

**PROPOSALS TO THE JAPANESE GOVERNMENT
CONCERNING THE DENUCLEARIZATION OF NORTH
KOREA**

**WITH A VIEW TO REDUCTION OF NUCLEAR THREAT AND ESTABLISHMENT OF NEW SECURITY
FRAMEWORK IN NORTHEAST ASIA**

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**WORKING GROUP ON NEW INITIATIVES FOR NUCLEAR
ENERGY AND NUCLEAR NON-PROLIFERATION**

SASAKAWA PEACE FOUNDATION

Preface

The Sasakawa Peace Foundation (SPF) established the International Peace and Security Department in order to contribute to peace and security in Japan, the Asia-Pacific region, and the rest of the world. The department conducts research and makes policy recommendations based on its research.

In September 2018, the SPF established the Working Group on New Initiatives for Nuclear Energy and Nuclear Non-Proliferation. The aim of this Working Group is to explore the contributions that Japan can make in the field of global nuclear disarmament and non-proliferation, as a leading nation in the civilian use of nuclear energy and the only country to have been subjected to nuclear bombings. The Working Group started discussions about Japan's role and the ways in which Japan can contribute internationally. To date, it has conducted research on a wide range of topics, including international management of nuclear fuel, denuclearization of North Korea, and global nuclear disarmament, and it has compiled the results into a sequence of policy recommendations. The first set of recommendations was published as "Proposals to the Japanese Government Concerning International Management of Plutonium—Aiming for reduction in plutonium stocks and adoption of new international norms" in May 2019, and this was delivered to the (then) Minister for Foreign Affairs, Taro Kono, in August 2019. The Working Group has now compiled new policy recommendations on the role of the Japanese government concerning the denuclearization of North Korea (Democratic People's Republic of Korea).

There have been rapid developments regarding the denuclearization of North Korea since 2018, and we are approaching a major turning point in the security of the whole of Northeast Asia. Denuclearization of the Korean Peninsula, achieving an end to the Korean War, and, furthermore, making the actions irreversible, are priorities for Japan's security. As well as providing recommendations for the entire process of denuclearization of the Korean Peninsula, the current proposals compile policies that Japan—as a leading nation in the civilian use of nuclear energy—should adopt so that it can contribute to the denuclearization process.

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In December 2019, Former Ambassador Tetsuya Endo, one of the committee members, passed away. Ambassador Endo participated in the Working Group since its establishment and provided valuable input for the proposals. We hereby offer our sincerest condolences and extend our heartfelt gratitude to him.

Proposals to the Japanese Government Concerning the Denuclearization of North Korea: With a view to reduction of nuclear threat and establishment of new security framework in Northeast Asia

There have been rapid developments regarding denuclearization of North Korea (Democratic People's Republic of Korea) since 2018, and we are approaching a major turning point in the security of the Korean Peninsula, and consequently, the whole of Northeast Asia. Taking advantage of the series of agreements made at the North Korea–United States summit and the inter-Korean summit in 2018 (Singapore Joint Statement, Panmunjom Declaration, Pyongyang Joint Declaration) to clarify the end goals of denuclearization talks and make the actions irreversible is of utmost importance. To do this, it is useful to learn from the events of past North Korean denuclearization talks.

Specifically, after determining the end goals, rather than pursuing denuclearization all at once, it is desirable to progress steadily under a consistent policy while building relationships of mutual trust, with the aim of achieving an agreement that combines “verifiable denuclearization” and “sanctions relief” in stages. It is also desirable to aim for a legally binding treaty or pact, rather than just a political agreement. At the same time, it is necessary to build a framework, not only for talks between the two Koreas and between North Korea and the USA, but also for multilateral discussions and trust building between relevant countries in the region (Japan, China, Russia, etc.). Also, opportunity should be taken of “denuclearization of the Korean Peninsula” and “the end of the Korean War” to pursue a reduction of the nuclear threat in Northeast Asia and the establishment of a new peace and security framework. This kind of comprehensive approach is considered necessary to promote the denuclearization of North Korea.

As well as beginning direct talks with North Korea aimed at normalization of diplomatic relations based on the Japan—North Korea Pyongyang Declaration of 2002, Japan should contribute actively to the denuclearization process and take leadership toward building peace in the whole of Northeast Asia. Together with a proposal for the entire process of denuclearization of North Korea, this Working Group has drawn up a proposal for Japan to contribute to the improvement of security in Northeast Asia, focusing on its role as a leading nation in the civilian use of nuclear energy.

Proposals

- 1. Proposal for entire denuclearization process: Building on a series of agreements, clarify the end goals of denuclearization talks, and pursue denuclearization of the Korean Peninsula and peace in the whole of Northeast Asia with a sound and consistent policy aimed at achieving those goals.**
- 2. Proposal concerning Japan’s contribution: As the only country to have been subjected to nuclear bombings and as a leading nation in the civilian use of nuclear energy, Japan will support the process of denuclearization of the Korean Peninsula and will take the initiative in easing tensions and building peace in Northeast Asia.**

Proposal 1 Proposal for entire denuclearization process:

Building on a series of agreements, clarify the end goals of denuclearization talks, and pursue denuclearization of the Korean Peninsula and peace in the whole of Northeast Asia with a sound and consistent policy aimed at achieving those goals.

- (1) Advance each stage of “complete, verifiable, and irreversible denuclearization” of North Korea, and proceed steadily with corresponding measures to ease tensions.**

It is of paramount importance that, not only the USA and North Korea, but also relevant countries including Japan identify and agree that the end goals of the talks are to achieve “complete denuclearization of the Korean Peninsula” and an “end to the Korean War” (Panmunjom Declaration), and to “build a lasting and stable peace regime on the Korean Peninsula” (US–North Korea Singapore Joint Statement), which were agreed in 2018. Also, taking lessons from past failures, it is advisable that the agreed items are implemented prudently in a step-by-step manner and under a consistent policy, while conducting carefully prepared working-level talks.

Although “complete denuclearization of the Korean Peninsula” is an end goal, it is first essential that “complete denuclearization of North Korea” be implemented in a way that is “verifiable” and “irreversible.” Talks must not continue while this point remains ambiguous. However, a clear agreement on the details and process of this complete denuclearization has not yet been reached between the USA and North Korea.

This Working Group recommends that “step-by-step denuclearization,” as a realistic denuclearization process, is advanced in a way that is “verifiable.” Specifically, this would involve the following steps: (a) declaration of stocks of nuclear materials (highly enriched uranium and plutonium) and halting of production of these materials and verification, (b) declaration of nuclear warheads, nuclear-related facilities, and missile-related facilities, as well as their dismantling/disposal and verification, (c) accession to the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and complete return to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). It is desirable that a timeline be established for these plans and they be advanced under clear time constraints—from submission of a denuclearization plan by North Korea to establishment of a verification system and dismantling of all nuclear-weapon programs. Furthermore, participation in the Missile Technology Control Regime (MTCR), the Biological Weapons Convention (BWC), and the Chemical Weapons Convention (CWC) should also be considered.

Meanwhile, in response to North Korea’s step-by-step implementation of denuclearization measures, the USA and the international community must gradually implement concrete measures for easing tensions and economic assistance. Specifically, these could include (a) establishment of liaison offices by the USA and North Korea in each other's capital cities, (b) phased lifting of sanctions, (c) release of declaration of the end of the Korean War and commencement of peace treaty negotiations (in which China and South Korea also participate), (d) plan for large-scale economic assistance including energy aid, and (e) measures for substantial reduction of military risk on the Korean Peninsula (establishment of crisis management/communication, etc.). Here, applying lessons learned from the Korean Peninsula Energy Development Organization (KEDO), it is also worth considering the creation of regional organizations for energy cooperation. However, the inclusion of nuclear power in energy cooperation would be

conditional upon North Korea's complete return to the NPT and ratification of additional protocols¹. The process of encouraging North Korea's smooth return to the international community while ensuring its security by gradually easing tensions and expanding economic assistance in this way is important.

While talks aimed at denuclearization are progressing, suspension of all nuclear activities and a complete cessation of missile testing (including short- and intermediate-range missiles) by North Korea as a first step in building trust, and a corresponding moratorium by the USA on US–South Korea joint military exercises, should be sought. During sincere and fair dialogue between the USA, North Korea, and relevant countries toward the end goal of complete denuclearization, the establishment of a suitable environment focused on trust building is required above anything else. The Japanese government should urge North Korea by way of countries such as China and the USA to “immediately suspend nuclear-related activities” while negotiations are ongoing.

(2) Construct a multilateral, internationally trusted “verification system” for denuclearization: a new system is required in which Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS) with particular interests and capabilities, such as Japan, are involved, as well as the International Atomic Energy Agency (IAEA).

No precedent exists for verification of North Korea's denuclearization. There is no system for international verification of “complete denuclearization (dismantling/disposal of all nuclear warheads, nuclear materials, and nuclear-weapon-related facilities)” of a country that possesses nuclear weapons. A particularly important point in the above-mentioned “(1) declaration of stocks of nuclear materials (highly enriched uranium and plutonium) and halting of production of these materials and verification” is, of course, verification of the quantity of nuclear materials produced, and North Korea's declaration must be independently assessed. Also, the involvement of NWS is essential in the dismantling of nuclear warheads to prevent know-how related to nuclear weapons from being disclosed to NNWS. It is, therefore, apparent that these verification measures will go beyond the scope of the International Atomic Energy Agency (IAEA) safeguards² required by the NPT, and a new verification system must be constructed³.

As a model, it is worth considering the United Nations Special Commission (UNSCOM), established based on the United Nations Security Council Resolution 687 with the aim of disposing of Iraq's weapons of mass destruction⁴. Also, with regard to bodies for reciprocal verification/monitoring in the region, it is worth referring to verification organizations such as the European Atomic Energy Community (EURATOM) and the Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), which contribute to regional trust building⁵. Furthermore, the

¹ See glossary (1)

² See glossary (2)

³ Mareena Robinson Snowden, “Probabilistic Verification: A New Concept for Verifying the Denuclearization of North Korea,” *Arms Control Today*, September 2019 (<https://www.armscontrol.org/act/2019-09/features/probabilistic-verification-new-concept-verifying-denuclearization-north-korea>); John Carlson, “Verification of DPRK Nuclear Disarmament: The Pros and Cons of Non-Nuclear-Weapon-States (Specifically, the ROK) Participation in This Verification Program,” PSNA Working Paper 7, May 20, 2019 (<http://www.recna.nagasaki-u.ac.jp/recna/psnaactivities/22104>).

⁴ Jacques Baute, “Timeline Iraq: Challenges and Lessons Learned from Nuclear Inspections,” *IAEA Bulletin*, Vol. 46, No. 1, June 2004, pp. 64-68.

⁵ Jose Goldemberg, Carlos Feu Alvim and Olga Y. Mafra, “The Denuclearization of Brazil and Argentina,” *Journal for Peace and Nuclear Disarmament*, Vol. 1, No. 2, May 23, 2018 (<https://www.tandfonline.com/doi/full/10.1080/25751654.2018.1479129?src=recsys>).

International Partnership for Nuclear Disarmament Verification (IPNDV) serves as a reference for the involvement of non-nuclear powers in the denuclearization process⁶.

(3) As end goals, aim for denuclearization of the Korean Peninsula, reduction of the nuclear threat in the whole of Northeast Asia, and construction of a new, multilateral peace and security framework in the region.

Concrete ideas for the goal of “building a lasting and stable peace regime on the Korean Peninsula” must also be conceived. Essential elements of this are “an end to the Korean War” and “conclusion of a peace treaty.” However, this matter cannot be settled by an agreement between the USA and North Korea only and will, of course, require the agreement of a minimum of four countries, including South Korea and China. As relevant countries in the region, Japan and Russia must also be involved. To ensure lasting peace and security on the Korean Peninsula, a “framework for multilateral dialogue” is necessary, and, looking toward the future, the construction of a stable, multilateral security framework in the region is important. Resumption of the Six-Party Talks should also be considered as a realistic option.

Going beyond denuclearization of North Korea, a trust-building framework for easing tensions in Northeast Asia is necessary to realize the establishment of a permanent peace regime on a nuclear-weapon-free Korean Peninsula. In particular, neighboring nuclear powers have a duty to proceed in good faith with nuclear disarmament negotiations specified in NPT Article 6 to ease tensions in the region. As far as North and South Korea and Japan are concerned, the establishment of a permanent peace regime is impossible as long as there is a nuclear threat from neighboring nuclear powers. However, in the difficult security environment that currently exists, there is no consensus on how to reduce the nuclear threat⁷. This Working Group proposes the following:

- (1) Call for the USA, Russia, and China to fulfill their nuclear disarmament commitments robustly and substantially in order to reduce the nuclear threat in Northeast Asia.
- (2) Commence discussions regarding a multilateral security framework⁸ and specific processes aimed at achieving steady and sustainable reduction of the nuclear threat in the whole of Northeast Asia.
- (3) When proceeding with the discussions in (2) above, conduct intensive talks on concrete measures that will enable the role of nuclear weapons in security policies to be reduced as far as possible over the next five to ten years⁹.

While being the only country subjected to nuclear bombings, Japan is faced with the dilemma of “abolition of nuclear weapons” and “dependence on the nuclear umbrella,” and this initiative is necessary for Japan to break free of this dilemma and call for nuclear powers to disarm.

⁶ See glossary (3).

⁷ There is a view that maintenance/enhancement of “nuclear deterrence” is necessary [Akiyama, Takahashi, 2019], but there is also a view that a security framework allowing dependence on “nuclear deterrence” to be reduced should be built with the aim of easing tensions [Yanagisawa, 2019].

⁸ As a vision for the future, researchers from Japan, USA, and South Korea have proposed a Treaty of Amity and Cooperation in Northeast Asia modeled on the Treaty of Amity and Cooperation in Southeast Asia (see glossary (3)) and a Northeast Asia Nuclear Weapon Free Zone (see glossary (4)) [Yoshida, Paik, Hayes, Hamel-Green, 2019].

⁹ For example, measures to reduce the role of nuclear weapons while maintaining a nuclear deterrence include (1) de-alerting, (2) no first use of nuclear weapons, and (3) negative security assurances (no nuclear strike/threat against a non-nuclear-weapon state). Nuclear-weapon-free zone treaties demand (3) in a form that is binding in terms of international law.

Proposal 2 Proposal concerning Japan's contribution:

As the only country to have been subjected to nuclear bombings and as a leading nation in the civilian use of nuclear energy, Japan will support the process of denuclearization of the Korean Peninsula and will take the initiative in easing tensions and building peace in Northeast Asia.

- (1) Begin talks on normalization of diplomatic relations with North Korea, and, in cooperation with the USA and South Korea, take the initiative in negotiations aimed at denuclearization of the Korean Peninsula.**

The Japanese government's handling of North Korea has recently shifted from pressure alone to "unconditional dialogue with North Korea," as stressed by Prime Minister Shinzo Abe. However, similar to the above-mentioned denuclearization process, clear end goals are necessary when starting dialogue with North Korea. Specifically, with the aim of normalizing diplomatic relations between Japan and North Korea in accordance with the 2002 Japan-North Korea Pyongyang Declaration, measures for comprehensive resolution of the nuclear, missile, and abduction issues and economic assistance to North Korea should be considered immediately. Japan, taking the initiative for building peace in the whole of Northeast Asia, in cooperation with South Korea, is expected to contribute greatly to security in the region. It is also important that dialogue on nuclear disarmament in the region, as recommended in Proposal 1 (3) above, is started on the initiative of Japan. It is desirable that it be made clear at the start of the negotiations that there is a readiness to provide large-scale economic assistance, such as energy aid, to North Korea, along with normalization of diplomatic relations. It is vital to gain domestic public support on these points, and the government must proactively and urgently engage in substantive dialogue with the public.

- (2) Contribute actively to denuclearization verification measures.**

As a leading nation in the civilian use of nuclear energy, Japan can contribute significantly to denuclearization verification.

Verifying the quantity of nuclear materials (highly enriched uranium and plutonium) produced in the past is key to the denuclearization verification process. North Korea declared the quantity of plutonium it possessed to China in June 2008 as 31–37 kilograms (a nuclear device can be manufactured with 8 kilograms). Based on (estimated) past operating results for reprocessing facilities, the estimated cumulative production until the end of 2018 is 36–75 kilograms, and, assuming that 7–15 kilograms of plutonium were consumed in six nuclear tests, plutonium stocks are estimated to be 29–60 kilograms. The margin of error in estimates of highly enriched uranium is greater, because it is more difficult to estimate the operating status of uranium enrichment facilities. Assuming that the cumulative production until the end of 2017 was 300–750 kilograms (a nuclear device can be manufactured with 25 kilograms) and 45–100 kilograms were used in nuclear tests, the stocks are estimated to be 255–650 kilograms¹⁰.

¹⁰ David von Hippel, "Methods for Refining Estimates of Cumulative DRPK Uranium Production," PSNA Working Paper 8, May 27, 2019 (<http://www.recna.nagasaki-u.ac.jp/recna/psnaactivities/22111>).

In this manner, it is possible to make certain estimations using publicly available information and satellite technology; however, advanced technologies, such as nuclear forensics, are needed to verify accurately the stocks declared by North Korea. Entry into and inspection of nuclear facilities will be required for this. Of course, data on past operating results will also be needed. Furthermore, by analyzing environmental samples, it will be possible to detect the existence of secret facilities and production activities. Japan possesses advanced technological capability in these nuclear material verification technologies. Regarding safeguards for reprocessing facilities and enrichment facilities as well, as the only non-nuclear power with experience of both types of facility, Japan could contribute greatly to inspections relating to both reprocessing and enrichment. On the condition that North Korea ratifies the NPT additional protocols, we propose that the Japanese government provide Japanese inspection/verification technology and actively participate in the denuclearization process.

(3) Build a “cooperative nuclear threat reduction” program modeled on aid for the former Soviet Union directly after the Cold War.

A major issue in the denuclearization process is how safely and efficiently nuclear-related facilities are decommissioned and nuclear materials are managed/disposed of (including the burning of plutonium).

Of reference here is the US–Russian Cooperative Threat Reduction (CTR) Program after the end of the Cold War. At that time, the USA enacted a variety of relevant legislation, such as the Nunn–Lugar Act, and actively provided financial and technical support to assist the management/disposal of nuclear materials and the dismantling/disposal of nuclear weapons by the former Soviet Union. A notable agreement within this is the agreement made in February 1993 to purchase 500 tons of highly enriched uranium recovered by Russia from dismantled nuclear weapons. By diluting this 500 tons of highly enriched uranium and selling it on the market as low-enriched uranium for nuclear power plant fuel, the USA implemented a meaningful program supporting nuclear disarmament known as the Megatons to Megawatts program. Meanwhile, both the USA and Russia agreed to dispose of 34 tons of plutonium each under the Plutonium Management and Disposition Agreement (PMDA) concluded in September 2000. However, the plans of neither country proceeded as scheduled, and Russia suspended the disposition agreement in 2016. The USA’s disposal plan of burning plutonium as MOX fuel was also discontinued, and technology is currently being developed in the direction of direct disposal.

We propose emulating the US–Russian Cooperative Threat Reduction (CTR) Program and creating a “(North Korean) Nuclear Threat Reduction Program,” with Japan, the USA, and South Korea taking central roles¹¹. Specifically, Japan, the USA, and South Korea would provide financial and technical support for the management/disposal, including burning in reactors, of nuclear materials (highly enriched uranium and plutonium) recovered after the dismantling of nuclear weapons, and for the dismantling/decommissioning of nuclear facilities. This would make it possible to minimize the risks associated with the process of dismantling North Korea’s nuclear weapons. When establishing the “North Korean CTR,” it is desirable that cooperation and support be sought from China and Russia, as well as Europe

¹¹ Lynn Rusten et al., “Building Security Through Cooperation: Report of the NTI Working Group on Cooperative Threat Reduction with North Korea,” Nuclear Threat Initiative, 2019 (https://media.nti.org/documents/NTI_DPRK2019_RPT_FNL.pdf).

and like-minded countries in the Asia-Pacific region, in addition to Japan, the USA, and South Korea.

(4) Support the transition of North Korean researchers/engineers into non-military fields.

With the aim of contributing to the economic development of North Korea and preventing an exodus of researchers/engineers who have been involved in nuclear weapon programs in North Korea until now, a program should be built to support the re-employment and transfer into non-military fields of North Korean researchers/engineers. Experience gained via the International Science and Technology Center (ISTC) established after the Cold War to support Russian researchers/engineers can be utilized here. The ISTC was founded in Moscow in March 1999, with the participation of the USA, Japan, the EU, and Russia. It is currently based in Kazakhstan, and in addition to the USA, Japan, and EU, the member countries are Norway, South Korea, Kazakhstan, Armenia, Kyrgyz Republic, Georgia, and Tajikistan. Private companies participate in the ISTC as partners, and they can implement joint projects with excellent researchers/engineers from Russia and the former Soviet Union at relatively low research costs, as well as receiving tax benefits. This system prevented an exodus of researchers/engineers from Russia and the former Soviet Union and secured their employment¹².

With the same intent, we propose the establishment of an “East Asia Science and Technology Center (EASTC),” with the participation of Japan, the USA, and South Korea, as well as countries such as Russia and China. Establishing this kind of organization will make it possible to facilitate the re-employment of North Korean researchers/engineers who were involved in nuclear development and the diversion of research findings to civilian uses. However, particular care must be taken regarding the civilian use of nuclear energy by a denuclearized North Korea, and the relevant countries will provide support for this use upon confirmation that the irreversibility of denuclearization has been guaranteed and secured, not only through a complete return to the NPT, but also rigorous IAEA inspections.

¹² “International Science and Technology Center,” Ministry of Foreign Affairs of Japan website.
https://www.mofa.go.jp/mofaj/gaiko/technology/istc_1.html

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Glossary

(1) NPT safeguards agreements and additional protocols

Under Article 3.1 of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), signatory non-nuclear-weapon states are obliged to conclude safeguard agreements with the IAEA. These agreements cover all nuclear materials related to peaceful nuclear activities by the relevant country. Also known as “full-scope safeguard agreements” or “comprehensive safeguard agreements,” IAEA safeguards are applied to nuclear power facilities based on declarations by the relevant country.

An additional protocol is an agreement concluded between the IAEA and a country that has entered into a safeguard agreement to strengthen the safeguards, and it verifies that there are no undeclared nuclear activities, such as nuclear-weapon manufacturing. The signatory country is required to declare activities related to nuclear power that are not declared in the comprehensive safeguards agreement and to allow the IAEA to make on-site inspections at short notice at locations where access (inspection) is not permitted under the existing agreement (complementary access (CA)). CA allows the IAEA to enter any location based on its own information.

(2) Safeguards

These are measures for confirming that nuclear materials, such as uranium and plutonium, and other materials/equipment used for nuclear power are confined to peaceful uses and are not diverted to nuclear devices or other military purposes. They are also aimed at early detection and prevention of nuclear weapon manufacture in the event that a country does attempt to use these nuclear materials, etc. for nuclear weapons. Specifically, they are activities and measures for independently verifying through inspections that the nuclear materials accounting (checking of shipper/receiver measurements and physical inventories) conducted by businesses is correct.

(3) International Partnership for Nuclear Disarmament Verification (IPNDV)

This is an initiative under which nuclear-weapon states and non-nuclear-weapon states discuss and examine the means and technologies for nuclear disarmament verification. The initiative began in December 2014 following a proposal by the USA. Since the first meeting in March 2015 in Washington, D.C., a total of six plenary meetings have been convened to date and working group meetings have been held every year. The participating countries include nuclear-weapon states (USA, United Kingdom, and France) and non-nuclear-weapon states (Australia, Belgium, Brazil, Canada, Chile, Finland, Germany, Hungary, Indonesia, Italy, Japan, Jordan, Kazakhstan, Mexico, Netherlands, Nigeria, Norway, Philippines, Poland, South Korea, Sweden, Switzerland, Turkey, United Arab Emirates, Vatican City, EU).
https://www.mofa.go.jp/mofaj/dns/ac_d/page22_002633.html

Regarding verification measures for nuclear disarmament and denuclearization of North Korea, see: Tatsujiro Suzuki, Satoshi Hirose, Kiichi Fujiwara (eds.), “How to Face Nuclear Threats: Denuclearization and Security in Northeast Asia,” Part 3 “Verification of denuclearization and issues in Northeast Asia”, pp. 141–191, Horitsu Bunka Sha, March 2018.

There is a view that maintenance/enhancement of “nuclear deterrence” is necessary [Akiyama, Takahashi, 2019], but there is also a view that a security framework allowing dependence on “nuclear deterrence” to be reduced should be built with the aim of easing tensions [Yanagisawa, 2019].

(4) Treaty of Amity and Cooperation in Southeast Asia

This treaty was concluded at the first summit meeting of the Association of Southeast Asian Nations (ASEAN) held in Bali, Indonesia, in February 1976. Article 2 stipulates principles such as respect for sovereignty and territorial integrity, non-interference in the internal affairs of another nation, settlement of disputes by peaceful means, and renunciation of the threat or use of force. To date, 26 countries have acceded to the treaty, including not only Southeast Asian countries, but also China, India (2003), Japan, Pakistan, South Korea, Russia (2004), New Zealand, Australia, Mongolia (2005), France (2006), East Timor, Bangladesh, Sri Lanka (2007), North Korea (2008), the USA, the European Union (2009), and Brazil (2011).

(5) Nuclear-weapon-free zone treaty

This is a system under international law aimed at creating conditions that exclude nuclear weapons from a given geographic region. Existing nuclear-weapon-free zone treaties have three important elements in common. The first element is the absence of nuclear weapons, i.e., a ban on their production, acquisition, provision, stationing, etc. The second element is the provision of negative security assurances (NSAs). In existing nuclear-weapon-free zone treaties, accompanying protocols stipulating the provision of NSAs guaranteeing that the nuclear-weapon state will not use or threaten to use nuclear weapons against non-nuclear-weapon states in the region are drafted, and they are signed and ratified by the nuclear-weapon state. The third element is the establishment of an organization with the function of verifying observance of the treaty and holding consultations if problems occur. In addition, many treaties include the right to peaceful use of nuclear power and its guarantee, etc. The idea of a “Northeast Asia Nuclear Weapon Free Zone” is to make the three countries of North Korea, South Korea, and Japan into a nuclear-weapon-free zone and prohibit the possession, stationing, and use of nuclear weapons in that area, and also to have the surrounding nuclear-weapon states (USA, Russia, and China) provide negative security assurances to the three countries in the nuclear-weapon-free zone. Establishing a nuclear-weapon-free zone greatly reduces the nuclear risk in the region.

