZ on the Korean Peninsula. The radius of the zone would be 1,200 km, involving the following areas: part of China, including Taiwan; Japan; Mongolia; the Democratic People's Republic of Korea (DPRK); the Republic of Korea; Russia; and the United States (although the United States is not physically within the zone, it will be expected to actively participate in the system).
- Ellipse Zone: This football-shaped zone (American, not British) would have its western border located in Northeast China and its eastern in Alaska, encompassing part of Russia and thus visibly involving three major nuclear weapon-possessing states. While the exact boundaries have not yet been delimited, the concept in this suggestion is to include some territory of all members in the zone.
- North Pacific Zone: This concept draws on the notion that certain "areas" within the North Pacific, i.e., a portion of Northeast China, eastern Russia, the western United States (Alaska), Japan, the Korean Peninsula, and Mongolia, would initially be in a non-nuclear zone.¹⁵

However, there have been many disputes about the three proposals. The issues under debate include:

- What kinds of nuclear weapons held by NWS should be excluded from the above-mentioned zone? Some scholars argued that only tactical nuclear weapons should be eliminated in the portions of territory of NWS included in a NWFZ. However, there are also disputes about how to sort nuclear weapons. Because it has a "no-first-use" policy and has a smaller nuclear arsenal than the United States and Russia, China holds that it does not need and does not have tactical nuclear weapons.
- Which one of the above-mentioned three methods to delimit the NWFZ-NEA is best?

• Should the NWFZ-NEA include portions of territory of nuclear weapon states? The proposed Circle Zone includes portions of Russian and Chinese territory. The Ellipse and North Pacific Zones include portions of Russia, China, and the United States. Chinese participants argue that the proposed NWFZ-NEA should not include territory of any NWS, for the following reasons:

(1) It is almost impossible, under the current circumstances, for the United States, Russia, and China to exclude their nuclear weapons from portions of their territory, as it would mean giving up sovereignty and there will not be sufficient mutual political trust among them to do so in the foreseeable future;

(2) It will be very difficult for the governments of the three NWS to explain to their peoples why certain portions of their countries should be included in the NWFZ-NEA, and why other nuclear powers can offer security assurances to these portions, but not to other areas; and

(3) Even if China were to agree to include eastern China, including Beijing and Shanghai, in the proposed NWFZ-NEA, it will be impossible for the United States to undertake not to use or threaten to use any nuclear explosive device against this region.

Some US and Russian participants agreed that all three above-mentioned methods were impracticable. Some Japanese scholars support the concept of establishing a NWFZ-NEA including only North Korea, South Korea, Japan, and Mongolia.

During the Third Expanded Senior Panel, in Moscow in October 1997, a consensus was reached on developing operating protocols for creation of a Phase I Limited Nuclear-Weapon-Free Zone based on a Northeast Asian League of Non-Nuclear States, especially Japan, the ROK, possibly Mongolia, and, if its non-nuclear status is clarified, the DPRK.¹⁶

In 1996, CISTP was designated the Interim Secretariat of the LNWFZ-NEA by the Expanded Senior Panel. During the Fourth Expanded Senior Panel, in Helsinki in October 1998, the members of the Panel reached an agreement to establish Working Groups to facilitate in-depth examination of outstanding concerns related to the agreements achieved in previous meetings in Moscow and Bordeaux.¹⁷

The most feasible first phase is for the four non-nuclear weapon states in Northeast Asia (Japan, the

DPRK, the ROK, and Mongolia) to negotiate and sign the Treaty of the NWFZ-NEA, and for the five official nuclear powers to give their negative security assurances (NSA) to the states parties of the NWFZ-NEA. The NSA should specify that the NWS undertake unconditionally not to use or threaten to use nuclear weapons against any state party of the NWFZ-NEA.

Until now, the IAEA and the United States have played the most important roles in preventing Taiwan from having nuclear weapons. Because Taiwan is not formally recognized as a state separate from China, its future status in the proposed NWFZ-NEA should be decided through talks across the Taiwan Strait.

POSITIVE FACTORS FOR ESTABLISHING A NUCLEAR-WEAPON-FREE ZONE IN NORTHEAST ASIA

International commitments and multilateral and bilateral mechanisms to promote nuclear nonproliferation in Northeast Asia exist already. These create a favorable foundation for establishing a NWFZ-NEA. At least nine features of the current situation can be counted as positive factors.

(1) Japan, North Korea, South Korea, and Mongolia are parties to the NPT as non-nuclear weapon states. According to the NPT, they undertake not to receive any transfer of nuclear weapons or other nuclear explosive devices and not to manufacture or acquire them. All have safeguard agreements with the IAEA, as required by the treaty.¹⁸

(2) Japan, South Korea, Mongolia, China, the United States, and Russia have signed the Comprehensive Nuclear-Test-Ban Treaty. Furthermore, Japan and Mongolia have ratified the treaty. According to the CTBT, they undertake “not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under [their] jurisdiction or control.” Furthermore, they undertake “to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.”¹⁹

(3) Both Korean states signed a Joint Declaration on the Denuclearization of the Korean Peninsula on January 20, 1992. The stated aim of the Declaration was to “eliminate the danger of nuclear war” and, in particular, to “create an environment and conditions

favorable for peace and peaceful unification of our country.”²⁰

(4) The United States and the DPRK signed the Agreed Framework on October 21, 1994. According to the Agreed Framework, North Korea agreed to freeze and eventually dismantle its graphite-moderated reactors, to seal and eventually dismantle its reprocessing facilities, to allow the IAEA to monitor the freeze of its reactors, to allow the implementation of its safeguards agreement under the NPT, to allow the IAEA to resume ad hoc and routine inspections of facilities not subject to the freeze upon conclusion of a Supply Agreement for a light-water reactor (LWR) project, to remain a party to the NPT, to take consistent steps to implement the North-South Joint Declaration on the Denuclearization of the Korean Peninsula, and so on.

(5) The Korean Peninsula Energy Development Organization (KEDO) was established in March 1995 to implement most of the 1994 US-DPRK Agreed Framework. So far KEDO has delivered more than one million tons of heavy fuel oil to the DPRK and begun a multi-billion dollar reactor project in that country, both activities required by the Agreed Framework.²¹ KEDO has helped to promote peace and stability on the Korean Peninsula and prevent nuclear proliferation in Northeast Asia.

(6) According to the US-DPRK Agreed Framework, North Korea should come into full compliance with its safeguard agreement with the IAEA upon conclusion of a significant portion of the LWR project. The Agreement on Supply of a Light-Water Reactor Project to the DPRK, signed by the United States and North Korea, stipulated: “KEDO shall develop a delivery schedule for the LWR project aimed at achieving a completion date of 2003.”²² That means that KEDO will complete the LWR project by 2003 and North Korea will have to be in full compliance with its safeguard agreement with the IAEA before then. If both KEDO and North Korea are able to meet these goals, it will be not very difficult for North Korea to implement the North-South Joint Declaration on the Denuclearization of the Korean Peninsula and to participate in the NWFZ-NEA by 2003, which will offer the best opportunity to establish the NWFZ-NEA.

(7) If the North Korean nuclear question can be resolved, there will be no excuse for Japan and South Korea not to participate in the NWFZ-NEA. Mongolia is now seeking to declare a single state NWFZ,

and it sponsored a resolution to that effect at the 1998 UN General Assembly.²³ At the same time, the Mongolian government has shown an interest in participating in the process of establishing the NWFZ-NEA. Dr. Ravdan Bold, secretary of the National Security Council of Mongolia, attended the Fourth Expanded Senior Panel on the LNWFZ-NEA, held in Helsinki in October 1998. It would be better for Mongolia to participate in the NWFZ-NEA than to declare a single state NWFZ, because the NWFZ-NEA would be created under a formal, legally binding international treaty. If the NWFZ-NEA can be realized and the relevant protocols can be signed by nuclear weapon states, the subregional states parties will get negative nuclear assurances from all NWS.

(8) From 1990 to 1991, the United States decided to withdraw most of the tactical nuclear weapons deployed outside its borders, and the South Korean president stated that there were no such weapons on his territory. Under the US-DPRK Agreed Framework, both sides committed to working together to achieve peace and security on a nuclear-free Korean Peninsula. The United States also agreed that “it will provide formal assurance to the DPRK against the threat or use of nuclear weapons by the US.”²⁴ Furthermore, the NWFZ-NEA will not be contradictory to the security commitment of the United States in the region. The main difference between the NNWS obligations under the NPT and those under nuclear-weapon-free zones is that the zones prohibit deployment of nuclear weapons belonging to a NWS (or anyone), whereas the NPT does not. Even if the future NWFZ-NEA has such a prohibition, however, that will not reduce the military capability of the United States in the region. The United States has not deployed nuclear weapons on the territory of the states in the subregion, and has sufficient sea-based nuclear warheads in the Asia-Pacific region.

(9) China supports the establishment of NWFZs in general, because China thinks that the establishment of such zones is of great importance to the advancement of nuclear disarmament, the prevention of nuclear proliferation, and the promotion of international and regional peace and security.²⁵ In a statement to the NPT Review and Extension Conference on April 18, 1995, the Chinese foreign minister stated: “China supports the efforts of relevant countries and regions to establish nuclear-weapon-free zones or zones free of weapons of mass destruction through

voluntary consultations.”²⁶ In a white paper on arms control and disarmament issued in November 1995, China stated that because it

has always respected and supported the demands of the countries concerned for the establishment of (NWFZs) on the basis of voluntary consultation and agreement and in accordance with actual local circumstances, China welcomes the African Nuclear-Weapon-Free Zone Treaty and supports the proposals by relevant nations on the establishment of nuclear-free zones in the Korean Peninsula, South Asia, Southeast Asia and the Middle East.²⁷

On September 15, 1997, China presented its seven principles on the creation of NWFZs.²⁸ China has signed and ratified the relevant protocols of the Treaty of Tlatelolco (the Zone of Prohibition of Nuclear Weapons in Latin America and the Caribbean), the Treaty of Rarotonga (the South Pacific Nuclear-Free Zone), and the Treaty of Pelindaba (the African Nuclear-Weapon-Free Zone). On July 15, 1999, during his state visit to Mongolia, Chinese President Jiang Zemin expressed that China respects the nuclear-free-zone status of Mongolia.²⁹ On July 27, during the ASEAN Regional Forum, Chinese Foreign Minister Tang Jiaxuan said that the Chinese government has agreed in principle to sign the Protocol of the South-east Asia Nuclear-Weapon-Free Zone Treaty.³⁰

NEGATIVE FACTORS AFFECTING THE CREATION OF A NWFZ-NEA

Despite these positive signs, at least four other factors give rise to continued concern.

(1) The DPRK has not participated in the meetings of the Expanded Senior Panels. During the Fourth Expanded Senior Panel on the LNWFZ-NEA, held in Helsinki in October 1998, representatives of the DPRK did not respond to repeated invitations from the Interim Secretariat of the LNWFZ-NEA, the Finnish Institute of International Affairs, and the Finnish Ministry of Foreign Affairs. However, the progress of the meeting was communicated to representatives at the DPRK Embassy in Helsinki throughout the conference.

(2) There is some ambiguity in Japanese and South Korean attitudes toward the creation of the NWFZ-

NEA. During the Third Senior Panel, held in Moscow in October 1997, panel members from Japan and South Korea demonstrated positive attitudes toward the process of establishing the NWFZ-NEA. However, after North Korea launched its rocket in August 1998, private statements from officials and scholars in Japan and South Korea indicated a desire to maintain more options.³¹

(3) The United States is actively pushing ahead with National Missile Defense (NMD) and Theater Missile Defense (TMD) programs. The development of NMD and TMD by the United States has been increasing the concerns of the Russian Duma, which has not yet ratified the START II Treaty. The NMD and TMD programs have thus become obstacles to further nuclear disarmament and nonproliferation efforts. At the same time, the fact that the United States is both pursuing missile defenses and sticking to its first-use policy means that it will have both spears and shields, which will greatly aggravate the concerns of other countries about the possibility of the United States using nuclear weapons. This may lead to an arms race. Furthermore, if the United States transfers TMD to Taiwan, it may spur separatists in Taiwan to push for independence, which would be very dangerous to Asia-Pacific security.³²

(4) The extended deterrence strategy of the United States has increased the danger of nuclear weapons being used. The United States has retained the option of first use of nuclear weapons, and has threatened to use nuclear weapons to retaliate against adversaries who attack US troops abroad, or US allies, with weapons of mass destruction. At the same time, the United States has been improving its nuclear warheads, which can be used for accurate attacks and destruction against underground targets. The extended deterrence strategy has become a major obstacle to taking further significant steps on nuclear disarmament and nonproliferation. In order to pursue the strategy, the United States has to maintain a large number of nuclear warheads, making it difficult for the United States to substantially reduce its nuclear stockpile. This provokes accusations that the United States is pursuing a “double standard,” and is spurring some countries to develop nuclear weapons and other weapons of mass destruction.

NEXT STEPS FOR THE NUCLEAR-WEAPON-FREE ZONE IN NORTHEAST ASIA

The Nuclear-Weapon-Free Zone in Northeast Asia should be created on the basis of voluntary agreement of the relevant countries and according to the United Nations Charter and generally recognized principles of international law. States wishing to create the NWFZ-NEA should seek to establish adequate contacts at an early stage—certainly before the treaty is finalized and signed—with the nuclear weapon states. During the drafting of the Pelindaba Treaty, in addition to extensive informal consultations, representatives of the NWS and other concerned extra-regional states participated in special meetings of the UN-OAU Group of Experts. This provided opportunities to ascertain in a timely fashion their viewpoints regarding the treaty protocols that are addressed to them. That process proved to be mutually beneficial.³³

States parties of the future NWFZ-NEA should make it clear that they are convinced of the need to take all necessary steps to achieve the ultimate goal of a world entirely free of nuclear weapons, and that they accept the obligations of all states parties to contribute to this end. The NWFZ-NEA will constitute an important step towards strengthening the nonproliferation regime, promoting cooperation in the peaceful use of nuclear energy, encouraging general and complete disarmament, and enhancing regional and international peace and security.

The future NWFZ-NEA should ban nuclear weapons in the territory of all states parties. This “territory” means land territory, internal waters, territorial seas, and archipelagic waters and the airspace above them, as well as the seabed and subsoil beneath. It should not include continental shelves and exclusive economic zones in the ocean (EEZs), nor the areas where disputes over sovereignty of territory or maritime rights and interests between the contracting parties to the nuclear-weapon-free-zone treaty and their neighboring countries exist. There have been sharply contrasting approaches to this issue. The Pelindaba Treaty excludes international waters from its zone of application, so all the nuclear weapon states have signed the relevant protocols of it within less than two years. Conversely, because the Bangkok Treaty applies to the “territories, continental shelves and EEZs” of the states that become parties, which includes certain areas under dispute between the contracting parties of the treaty and their neighboring

countries, it has not been accepted by some countries, including some nuclear weapon states. The more successful experience of the Pelindaba Treaty further indicates that the extent of the zone of application of the treaty should be both defined in an article and illustrated in a map.

Some other lessons from the Pelindaba Treaty are also worthy of consideration. There are existing disputes between extra-regional states and certain African nations over contested territories and islands that might lie within the African NWFZ. The problem was solved through extensive consultations with the extra-regional states concerned. In the case of the Chagos Archipelago, including the island of Diego Garcia, the compromise solution was to encircle the archipelago, claimed by both the United Kingdom and Mauritius, with a footnote that reads: “Appears without prejudice to the question of sovereignty.”³⁴

According to the experiences of other NWFZs, each state party of the NWFZ-NEA should undertake:

- Not to conduct research on, test, develop, manufacture, stockpile, acquire, possess, or have control over any nuclear explosive device by any means, anywhere;
- Not to seek or receive any assistance in research, testing, development, manufacture, stockpiling, acquisition, or possession of any nuclear explosive device;
- Not to take any action to assist or encourage research, testing, development, manufacture, stockpiling, acquisition, or possession of any nuclear explosive device;
- To conduct all activities for the peaceful use of nuclear energy under strict nonproliferation measures to provide assurance of exclusive peaceful use; and
- To conclude a comprehensive safeguards agreement with the IAEA for the purpose of verifying compliance with the above undertakings.

All nuclear weapon states should undertake not to use or threaten to use any nuclear explosive device against any state party to the NWFZ-NEA Treaty.

The status of the NWFZ-NEA should not be affected by other security mechanisms, so that no state party is allowed to fail to carry out its relevant obligation on any excuse, including military alliance duties.

Because Japan is one of the major powers in the Asia-Pacific region and is the only state that has been hit by

nuclear weapons, it should take the lead in moving the consultations on establishing the NWFZ-NEA onto track one. If the Japanese government can do so, the concerns of other countries about the possibility of Japan's development of nuclear weapons will be greatly reduced. In the long run, it will help Japan to become a political power and to play a leading role in East Asia. As China has consistently supported the establishment of NWFZs, it will react very positively to initiatives on creating the NWFZ-NEA by other countries, including Japan. However, because China is one of the nuclear powers, it will be very difficult for China to take the lead in moving the consultations onto track one.

The NWFZ-NEA will contribute to nonproliferation in Northeast Asia in several ways:

- The scope of the verification regime of the NWFZ-NEA can go beyond the full application of IAEA safeguards, which will be especially useful for monitoring potential clandestine nuclear projects.
- The NWFZ-NEA can create a regional control mechanism, including reports and information exchange, consultations, and a complaint procedure. The regional control mechanism can also authorize challenge inspections of some suspected nuclear facilities. The mechanism will increase mutual understanding and trust among the states parties.
- The NWFZ-NEA may require each party to make a declaration of dismantling, destruction, or conversion of nuclear explosive devices, as well as any facilities for their manufacture and testing, that it may possess prior to the coming into force of the Treaty. The measure will force states parties, including North Korea, to clarify their status on nuclear issues.
- The NWFZ-NEA will preclude the possibility of NWS deploying nuclear weapons under their own control on the territory of states parties, which the NPT does not.

CONCLUSIONS

Establishing a Nuclear-Weapon-Free Zone in Northeast Asia would be the most effective way to finally resolve the North Korean nuclear problem and prevent nuclear proliferation in the region. Until now, non-governmental organizations have played a major role in the process of creating a NWFZ-NEA. In order to accelerate the process, some policy recommendations should be considered. First, the United States should re-examine the role that could be played by regional nuclear-

weapon-free zones in nuclear nonproliferation, and should take more active measures to speed up the process of creation of regional nuclear-weapon-free zones, especially the NWFZ-NEA. Second, the relaxation of tensions on the Korean Peninsula is the key to making North Korea give up its nuclear option, so countries concerned should make a common effort towards progress in the Four-Party Talks, and the United States should take positive steps to improve its relations with the DPRK. Third, the countries concerned should strictly implement the US-DPRK Agreed Framework, which has been playing an important role in nuclear nonproliferation on the Korean Peninsula. And finally, the work to create the NWFZ-NEA should move from informal and unofficial (track two) to formal and official (track one) as soon as possible. It would be especially appropriate for Japan to take the lead in this process.

¹ Amitav Acharya and Sola Ogunbanwo, "The nuclear weapon-free-zones in South-East Asia and Africa," *SIPRI Yearbook 1998: Armaments, Disarmament and International Security* (New York: Oxford University Press and Stockholm International Peace Research Institute, 1998), Appendix 10B, p. 454.

² "Nuclear-Weapon-Free Zones (NWFZs): Questions & Answers," International Organizations and Nonproliferation Project, the Center for Nonproliferation Studies (CNS), Monterey, CA, July 25, 1997, p. 14.

³ *Ibid.*

⁴ *Ibid.*, pp. 11-12.

⁵ Former South African President F. W. de Klerk admitted on March 24, 1993, that South Africa had developed and produced six nuclear weapons but had dismantled and destroyed them before joining the NPT. The Pelindaba Treaty bans research aimed at acquiring nuclear explosive devices (Article 3). Article 6 states that Parties undertake to declare their capabilities for manufacturing nuclear explosive devices, to dismantle and destroy any such device that it has manufactured before the treaty enters into force, to destroy or convert facilities for production, and to permit international inspection of the processes of dismantling and destruction of nuclear explosive devices and destruction or conversion of production facilities.

⁶ The Three Non-Nuclear Principles of Japan are "not manufacturing, possessing, or allowing nuclear weapons onto Japanese soil." The Principles were put forward as the policy of Japanese government during the Cold War. However, they were not embodied in a binding law or treaty.

⁷ Japanese Atomic Energy Commission (JAEC), "White Paper on Nuclear Energy," No. 7, (September 1996), p. 77.

⁸ Selig S. Harrison, ed., *Japan's Nuclear Future: The Plutonium Debate and East Asian Security* (Washington, DC: Carnegie Endowment for International Peace, 1996), p. 100.

⁹ David Albright and Corey Gay, "Taiwan: Nuclear Nightmare Averted," *The Bulletin of the Atomic Scientists* 54 (January-February 1998).

¹⁰ Rodney W. Jones and Mark G. McDonough, *Tracking Nuclear Proliferation: A Guide in Maps and Charts, 1998* (Washington, DC: Carnegie Endowment for International Peace, 1998), pp. 147-48.

¹¹ Ibid., pp. 148-49.

¹² Taewoo Kim, "Japanese Ambitions, US Constraints, And South Korea's Nuclear Future," in Selig S. Harrison, ed., *Japan's Nuclear Future: The Plutonium Debate and East Asian Security* (Washington, DC: Carnegie Endowment for International Peace, 1996), pp. 102-105.

¹³ The meetings on the LNWFZ-NEA sponsored or co-sponsored by the Center for International Strategy, Technology, and Policy at the Georgia Institute of Technology include the Senior Panel Workshop (January-February 1995), the First Expanded Senior Panel in Buenos Aires, Argentina (March 1996), the Second Expanded Senior Panel in Bordeaux, France (October 1996), the Third Expanded Senior Panel in Moscow (October 1997), the Fourth Expanded Senior Panel in Helsinki, Finland (October 1998), and the Working Group meeting in Shanghai, China (April 1999).

¹⁴ See Center for International Strategy, Technology, and Policy, "The Bordeaux Protocol of the Limited Nuclear Weapons Free Zone for Northeast Asia" (Atlanta, GA: Georgia Tech Research Corporation, March 1997), pp. 69-77.

¹⁵ Ibid., pp. 71-72.

¹⁶ Center for International Strategy, Technology, and Policy, "The Moscow Memorandum: Findings and Recommendation of the Third Expanded Senior Panel of the Limited Nuclear Weapons Free Zone for Northeast Asia," Moscow, October 11, 1997.

¹⁷ Center for International Strategy, Technology, and Policy, "The Summary Report of the Fourth Expanded Senior Panel on the Limited Nuclear Weapons Free Zone for Northeast Asia," Helsinki, October 12-14, 1998.

¹⁸ Although on March 12, 1993, North Korea announced its intention to withdraw from the NPT, it subsequently suspended the decision. (The NPT permits any state party to withdraw from it on 90 days notice if the country's "supreme national interests" are jeopardized.)

¹⁹ The Comprehensive Nuclear-Test-Ban Treaty, <<http://www.ctbto.org/ctbto/treaty.shtml>>.

²⁰ Jozef Goldblat, "Nuclear-Weapon-Free Zones: A History and Assessment," *The Nonproliferation Review* 4 (Spring-Summer 1997), p. 24.

²¹ Joel Wit, "The Korean Peninsula Energy Development Organization: Achievements and Challenges," *The Nonproliferation Review* 6 (Winter 1999), p. 59.

²² "Agreement on Supply of a Light-Water Reactor Project to the DPRK Between the Korean Peninsula Energy Development Organization and the Government of the DPRK," Article III, on December 15, 1995, in CNS, "North Korea's Nuclear Program and Nonproliferation Commitments," <<http://cns.miis.edu/db/china/ndprkpos.htm>>.

²³ A/RES/53/74, adopted by consensus, on "Mongolia's International Security and Nuclear-Weapon-Free Status." See Tariq Rauf and John Simpson: "The 1999 NPT PrepCom," *The Nonproliferation Review* 6 (Winter 1999), pp. 129 and 133.

²⁴ "Agreed Framework Between the United States and the DPRK," Geneva, October 21, 1994, in CNS, "North Korea's Nuclear Program and Nonproliferation Commitments."

²⁵ "Speech by Head of the Chinese Delegation to the International Conference 'Central Asia—Nuclear Weapons Free Zone'," Tashkent, Uzbekistan, September 15, 1997.

²⁶ "Statement by Qian Qichen, Vice Premier and Foreign Minister and Head of Delegation of the People's Republic of China at the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons," April 18, 1995, in CNS, "Nuclear Weapon Free Zones," <<http://cns.miis.edu/db/china/nwfzorg.htm>>.

²⁷ "China: Arms Control and Disarmament," Information Office of the State Council of the People's Republic of China, November 1995.

²⁸ "Speech by Head of the Chinese Delegation to the International Conference 'Central Asia—Nuclear Weapon Free Zone'," Tashkent, Uzbekistan, September 15, 1997.

²⁹ *The Peoples' Daily*, July 16, 1999, p. 6.

³⁰ Ibid.

³¹ Mr. Tsutomu Numajiri, chief researcher, *Asahi Shimbun*, and Brigadier General Kim Kook-Hun, Office of Defense Policy, ROK Ministry of National Defense, interviews by author.

³² Yan Xuetong, "Theater Missile Defense and Northeast Asian Security," *The Nonproliferation Review* 6 (Spring-Summer 1999).

³³ Acharya and Ogunbanwo, "The nuclear weapon-free zones," p. 455.

³⁴ Ibid., p. 454.