Part III

Nuclear Disarmament and Non-proliferation

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Chapter 1. Overview (Japan's basic stance on nuclear disarmament and non-proliferation)

1. Basic stance

It is natural for Japan, the only country to have ever suffered nuclear devastation in Hiroshima and Nagasaki, to focus on disarmament and non - proliferation of nuclear weapons (nuclear disarmament and non - proliferation). Given the massive destructive power of nuclear weapons, it is also natural from a security point of view that Japan places high priority on nuclear disarmament and non - proliferation. In practice, Japan has played an active role in the international community for this issue, and has made a substantial contribution.

Japan's basic stance on nuclear disarmament and non - proliferation rests with two fundamental requests: (i) a request for an effort toward the total elimination of nuclear weapons to improve Japan's security environment as the only country to have ever suffered nuclear devastation, as well as from a long - term perspective, and (ii) a request not to harm Japan's security while Japan relies on the United States' deterrence, including nuclear deterrence. Based on these fundamental requests, on the one hand Japan does rely on the United States' nuclear deterrent against nuclear threats, on the other hand Japan, being the sole country to have suffered nuclear devastation, adopts a realistic and incremental approach to realize a peaceful world free of nuclear weapons through practical disarmament measures to improve Japanese security environment.

2. Efforts to nuclear disarmament and non - proliferation

Japan ratified the Treaty on the Non - Proliferation of Nuclear Weapons (NPT) in June 1976. Upon depositing the instrument of ratification, Japan explicitly stated, "Japan, as the only nation to have suffered atomic bombings, declares anew to the world its fundamental policy of forsaking nuclear armament." At the same time, Japan hoped "as many States as possible will become parties to this Treaty in order to make it truly effective." Furthermore, Japan strongly "urged" the nuclear - weapon states, which have special responsibilities for nuclear disarmament "to take concrete nuclear disarmament measures such as the reduction of nuclear weapons and the realization of a comprehensive nuclear test ban, in accordance with Article VI of this Treaty." Japan made such statements under the belief that "the nuclear - weapon states must rectify this discrimination in the future by totally abolishing their nuclear weapons" since "the NPT permits only the nuclear - weapon states to possess nuclear weapons and allows them a special status."

The basic stance of Japan on nuclear disarmament and non - proliferation and its support for the NPT have remained unchanged since Japan ratified the Treaty. The realization of a world free of nuclear weapons is the essential condition to ensure Japan's national security since Japan renounced its nuclear option by joining the NPT. At the same time, Japan, as the only nation that has suffered atomic bombings, has a humanitarian responsibility to the international community to advocate the total elimination of weapons of mass destruction, in particular nuclear weapons. Therefore, Japan emphasizes the importance of making diplomatic efforts to implement concrete measures based on a practical and incremental approach so as to achieve its objectives of total elimination of nuclear weapons as early as possible. Instead of arousing negative reactions in nuclear - weapon states by making unrealistic and radical requests that may not be acceptable to them, and thereby causing a stalemate in nuclear disarmament, Japan intends to engage

nuclear - weapon states in nuclear disarmament and build up feasible measures one by one, taking into account the undeniable reality that nuclear weapons still exist and that they serve as a deterrent.

Based on those basic stances on nuclear disarmament and non - proliferation, Japan attaches great importance to the NPT as the foundation to achieve the goals of nuclear disarmament and non - proliferation. In addition, Japan also regards the International Atomic Energy Agency (IAEA) Safeguards and the Comprehensive Nuclear - Test - Ban Treaty (CTBT) as major pillars supporting the NPT regime.

The NPT is the most universal disarmament and non - proliferation treaty, ratified by 190 state parties (as of November 2007). However, there are states that are not yet parties to the Treaty, as well as countries suspected of developing nuclear weapons clandestinely in violation of the Treaty (North Korea, etc.). There are three important measures to strengthen the nuclear non - proliferation regime (i) to further enhance the Treaty's universality; (ii) to strengthen the capability to verify the compliance with the obligations under the Treaty by the State Parties; (iii) to take appropriate measures to redress the non - compliance of the Treaty when it occurs.

The IAEA Safeguards play an important role in verification. By ensuring to prevent nuclear materials and activities for peaceful purposes from being diverted to military ends, it makes nuclear non - proliferation effective through controlling nuclear materials. The NPT requires non - nuclear - weapon States to sign a Comprehensive Safeguards agreement with the IAEA. See Chapter 5, Part III.) Triggered by covert nuclear weapon development programs conducted by Iraq and North Korea that had been brought to light during the early 1990s, the importance of strengthening the traditional Safeguards systems was recognized. As a result of strenuous work and deliberations, the IAEA adopted a Model Additional Protocol in May 1997. The Additional Protocol is designed with the main aims of further enhancing the IAEA's capacity to detect undeclared nuclear activities, by expanding the scope of facilities to be inspected by the IAEA and by granting the IAEA the ability to inspect with shorter advance notice. Japan concluded the Additional Protocol in December 1999 as the first state possessing nuclear - power reactors for commercial use. Regrettably however, as of November 2007, only 116 states had signed the Additional Protocol, and only 85 of these countries had placed it into effect. It is an urgent task to universalize the Additional Protocol, so Japan has been vigorously making efforts to this end. (See Section 4, Chapter 5, Part III.)

While prohibiting non - nuclear - weapon states from developing and acquiring nuclear weapons, the NPT obliges the nuclear - weapon states to make efforts toward disarmament in good faith. Therefore, if nuclear - weapon states only emphasize the nuclear - non - proliferation aspect of the NPT regime and disregard their obligations for nuclear disarmament, it may endanger the credibility of the NPT regime itself, and result in the weakening of the NPT regime. From this perspective, Japan has been persistently urging the nuclear - weapon states to make progress in nuclear disarmament process.

When the indefinite extension of the NPT was decided in 1995, the international community agreed to promote negotiations on the CTBT as one of the nuclear disarmament measures to be implemented by nuclear - weapon states. Japan has been making active diplomatic efforts for the early entry into force of the CTBT since Japan regards the treaty as an effective and practical measure to achieve both nuclear disarmament and non - proliferation. The entry into force of the CTBT still seems far away given the fact that states such as the United States, China, India, Pakistan, as well as North Korea, whose ratifications are required for the entry into force of the Treaty, have not yet signed or ratified it. Nevertheless, fully convinced of the importance of advancing the establishment of the

International Monitoring System, which is a verification measure of the CTBT, and setting up a network to monitor nuclear tests around the world, Japan has been making earnest efforts to install monitoring facilities in Japan and to provide technical assistance to other states. (See Section 3, Chapter 3, Part III for details of Japan's efforts for the early entry into force of the CTBT.)

The next significant issue to the CTBT in the multilateral disarmament and non - proliferation negotiations is the conclusion of a Fissile Materials Cut - off Treaty (Cut - off Treaty). The Cut - off Treaty, intended to ban the production of fissile materials that could be used to produce nuclear weapons, is a concrete measure of nuclear non - proliferation and disarmament. It is an urgent task to activate the Conference on Disarmament (CD) for early commencement of negotiations on this Treaty.

It is also of great significance to develop practical international cooperative projects not only to form agreements, but to implement them for nuclear disarmament and non - proliferation. Such demand has been generated in the international environment after the Cold War, and Japan has deployed active efforts for such projects under the policy referred to as "Disarmament in Action." Japan is cooperating within the framework of G8 to ensure the safe control of fissile materials such as plutonium removed from dismantled nuclear weapons of Russia, to dispose such materials so that these materials will not be used again in the manufacture of nuclear weapons, and to prevent the outflow of nuclear scientists from Russia and the Ukraine. The dismantlement projects of decommissioned nuclear submarines in Far East Russia (the so - called "Star of Hope") (See Section 3, Chapter 8, Part III) are placed in the context of this type of cooperation as part of the G8 Global Partnership.

Such cooperation is becoming increasingly important not only to promote nuclear disarmament, but also to minimize the risks of nuclear weapons, fissile materials and related technologies falling into the hands of countries of concern or terrorists.

3. Submission of Japan's draft resolution on nuclear disarmament to the UN General Assembly

The resolution submitted by Japan to the UN General Assembly every year since 1994 summarizes and clearly demonstrates the basic stance of Japan on nuclear disarmament and nonproliferation. Japan presented draft resolutions entitled "Nuclear Disarmament with a View to the Ultimate Elimination of Nuclear Weapons" during the period from 1994 and 1999, which was supported by the overwhelming majority of the international community. This idea of "the ultimate elimination of nuclear weapons" was incorporated into the document adopted at the NPT Review Conference in 1995 (the Conference takes place every 5 years) entitled "Principles and Objectives for Nuclear Non - proliferation and Disarmament." It was quite meaningful that nuclear - weapon states undertook to pursue the objective of "the elimination of nuclear weapons" even though it was qualified by the word "ultimate."

At the NPT Review Conference held in 2000, the Final Document was adopted unanimously. The Final Document mentions "practical steps for the systematic and progressive efforts on nuclear disarmament" that have to be taken up by the international community, which include the early entry into force of the CTBT, and the immediate commencement of negotiations on a Cut - off Treaty with a view to its conclusion within five years. In the Final Document, an "unequivocal undertaking" by the nuclear - weapon states to accomplish the total elimination of their nuclear weapons was agreed on. This undertaking marked a step forward ahead of Japan's resolution, "Nuclear Disarmament with a View to the Ultimate Elimination of Nuclear Weapons," and it is safe to say that Japan's resolutions laid the groundwork for this progress.

Based on these achievements, Japan submitted a new nuclear disarmament resolution entitled, "A Path to the Total Elimination of Nuclear Weapons," replacing "Resolution on Nuclear Disarmament with a View to the Ultimate Elimination of Nuclear Weapons" at the United Nations Millennium General Assembly in 2000; this resolution was adopted by an overwhelming majority. This resolution indicated a concrete path based on a practical and incremental approach toward the realization of the total elimination of nuclear weapons, with the goal of "a world free of nuclear weapons." This resolution contained progressive measures in addition to those in the Final Document of the 2000 NPT Review Conference, including further reduction of nuclear weapons with a view to their total elimination, while ensuring an appropriate balance between nuclear disarmament and nuclear non - proliferation.

Since 2001, the United States has drastically changed its approach from that of the previous US - Russia nuclear arms control regime. While pursuing unilateral reduction of its nuclear weapons, the United States took a passive or negative stance against several multilateral treaties on disarmament and nonproliferation: for example the CTBT. Even under such circumstances, Japan has continued to submit the draft resolutions on nuclear disarmament to the UN General Assembly. In 2004, Japan submitted a draft resolution on nuclear disarmament entitled "A Path to the Total Elimination of Nuclear Weapons." Japan prepared the draft taking its consistent stance based on the practical and incremental approach and aiming at bringing about a peaceful and safe world free of nuclear weapons through the accumulation of specific measures for nuclear disarmament. Japan also paid due consideration to the expression of growing concerns over proliferation of weapons of mass destruction and to increasing emphasis on the importance of the compliance with the NPT, to reflect in the draft shared views emerging from recent developments in the international scene. This draft resolution was adopted by an overwhelming majority at the UN General Assembly. In light of the failure of the NPT Review Conference in May 2005 and the lack of reference to disarmament and non - proliferation in the UN World Summit Outcome in September of the same year, Japan submitted a new resolution entitled "Renewed determination towards the total elimination of nuclear weapons" which continues to enjoy overwhelming support from the international community (adopted at the UN General Assembly with 168 votes in favor.) In the resolution in 2006, Japan, with a view to making the 2010 NPT Review Conference into a success after the breakdown of the 2005 NPT Review Conference, called for the international community's cooperation for the First Session of the NPT Preparatory Committee (in 2007), as well as the immediate resumption of substantial activities of the CD, which had been suspended for over a decade, in response to a new positive move where the United States submitted a draft of a Cut - off Treaty at the CD in Geneva. The preamble of the resolution also contained the condemnation toward the North Korean nuclear test that was announced on October 9, 2006.

In the resolution submitted to the UN General Assembly in 2007, with the resolutions in 2005 and 2006 as its basis, Japan stressed the significance of compliance with the NPT, called for early entry into force of the CTBT and continuation of moratorium on nuclear tests, and emphasized the need for resumption of negotiations for a Cut - off Treaty and early conclusion thereof. The resolution also called for the international community's cooperation for the NPT Review Conference, which is only three years away. Said resolution was adopted by an overwhelming majority of 170 at the 62nd Session of the UN General Assembly on December 6 (December 5 US time), 2007 (170 affirmatives (largest number of affirmative votes since Japan's first submission of a resolution in 1994), three oppositions (the United States, India and North Korea) and nine abstentions).

Chapter 2. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

Section 1. Overview of the Treaty

1. Treaty on the Non - proliferation of Nuclear Weapons

The Treaty on the Non - proliferation of Nuclear Weapons (NPT) designates the United States, Russia, the U.K., France and China as the "nuclear - weapon States." While the Treaty aims to prevent the spread of nuclear weapons to other States ("non - nuclear - weapon States"), it also aims to place the nuclear - weapon States under the obligation to pursue negotiations on nuclear disarmament. The Treaty was opened for signature in July 1968 and entered into force in March 1970 (Japan signed the NPT in February 1970 and ratified it in June 1976). The number of State Parties has increased to 190 as of September 2007. Considering the fact that the number of United Nations Member States is 192 (as of September 2007), this figure is evidence of the overwhelming universality of the NPT. Only India, Pakistan, and Israel have not joined the NPT out of the UN Member States.

2. Major provisions of the NPT

The NPT is composed of a preamble, 11 articles and a concluding text. Under the Treaty, a country is defined as a 'nuclear - weapon State' if it has manufactured and detonated a nuclear weapon or other nuclear explosive devices prior to 1 January 1967 (Article IX - 3) while other countries are defined as "non - nuclear - weapon States." Roughly divided, the Treaty stipulates the following four items:

(1) Obligation of nuclear non - proliferation

The NPT prohibits the nuclear - weapon States from transferring nuclear weapons (Article I), and prohibits the non - nuclear - weapon States from receiving and manufacturing nuclear weapons (Article II). The Treaty obliges the non - nuclear - weapon State Parties to the NPT to accept the International Atomic Energy Agency (IAEA) Safeguards (Article III). (See Chapter 5.)

(2) Rights to use nuclear energy for peaceful purposes

The NPT aims to prevent the non - nuclear - weapon States from diverting fissile materials and equipment to military purposes by obliging those States to accept the IAEA Safeguards. On the other hand, the Treaty stipulates the "inalienable right of all Parties to the Treaty" to develop research, production and use of nuclear energy for peaceful purposes (Article IV - 1). It acknowledges that all Parties to the Treaty have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy (Article IV - 2).

(3) Obligation of negotiations on nuclear disarmament

The NPT obligates the State Parties to pursue negotiations in good faith on nuclear disarmament (Article VI), while preventing the non - nuclear - weapon States from diverting nuclear energy for military purposes.

(4) Procedural matters

The NPT stipulates that a conference shall be held at intervals of five years in order to review the operation of this Treaty (Article VIII - 3), and also to convene a conference twenty - five years after the entry into force to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods (Article X - 2). The Treaty was

indefinitely extended at the 1995 NPT Review and Extension Conference, which was decided based on this article.

3. Development of the NPT

South Africa abandoned its nuclear weapons and acceded to the NPT as a non - nuclear - weapon State in 1991, and France and China acceded to the NPT as nuclear - weapon States in 1992. Kazakhstan, Belarus and Ukraine, which became independent from the former Soviet Union, transferred their nuclear weapons within their territories to the Russian Federation and had all acceded to the Treaty as non - nuclear - weapon States by 1994. Also, Brazil and Argentina, after overcoming many years of mutual rivalry, renounced their nuclear development programs and acceded to the Treaty as non - nuclear - weapon States (Argentina acceded to the Treaty in 1995, Brazil in 1998). Furthermore, Cuba acceded to the Treaty in 2002 and Timor - Leste in 2003. Montenegro also acceded to the NPT in 2006, after independence from Serbia and Montenegro.

Section 2. Outcome of the 2005 NPT Review Conference and Future Issues

1. The 2005 NPT Review Conference

The 2005 Review Conference of the Parties to the Treaty on the Non - proliferation of Nuclear Weapons was held in New York from May 2 to 27. The NPT Review Conference is held every five years with the objective of reviewing the operation of the Treaty in accordance with Article VIII of the Treaty. Substantive discussions were to take place in Main Committee I (nuclear disarmament), II (nuclear non - proliferation) and III (peaceful uses of nuclear energy). Each Committee was appointed with the task to make a consensus report on the substantive issues allocated to each Committee and to submit it to the Plenary for adoption as an integral part of a final document.

The 2005 Review Conference began without even having reached a decision on procedural issues (the agenda and the establishment of subsidiary bodies) although they were supposed to be settled before the Conference. Two - thirds of the Conference was spent in order to resolve these procedural issues due to differences of views between the Non - Aligned States, centering on the Middle Eastern countries, on one hand, and the Western countries on the other hand. As a result, time for substantive discussions and for coordination on the language of the final document was extremely limited.

Although each of the three Main Committees held substantive discussions, none of them was able to produce a consensus report on substantive issues. There were two constraints posed on the Conference: first was the severe time constraint; second, the consensus rule. These factors posed a constraint to reaching agreement among concerned States Parties and groups of States Parties on some regional issues such as the Middle East (treatment of Israel, etc.) and the Iranian nuclear issue, and nuclear disarmament issues including the Comprehensive Nuclear - Test - Ban Treaty (CTBT). Furthermore, the President of the Conference did not issue any statement on substantive issues at the end of the Conference.

Nonetheless, many States Parties pointed out at the Conference the important role of the NPT in ensuring international peace and security as well as the necessity of compliance with it. Many States Parties and groups of States Parties, including Japan, the EU and G10 (note: a group of Western countries formed mainly for the purpose of nuclear non - proliferation and peaceful uses of nuclear energy; Australia, Canada and New Zealand are among the member states.), presented useful proposals to the Conference for strengthening the NPT regime.

2. Japan's efforts for the 2005 NPT Review Conference

Prior to the Review Conference, Japan held an NPT Seminar in Tokyo in February 2005, in which President Duarte and other ambassador - level officials participated, in an effort to facilitate the smooth operation of the Conference. Japan also actively contributed to the Review Conference in May 2005.

Foreign Minister Nobutaka Machimura (then) made a statement on the first day of the Conference. Japan submitted a proposal entitled "21 Measures for the 21st Century", which comprehensively covers the three pillars of the NPT (nuclear disarmament, nuclear non - proliferation, and peaceful uses of nuclear energy; of which the nuclear disarmament - related section was jointly proposed with Australia), and Japan made every effort for these measures to be reflected in the final document. Japan also submitted a comprehensive working paper on its position and two reports on nuclear disarmament and on the implementation of the 1995 Middle East Resolution. Furthermore, in addition to jointly submitting with seven other countries a working paper on disarmament and non - proliferation education, Japan submitted a working paper introducing Japan's own efforts in this area.

In the second week of the Conference, Vice - Minister Katsuyuki Kawai (then) attended the NGO session and subsequently held a reception for NGOs, which called attention to Japan's position of attaching importance to dialogue with NGOs in the field of disarmament and non - proliferation.

With regard to the North Korean nuclear issues, Japan kept close contact with the United States and the Republic of Korea (ROK) from an early date, and held a number of consultations with China, Russia, the President of the Conference and others, with the aim of reflecting in the final document Japan's position that the North Korean nuclear program is a grave threat to the NPT regime and cannot be accepted.

At the Conference, Japan called for a further reduction in nuclear weapons. Prior to the Conference, in April, Foreign Minister Machimura sent letters to Foreign Ministers of all the states that have yet to ratify the Comprehensive Nuclear - Test - Ban Treaty (CTBT) and whose ratification is required for its entry into force, including the United States, urging them to ratify the CTBT at an early date. Japan also held a meeting of the CTBT Friends while the Conference was in session.

Japan reiterated its position on the importance of universalizing the Additional Protocol of the International Atomic Energy Agency (IAEA), which was supported by many countries. As for the peaceful uses of nuclear energy, Japan expressed its support for promoting the IAEA's efforts in the fields of nuclear safety and security and stressed the importance of technical cooperation. At the final stage of the Conference, Foreign Minister Machimura issued an emergency appeal calling on States Parties to cooperate further in order to make the Conference a success.

3. Evaluation of the 2005 NPT Review Conference

Japan finds it regrettable that the 2005 Review Conference was unable to produce a final consensus document on substantive issues, thus missing an important opportunity to send a strong message for maintaining and strengthening the NPT regime.

The following factors can be considered the main reasons behind this result.

(i) There were serious differences in views regarding the Middle East issues and the Iranian nuclear issue.

(ii) The rule that "every effort should be made to reach agreement on substantive matters by means of consensus" was abused and applied even to procedural matters.

(iii) From the beginning, the prevailing view was that it would be difficult to agree on more substantive

content than that in the 2000 Final Document. Many countries thought it was better to retain the 2000 agreement than to compromise and agree on less favorable content.

(iv) There was a wide gap between States Parties with respect to their stance on nuclear disarmament and the CTBT.

(v) The perceived gravity of the proliferation threat was not necessarily shared by all States Parties.

(vi) In addition to the above, considerable time was spent sorting out procedural issues, leaving limited time for substantive discussions. In particular, the time available to seek out consensus language for the final document was extremely insufficient.

Nonetheless, many States Parties including Japan and groups of States Parties submitted useful proposals of various kinds in order to contribute to the Review Conference. Japan believes that the intensive exchange of opinions on these proposals provided valuable material for future work on strengthening the nuclear disarmament and non - proliferation regime.

4. The First Session of the Preparatory Committee for the 2010 NPT Review Conference

From April 30 to May 11, 2007, the First Session of the Preparatory Committee for the 2010 NPT Review Conference was held in Vienna. Ambassador Yukiya Amano, Permanent Representative of Japan to the International Organizations in Vienna, chaired the session and the then Vice - Minister Masakazu Sekiguchi and other delegates participated from Japan.

With the NPT regime facing grave challenges posed by the North Korean and Iranian nuclear issues, the First Session of the Preparatory Committee was positioned as a significant starting point for the 2010 NPT Review process. The task of the Preparatory Committee was to reach an agreement on procedural matters including a draft agenda, and thereby conduct substantive discussions that contribute to the maintenance and enhancement of the NPT regime in order to maintain the international community's trust in the NPT.

At first, the First Session of the Preparatory Committee aimed to adopt the draft agenda on the first day, finish general debate by heads of delegation from each country in the first two days and then to commence substantive discussions from the third day. However, Iran opposed the adoption of the draft agenda proposed by Chairman Amano, and it took several days to discuss this matter (decision making at the NPT Preparatory Committee is basically based on the consensus method). The draft agenda proposed by the Chairman, though based on the agenda for the First Session of the Preparatory Committee for the 2005 NPT Review Conference in 2002, contained new content to reconfirm the necessity of "compliance" with the NPT. Iran requested to use the 2002 agenda as it is or to amend the term "compliance with the NPT" to "compliance with all provisions of the NPT." However, the Chairman insisted that a partial amendment might jeopardize the agreement on the entire agenda and consistently maintained the stance of rejecting any amendment to the language of the draft agenda he had proposed. Finally, Iran agreed to accept the draft agenda proposed by the Chairman by adding, as a footnote, the Preparatory Committee's understanding of "compliance" based on the proposal by South Africa. The draft agenda was thus adopted by consensus on the morning of the second day of the second week of the session.

During the general debate in the first two days, representatives from 47 states made statements. After the adoption of the draft agenda, substantive discussions were held on individual matters (such as general nuclear disarmament, nuclear disarmament and security assurances, nuclear non - proliferation, regional issues, peaceful uses of nuclear energy, and withdrawal from the Treaty, etc.). The allowed time for substantive discussions was shorter than what had been scheduled in advance, but well -

balanced discussions took place on all matters under effective proceedings and in a constructive atmosphere. As a result of informal consultations with the relevant states, the Chairman's summary compiling the details of these discussions was decided to be referred to in the report of the First Session of the Preparatory Committee as a working paper by the Chairman, and the report was adopted.

5. Japan's efforts for the First Session of the Preparatory Committee for the 2010 NPT Review Conference

For the First Session of the Preparatory Committee, Japan chose Ambassador Amano, Permanent Representative of Japan to the International Organizations in Vienna, as the Chairman and played a leading role in the smooth proceedings of the Committee. Ahead of the session, Ambassador Amano held briefings and exchanged views with States Parties several times in Geneva, New York, Vienna and other locations, making strenuous efforts for the success of the session. When the meeting was on the verge of collapse over the adoption of the draft agenda, serious confrontation between nuclear - weapon States and non - nuclear - weapon States or between Western group countries and Non - Aligned States was avoided, which was largely due to such careful preparatory efforts.

Furthermore, ahead of the Preparatory Committee, Japan held a seminar concerning the NPT jointly with the Center for the Promotion of Disarmament and Non - Proliferation (CPDNP) of the Japan Institute of International Affairs in Vienna in February 2007, contributing to laying the foundation for the success of the Preparatory Committee through frank opinion exchanges among relevant states and experts.

At the Preparatory Committee, the Vice - Minister Sekiguchi (then) made a general statement and Ambassador Sumio Tarui, Permanent Representative of Japan to the Conference on Disarmament (CD), and other participants also delivered statements on specific issues. In these statements, Japan actively expressed its position concerning the North Korean and Iranian nuclear issues, further progress on nuclear disarmament by the nuclear - weapon States, and the significance of ensuring nuclear non - proliferation, nuclear safety and nuclear security in peaceful uses of nuclear energy, and participated in discussions in a constructive manner. Japan also submitted a working paper that comprehensively explained Japan's position concerning the three pillars of the NPT (nuclear disarmament, nuclear non - proliferation, and peaceful uses of nuclear energy), a working paper on disarmament and non - proliferation education, and a report on nuclear disarmament. Major parts of Japan's statements were reflected in the Chairman's working paper together with other States' statements.

With regard to disarmament and non - proliferation education, Japan delivered a joint statement together with eight other States that had submitted a joint working paper with Japan in 2004. Japan also made its own statement, in which ideas were introduced, such as utilizing manga comics and holding a debate competition, as a new initiative for disarmament and non - proliferation education. In the conference room of the Preparatory Committee, Japan made great efforts for public relations and awareness raising by way of delivering manga comics (in English), showing animated films that convey the tragedy of the atomic bombing and handing out material compiled by the government, such as the White Paper on Disarmament and Non - proliferation.

At the same time, Ambassador Tarui and other participants exchanged opinions individually with NGO representatives with a view to enhancing partnerships with NGOs.

Vice-Minister Sekiguchi (then) delivering a speech at the First Session of the Preparatory Committee for the 2010 NPT Review Conference

6. Evaluation of the First Session of the Preparatory Committee for the 2010 NPT Review Conference

With the NPT regime facing serious challenges posed by the North Korean and Iranian nuclear issues, the successful commencement of the process toward the 2010 NPT Review Conference was a significant step for maintaining and strengthening the credibility of the NPT and promoting nuclear disarmament and non - proliferation.

The adopted draft agenda was used as the agenda for the Second Session of the Preparatory Committee in 2008 and is to be used as the agenda for the Third Session in 2009, and is also expected to contribute to the smooth proceedings of the current review process as the basis for a draft agenda of the 2010 NPT Review Conference. The Chairman's working paper compiled by Chairman Amano, which contained a determined message from States Parties regarding the North Korean and Iranian nuclear issues faced by the NPT, summarized the discussions at the First Session of the Preparatory Committee based on the actual statements from both nuclear - weapon States and non - nuclear weapon States. The working paper was highly appreciated as a well - balanced summary by many participants.

Section 3. Developments prior to 2005

1. Progress in the international nuclear non - proliferation regime to date

The NPT has been one of the most successful disarmament and non - proliferation treaties, and has contributed greatly to the maintenance of international peace and security as a central pillar of the nuclear non - proliferation regime since it entered into force in 1970. The universality of the treaty has drastically increased, especially since the end of the Cold War. On the other hand, several serious challenges have emerged since the 1990s that threatened the international nuclear non - proliferation regime founded on the NPT.

One of these issues is the nuclear capacity of the non - States Parties India and Pakistan, neither signatory to the NPT, which conducted nuclear tests one after another in 1998. These two countries continue to have the capacity to manufacture nuclear weapons. In addition, Israel takes the stance of neither confirming nor denying that it has nuclear weapons. It is extremely difficult to persuade these countries to accede to the NPT; however, Japan has been calling on these three NPT non - States Parties for their early accession to the treaty. (See Part II "Regional Non - proliferation Issues and Japan's Efforts.")

Furthermore, the relationship between the right to use nuclear energy for peaceful purposes and the capacity to develop nuclear weapons has become a particularly significant issue in recent years. North Korea's announcement of its withdrawal from the NPT after developing a nuclear weapons program and the proclamation that it had conducted a nuclear test are extremely grave cases (See Chapter 1, Part II "North Korea"). Moreover, although Iran asserts that its nuclear program is exclusively peaceful in nature, Iran was found in non - compliance with its IAEA Safeguards Agreement and has not cleared up the suspicions of nuclear weapons development (See Chapter 2, Part II "Iran and other Middle East Countries"). Issues regarding non - compliance with the NPT not only have a negative impact on the Treaty's credibility but may also jeopardize the NPT regime from within, and therefore could directly and seriously threaten international peace and stability. Japan has been making a series of efforts in this regard toward the peaceful resolution of these issues in cooperation with the countries concerned (See Part II "Regional Non - proliferation Issues and Japan's Efforts").

Under such severe circumstances, the international community is faced with the crucial task of deciding how to maintain, strengthen and further universalize the international regime of nuclear non - proliferation and disarmament founded on the NPT.

2. The NPT Review and Extension Conference in 1995 and decision of indefinite extension of the NPT

The NPT stipulates that a conference shall be held every five years in order to discuss the operational issues of the treaty. Since nuclear - weapon States and non - nuclear - weapon States have different obligations under the NPT regime, it is significant for State Parties to assure compliance with the NPT among themselves, for the sake of better transparency and confidence building. Japan also attaches importance to this perspective.

The NPT also stipulates that, 25 years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. In accordance with this provision, 25 years after the entry into force of the NPT, the NPT Review and Extension Conference was held in New York from April to May 1995. As a result, at the Conference, it was decided without a vote that the NPT should continue in force indefinitely, and the decisions on "Principles and Objectives for Nuclear Non - Proliferation and Disarmament" and "Strengthening the Review Process for the Treaty" were concurrently adopted. The "Resolution on the Middle East" was also adopted.

Japan presented to the First Committee of the UN General Assembly, the "Draft Resolution on Nuclear Disarmament with a View to the Ultimate Elimination of Nuclear Weapons" in the fall of 1994, and it was adopted with an overwhelming majority. This resolution showed the future direction in which international efforts for nuclear non - proliferation and disarmament would be engaged. The substance of this resolution was reflected in the "Principles and Objectives" mentioned above.

3. The 2000 NPT Review Conference

The first Review Conference subsequent to the 1995 decision to indefinitely extend the NPT was held in New York from April to May 2000. The situations surrounding disarmament and non - proliferation at that time were severe: the progress of nuclear disarmament was in a stalemate and,

Furthermore, the international community was facing a serious nuclear proliferation crisis triggered by the nuclear tests by India and Pakistan in 1998, etc. Nonetheless, the conference successfully adopted

its Final Document by consensus, which included thirteen "practical steps" toward future nuclear disarmament and non - proliferation, after overcoming several crises when negotiations almost broke down in the course of four weeks of discussions.

Japan actively coordinated preparations for the 2000 Review Conference from an early stage, and these efforts contributed to its success. At the Conference, Japan presented the practical "Eight - item Proposal", which covered measures designed to advance nuclear disarmament and nonproliferation, providing a foundation for consensus building.

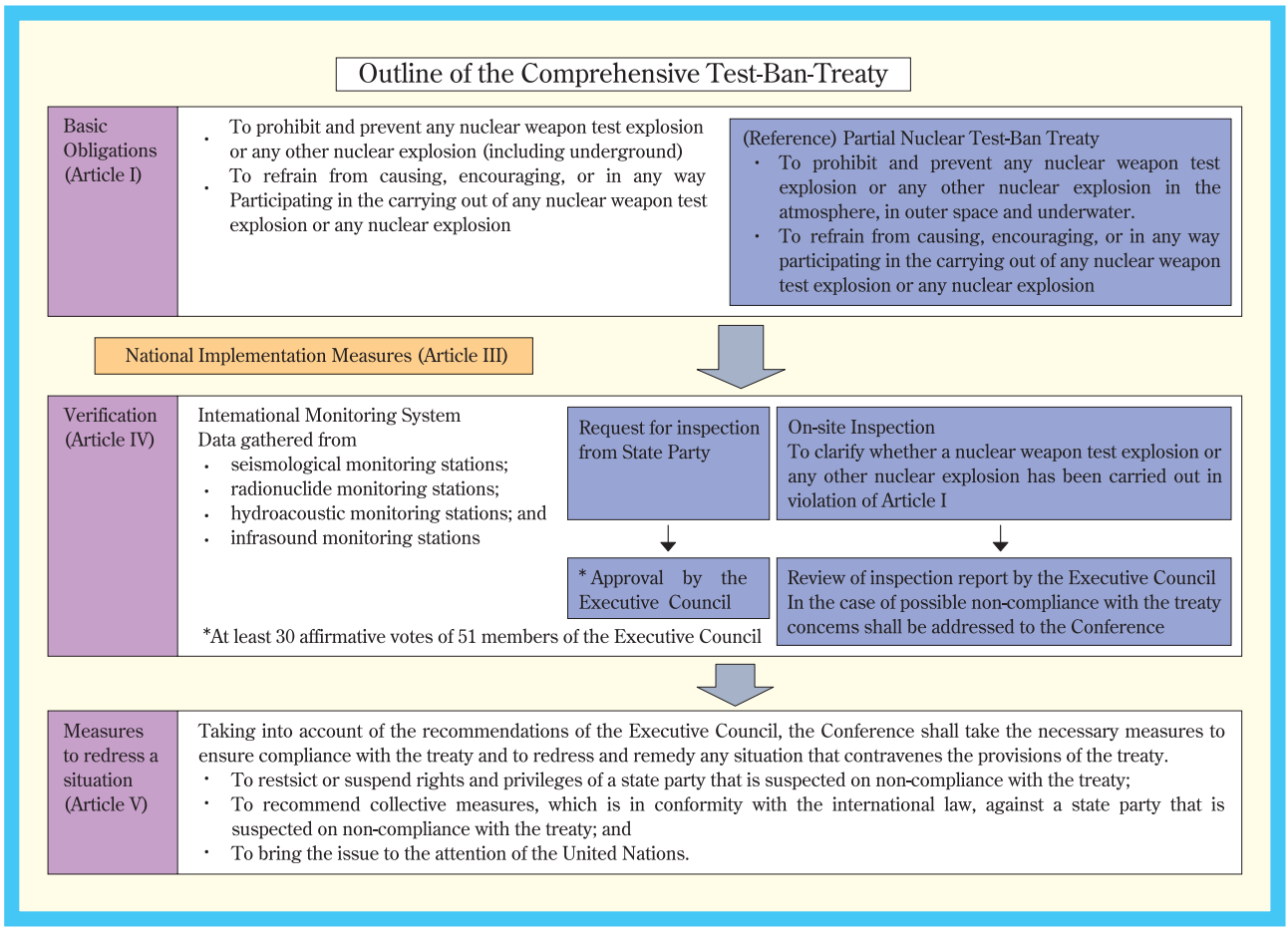
Chapter 3 Comprehensive Nuclear-Test-Ban Treaty (CTBT)

Section 1. Overview of the Comprehensive Nuclear-Test-Ban Treaty (CTBT)

Nuclear tests are considered indispensable for the development of nuclear weapons. Therefore, to ban nuclear tests is of great significance for promoting both nuclear disarmament and non - proliferation. Although the Partial Test - Ban - Treaty (PTBT) was concluded in August 1963, underground nuclear tests were excluded from the scope of prohibition in the PTBT, and the ban on all nuclear tests including underground nuclear tests has been deemed one of the primary tasks of the international community. The Comprehensive Nuclear - Test - Ban Treaty (CTBT) is a treaty on nuclear disarmament and non - proliferation that bans all nuclear tests at any place.

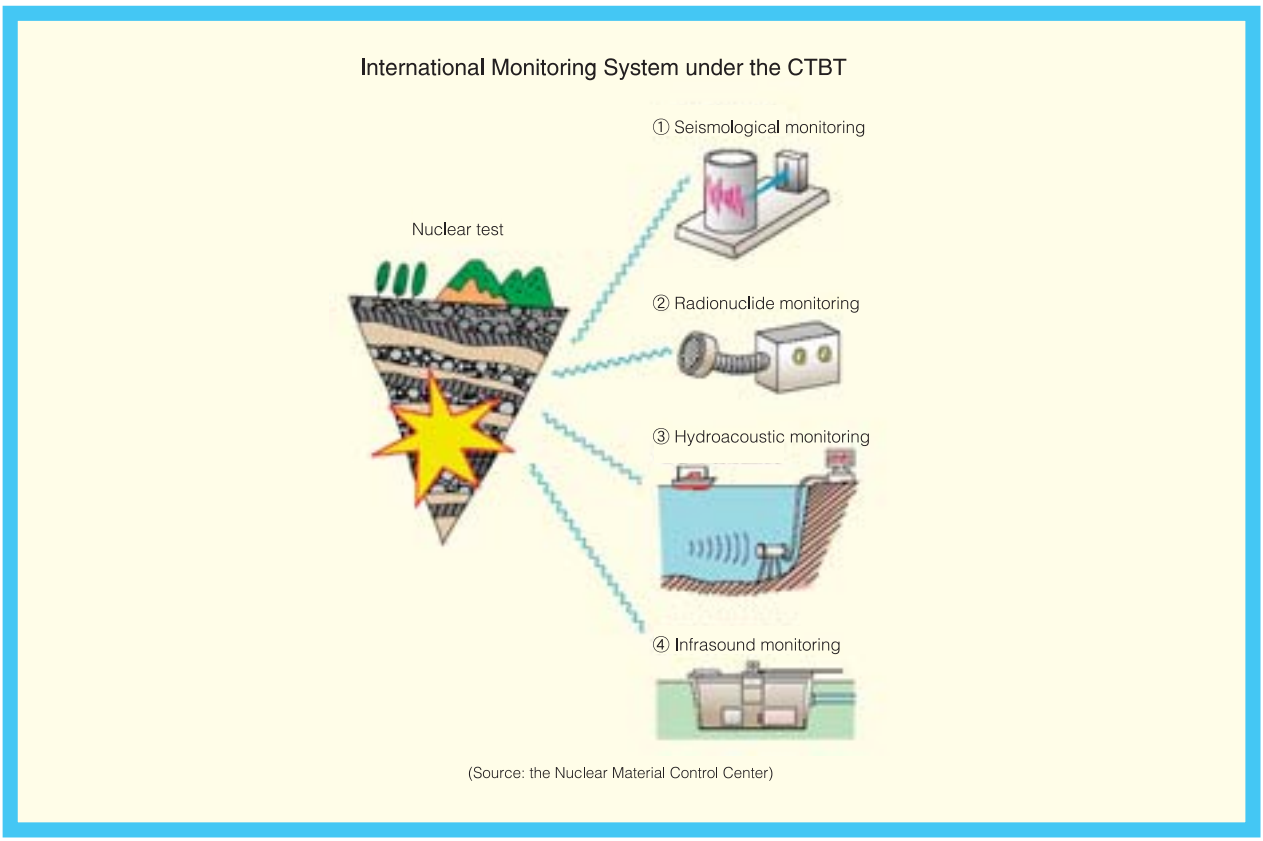
Negotiations for establishing the CTBT started at the Conference on Disarmament in Geneva in January 1994, but after two and a half years of difficult negotiations, the CTBT was not adopted in the end at the CD, which adopts the decisions by consensus, due to the opposition by countries such as India. Then, the draft text of the CTBT made at the CD was submitted to the UN General Assembly by Australia and other states in September 1996, and it was adopted by an overwhelming majority (Favor:153, Opposed: India, Bhutan, Libya, Abstention: Cuba, Syria, Lebanon, Tanzania, Mauritius).

The entry into force of the CTBT needs ratification by the specified 44 states (the so - called "Annex 2 States") which are considered to have the potential to develop nuclear weapons; for example, possessing nuclear reactors is regarded as conferring such potential. However, at present the prospect for ratification by some of the Annex 2 States is slim. The CTBT has not yet entered into force.



1. Major elements of the CTBT

Besides prohibiting all nuclear tests explosions (any nuclear weapon test explosion or any other nuclear explosion), the CTBT provides for the establishment of the CTBT Organization in Vienna in order to verify the compliance, as well as the international verification systems. These international verification systems include measures such as an International Monitoring System (IMS) consisting of 321 monitoring stations and 16 radionuclide laboratories around the world to detect all nuclear tests explosions, on - site inspections, and confidence - building measures. The CTBT also foresees measures to be taken in the event that a State Party conducts a nuclear test explosion. These measures include restriction or suspension of the State Party's exercise of its rights and privileges under the CTBT, and recommendations to the State Parties on collective measures in conformity with international law.



(Source: the Nuclear Material Control Center)

2. Verification system

In order to verify compliance with the treaty, the CTBT provides verification systems comprising (1) the International Monitoring System (IMS), (2) consultation and clarification, (3) onsite inspections, and (4) confidence - building measures.

(1) The International Monitoring System (IMS) is designed to monitor nuclear weapon test explosions or any other nuclear explosions that are prohibited under the CTBT, with four types of monitoring stations installed at 321 locations around the world: seismological monitoring stations (Note 1), radionuclide monitoring stations (Note 2), hydroacoustic monitoring stations (Note 3) and infrasound monitoring stations (Note 4). The effectiveness of this system was proved on the occasion of the proclaimed nuclear test by North Korea in October 2006, especially through its seismological monitoring and radionuclide monitoring (noble gas monitoring in particular). Data obtained by the monitoring activities is sent to the International Data Center established in Vienna for processing.

(Note 1) Nuclear explosions are monitored through the observation of seismic waves.
(Note 2) Nuclear explosions are monitored through the observation of radionuclides in the atmosphere.
(Note 3) Nuclear explosions are monitored through the observation of acoustic waves propagating underwater.
(Note 4) Nuclear explosions in the atmosphere are monitored through the observation of very low-frequency sound waves in the atmosphere.

(2) "Consultation and clarification" is a system by which State Parties clarify and resolve, among themselves or with or through the CTBT Organization, any matter which may cause concern about possible non-compliance, in the event that a State Party is suspected of conducting a nuclear weapon test explosion or any other nuclear explosion. The system includes clarification by the suspected state.

(3) "On-site inspection" is performed by an inspection team sent to a State Party to clarify whether a nuclear weapon test explosion or any other nuclear explosion has been carried out in violation of the CTBT, and, to gather as much information as possible that might be useful in identifying a suspected violator. The decision to approve of the on-site inspection is made by at least 30 affirmative votes of 51 members of the Executive Council.

(4) "Confidence-building measures" means measures to be taken by a State Party that include the timely resolution (with a report to the Technical Secretariat of the CTBT Organization) of any concerns arising from possible misinterpretations of verification data relating to, for instance, chemical explosions carried out in a mine.

Section 2. Towards the early entry into force of the CTBT

1. Current status of signature and ratification

The CTBT has been signed by 178 states and ratified by 144 states as of March 2008. Of 44 Annex 2 States, 41 have signed and 35 have ratified the treaty. The Annex 2 States that have not signed are India, Pakistan and North Korea. States that have signed but not ratified are China, Egypt, Indonesia, Iran, Israel, and the United States. Vietnam and Columbia, which are Annex2 States, ratified the treaty in March 2006 and in January 2008, respectively.

2. Prospects for the treaty's entry into force

Though some progress has been made since 2000 with ratification by some Annex 2 States such as Turkey, Russia, Ukraine, Chile, Bangladesh, Algeria, the Democratic and Republic of Congo, and recently by Vietnam (in March 2006) and Columbia (in January 2008), the outlook for the entry - into - force of the CTBT still remains uncertain. Of Annex 2 States, India and Pakistan are committed to continuing the moratorium on nuclear testing after their nuclear tests in 1998 and have repeatedly expressed their willingness to make their best efforts to form a domestic consensus on their signing of the treaty. However, they have not signed the treaty to date. In addition, China, a nuclear - weapon state that has not ratified the CTBT, is not definite about when the ratification bill will be approved although it has, according to the Chinese authorities, already been presented to the National People's Congress. The nuclear test proclaimed by North Korea in October 2006 posed a serious challenge against the will of the entire international community requiring a nuclear test ban as well as to the CTBT, making the whole world strongly recognize the necessity of the early entry into force of the CTBT and the development of the verification system.

3. Attitude of the United States to the CTBT

The United States signed the CTBT in September 1996 during the Clinton Administration. The US Senate, however, rejected ratification with 48 votes in favor versus 51 against in October 1999 despite the cumulative momentum toward entry into force that had gathered in the international community on the occasion of the first Conference on Facilitating the Entry into Force of the CTBT. Immediately before the Bush Administration was formed in January 2001, the former Chairman of Joint Chiefs of Staff John Shalikashivili presented his report recommending certain measures necessary for the Senate's approval at the request of the White House, and President Clinton himself urged the Senate and the Bush Administration to take action on the CTBT in his statement. However, in the same month, Colin Powell, the Secretary of State designate (at that time), made a statement at the hearing of the Senate Foreign Relations Committee that the administration would not ask the Senate to ratify the CTBT in its next session, and that there were still flaws with the CTBT. Thus, the passive and negative attitude of the Bush Administration toward the CTBT was made known to the public.

The United States upholds the development of the international monitoring system under the Preparatory Commission for the CTBTO, but voted against a draft resolution for nuclear disarmament that Japan had submitted to the UN General Assembly, on the ground that the draft refers to the early entry into force of the CTBT, and has not attended the second Conference on Facilitating the Entry into Force of the CTBT and thereafter.

4. Significance of the efforts in the promotion of the entry - into - force of the CTBT

As described above, prospect of the entry into force of the CTBT is not yet in sight. However, during the period between the beginning of 2006 and March 2008, 18 states, including nine states that joined after the proclaimed North Korean nuclear test, newly ratified the treaty, and the international community still maintains a significant interest in the entry into force of the CTBT. Furthermore, five nuclear - weapon states declared a moratorium on nuclear weapon test explosions and both India and Pakistan, which conducted nuclear tests in 1998, finally announced a moratorium on nuclear weapon test explosions. All these states have faithfully kept their commitments. It is fair to say that the political momentum of seeking the entry into force of the CTBT has considerable effect on deterrence of nuclear tests, when considering the fact that nuclear tests were carried out by some countries every year since the end of the Second World War until 1996, and at the peak, 178 tests were conducted in a year. Harsh responses from the international community against the proclaimed North Korean nuclear test as shown by the UN Security Council Resolution and the international community's call for the early entry into force of the CTBT (nuclear disarmament resolution and CTBT resolution at the UN General Assembly) suggest that conducting nuclear test explosions has become more politically costly. Japan has taken the initiative in the international community in facilitating the entry into force of the CTBT, for the purpose of making deterrence against nuclear test explosions legally binding and irreversible.

Section 3. Japan's efforts to facilitate the entry into force of the CTBT

Japan regards the CTBT, along with the International Atomic Energy Agency (IAEA) Safeguards, as an indispensable pillar of the nuclear non - proliferation and disarmament regime established under the NPT. Accordingly, Japan considers the CTBT's early entry into force as the top priority in the area of nuclear disarmament and non - proliferation, and has continued its diplomatic efforts as described below.

1. Contribution to the Conference on Facilitating the Entry into Force of the CTBT

(1) Conference on Facilitating the Entry into Force of the CTBT

The CTBT stipulates that a conference to facilitate early entry - into - force of the treaty upon the request of a majority of the state parties be convened if the treaty has not entered into force three years after the date of the anniversary of its opening for signature. Conferences on Facilitating the Entry into Force of the CTBT have been held five times so far, in October 1999, November 2001, September 2003, September 2005 and September 2007, pursuant to this provision.

At the First Conference on Facilitating the Entry into Force of the CTBT in 1999, then Minister for Foreign Affairs Masahiko Koumura attended as the representative of Japan and presided at the conference. After that, Japan endeavored to coordinate opinions among states concerned by, among other moves, hosting an unofficial meeting prior to the Second Conference on Facilitating the Entry into Force of the CTBT in 2001 as a "coordinator." At the Second Conference, a Progress Report was presented by the representative of Japan, Nobuyasu Abe, (former UN Under - Secretary - General for Disarmament Affairs) that noted the progress in the situation toward the entry into force of the treaty since the last conference.

At the Fifth Conference on Facilitating the Entry into Force of the CTBT held in Vienna in September 2007, participated in by 106 states (Senior Vice - Minister for Foreign Affairs Hitoshi Kimura attended the conference from Japan), the Final Declaration containing requests for each state's early signature and ratification was adopted unanimously. However, the United States, which had clarified its opposition to the ratification of the CTBT for maintaining the credibility and security of nuclear weapons, did not attend the conference as in the case of the former conferences and India and North Korea, which had not signed the treaty, did not attend either.

Speech by Senior Vice-Minister Kimura as the representative of Japan at the Fifth Conference on Facilitating the Entry into Force of the CTBT

(2) "Friends of the CTBT" Foreign Ministerial Meeting

In September of 2002, a year when the Conference on Facilitating the Entry into Force of the CTBT was not convened, the CTBT Ministerial Meeting was held at the UN Headquarters in New York, attended by Foreign Ministers of the countries that had already ratified it, including Foreign Minister Yoriko Kawaguchi (then) and the foreign ministers of Australia and the Netherlands. A joint ministerial statement was issued that called for the treaty to be signed and ratified as soon as possible and the moratorium on nuclear testing to be continued. This statement was originally signed by the foreign ministers of 18 countries including three nuclear - weapon states, namely the United Kingdom, France and Russia, and went on to win the approval of the foreign ministers of more than 50 countries. The "Friends of the CTBT" Foreign Ministerial Meeting

has been held every other year when the Conference on Facilitating the Entry into Force of the CTBT was not convened (Vice - Minister Ito (then) attended the meeting in September 2006), each time issuing a joint ministerial statement calling for the early entry into force of the CTBT.

2. Efforts to facilitate the entry into force at the bilateral talks and other occasions

Japan has been calling for the early entry into force, signature and ratification of the CTBT on various occasions, such as at bilateral meetings and international or regional forums, etc. The following is a list of the major efforts of Japan in recent years.

(1) Foreign Minister's letter urging other countries to ratify the CTBT at an early stage

Japan has issued Foreign Minister's letters calling for early ratification of the CTBT several times so far. In April 2005, ahead of the 2005 NPT Review Conference, Foreign Minister Nobutaka Machimura (then) issued a letter calling for early ratification of the CTBT to foreign ministers of 11 Annex 2 States that had not yet ratified it. In May 2007, ahead of the First Session of the Preparatory Committee for the 2010 NPT Review Conference, Japan took an approach to Annex 2 States that had not yet ratified the CTBT via overseas diplomatic missions, and in July of the same year, also took an approach to other non - Annex 2 States that had not ratified or signed the CTBT via overseas diplomatic missions.

(2) Commitments at bilateral meetings

At the Japan - US Foreign Minister's Meeting (Tokyo) in January 2002, Japan again requested that the United States ratify the CTBT. Prime Minister Junichiro Koizumi (then) worked with Pakistani President Pervez Musharraff to promptly sign the CTBT at the Japan - Pakistan summit talks in March 2002. Prime Minister Koizumi (then) also encouraged General Secretary of the Communist Party of Vietnam Central Committee, Nong Duc Mahn, for early ratification of the CTBT at the Japan - Vietnam summit talks in October 2002.

Foreign Minister Kawaguchi (then) called on Indian Foreign Minister Singh and Israeli Foreign Minister Shalom to urgently ratify the CTBT in January and April 2003, respectively. Early ratification of the CTBT was called for on the following occasions: from Foreign Minister Kawaguchi (then) and Senior Vice - Minister Yano (then) to the Vietnamese Vice Prime Minister Khiem in September 2003, from Foreign Minister Kawaguchi (then) to Foreign Minister Hassan of the Republic of Indonesia at the APEC Ministerial Meeting in October 2003, and from Foreign Minister Kawaguchi (then) to the Egyptian Foreign Minister Maher on her visit to Egypt in October 2003.

Prime Minister Koizumi (then) called on Vietnamese Prime Minister Khai to promptly ratify the CTBT at the Japan Vietnam summit talks in June 2004. Foreign Minister Kawaguchi (then) used the following occasions to call for early ratification of the CTBT: to Foreign Minister Barco of Columbia in March 2004, to Foreign Minister Singh of India and Foreign Minister Kasuri of Pakistan in June 2004, to Foreign Minister Nien of Vietnam in July 2004, and to President Musharaff of Pakistan and Foreign Minister Singh of India in August 2004. Furthermore, Foreign Minister Machimura (then) urged Foreign Minister Singh of India to promptly sign and ratify the CTBT in November 2004.

In February 2005, Foreign Minister Machimura (then) called for Foreign Minister Kasuri of Pakistan to sign and ratify the CTBT as soon as possible. In April 2005, the summit meeting was held in April 2005 between Prime Minister Koizumi (then) and Columbian President Uribe, and the transcript of the joint press conference states that despite institutional and constitutional provisions against said matter, the President of Columbia reiterates his intention to ratify the

CTBT as soon as possible.

In March 2006, responding to the completion of Vietnam's domestic procedures for ratifying the CTBT in February, Japan invited CTBT - related administration officials from Vietnam to help them develop their domestic system after ratification. Japan also invited CTBT - related administration officials from Columbia in February 2007 and from Indonesia in July 2007, calling for their early ratification of the CTBT. When Prime Minister Shinzo Abe (then) visited Indonesia, he requested early ratification of the CTBT by Indonesia at his meeting with President Yudhoyono. Partly due to such efforts by Japan, Columbia ratified the CTBT in January 2008.

3. Initiative to establish International Monitoring System

Through its advanced seismological observation technology, Japan has provided technical assistance to developing countries in order to support the development of the International Monitoring System for verifying compliance with the CTBT. Specifically, Japan has accepted trainees for global seismological observation training courses every year since 1995 (127 trainees by FY 2007), and supplied seismological observation instruments (17 cases by FY 2004). Japan has been deploying much effort in order to contribute to the development of the International Monitoring System, and at the same time, to facilitate the entry into force of the CTBT by making it easier to comply with the obligations under the CTBT. These activities have been highly valued by the CTBT Organization Preparatory Committee and other states.

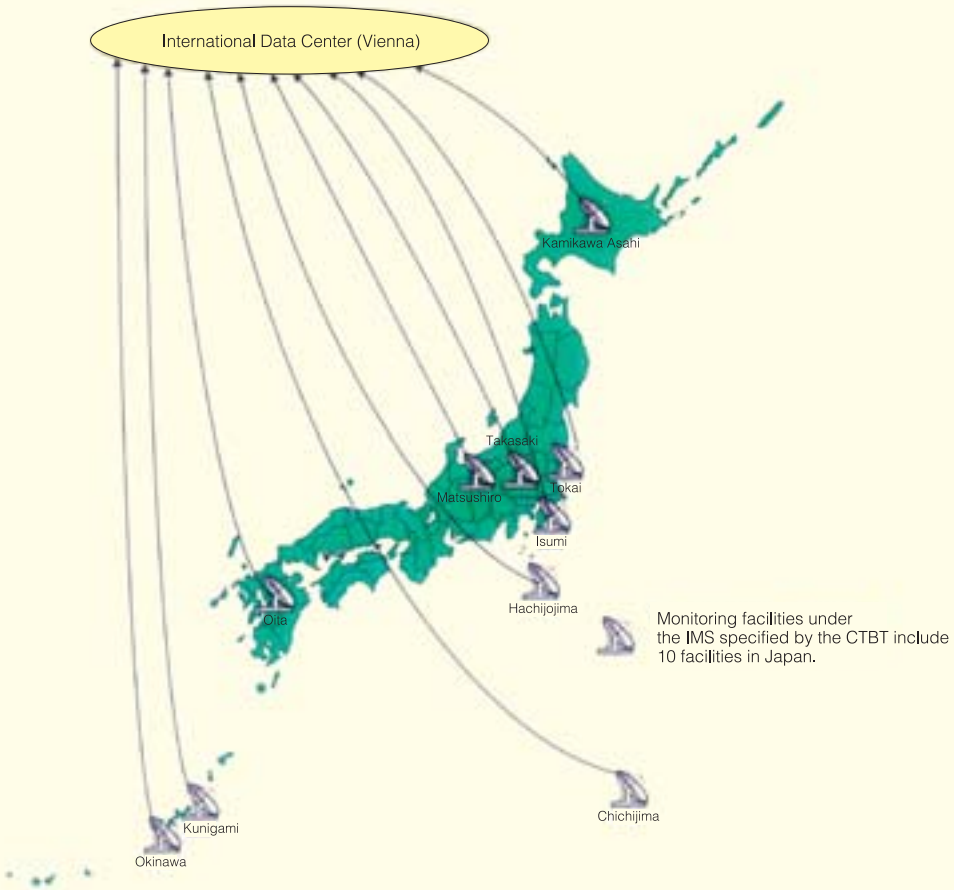
4. Commitments for the International Monitoring System in Japan

The establishment of 10 monitoring facilities in Japan, as listed below, is required under the CTBT. The CTBT National Operation System of Japan was established in November 2002 in order to facilitate the establishment of theses facilities. To date, the facilities in Takasaki, Matsuhiro, Isumi and Okinawa have started provisional operation after being certified by the Provisional Technical Secretariat of the CTBT Organization Preparatory Committee. Although incomplete as a monitoring facility under the Treaty, seismic data obtained at the facility (2) below have already been transmitted to the International Data Center in Vienna.

(1) Primary Seismological Station: Matsushiro
(2) Auxiliary Seismological Stations: Oita, Kunigami, Hachijojima, Kamikawa - Asahi, Chichijima
(3) Infrasound Station: Isumi
(4) Radionuclide Stations: Okinawa, Takasaki
(5) Radionuclide Laboratory: Tokai

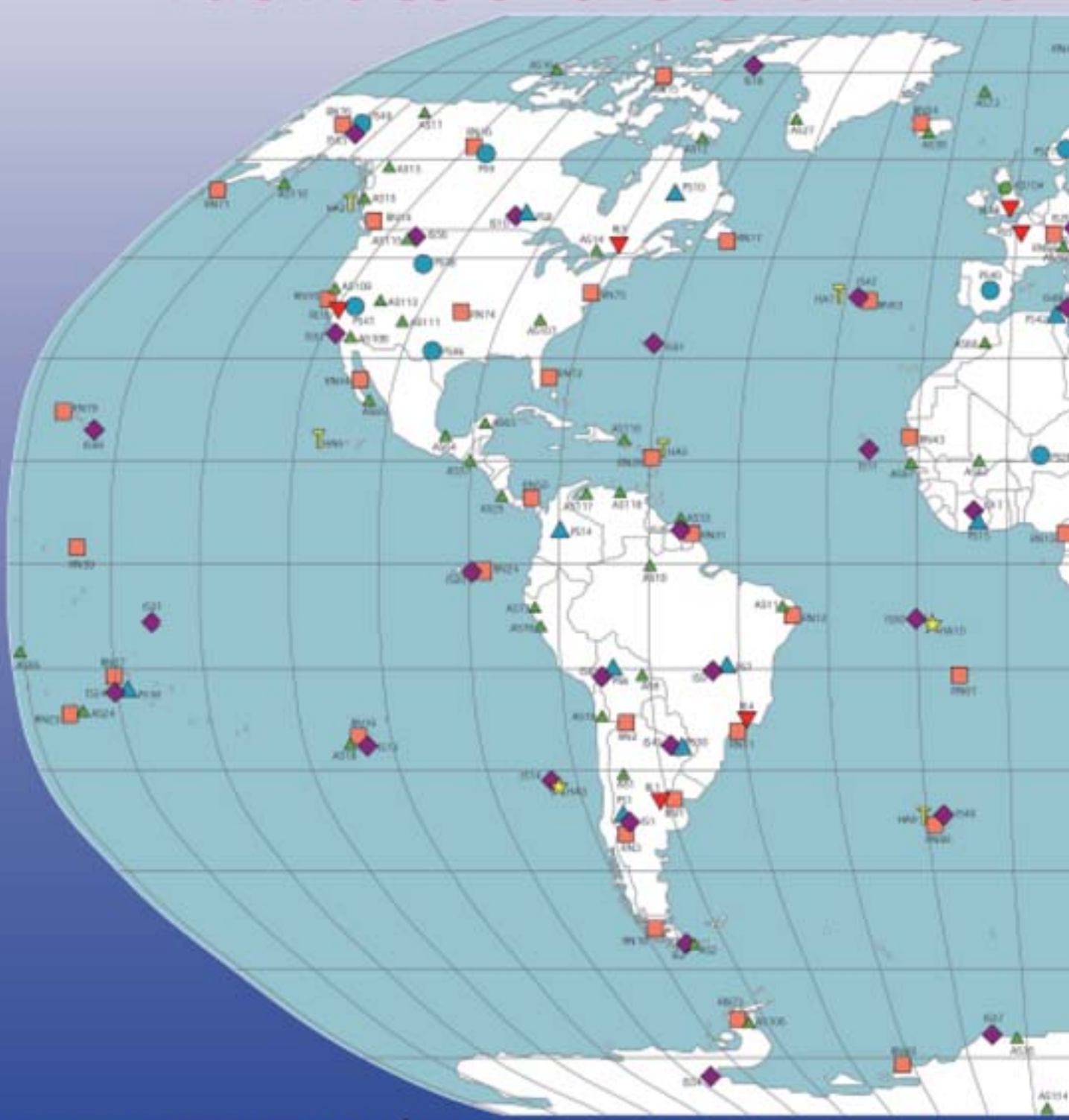
Observation at the Isumi Infrasound Station by participants of CTBT Infrasound Technology Workshop in Tokyo

Locations of International Monitoring Facilities in Japan



Preparatory Commission for the Com

Facilities of the CTBT Intern



Seismic primary array (PS)

Seismic primary three-component station (PS

Seismic auxiliary array (AS)

Seismic auxiliary three-component station (A

Infrasound station (IS)

nprehensive Nuclear-Test-Ban Treaty (CTBTO)

national Monitoring System

S) Hydroacoustic (hydrophone) station (HA)

AS) Hydroacoustic (T-Phase) station (HA)

Radionuclide station (RN)

Radionuclide laboratory (RL)

International Data Centre, CTBTO PrepCom, Vienna

Chapter 4. Efforts at the Conference on Disarmament (CD)

Section 1. Overview

1. Overview

As the single multilateral disarmament negotiating forum of the international community, the Conference on Disarmament (CD) is expected to produce results based on the efforts of the international community in the area of disarmament. It also plays a very important role in Japan's diplomacy to promote disarmament. However, no substantive negotiations have taken place at the CD since the drafting of the Comprehensive Nuclear - Test - Ban Treaty (CTBT) in 1996. In addition, no annual programme of work, which should be adopted every year, has been agreed with or adopted due to a lack of convergence in the different positions of Member States since the adoption in 1998. The primary reason for the stalemate at the CD has been a conflict among countries concerning how to deal with the issues of a Fissile Material Cut - Off treaty (Cut - off Treaty), the "Prevention of Arms Race in Outer Space (PAROS)," nuclear disarmament and negative security assurances (NSAs) at the CD.

To deal with this situation, there have been various proposals put forward on a programme of work, including a programme of work drafted by the ambassadors of five countries who had served as Presidents of the CD, (otherwise known as the "Five Ambassadors Proposal", which stipulates, as a basis for a programme of work, the establishment of Ad Hoc Committees in the four issues — (1) nuclear disarmament, (2) a Cut - off Treaty, (3) PAROS and (4) NSAs — as well as the mandates of the Ad Hoc Committees) and a "revised Five Ambassadors' Proposal," but no agreement was reached on any of these proposals.

Under such circumstances, it is still difficult for the CD to reach an agreement on a programme of work. However, sharing a common understanding that stalemate in the CD should be resolved through substantive discussions, a proposal made by the six ambassadors (P6) who served as Presidents during the 2006 session successfully persuaded Member States to conduct structured debates during the 2006 session based on the CD agenda. Structured debates were thus carried out on a Cut - off Treaty in May, along with detailed discussions on each specific point (See Section 2 below).

Also in 2007, due to coordination by the six ambassadors who served as Presidents for that year, it was determined to appoint a coordinator for each of the agenda items and hold informal meetings. These informal meetings essentially worked in the same way as structured debates did in 2006.

During the first part of the 2007 session, informal meetings were held for all agenda items, while creating a constructive atmosphere. Immediately before the end of the first part of the 2007 session, the P6 presented a presidential draft decision (L1) regarding work during and after the second part. This proposal suggested to appoint a coordinator for each issue of (1) a Cut - off Treaty, (2) nuclear disarmament, (3) PAROS and (4) NSAs, and to have negotiations for (1) and substantive discussions for (2) to (4).

Many countries expressed their intention to support this proposal or not to obstruct consensus, but consensus was not reached by the end of the third part due to its non - acceptance by China, Pakistan and Iran. It was regrettable that the proposal was not adopted during the 2007 session. However, the fact that the majority of the CD Member States accepted this proposal based on broad common interests for the purpose of revitalizing the CD can be recognized as an achievement.

Conference hall of the Conference on Disarmament
(March 2008:With attendance of Vice-Minister for Foreign Affairs Yasuhide Nakayama)

2. Japan's efforts

Japan regards the early commencement of negotiations on a Cut - off Treaty as the priority of the CD, and has been conducting various diplomatic efforts, including the submission of a working paper on a Cut - off Treaty, to overcome the stalemate in the CD.

Recently, Akiko Yamanaka, Vice - Minister for Foreign Affairs (then) (June 2006), Yohei Kono, Speaker of the House of Representatives (September 2006), Masayoshi Hamada,Vice - Minister for Foreign Affairs (then) (March 2007) and Yasuhide Nakayama, Vice - Minister for Foreign Affairs (March 2008), attended and addressed the CD, appealing for its revitalization and necessity as well as the importance of an early commencement of negotiations on a Cut - off Treaty.

Japan intends to make further diplomatic efforts toward the adoption of a programme of work at the CD and an early commencement of negotiations on a Cut - off Treaty.

Section 2. Fissile Material Cut-off Treaty (Cut-off Treaty)

1. Overview of the Cut - off Treaty and its significance

A Fissile Material Cut - off Treaty is generally called an FMCT or a Cut - off Treaty. In the movement of the international disarmament negotiations, this treaty is regarded as a practical and substantial multilateral measure for nuclear disarmament and non - proliferation, which the international community should pursue, following the conclusion of the Comprehensive Nuclear - Test - Ban Treaty (CTBT) in 1996. In other words, the Treaty on the Non - proliferation of Nuclear Weapons (NPT), which is the basis of the current nuclear non - proliferation regime, aims to prevent the transfer of nuclear weapons and other nuclear explosive devices from the nuclear - weapon States to the non - nuclear - weapon States, and to suppress the emergence of new nuclear - weapon States by banning the development and acquisition of nuclear weapons by the non - nuclear - weapon States. A Cut - off Treaty aims to prevent the emergence of new nuclear - weapon States by banning the production of fissile materials (such as highly enriched

uranium or plutonium) and to restrict the production of nuclear weapons by nuclear - weapon States, thus it carries great significance from the perspective of both nuclear disarmament and non - proliferation.

If a Cut - off Treaty is concluded, it would support the reduction of nuclear weapons by nuclear - weapon States, such as the United States and Russia, and prevent non - nuclear - weapon States from acquiring nuclear weapons. Also, it could lead to a halt in the nuclear arms race. The conclusion of a Cut - off Treaty would not only be significant in the history of nuclear disarmament and non - proliferation but also contribute greatly to stabilizing the international security environment. It is a positive sign that the Bush Administration of the United States also supports the commencement of negotiation on a Cut - off Treaty.

The assumed provisions under the treaty are: (1) to prohibit the production of fissile materials for weapons purposes with the aim of research, production and use in nuclear weapons and other nuclear explosive devices; and (2) to prohibit assistance to other States in the production of fissile materials for weapons purposes.

2. Background

A Cut - off Treaty was initially proposed by US President Bill Clinton (then) in his speech at the UN General Assembly (UNGA) in September 1993. The UNGA resolution, recommending negotiations at an appropriate international forum, was adopted by consensus in November of the same year. It was later agreed that the CD would be the forum for negotiations.

It was agreed that an Ad Hoc Committee on an FMCT would be established to negotiate a Cut - off Treaty within the CD, following the adoption in 1995 of a negotiation mandate drafted by the Special Coordinator, Ambassador Shannon of Canada. At the CD, it is necessary to establish a subsidiary body such as an ad hoc committee to conduct negotiations; however, only in the years 1995 and 1998 were ad hoc committees established. Even then, negotiations on a Cut - off Treaty were not undertaken at the Ad Hoc Committee in 1995, as a chair was not appointed.

An Ad Hoc Committee was established in August 1998 in response to the emergence of new situations such as the nuclear tests by India and Pakistan, and Ambassador Moher of Canada was appointed as Chair of the Ad Hoc Committee. Under the leadership of the Chairman, two meetings of the Ad Hoc Committee were convened between August 27 and September 1, 1998. However, apart from some exchanges of opinions among the participants, no substantial negotiations for the treaty took place, mainly because it was near the end of the 1998 session of the CD.

The reestablishment of the Ad Hoc Committee failed at the 1999 session of the CD due to the repeated disagreement over the programme of work. At the 2000 NPT Review Conference, the CD was urged in the Final Document to agree on a programme of work that included the immediate commencement of negotiations on a Cut - off treaty with a view to their conclusion within five years. This raised the expectation for new progress in negotiations on a Cut - off Treaty during the 2000 sessions. China, however, insisted that the negotiations on PAROS must be concurrently commenced with that of a Cut - off Treaty, while the United States stated that it would not accept the commencement of negotiations on PAROS. Due to this divergence of views between the United States and China, an ad hoc committee failed to be reestablished and negotiations on a Cut - off Treaty did not commence.

Many countries including Japan have repeatedly advocated the importance of the commencement of negotiations on a Cut - off Treaty, and have made various efforts to obtain consensus among the countries concerned.

At the third session of 2004, the United States, which had previously been noncommittal about the programme of work, officially took the stance of encouraging Member States to commence negotiations on a legally binding Cut - off Treaty at the CD. This gathered momentum toward an agreed programme of work at the CD; however, the CD failed to reach an agreement on a programme of work at the 2004 session, partly due to the time remaining before the end of the third session being quite limited.

In 2006, the structured debate on a Cut - off Treaty was carried out for three days in May, and active and concrete discussions were held on each issue (definitions and scope on the first day, stocks and other issues on the second day, and verification and compliance on the third day) with participation of experts from Member States. In particular, the US Assistant Secretary of State's attendance at the meeting and presentation of a new draft Cut - off Treaty and draft mandate attracted the attention of the CD Member States. The Member States that place importance on verification did not support the draft Cut - off Treaty presented by the United States, which contained no verification measures. Nevertheless, it contributed significantly to fostering momentum for the commencement of negotiations, serving as one of the bases for future treaty negotiations. (The draft Cut - off Treaty presented by the United States is registered as a CD official document (CD/1776), which is available at www.unog.ch.)

At informal meetings under coordinators in 2007, a meeting on a Cut - off Treaty was held both in February and March and discussions were held on each issue (the purpose and the preamble of the Treaty, definitions, scope, production of fissile materials for non - explosive purposes, existing organizations, transparency, stocks, compliance and verification, domestic implementation, disputes and entry into force) (The summary of the aforementioned informal meetings held under coordinators is registered as CD/1827).

3. Basic stance of Japan

Japan considers it important to immediately commence and conclude negotiations on a Cut - off Treaty, and continues to make efforts in this direction (See 2. of Section 1.). It may take a long time for a treaty to enter into force even if negotiations on the treaty are concluded. Japan, therefore, asserts that the nuclear - weapon States should unilaterally declare a moratorium on the production of fissile materials for weapons purposes pending the entry into force of a treaty. In fact, four nuclear - weapon States, except for China, have already declared a production moratorium. Japan referred to this point in its draft resolution on nuclear disarmament, which was adopted by an overwhelming majority at the UN General Assembly in 2007. Japan also requested China to commit itself to the production moratorium (at the Japan - China Consultation on Disarmament and Non - proliferation in May 2007).

4. Japan's efforts for the commencement of negotiations on a Cut - off Treaty

Japan has been advocating an early commencement of negotiations on a Cut - off Treaty on various occasions, such as at the 2000 NPT Review Conference and the UN General Assembly First Committee (dealing with disarmament and security affairs). Also, various diplomatic efforts have been directed to the development of conditions so as to facilitate the conclusion of a treaty once negotiations have commenced. For example, Japan hosted a seminar on a Cut - off Treaty in Geneva in May 1998, mainly from a technical perspective. Japan jointly hosted a workshop with Australia in Geneva in May 2001 to help representatives of various countries deepen their knowledge about all issues related to the negotiations on a Cut - off Treaty. Japan, Australia and the United Nations Institute for Disarmament Research (UNIDIR) co - hosted a workshop entitled "Promoting Verification in Multilateral Disarmament Treaties" again in Geneva in

March 2003. Furthermore, with an eye to the appointment in August 2003 of Ambassador Kuniko Inoguchi, Permanent Representative of Japan to the CD (then), as the President of the third part of the CD, Japan presented a working paper (which clarified issues concerning the scope of the treaty's coverage, technical issues including verification, and organizational and legal issues) to the Conference in which major points of argument were comprehensively clarified, in order to activate discussions on a Cut - off Treaty.

For the structured debates on a Cut - off Treaty in 2006 (see 2. above), Japan dispatched an expert and worked to deepen discussions by presenting a working paper in advance that organized the major points of contention on a Cut - off Treaty, including the scope of the Treaty, how to deal with stocks, definitions and verification issues. In addition to these efforts, Japan has emphasized the importance of a Cut - off Treaty to governments of relevant countries and the international community on various occasions. Japan will continue such diplomatic efforts for early commencement of negotiations.

Ambassador Tarui, Permanent Representative of Japan to the CD, was appointed as a coordinator of informal meetings on a Cut - off Treaty in 2008.

Section 3. Prevention of arms race in outer space

1. Overview

(1) Background

Placement of weapons of mass destruction in outer space is prohibited by the Outer Space Treaty. Reconnaissance, early - warning satellites, communication satellites, the global positioning system (GPS), etc., are primarily cited as examples of the current military use of outer space.

On the other hand, in consideration of the need to restrain further expansion of the military use of outer space with the advance of science and technology, it was proposed in the Final Document of the first special session of the UN General Assembly in 1978 that further measures and appropriate international negotiations be held in accordance with the spirit of the Outer Space Treaty in order to prevent an arms race in outer space. This formed the concept of PAROS and the basis for subsequent discussions.

(2) Discussions on PAROS

The Ad Hoc Committee on PAROS was established in 1985 at the Conference on Disarmament in Geneva to discuss issues such as the necessity of a new treaty, the prohibition of offensive anti - satellite weapons, the evaluation of anti - ballistic missile systems and the treatment of confidence building measures. At the CD, while the former Soviet Union and Eastern European countries expressed serious concerns that the US's Strategic Defense Initiative (SDI) would lead to the militarization of outer space, the United States and the United Kingdom contended that a new treaty was not necessary since there was no sign of any countries pursuing the development of outer space weapons, arms races were restricted under the existing treaties and an effective verification system would be difficult to establish. The Ad Hoc Committee ended in 1994 without substantial results.

Later, in 1999, with the emergence of the US national missile defense issue, China proposed to reestablish an ad hoc committee with a mandate to negotiate a treaty to prevent the weaponization of outer space. This was followed by strong appeals from China for the promotion of prevention of the weaponization of outer space, highlighted by the submission of documents on the prevention of the weaponization of outer space in 2000 and 2001 to the CD.

Russia was also concerned about the promotion of the missile defense program by the United States and its withdrawal from the ABM Treaty. Foreign Minister Igor Ivanov (then) gave a speech at the UN General Assembly in September 2001, emphasizing the importance of the efforts of the international community to formulate a comprehensive treaty that prohibits the deployment of weapons in outer space and the use of force against space objects.

In June 2002, China and Russia together with other nations submitted a joint working paper to the CD. The principle objective of the document was to prohibit the deployment in outer space of so called conventional arms, rather than weapons of mass destruction whose deployment in outer space is already prohibited by the Outer Space Treaty.

In June 2006 and in February and March 2007, the CD held informal meetings to discuss each issue on PAROS, such as the joint working paper by China and Russia, the scope of PAROS, definitions, verification and transparency and confidence building measures. However, while China and Russia advocates the necessity of a new treaty to ban the placement of weapons in general in outer space so as to address the lacuna in the existing legal framework including the Outer Space Treaty, the United States asserts that a new treaty is not needed as no weapons are currently deployed nor does any arms race exist in outer space. A chasm still exists among the CD Member States.

Around the same time, in September 2007 the EU submitted a proposal on transparency and confidence building measures for the prevention of an arms race in outer space to the UN Secretary - General, based on the UN General Assembly Resolution 61/75 "Transparency and Confidence Building Measures in Outer Space Activities." The EU recommends discussing this proposal at the CD at an appropriate time, after going through discussions at the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space (COPUOS) concerning its technical aspects if necessary.

(Reference) Outline of a Working Paper presented by China and Russia in 2002 on the Prevention of the Weaponization in Outer Space

1. Name:

Possible Elements for a Future International Legal Agreement on the Prevention of the Deployment of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects

2. Basic Obligations

- **Not to place in orbit around the Earth any objects carrying any kinds of weapons;**
- **Not to install such weapons on celestial bodies;**
- **Not to station such weapons in outer space in any other manner;**
- **Not to resort to the threat or use of force against outer space objects; and**
- **Not to assists or encourage other States, groups of States, or international organizations to participate in activities prohibited by this Treaty.**

3. The Use of Outer Space for Peaceful and Other Military Purposes

- **This Treaty shall not be construed as impeding the research and use of outer space for peaceful purposes or other military uses not prohibited by this Treaty.**
- **Each State Party to the Treaty shall carry out activities in outer space in accordance with the general principles of international law and shall not violate the sovereignty and security of other States.**

(3) Japan's stance

Japan ratified the Outer Space Treaty in 1967. A "Diet Resolution concerning Principles for the Development and Utilization of Outer Space" adopted at a plenary session of the

House of Representatives in May 1969 provides that Japan's development and utilization of outer space shall be limited to 'peaceful purposes.' The Japanese government considers that the use of outer space by the Ministry of Defense and the Self - Defense Forces is unrestricted if such use is of a general nature. For example, the use of communication satellites or earth observation satellites by the Self - Defense Forces does not contravene the principles of peaceful uses of outer space. Japan recognizes that the proliferation of weapons of mass destruction and missiles as their means of delivery, poses a challenge to its security, and strongly feels that space development technology must not be used to conceal ballistic missile programs.

Based on this stance, Japan has been voting in favor of the resolutions on the "Prevention of an Arms Race in Outer Space" and "Transparency and Confidence Building Measures in Outer Space Activities" at the UN General Assembly. Japan has also been playing an active role in the international frameworks that deal with the proliferation of ballistic missiles. At the CD, Japan has actively participated in discussions on PAROS, while placing the utmost priority on the early resumption of negotiations for a Cut - off Treaty.

2. China's anti - satellite weapon test

On January 12, 2007, it was reported that China carried out a test to destroy its aging weather satellite "Feng Yun II" with an anti - satellite weapon at an altitude of 850 kilometers. Japan expressed its concerns over this test in the interest of the safe use of outer space and national security, and requested China to explain all of the facts and its intentions regarding the test. When Foreign Minister Li Zhaoxing (then) visited Japan in February 2007, Japan repeated its request for an explanation from China. At an official CD plenary meeting in February, Japan also called for China to provide promptly information and further transparency concerning its military activities. Japan additionally pointed out that China's action was inconsistent with not only the draft treaty on PAROS that China had proposed at the CD, which includes a ban on the threat or use of force against outer space objects, but also the provisions of the Outer Space Treaty. Furthermore, at the Scientific and Technical Subcommittee of COPUOS held in Vienna in the same month, Japan expressed its anxiety over the space debris created by the test and stated that China's action was contradictory to the safe use of outer space.

In addition to Japan, other countries, including the United States, Australia, New Zealand, Canada, and the EU, expressed concerns over this matter at the CD, COPUOS and other bodies.

In response, China explained that the test was not aimed at any country and did not pose any threat to any country. But this explanation fell short of eliminating the concerns of the international community including Japan. When Defense Minister Cao Gangchuan visited Japan in August 2007, Foreign Minister Machimura (then) pointed out the concern related to military matters including the anti - satellite test, and suggested enhancing transparency concerning China's military force to eliminate the suspicions of the Japanese people is the basis to formulating friendly Japan - China relations.

In the "Draft Resolution concerning Peaceful Uses of Outer Space" (A/62/403) adopted at the UN General Assembly in December 2007, "Space Debris Mitigation Guidelines" were approved.

Reference: Arms control and nuclear disarmament by nuclear-weapon states

Section 1. Overview

1. Nuclear - weapon states

The states officially recognized as the nuclear - weapon states under the NPT are the United States, Russia, the United Kingdom, France and China. India and Pakistan that have performed nuclear detonation tests and have publicly announced possession of nuclear weapons are Non - states Parties to the NPT. Although Israel has never admitted to possessing nuclear weapons, it is considered a de facto nuclear - weapon state.

The United States and Russia possess the majority of nuclear weapons in the world, therefore reduction of nuclear weapons by the two states is crucial for global nuclear disarmament.

Article VI of the NPT stipulates that each of the parties "undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament ⋯ "

Current Status of Nuclear Weapons Possessed by Nuclear-Weapon States

Current Status of Nuclear Weapons (as of January 2007)

	Details	Number of nuclear warheads		Number of delivery means	
US	ICBM	900	Total 5045	500	Total 894
	SLBM	1728		288	
	Strategic bombers	1917		106	
	Non-strategic nuclear weapon	500		–	
Russia	ICBM	1788	Total 5614	489	Total 747
	SLBM	624		180	
	Strategic bombers	872		78	
	Non-strategic nuclear weapon	2330		–	
UK	Ground-based missile	0	Total 160	0	Total 48
	SLBM	160		48	
	Aircraft such as bomber	0		0	
France	Ground-based missile	0	Total 348	0	Total 132
	SLBM	288		48	
	Strike aircraft (including carrier-based aircraft)	60		84	
China	Ground-based ballistic missile	93	Total 145	93	Total 125
	SLBM	12		12	
	bombers(including strike aircraft)	40		20	
	Non-strategic nuclear weapon	–		–	

Source: SIPRI (Stockholm International Peace Research Institute) Yearbook 2007

Transitional change in the Number of Nuclear Warheads of Nuclear-Weapon States

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
US	19,924	19,123	14,872	11,536	11,012	10,953	10,886	10,829	10,763	10,698	8,876	8,876	7,600	7,068	7,006	4,896	5,521	5,045
Russia	25,698	25,285	22,555	22,101	18,399	14,978	12,085	11,264	10,764	10,451	9,906	9,196	8,331	8,232	7,802	7,360	5,682	5,614
UK	296	300	300	300	250	300	300	260	260	185	185	185	185	185	185	185	185	160
France	535	621	601	525	510	500	450	450	450	450	464	348	348	348	348	348	348	348
China	318	413	413	435	400	400	400	400	400	400	410	410	402	402	402	402	130	145

Source: Data from 1993 to 1999 are from the Bulletin of the Atomic Scientists (November/December 2002).
Data from 1990 to 1992 and from 2000 to 2007 are from SIPRI (Stockholm International Peace Research Institute) Yearbook

2. Types of nuclear weapons

There is no established classification of nuclear weapons, but they are generally classified into three groups : nuclear weapons that can directly attack opponent's territory to destroy war - waging capability are classified as strategic nuclear weapons, (including long - range nuclear weapons, or ICBMs, and heavy bombers and SLBM), nuclear weapons used within a theater of war are classified as theater nuclear weapons (intermediate - range nuclear weapons), and nuclear weapons primarily used in limited military maneuvers are classified as tactical nuclear weapons (short - range nuclear weapons). In some cases, theater nuclear weapons and tactical nuclear weapons are collectively referred to as non - strategic nuclear weapons. Between the United States and Russia, strategic (nuclear) weapons are defined by the Strategic Arms Reduction Treaty (START), etc., and other nuclear weapons are interpreted as non - strategic nuclear weapons. START classifies nuclear weapons according to the delivery means (ICBMs, SLBMs, strategic bombers, etc.), instead of the size of the warheads (nuclear yield).

However, a strict definition is hard to come by since a theater nuclear weapon by the definition of the United States and Russia can be, in effect, treated as a strategic nuclear weapon by other countries, depending on the geographical location and land area, etc.

Section 2. Nuclear disarmament and arms control of the United States and Russia

1. Outline of the US - Russia Strategic Arms Reduction Treaty

(1) Outline

Negotiations on the Strategic Arms Reduction Treaty (START) were a process that, for the first time, reduced strategic nuclear weapons held by the United States and Russia that had accumulated during the Cold War. (The Intermediate - Range Nuclear Forces Treaty (INF Treaty) to eliminate all ground - launched intermediate - range nuclear weapons was signed between the United States and the Union of Soviet Socialist Republics in December 1987 and entered into force in June 1988.) Through this process, the strategic nuclear weapons of both states were substantially reduced, and it was considered as significant from the perspective of nuclear disarmament. As a result of the START I process, the number of strategic nuclear warheads of the United States and Russia was reduced to about 60% of those during the Cold War. START has, therefore, established one of the important foundations for nuclear disarmament.

The Bush administration, which took office in January 2001, put an end to hostile relations with Russia (USSR) which existed during the Cold War with each state possessing more than 10,000 strategic nuclear weapons, and advocated the need to establish a new security regime to combat threats such as proliferation of weapons of mass destruction and ballistic missiles. Accelerated by the terrorist attacks on September 11, 2001 in the United States, this policy direction was pushed forward, and an agreement was formed to mutually reduce the number of strategic nuclear weapons to 2,000. As a result, the Strategic Offensive Reductions Treaty (Moscow Treaty), which codifies both countries' commitment to make strategic nuclear weapons reductions came into effect separately from the previous START process.

(2) START process

(a) Strategic Arms Reduction Treaty I (START I)

START I signed by the United States and the USSR in July 1991 stipulates that both states reduce the three major means of delivery for strategic nuclear weapons, namely, Intercontinental

Ballistic Missiles (ICBMs), Submarine - launched Ballistic Missiles (SLBMs), and heavy bombers, to 1,600 for each side within seven years after the Treaty enters into force. The Treaty also stipulates that heavy ICBMs possessed by Russia (those ICBMs with massive destruction power, i.e., heavy launch weight or throw - weight such as the SS - 18 equipped with multiple warheads) are to be reduced to 154 or less. In addition, the number of strategic nuclear warheads deployed is limited to 6,000, of which the total number of strategic nuclear warheads mounted on ICBMs or SLBMs must not exceed 4,900.

After the collapse of the USSR, it was agreed that Ukraine, Kazakhstan, Belarus, and Russia, where strategic nuclear weapons were deployed, and the United States, would become the parties to START I, while Ukraine, Kazakhstan, and Belarus would accede to the NPT as non - nuclear - weapon - states (the Lisbon Protocol).

The three republics of the former Soviet Union other than Russia were required to transfer all of their nuclear weapons in their respective territories to Russia to place them under the control of Russia. The last nuclear warheads were transferred from Belarus to Russia in November 1996, making completion of the transfer of all nuclear warheads (Kazakhstan completed the transfer in May 1995 and Ukraine in June 1996).

START I entered into force in December 1994. In December 2001, the United States and Russia announced that they had reduced the number of strategic nuclear warheads to 6000, and completely implemented their obligation under START I.

(b) Strategic Arms Reduction Treaty II (START II)

Even before the entry into force of START I, the United States and Russia reached an agreement on the basic framework of START II in June 1992. START II was signed in January 1993, stipulating as follows: the number of deployed strategic nuclear warheads of the United States and Russia should be reduced to less than 3,000 - 3,500 by January 1, 2003, among which the number of nuclear warheads mounted on SLBMs should be reduced to less than 1,700 - 1,750; and each ICBM should be fitted with a single warhead, in other words, multiple - warhead ICBMs and heavy ICBMs (SS - 18) should be eliminated. (Thereafter, the completion date of START II was extended to 2007 under the START II Protocol signed in September 1997.)

The Russian parliament approved the Federal Law on the Ratification of START II in April 2000 on the condition that Russia reserves the right to withdraw from START II if the United States decides to withdraw from the Anti - Ballistic Missile (ABM) Treaty. Although the United States ratified START II, it did not ratify the START II Protocol, which modified START II, and thus START II has yet to enter into force.

On December 13, 2001, the United States notified Russia of its withdrawal from the ABM Treaty. The Russian Government pointed out that the United States rejected the ratification of the START II Protocol and withdrew from the ABM Treaty, and announced in a statement on June 14, 2002, that "the Russian Federation notes the absence of any prerequisites for the entry into force of the START II Treaty, and does not consider itself bound any longer by the obligation under international law to refrain from any actions which could deprive this Treaty of its object and goal."

(c) Strategic Arms Reduction Treaty III (START III)

The United States and Russia agreed, in the Joint Statement on "Parameters on Future Reduction in Nuclear Forces" issued after the US - Russian Summit talks in Helsinki in March 1997, as follows: the United States and Russia are to start negotiations on a START III as soon as START II

enters into force; the number of strategic warheads shall be reduced to 2,000 - 2,500 by December 31, 2007 as a basic element of START III; and both states shall start negotiating on other issues including tactical nuclear weapons and Submarine Launched Cruise Missiles (SLCMs). However, no agreement or its signature was made on the draft treaty to this date.

(3) The Treaty on Strategic Offensive Reductions (Moscow Treaty)

From the beginning, the Bush administration had emphasized the necessity of establishing a new security structure in the post - Cold War era. In his statement delivered at the National Defense University in May, 2001, President Bush stated that "in the post - Cold War era, Russia is no longer an enemy of the United States. Although nuclear weapons continue to play a crucial role in the security of the United States and its allies, the United States is now able to change the scale, composition and characteristics of its nuclear force and will do so, reflecting the fact that the Cold War has ended."

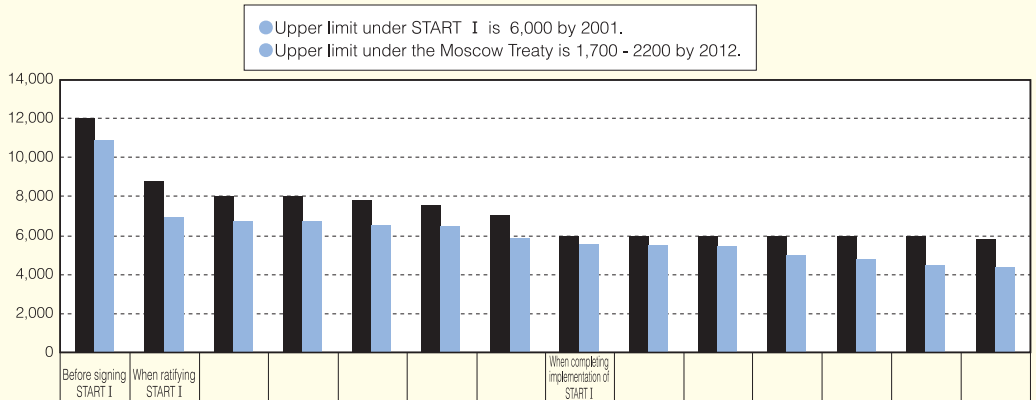
Summit talks between the United States and Russia were held (in Washington D.C./Crawford) during November 13 - 15, 2001, and President Bush conveyed to President Putin that the United States would reduce the number of operationally deployed strategic nuclear warheads to 1,700 - 2,200 in the next decade, a level commensurate with US security requirements.

Following a series of talks, at the US - Russia Summit Meeting in Moscow on May 24, 2002, the two leaders signed the Treaty on Strategic Offensive Reductions (Moscow Treaty), which stipulates a further reduction of strategic nuclear forces than START I. The United States and Russia completed the ratification procedure at Congress in March 2003 and at the Parliament in May 2003, respectively. US President George W. Bush and Russian President Vladimir Putin exchanged instruments of ratification in St. Petersburg and the Treaty entered into force on June 1, 2003.

(Reference) Outline of the Moscow Treaty

1. **The Moscow Treaty is a legally binding treaty which stipulates that the United States and Russia shall reduce strategic nuclear warheads to a level not exceeding 1,700-2,200 respectively in the next decade until 2012 (The Treaty must be ratified by the parliaments of both Parties).**
2. **The Treaty stipulates that the number of operationally deployed strategic nuclear warheads be reduced, rather than destroying nuclear warheads or their delivery systems (missiles, such as ICBMs, and SLBMs and bombers, etc,). Both Parties are allowed to stockpile the reduced warheads.**
3. **The composition and structure of strategic offensive (nuclear) weapons (to be retained without reduction) shall be determined by each Party (no restriction would be imposed on such matters as the type and number of ICBMs, SLBMs, and strategic bombers, or the possession of MIRV).**
4. **The Parties shall hold meetings at lease twice a year of the Bilateral Implementation Commission, for the purposes of implementing the Treaty.**
5. **The verification measures shall be based on the provisions of START I and be entrusted to the Bilateral Implementation Commission.**

Changes in the Number of Strategic Nuclear Warheads of the US and Russia, and Upper Lomit of START Ⅰ and Moscow Treaty



	Before signing START I January 1991	When ratifying START I December 1994	July 1997	July 1998	July 1999	July 2000	July 2001	When completing implementation of START I December 2001	July 2002	Juanuary 2003	Juanuary 2004	Juanuary 2005	Juanuary 2006	Juanuary 2007
US	11,966	8,824	7,957	7,982	7,815	7,519	7,013	5,949	5,927	5,974	5,968	5,966	5,966	5,914
Russia	10,880	6,914	6,750	6,674	6,546	6,464	5,858	5,520	5,483	5,436	4,978	4,732	4,399	4,237

Data of 1991: SIPRI Yearboo; Data between 1994-2007: FACT SHEET by the US Department of State
(Note) Regarding reduction target under the Moscow Treaty, interpretations differ between the United States, which considers "operationally deployed nuclear warheads," and Russia, which considers "deployed nuclear warheads" as under START Ⅰ.

(4) Post - START arrangement

START I, which entered into force in 1994 (hereinafter the "START"), will expire on December 5, 2009 or 15 years after the enforcement unless member countries agree to another five - year extension. Therefore, it is considered necessary to formulate a new framework substituting for START, which has so far provided credibility, transparency and predictability in reducing strategic nuclear forces between the United States and Russia by way of information exchange and verification measures. On the occasion of the US - Russia summit meeting on July 3, 2007, US Secretary of State Condoleezza Rice and Russian Foreign Minister Sergey Lavrov announced the "US - Russia Foreign Ministers Joint Statement on Strategic Nuclear Forces," in which both states reconfirmed their mutual intentions to carry out strategic offensive reductions to the lowest possible level consistent with their national security requirements and alliance commitments, and at the same time expressed their will to continue discussions on how to make an agreement on a post - START arrangement with a view toward early results.

2. The Anti - Ballistic Missile Treaty (ABM Treaty)

(1) Overview of the ABM Treaty and its significance

Signed in May 1972 between the United States and the USSR, and entered into force in October 1972, the Anti - Ballistic Missile Treaty (ABM Treaty) strictly limited the development and deployment of the missile systems that would intercept strategic ballistic missiles to initially two locations (one location each as modified by the Protocol of July 1974, i.e., the ICBM base in North Dakota for the United States, and in Moscow, the capital of the USSR). The Treaty also stipulated that each state could deploy up to 100 launchers and interceptor missiles per location.

The ABM Treaty forms the basis of the concept of so - called "Mutual Assured Destruction" (MAD) and enables each state to deter the opponent's nuclear attack by limiting the capability of "the shield" and by intentionally maintaining a vulnerable defense posture.

(2) Withdrawal of the United States from the ABM Treaty

After taking office, US President George W. Bush advocated the need for the establishment of National Missile Defense in order to combat threats faced by today's world, which are different from those during the Cold War, and a framework that moves beyond the constraints of the ABM Treaty, which imposes limits on the defense capability of the United States. (Speech at the National Defense University, May 2001).

Following the terrorist attacks in September 11, 2001, the Bush administration has further emphasized the link between international terrorism and the threat posed by the proliferation of weapons of mass destruction as well as ballistic missiles.

Under these circumstances, President Bush officially notified the Russian Federation of its withdrawal from the ABM Treaty on December 13, 2001, with a view to promoting the missile defense program. President Putin of the Russian Federation gave a restrained response to the notification, and observed that such an action by the United States was not unexpected, and the US's withdrawal from the ABM Treaty did not pose a threat to Russia's national security, though he regarded the US's decision as a mistake.

The US's withdrawal from the ABM Treaty meant the collapse of the framework for securing strategic stability between the United States and Russia symbolized by the ABM Treaty which was based on the concept of Mutual Assured Destruction (MAD) during the Cold War (the framework of nuclear arms control). The important issue of international peace and security was what kind of strategic framework might subsequently be established between the states. In such circumstances, the fact that the United States and Russia signed the Moscow Treaty in May 2002 is a symbolic effort for more stable bilateral relations between the two states and for the establishment of a new strategic framework.

As the ABM Treaty stipulated that a member state needs to notify its withdrawal six months in advance, the withdrawal of the United States became effective on June 13, 2002, and the treaty expired.

3. Measures of unilateral disarmament of the United States and Russia

The United States and Russia drastically reduced their non - strategic nuclear weapons (tactical nuclear weapons) in a voluntary manner in the early 1990s. This was a measure responding to imminent dangers that emerged while the former Soviet Union was disintegrating into the several republics, signifying the collapse of the nuclear control system and nuclear proliferation in the third world.

In September 1991, then US President George H. Bush announced his nuclear weapons reduction initiatives, calling on the Gorbachev administration to cooperate. The initiatives include the unilateral withdrawal and disposal of ground - launched tactical nuclear weapons and the withdrawal of all and the disposal of a part of the sea - launched tactical nuclear weapons. In the next month in response to this, President Gorbachev (then) announced that the USSR would withdraw and dispose of all of its ground - launched and sea - launched tactical nuclear weapons.

Following the collapse of the Soviet Union in December 1991, US President Bush (then) announced, in January 1992, his nuclear weapons reduction initiative including: reduction of the B - 2 bombers; cancellation of the small ICBM program; reduction of strategic nuclear weapons, including the reduction of the number of warheads on the US submarine - launched ballistic missiles (SLBMs), by about one - third, if the Commonwealth of Independent States (CIS) would eliminate all land - based multiple - warhead ICBMs.

In response to the above initiative, Russian President Yeltsin (then) made a comprehensive proposal in his statement on arms control and disarmament policy to reduce all ground - launched tactical nuclear weapons, as well as to reduce aircraft - loaded air - and sea - launched tactical nuclear weapons, to halt the production of heavy bombers (TU - 160, TU - 95MS), and to reduce the total number of strategic nuclear warheads.

As of January 2007, the United States is believed to possess 500 non - strategic nuclear warheads, while Russia possesses 2,330 (including those for defense purposes) (SIPRI Year Book 2007).

In addition, the United States and Russia announced that each ceased the production of fissile materials for nuclear weapons in 1988 and 1994, respectively.

Regarding nuclear warheads stockpile, US President George W. Bush announced in December 2007 that he approved significant reduction in the US nuclear weapons stockpile in accordance with its commitments to allies and thereby the US nuclear stockpile would be less than one - quarter its size at the end of the Cold War.

4. Development in nuclear - weapon states

(1) The United States

(a) Issue of research on so - called mini - nukes

The FY 2004 National Defense Authorization Bill was adopted in November 2003, which included the abolition of the Spratt - Furse Provision prohibiting research and development of low - yield nuclear weapons, and resumption of research was approved. However, such research has never been carried out even without any budget request being made since FY2006. With regard to research on nuclear earth penetrators, budget requests were made for FY2005 and FY2006, but Congress did not approve them and no request has been made since FY2007. At regular meetings between Japan and the United States, Japan has pointed out the concerns of the international public opinion including that of the Japanese that the resumption of research on mini - nukes might negatively affect the nuclear disarmament and non - proliferation regime and might lead to the resumption of nuclear tests and has expressed Japan's awareness that such concerns might have adverse effects on international moves for the disarmament and non - proliferation of weapons of mass destruction.

(b) Reliable Replacement Warhead

At present, the United States controls its deteriorating nuclear warheads under the Life Extension Program (LEP), but has been conducting research based on the Reliable Replacement Warhead (RRW) Program since FY2005, as there is concern over whether or not the LEP can sufficiently maintain the security and reliability of nuclear stockpiles over a long period of time without carrying out any nuclear tests. The RRW aims to carry out research on warheads with higher long - term reliability that would replace existing nuclear warheads so as to improve the reliability, longevity and certifiability of nuclear weapons stockpile. Such new warheads are expected to reduce the necessity of future nuclear tests by holding the same military capability as existing nuclear weapons and ensuring longer - term reliability.

(2) Russia

(a) Efforts for strengthening nuclear military forces

Russia operationally deployed new mobile Topol - M missile systems in December

2006, launched a new strategic nuclear submarine Yuri Dolgoruki in April 2007, and conducted the first launching test of MIRV - equipped intercontinental ballistic missile "RS - 24" currently under development in May 2007. The "RS - 24" is considered to be a next - generation MIRV - equipped ballistic missile which is part of Russia's efforts for strengthening its strategic nuclear military forces.

(b) Proposal to globalize the INF Treaty

In February 2007, at the Munich Conference on Security Policy, Russian President Vladimir Putin expressed concerns over the fact that North Korea, Republic of Korea, India, Iran, Pakistan and Israel now hold intermediate - range missiles while only the United States and Russia are obliged not to produce such missiles. On October 12, 2007, ahead of the "two - plus - two" meeting between the United States and Russia, President Putin proposed globalization of the INF Treaty to US Secretary of State Condoleezza Rice and US Secretary of Defense Robert M. Gates. On the 25th of the same month, at the First Committee of the UN General Assembly, the United States and Russia issued a joint statement, calling for discussions on the possibility to globalize the Treaty.

(3) China

(a) China's nuclear policy

China's nuclear deployment and nuclear disarmament measures are not completely visible, but the following are the nuclear policies of China expressed in the statements at international conferences:

(i) China possesses a small number of nuclear weapons necessary for self - defense purposes only;

(ii) China will not use nuclear weapons first against any state. Nor will it use or threaten to use nuclear weapons against non - nuclear - weapon states; and

(iii) China will not participate in a nuclear arms race.

China's nuclear forces, though not at all comparable to those of the United States or Russia, are reported to be composed of about 145 nuclear warheads (SIRPI Year Book 2007). Its means of delivery are ground - launched missiles, submarine - launched missiles and bombers. China also possesses a small number of intercontinental ballistic missiles (ICBMs) capable of reaching the east coast of the United States. While the other four nuclear - weapon states declared a unilateral production moratorium of fissile materials for nuclear weapons, China has not done so.

(b) Japan's response

Japan has taken various approaches to the Chinese nuclear issues on a number of occasions through bilateral talks such as the Japan - China Security Dialog, Japan - China Consultation on Disarmament and Non - proliferation, etc. In recent years, the Japan - China Consultations on Disarmament and Non - proliferation were held in Tokyo in May 2007. Japan requested that China promptly ratify the CTBT, declare a moratorium on nuclear testing, cease production of fissile materials for nuclear weapons, and take concrete measures to reduce nuclear weapons. Japan also expressed concerns over China's anti - satellite weapon test conducted in January 2007. Although China's military forces are the largest in scale in the world, much military equipment of the People's Liberation Army of China is obsolete, and sufficient weapons in terms of fire power and mobility are not available for the entire force. Thus, China has been modernizing its nuclear and missile forces as well as naval and air forces. According to the Chinese Government, China's defense budget has recorded a double - digit increase for 19 consecutive years until 2007. There

remains some obscurity in these circumstances, and Japan regards it as important that China increases its military transparency in order to eliminate the concerns of the neighboring states. Based on this recognition, at the bilateral talks, Japan requested that China increase its military transparency. With respect to the move of the EU toward the lifting of its arms embargo against China, Japan has expressed its opposition to the lifting from the perspective of the security environment in East Asia.

(4) France

Since its announcement to eliminate all surface - to - surface nuclear missiles in September of 1997, France's nuclear forces are based on its second - strike capability to survive an opponent's attacks, in the form of highly survivable bomber loaded air - and submarine - launched systems.

France reduced the means of delivery of nuclear weapons by two - thirds since 1985. The share of nuclear weapons in the defense budget fell from 17% in 1990 to below 9.5% in 2004. France abandoned all of its surface - to - surface nuclear missiles and reduced the number of nuclear ballistic missile submarines (SSBN). France declared that it no longer produces fissile materials for nuclear weapons. France then closed down the Pierrelatte plant for producing weapon - grade fissile materials, and closed and dismantled the South Pacific nuclear test site (in Mururoa). France explained that these disarmament operations are in line with France's hitherto known principle that it maintains the nuclear forces at a level of strict sufficiency.

(5) United Kingdom

In its "Strategic Defense Review" in July 1998, the United Kingdom, while maintaining its security strategy based on nuclear deterrence like France, announced the following measures: to reduce the number of nuclear warheads for the Trident - type nuclear missiles to be launched by a Vanguard class submarine, the UK's only nuclear force, from 300 to fewer than 200; to reduce the number of Trident submarines on patrol at any one time to only one; to reduce the number of missiles equipped with nuclear warheads on the submarine from 96 to 48; and to lower the alert level of nuclear - powered submarines to de - target its missiles. As the service life of a Vanguard class submarine expires in 2024 and it takes 17 years to build a new one, the United Kingdom announced a White Paper entitled "The Future of the United Kingdom's Nuclear Deterrence" and determined to (i) maintain the nuclear deterrence system by holding a new nuclear submarine and (ii) reduce the number of operational nuclear warheads to less than 160 (about 20% reduction from the current level).

Also, the United Kingdom announced that it ended the production of fissile materials for nuclear weapons and other nuclear explosive devices in 1995, and completed the disposal of submarine - launched ballistic missile Chevaline warheads in 2002.

Chapter 5. International Atomic Energy Agency (IAEA) Safeguards system

Section 1. Overview of the IAEA Safeguards system

Safeguards are a set of activities by which the International Atomic Energy Agency (IAEA) verifies that a state is not using its nuclear materials such as uranium and plutonium in a way which would help develop nuclear weapons in the course of utilizing nuclear energy. Article III - A5 of the IAEA Statute stipulates that the implementation of such Safeguards is the responsibility of the IAEA. Based on this, the IAEA assumes the role of verifying the nuclear activities of a state, in line with the Safeguards Agreement concluded between that state and the IAEA. The IAEA Safeguards system is an indispensable mechanism to verify the effectiveness of the nuclear non - proliferation regime centered on the NPT.

Originally, the IAEA initially concluded Safeguards Agreements with recipient states of nuclear materials and nuclear equipment, in accordance with bilateral nuclear energy agreements, and implemented Safeguards only targeting nuclear materials and nuclear equipment transferred between the relevant states. Subsequently, the Treaty on the, Non - Proliferation of Nuclear Weapons entered info force in 1970, which obliges non - nuclear weapon states party to the Treaty, with its Article 3, to accept IAEA safeguards applied on all sources and special fissionable material in its territory. Accordingly, the IAEA structured a Model Safeguards Agreement to be concluded by NPT signatory states. Since then, the IAEA has concluded Safeguards Agreements with individual states in line with the Model and implemented Safeguards in the states with such Agreements in force.

However, allegations of nuclear development by Iraq and North Korea in the early 1990s indicated the limitations of the conventional Safeguards system, and strengthening Safeguards became an urgent task. The Board of Governors of the IAEA approved the Model Additional Protocol in 1997, which was to be concluded by each state in addition to their respective Safeguards Agreement. Since then, strengthened Safeguards have been applied to states which concluded the Additional Protocols. While the Safeguards are being strengthened, the Integrated Safeguards, in view of more effective utilization of limited Safeguards resources, have been applied since 2002 to the states where there no indication of diversion of declared nuclear from peaceful nuclear and no indications of undeclared nuclear material or activities in the States as a whole.

Japan has exerted its utmost efforts in cooperating in implementing the IAEA Safeguards in order to maintain transparency of its own nuclear activities as one of the leading nuclear energy users in the world, while continuing diplomatic efforts for the universality of the Additional Protocols in order to strengthen the international nuclear non - proliferation regime.

Section 2. Details of Safeguards Agreement

1. Comprehensive Safeguards Agreement

Article III - 1 of the NPT stipulates that each non - nuclear - weapon state party to the treaty accepts Safeguards to prevent diversion of nuclear material from peaceful uses to nuclear weapons or other nuclear explosive devices, as set forth in an agreement to be negotiated and concluded with the IAEA in accordance with the Statute of the IAEA and the Agency's Safeguards system. Furthermore, the Safeguards required by this Article shall be applied to all source or special fissionable materials in all peaceful nuclear

activities within the territory of such state, under its jurisdiction, or carried out under its control anywhere.

Many non - nuclear - weapon state parties to the NPT have concluded these agreements with the IAEA, called "Comprehensive Safeguards Agreements" (also called "INFCIRC/153 type Safeguards Agreements" from the IAEA document number or "Full - scope Safeguards Agreements"). As for Japan, the Agreement entered into force on December 2, 1977.

The objective of Safeguards measures under Comprehensive Safeguards Agreements is the timely detection of diversion of significant quantity of nuclear materials from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for unknown purposes, and the deterrence of such diversion by the risk of early detection. "Significant quantity" is defined as an amount of nuclear materials where the manufacture of nuclear explosive devices cannot be ruled out: for example, 8 kg of plutonium or U - 233, or 25kg of enriched uranium containing 20% or more of U - 235.

The measures of Safeguards consist mainly of the "nuclear material accountancy," which verifies the accountancy records of nuclear materials maintained by facility operators, and these measures are complemented by "containment" and "surveillance." The purpose of accountancy is to control the stock of nuclear materials and the inventory of received and shipped materials at nuclear facilities. In addition to the control by the facility operators and by the state, the IAEA verifies whether declaration by the state is appropriate or not. "Containment" is a means by which the IAEA attaches seals to containers and physically contains nuclear materials therein in order to detect if the containers with nuclear materials are tampered with. "Surveillance" is a measure to ensure no illicit transfer of nuclear materials occurs, utilizing video cameras, radiation measuring and other monitoring devices.

2. Other Safeguards Agreements

The Safeguards Agreements based on the IAEA document which were set out prior to the Comprehensive Safeguards Agreements based on the NPT are called "INFCIRC/66 - type Safeguards Agreements" or "Individual Safeguards Agreements." The agreements place nuclear materials and equipment only within the scope of the Agreement. As of today, it is applied to three Non - State Parties to the NPT (India, Pakistan and Israel). Although the five nuclear - weapon states (US, UK, France, China and Russia) have no obligation to accept Safeguards under the NPT, they, in light of the importance of nuclear non - proliferation, have voluntarily accepted Safeguards on the nuclear materials used for non - military purposes. The Safeguards Agreements concluded between these nuclear - weapon states and the IAEA are called "Voluntary Offer Agreements."

Section 3. Improving the effectiveness and efficiency of Safeguards

1. Strengthened Safeguards and the Additional Protocols

The revelation of nuclear development by Iraq and North Korea in the early 1990s made it apparent that the existing Comprehensive IAEA Safeguards system fell short of detecting undeclared nuclear activities and preventing the diversion of undeclared nuclear materials to military use. This is mainly due to the fact that the inspection targets set forth in the Comprehensive Safeguards Agreements are the nuclear materials declared by the states, on the assumption that all nuclear materials in the territory of the relevant state are declared. In response, the IAEA started to seek ways to strengthen Safeguards, aiming at improving detection capabilities of undeclared nuclear materials and activities.

The IAEA launched "Program 93+2" in 1993 to strengthen and improve efficiency of the IAEA Safeguards which, as a result, issued recommendations on measures enforceable within the framework of the Comprehensive Safeguards Agreements and measures to be taken through the establishment of a new framework. The former measures have been gradually implemented. As for the latter, a model protocol, designed to be added to the existing Comprehensive Safeguards Agreements was adopted at the Board of Governors meeting of the IAEA in May 1997. This is called an "Additional Protocol" due to its relation with the existing Comprehensive Safeguards Agreement.

The Additional Protocol expanded the scope of information provided to the IAEA, the scope of verification by the IAEA and the accessible sites for the IAEA inspectors. This gave the IAEA an enhanced power to verify whether there was no indication of undeclared nuclear activities in addition to the inspections conducted under the existing Comprehensive Safeguards Agreements. Specifically, a state with the Additional Protocol is required to provide the IAEA with information on research activities on the nuclear fuel cycle without using nuclear materials, on activities such as manufacture and assembly of specific nuclear - related (such as enrichment and reprocessing - related) materials and equipment, and on import and export of specific equipment and materials. Furthermore, in order to verify the absence of undeclared nuclear materials or nuclear activities, the IAEA is granted a right to conduct two hours or 24 hours notice inspection called complementary access, and a right to collect environmental samples at all places.

In consideration of the recent challenges to the nuclear non - proliferation regime, the importance of the IAEA Safeguards, indispensable to maintaining the non - proliferation regime, has been widely recognized. It is of great importance that a greater number of states conclude both the Comprehensive Safeguards Agreement and the Additional Protocol in order to strengthen the nuclear non - proliferation regime and to maintain peace and security of the world. However, out of 185 State Parties that are obliged to conclude Comprehensive Safeguards Agreements under the NPT, only 154 have actually done so (as of August 2007). The number of State Parties with Additional Protocols in force also remains low at 83 out of 115 signatory states (as of August 2007). Further efforts are required to universalize the Additional Protocols, in addition to Comprehensive Safeguards Agreements.

2. Efficiency of Safeguards and Integrated Safeguards

The strengthening of Safeguards also brought about such issues as an increased workload of Safeguards operations and the need to secure financial resources. Active discussions took place concerning Integrated Safeguards which aimed at rationalization and improved efficiency of Safeguards. As a result, basic principles concerning the application of Integrated Safeguards were adopted at the Board of Governors meeting of the IAEA in March 2002.

Integrated Safeguards are the conceptual framework to systematically integrate conventional Safeguards and Safeguards based on the Additional Protocols, and it is applied to the states, where the absence of undeclared nuclear materials and activities has been concluded by the IAEA through the implementation of the Comprehensive Safeguards Agreements and Additional Protocols. In effect, it serves to rationalize regular inspections based on Comprehensive Safeguards. Application of Integrated Safeguards is of importance for contributing to the reduction of clerical work and costs that accrue from the implementation of Safeguards for both the IAEA and the states concerned. In order to receive application of Integrated Safeguards, the relevant state needs to obtain an IAEA safeguards conclusion that there is no indication of diversion of declared nuclear material from peaceful nuclear activities and no indication of undeclared nuclear material and nuclear activities in the State.

(The application of Integrated Safeguards began in Japan in FY2004 (see below). As of the end of 2006, Integrated Safeguards are applied to nine states including Japan (Australia, Bulgaria, Hungary, Indonesia, Japan, Norway, Peru, Slovenia, and Uzbekistan).)

Section 4. Japan's efforts

Japan has been making efforts as described below in order to strengthen and improve efficiency of the Safeguards system, which constitutes a crucial part of the functions of the IAEA, as a designated member of the Board of Governors(Note). In addition to such contributions, Mr. Yukiya Amano, Ambassador to the Permanent Mission of Japan to the International Organizations in Vienna, worked for one year from October 2005 as the Chairman of the IAEA Board of Governors, which is the decision - making body of the IAEA responsible to the General Conference, contributing to strengthening the international nuclear non - proliferation regime through efforts for smooth and effective operation of the IAEA. In December 2005, the IAEA and its Director General, Dr. Mohamed Elbaradei, were awarded the Nobel Peace Prize "for their efforts to prevent nuclear energy from being used for military purposes and to ensure that nuclear energy for peaceful purposes is used in the safest possible way." Director General Elbaradei and Ambassador Amano, representing the IAEA as the Chairman of the Board of Governors attended the award ceremony to receive the award including the commemorative medal.

(Note)
Thirteen nuclear advanced members states are including Japan and other G8 countries designated at the Board of Governors meeting in June every year.

1. Universalizing the Additional Protocol

Japan accepted the IAEA Safeguards based on the Comprehensive Safeguards Agreement and its Additional Protocol, and has been working to ensure transparency of its nuclear activities including the use of plutonium. In particular, Japan is one of the countries with the most advanced nuclear industries and has sufficient knowledge as a country accepting the Safeguards. Japan not only played an active role in the process of formulating the Model Additional Protocol, but also has been accepting many complementary accesses based on the Additional Protocol since 2000, following its entry into force in December 1999, as the first country to do so among those engaged in nuclear power generation. Japan believes that, in order to enhance the international nuclear non - proliferation regime, the most practical and effective way is to have as many countries as possible conclude the Additional Protocols, and thus has been actively working towards the "universalization of the Additional Protocols." As a part of such efforts, Japan has made substantial financial and personnel contributions to a series of regional seminars hosted by the IAEA, including one held in Tokyo in June 2001. In cooperation with the IAEA, Japan held the "International Conference on Wider Adherence to Strengthened IAEA Safeguards" in Tokyo in December 2002, inviting representatives from 36 countries. Japan, taking advantage of bilateral meetings and multilateral forums, has also been working to urge other countries to accept the Additional Protocols and to actively take part in the joint efforts of G8 countries in this respect. At the same time, in cooperation with the IAEA, Japan has offered personnel and financial support for regional seminars (in Sydney in July 2006 and in Vietnam in August 2007) so as to help each country's support system for concluding the

Additional Protocols.

2. Efficiency of Safeguards and implementation of Integrated Safeguards

The IAEA has come to face difficulties in effectively executing its expanding tasks under the limited budgetary resources amidst zero real growth in recent years, especially in the field of Safeguards, which accounts for about 40% of its regular budget. The new budget adopted at the 47th IAEA General Conference in 2003 marked a significant increase in the regular budget, the bulk of which was for the Safeguards. Japan accepted the increase, with the view that securing the financial basis contributes to the enhancement of the Safeguards. At the same time, in view of the importance of effective utilization of the limited resources of the IAEA, Japan has been urging the IAEA Secretariat to improve efficiency and reduce costs in terms of Safeguards activities. Under such circumstances, Director General Elbaradei proposed to carry out a survey on the IAEA's projected budget for the coming ten years (from 2010 to 2020) under the IAEA Secretariat and establish a high - level panel consisting of eminent persons to review the survey results.

Regarding the application of Integrated Safeguards, the broader safeguards conclusion for Japan was reached at the IAEA Board of Governors meeting in June 2004, and integrated safeguards to Japan's nuclear activities has been implemented since September 15, 2004. Japan is the first country in which integrated safeguards are implemented with large scale nuclear activities. This proves the highest level of transparency of Japan's nuclear activities and at the same time is expected to ease the burden of implementing the safeguards in Japan.

Chapter 6. Strict control on equipment and technologies for enrichment and reprocessing

Section 1. International discussions

1. Overview

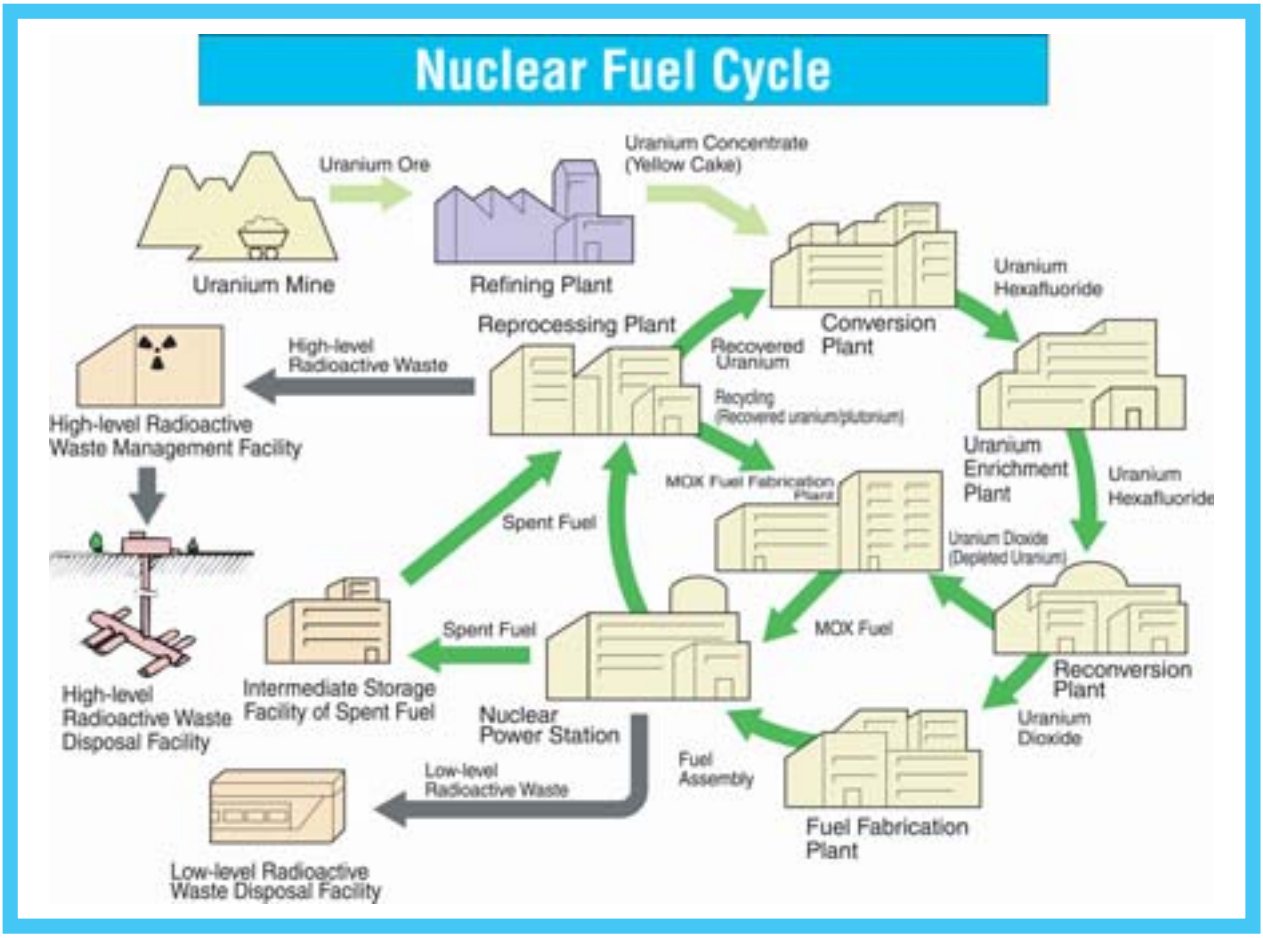
Article IV of the NPT acknowleges non - nuclear - weapon states' use of nuclear energy for peaceful purposes as an inalienable right for all States Parties. On the other hand, it is also true that the risk of nuclear proliferation will increase if each country tries to possess its own enrichment and reprocessing facilities in its territory in the contest of increasing nuclear energy demand. Against this background, a series of initiatives have proposed in recent years to satisfy both the nuclear non proliferation objectives and peaceful uses of the nuclear energy, which have triggered widespread discussion on international efforts for that purpose mainly in the IAEA. Following are the proposals by Director General ElBaradei of the IAEA and President George W. Bush of the United States,which have activated such proposals.

In October 2003, Director General ElBaradei contributed to "The Economist" an article titled "Towards a safer world," in which he stated that "there is nothing illicit, under the current regime, in a non - nuclear - weapon state having enrichment and reprocessing technology or possessing weapon - grade nuclear materials," and "if a state with a fully developed fuel cycle capacity decides to break away from its non - proliferation commitments, it could produce a nuclear weapon within a matter of months," and therefore underlined the necessity of "a new approach."

In a speech at the National Defense University in February 2004, President George W. Bush remarked: "the greatest threat before humanity today is the possibility of a secret and sudden attack with chemical or biological or radiological or nuclear weapons." Referring to the recent revelation of the underground network of nuclear proliferation by Dr. A.Q. Khan, President Bush made seven proposals to strengthen the non - proliferation regime. In the speech, he urged the 40 nations (45 as of the end of December 2007) of the Nuclear Supplies Group (NSG) to "refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full - scale, functioning enrichment and reprocessing plants."

Prompted by these proposals, various initiatives as shown in 2. below have been proposed so as to prevent proliferation of nuclear - related materials, equipment and technologies, and technologies for enrichment and reprocessing in particular, aiming at ensuring consistency between nuclear non - proliferation and peaceful uses of nuclear energy. At the 50th IAEA General Conference in September 2006, the Special Event on Assurances of Nuclear Fuel Supply and Non - Proliferation was held. In this event, proposals were presented and all participants shared the awareness that these proposals are useful to complement or to be compatible with existing proposals and are worth discussing in the future. In addition, it was determined that the IAEA Secretariat would make a proposal on issues to be discussed at the IAEA Board of Governors meeting for the year 2007.

Later at the IAEA Board of Governors meeting in June 2007, the Director General's report on assurances of supply of nuclear fuel based on the following proposals was presented for future discussion.



Source: The Japan Atomic Energy Relations Organization, Nuclear Power/Energy Picture Book 2005-2006

2. Proposals aiming for ensuring consistency between nuclear non - proliferation and peaceful uses of nuclear energy

(1) Multilateral Nuclear Approaches (MNAs)

In October 2003, Director General ElBaradei of the IAEA advocated a new approach to place uranium enrichment and reprocessing activities under multilateral control. Subsequently, an international expert group on MNAs appointed by Director General ElBaradei submitted and announced a report to propose the following five approaches in February 2005:

(i) Reinforcing existing commercial market mechanisms;

(ii) Developing and implementing supply assurance with IAEA participation;

(iii) Promoting voluntary conversion of existing facilities to MNAs;

(iv) Creating multinational and regional MNAs for new facilities; and

(v) Developing a nuclear fuel cycle with stronger multilateral arrangements - by region or by continent - and broader cooperation, involving the IAEA and the international community.

(2) Russia: "The creation of a system of International Centers Providing Nuclear Fuel Cycle Services"

President Putin of Russia proposed to create international centers providing nuclear fuel cycle services including enrichment. Russia explains that this proposal envisions provision of enrichment and reprocessing services by international centers on a non - discriminatory, rational and commercial basis and under the control of the IAEA, to nations that forgo uranium enrichment and reprocessing technologies which can be converted to military use. This aims to grant access to nuclear energy to all interested states, while ensuring consistency with the requirements of nuclear

non - proliferation. Russia is considering the possibility of utilizing its own existing facilities (proposing to establish an international center in Angarsk).

(3) The United States: "Global Nuclear Energy Partnership (GNEP)"

As part of the Advanced Energy Initiatives announced by President Bush in the State of the Union address in January 2006, Secretary of Energy Samuel Bodman announced in February 2006 the Global Nuclear Energy Partnership (GNEP). This new initiative aims to provide nuclear energy through nuclear fuel cycle, while addressing various issues concerning energy demand, the environment, development and non - proliferation.

Five states, the United States, Japan, France, Russia and China, took the initiative in holding exchanges of views for realizing the GNEP, and at the ministerial meeting in September 2007, 16 states including Japan signed the "GNEP Statement of Principles." This statement, aiming to expand the peaceful uses of nuclear energy, while ensuring nuclear proliferation, nuclear safety and nuclear security, describes that the goal of the GNEP is to (i) establish international frameworks by creating a viable alternative acquiring sensitive fuel cycle technologies, and (ii) pursue cooperation for the development of advanced technologies for recycling spent nuclear fuel. It was determined as an immediate plan to hold exchanges of views concerning support for infrastructure development for states that have or are concerning plans to embark on nuclear power programmes and nuclear fuel services.

(4) The Six enrichment services supplier states proposal: Concept for Multilateral Mechanism for Reliable Access to Nuclear Fuel (RANF)

Aiming at creating a "virtual fuel bank" as a safety net that complements the existing market for nuclear fuel, for the countries that meet the standard for nuclear safety and physical protection of nuclear materials without any violations to the safeguards agreements and that do not pursue sensitive activities such as enrichment and reprocessing, discussions have been held since September 2005 between the United States, France, the United Kingdom, Russia, Germany and Netherlands (the current suppliers of enriched uranium) concerning the establishment of a framework for assurance of the nuclear fuel supply that is similar to the aforementioned MNAs' approaches (i) and (ii).

With regard to assurance of nuclear fuel supply, the United States proposed, as its original initiative, to create a Fuel Reserve by 2009, which uses low - enriched uranium which is obtained by down - blending 17.4 metric tons of weapon grade highly enriched uranium, under the monitoring of the IAEA.

(5) Japan's proposal: IAEA Standby Arrangements System for the Assurance of Nuclear Fuel Supply

Japan, supporting the purpose and objective of the RANF mentioned (4) above, made a proposal concerning the "IAEA Standby Arrangement System for the Assurance of Nuclear Fuel Supply" at the IAEA General Conference and the Special Event in September 2006. With a view to participating in and contributing to international discussion in a constructive manner, the proposal aims to enhance participation in and complement the details of the RANF which has been perceived with a certain skepticism as a system just for maintaining the current suppliers' monopolization. The proposal recommends that the IAEA establish a system under which Member States register their nuclear fuel supply capacity to the IAEA in accordance

with their current status, including not only their uranium enrichment capacity but also their supply capacity concerning uranium supply, conversion, fuel fabrication, uranium storage and reserve, for the purpose of remedial responses to market failure for uranium fuel supply and the prevention of occurrence of market disturbance failure.

(6) German Foreign Minister's proposal: Multilateralizing the Nuclear Fuel Cycle

At the Special Event at the IAEA General Conference in September 2006, German Foreign Minister Frank - Walter Steinmeier proposed the creation of a multilateral uranium enrichment center as a complement to the aforementioned RANF. The key points of the proposal are as follows: a uranium enrichment facility managed by the IAEA would be created in an exterritorial status; and the IAEA would control the nuclear fuel supply and judge whether or not the conditions for nuclear fuel supply based on the principle of peaceful uses of enriched uranium are satisfied.

(7) The United Kingdom Proposal: Enrichment Bond

At the Special Event at the IAEA General Conference in September 2006, the UK government proposed a system to promote the realization of the aforementioned RANF under which the suppliers' governments guarantee the supply of enrichment services by introducing an enrichment bond based on the agreement between supplier state governments, the IAEA and recipient states. Under this system, in the case of market failure caused by political reasons unrelated to non - proliferation (such as an embargo by a supplier), recipients may request the IAEA to implement said system and the IAEA would take the final decision as to whether the conditions for its implementation have been met to allow export of low - enriched uranium.

(8) NTI's proposal: a low - enriched uranium stockpile

At the Special Event at the IAEA General Conference in September 2006, the Nuclear Threat Initiative (NTI), a US nongovernmental organization, made a proposal to help create a low - enriched uranium stockpile owned and managed by the IAEA as a support for nations that make the sovereign choice not to build indigenous nuclear fuel cycle facilities in their own territories. In order to promote realization of this plan, the NTI expressed their readiness to offer 50 million dollars on the condition that other IAEA member states contribute an additional 100 million dollars in funding or an equivalent value of low - enriched uranium.

3. Japan's efforts

Japan has, considering that the maintenance and reinforcement of the nuclear non - proliferation regime is an urgent task, actively participated in discussions aiming for such purposes. At the same time, Japan has also played a leading role in promoting the peaceful uses of nuclear energy under international collaboration.

Regarding the assurance of nuclear fuel supply for ensuring consistency between nuclear non - proliferation and the peaceful uses of nuclear energy, Japan advocates the importance of formulating an effective framework that is easy for many countries to take part in and can be widely accepted, as seen in its proposal concerning IAEA Standby Arrangements System for the Assurance of Nuclear Fuel Supply. In 2007, a review committee consisting of academic experts and specialists in the nuclear industry was established in Japan and the concept of the assurance of nuclear fuel supply has been reviewed and opinions have been collected from the industrial sector. Japan will continue to actively participate

in discussions held on various occasions including the IAEA meetings, paying attention to the intention of the recipient side of nuclear fuel.

Chapter 7. Nuclear security

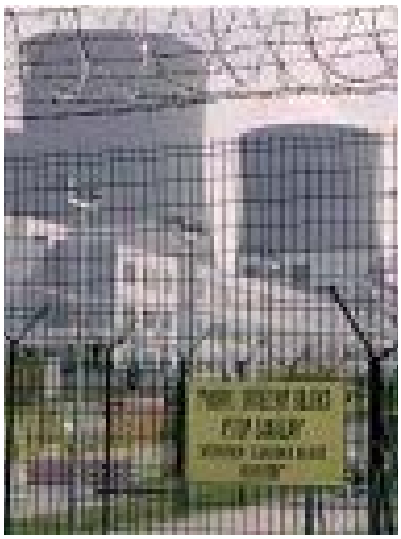
Following the terrorist attacks on September 11, 2001, the international community has reviewed and strengthened measures against terrorism with renewed urgency. However, taking full advantage of advanced science and technology and the mechanisms of global society, terrorist organizations are becoming ever more sophisticated in their activities, undertaking cross - border activities, financial and weapon procurement, propaganda activities, etc. Nuclear technologies have been used for peaceful purposes in various areas including power generation, human health, agriculture, and industry, etc., but if nuclear materials and radioactive sources fall into the hands of terrorists and are abused, it would cause enormous harm to human life, health, or property. The International Atomic Energy Agency (IAEA) has categorized four potential nuclear security risks: (i) the theft of a nuclear weapon; (ii) the acquisition of nuclear materials for the construction of nuclear explosive devices; (iii) the malicious use of radioactive sources - including so - called "dirty bombs"; and (iv) the radiological hazards caused by an attack on, or sabotage of, a facility or a transport vehicle.

The IAEA considers various measures taken to prevent these threats from becoming real as a general concept of nuclear security. The IAEA identifies the overall measures to prevent, detect and respond to theft, attack or sabotage, illicit transfer, or malicious conduct with regard to nuclear materials and other radioactive sources or related facilities as preventive measures for nuclear security.

Various approaches are taken, primarily by the IAEA and the UN, toward strengthening nuclear security at an international level, and Japan actively supports these approaches.

A transport container for radioactive materials recovered by the IAEA
(Source: IAEA)

Georgian inspection team preparing for equipment for the detection of radioactive sources (Source: Petr Pavlicek/IAEA)



Ensuring the security of nuclear facilities has become the top priority after 9/11.
(Source: IAEA)

Section 1. Efforts by the international community

1. Efforts of the IAEA

(1) IAEA Nuclear Security Plan of Activities

At the IAEA General Conference held in Vienna immediately after the terrorist attacks on September 11, 2001, a resolution was adopted to the effect that the IAEA activities and programmes relevant to preventing acts of terrorism involving nuclear materials and other radioactive materials shall be reviewed and a report shall be submitted to the IAEA Board of Governors as soon as possible. In response, the first Plan of Activities (2002 - 2005) was approved by the IAEA Board of Governors in March 2002. The plan consists of eight activity areas such as physical protection of nuclear materials and nuclear facilities(Note), to be implemented by the IAEA to support measures against nuclear terrorism. Accordingly, the Nuclear Security Fund was established for the implementation of the plan. The International Conference on Nuclear Security was held in London in March 2005 to review the IAEA's activities against nuclear terrorism. The importance of continuing and strengthening the activities through the utilization of the Agency's Nuclear Security Fund was emphasized at this Conference. Then, Activity Areas were reorganized ((i) needs assessment, analysis and coordination, (ii) prevention (iii) detection and response) and the second Plan of Activities (2006 - 2009) was approved by the IAEA Board of Governors in September 2005.

(Note)

Eight Activities Areas: (i) physical protection of nuclear materials and nuclear facilities; (ii) detection of malicious activities involving nuclear and other radioactive materials; (iii) strengthening state systems for nuclear material accounting and control; (iv) security of radioactive materials other than nuclear materials; (v) assessment of safety and security-related vulnerability at nuclear facilities; (vi) response to malicious acts or threats thereof; (vii) adherence to and implementation of international agreements, guidelines and recommendations; and (viii) nuclear security co-ordination and information management.

(2) Safety and control of radioactive sources

As a result of the emergence of new concerns about the diversion of radioactive sources to a "dirty bomb," the control of radioactive sources, to which potential terrorists may find it easier to gain access, has become a task with equal urgency to the physical protection of nuclear materials. The IAEA has been working on the formulation of the Code of Conduct on the Safety and Security of Radioactive Sources, which incorporates more details, since the beginning of 2000. Particularly, following the terrorist attacks in the US on September 11, 2001, there was a growing concern in the international community about the diversion of radioactive sources to a "dirty bomb." Accordingly, the IAEA Board of Governors approved the revised Code of Conduct on the Safety and Security of Radioactive Sources in September 2003. The Code of Conduct requests that all states establish a legal framework to implement effective control over radioactive sources with an aim to prevent malicious use of radioactive sources. The part related to the import and export control of the Code of Conduct became more specific and was formulated as the IAEA Guidance on the Import and Export of Radioactive Sources. It was approved at the IAEA Board of Governors in September 2004. Also at the subsequent IAEA General Conference, a resolution was adopted, encouraging all states to act in accordance with the Guidance on a harmonized basis and to notify the Director General of their intention to do so as supplementary information to

the Code of Conduct.

(3) International standards for physical protection of nuclear materials

The IAEA has formulated the recommendations on the physical protection of nuclear materials (INFCIRC/225) since 1975 in order to develop international standards for the physical protection of nuclear materials, and Revision 4 is the latest updated version of the document. In the recommendations in INFCIRC/225/Rev.4 (Corrected), (i) roles between the state and the operator are more clearly defined; (ii) it is clearly stipulated that evaluation and formulation of Design Basis Threat, which is to identify the level of threats to be considered when designing the state's system of physical protection, shall fall under the responsibility of the state; (iii) requirements for physical protection against sabotage of nuclear facilities (the title itself has been changed from "Physical Protection of Nuclear Material" to "Physical Protection of Nuclear Material and Nuclear Facilities") are clearly stipulated; (iv) it is recommended to thoroughly ensure the confidentiality of physical protection systems and associated documentation including making offences punishable by appropriate penalties; and (v) it is also recommended that the state should be responsible for verifying continued compliance with the physical protection regulations of operators and operators themselves should conduct self - evaluations. It also recommends (vi) to require an evaluation of transport by safety specialists and advance authorization of transport plans and protective measures by a competent authority in order to reinforce protection and (vii) to install a central alarm station, transport control center, and every possible measure to communicate and coordinate with response forces to respond to sabotage against nuclear facilities in order to ensure response to armed attacks.

(4) Convention on the Physical Protection of Nuclear Material

The main objective of the Convention on the Physical Protection of Nuclear Material (CPPNM) is to protect against theft and other unlawful taking of nuclear materials in use, storage and transport. The current Convention obliges States Parties to ensure a certain level of protective measures to protect nuclear materials during international transport, such as constant surveillance by guards, and it restricts the import or export of nuclear materials unless such measures are assured. The Convention also obliges the States Parties to establish certain acts related to nuclear materials, such as theft and robbery, as punishable offenses, and all States Parties are obliged to establish their jurisdiction and to deem the offenses under this Convention to be made extraditable offenses, with a view to extraditing the alleged offender or submitting the case to its competent authorities, so that the alleged offender would not escape penal proceedings. The current Convention entered into force in February 1987, and as of October 2007, 130 states and one international organization (European Atomic Energy Community) are States Parties to the Convention. Japan acceded to the Convention in October 1988.

With the purpose of further strengthening international efforts for the physical protection of nuclear materials and nuclear facilities, various consultations have been made to amend the Convention on the Physical Protection of Nuclear Material since 2001. As a result, the amendment to the Convention was adopted by consensus in July 2005. The amended Convention makes it legally binding for States Parties to protect nuclear materials and nuclear facilities in peaceful domestic use, storage as well as transport, and to criminalize an act of sabotage against nuclear material and nuclear facilities as a punishable offense.

(5) Coordination with Global Threat Reduction Initiative

The Global Threat Reduction Initiative (GTRI) was announced by the United States in May 2004. This is a comprehensive initiative to minimize the world - wide amounts of nuclear materials and radioactive sources that could pose threats to the international community, with a view to preventing highly - enriched uranium, which has been supplied as fuel for research reactors to various countries from the United States and the former Soviet Union, from falling into the hands of terrorists. The GTRI International Partners Conference held in September 2004 set its purpose as repatriation of all Russian - origin spent fuel by 2010 and expediting the repatriation of all US - origin research reactor spent fuel to be completed within 10 years (Note), and decided to continue considerations about the implementation modality of the GTRI in cooperation with the IAEA.

(Note)
In December 2004, the United States Department of Energy announced that it would extend the repatriation deadline to 2019.

2. Efforts of the UN

Prompted by the adoption of a resolution on Measures to Eliminate International Terrorism, which includes the establishment of an Ad Hoc Committee for the suppression of international terrorism, by the UN General Assembly in 1996, negotiations began for the International Convention for the Suppression of Acts of Nuclear Terrorism at the Ad Hoc Committee for the suppression of international terrorism in February 1997. Although negotiations were temporary suspended, they were resumed following the terrorist attacks on September 11, 2001, and the Convention was adopted by consensus by the 59th UN General Assembly on April 13, 2005. The Convention entered into force on July 7, 2007 due to conclusion by 22 states. As of October 2007, 115 states have signed the Convention and 29 states have concluded it.

Under the consideration that nuclear terrorism would cause devastating consequences and is a threat to the peace and security of the world, this Convention aims to strengthen international cooperation as well as to prevent nuclear terrorism for the purpose of taking effective and practical measures to prosecute and punish alleged offenders. In specific terms, the Convention obliges the Parties to establish the act of possession and use of radioactive materials or nuclear explosive devices with the intent to cause death, or serious bodily injury, or to cause substantial damage to property, etc., and the act of use and/or damage to nuclear facilities in a manner which releases radioactive materials as criminal offenses under the national law.

3. Global Initiative to Combat Nuclear Terrorism

At the G8 Summit meeting in July 2006, the US President and the Russian President advocated the "Global Initiative to Combat Nuclear Terrorism (GI)" with a view to globally combating the threat of nuclear terrorism, which is one of the most dangerous challenges to international security. After that, it was only G8 countries, Australia, China, Kazakhstan, and Turkey, that participated in the first meeting held in October 2006, but the GI participants increased to 51 at the third meeting in June 2007.

At the first meeting in October 2006, the "Statement of Principles" was adopted, and at the second meeting in February 2007, participants proposed respective concrete action plans (seminars and workshops, etc.) for 2007 and 2008 based on the "Statement of Principals." At the third meeting in June

2007, opinions were exchanged concerning the further expansion of participants and the necessity to strengthen each country's countermeasures against nuclear terrorism by involving various organizations including local governments.

Section 2. Japan's efforts

Japan has contributed an accumulated total of US$810,000 by the end of FY 2004 to the Nuclear Security Fund. Using part of this contribution, the IAEA carried out a project of improving the nuclear material control system at the Ulba nuclear fuel fabrication facility in Kazakhstan by utilizing such systems as accurate analysis and accountancy techniques, which Japan has gained from its long - term experience with the peaceful use of nuclear energy and experiences in accepting Safeguards. This project drastically improved the accuracy of accounting of residual uranium within the fabrication process, which was one of the problems of the facility.

Furthermore, for the purpose of preventing the proliferation of threat and from the viewpoint that appropriate control and physical protection of nuclear materials will promote denuclearization, Japan provided equipment for accountancy and control systems, including various radiation measurement devices, computers, accountancy and control software, etc., to Ukraine, Kazakhstan and Belarus, to support the establishment of the State System for Nuclear Material Accountancy and Control (SSAC). At the same time, Japan also contributes to upgrading nuclear security by improving the nuclear material protection system through the provision of such equipment as various sensors, surveillance cameras and surveillance systems, etc. In December 2006, Japan sent a team to Kazakhstan to study the current status of its nuclear security. Based on the results of the study, Japan decided in April 2007 to cooperate with up to 500 million yen for improving nuclear security to the Ulba Metallurgical Plant and the Institute of Nuclear Physics.

With respect to the International Convention for the Suppression of Acts of Nuclear Terrorism mentioned earlier, Prime Minister Junichiro Koizumi (then) signed it in September 2005 when the Convention was opened for signature at the time of the UN World Summit. Japan deposited its instrument of acceptance to the UN Secretary General and became a State Party on August 3, 2007. Together with the Amendment to the Convention on the Physical Protection of Nuclear Material which was adopted in July 2005, considerations have been underway for early conclusion of the Convention.

Furthermore, Japan has been participating in all of the meetings of the Global Initiative to Combat Nuclear Terrorism held so far, actively joining the discussions, and sharing experience with its partner nations, introducing Japan's efforts in this field such as the Seminar on Strengthening Nuclear Security in Asian Countries held in November 2006.

In response to the increasing need for strengthening nuclear security following the terrorist attacks on September 11, 2001, the Japanese Government instructed nuclear facility operators to tighten security as part of the anti - terrorism measures at nuclear facilities, including nuclear power stations, etc.

In order to also upgrade the protection of nuclear facilities including nuclear power stations to the highest level on an international scale and to solidify the nuclear material protection regime, it was determined to strengthen and improve protective measures against the conceived threats, using protection requirements stipulated by the latest recommendations in the IAEA IINFCIRC/225/Rev.4 (Corrected)). In 2005 in its ordinary session, the Diet passed the revision of the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors, which includes the following protective measures:

(i) The government shall establish the Design Basis Threat (DBT) which is indispensable when nuclear facility operators design an effective nuclear material protection system and provide it to operators.

(ii) The government shall inspect and verify whether operators take appropriate protection measures corresponding to the DBT.

(iii) In order to ensure confidentiality of information on protection of nuclear materials, a person who leaked confidential information shall be penalized.

In January 2006, Japan also started to implement the aforementioned IAEA Guidance on the Import and Export of Radioactive Sources, which was approved at the IAEA Board of Governors meeting in September 2004, by revising the Export Trade Control Order and through export confirmation of radioisotope introduced due to the revision.

Chapter 8. G8 Global Partnership and assistance of Japan for denuclearization of the former Soviet Union

Section 1. Overview

The United States and Soviet Union signed START I (Strategic Arms Reduction Treaty I) and agreed to reduce large quantities of nuclear weapons in July 1991. Strategic nuclear weapons were deployed in four of fifteen republics, namely Russia, Ukraine, Kazakhstan, and Belarus, when the Soviet Union collapsed in December 1991. It was decided in May 1992 to transfer all of the nuclear weapons deployed in Ukraine, Kazakhstan and Belarus to storage facilities in Russia as part of the nuclear non - proliferation measures.

Russia has assumed primary responsibility for the dismantlement of these nuclear weapons since succeeding them. However, due to the political, economic and social disorder after the collapse of the Soviet Union, there was concern that the dismantlement of nuclear weapons and implementation of nuclear non - proliferation measures might not be fully carried out. Ignoring this situation could lead to risks of proliferation of nuclear weapons and accidents involving radioactive contamination, and this represents a serious international security concern. Therefore, there emerged a call for international efforts to support countries, initially Russia, in order to dismantle nuclear weapons.

In cooperation with the United States, the United Kingdom, Germany, France and Italy, Japan decided, therefore, to provide assistance in the safe dismantlement of nuclear weapons of the former Soviet Union countries and in solving the related environment problems. For example, Japan concluded a bilateral agreement with the four former Soviet Union countries (Russia, Ukraine, Kazakhstan and Belarus where nuclear weapons were deployed under the Soviet Union) on assisting their denuclearization in the form of several concrete projects. The Japanese government announced its commitment to provide US$100 million in April 1993, and commenced with assistance to those countries by establishing the committees between October 1993 and March 1994.

At the G8 Summit Meeting in Cologne in 1999, Japan pledged funds amounting to US$200 million (some portion was to be allotted from the funds that had already been contributed) to the four former Soviet Union countries to further promote the projects. (See Sections 3 and 4 for the details of the assistance program for each country.)

Later, an important task of preventing the proliferation, particularly the acquisition of weapons of mass destruction by terrorists, has become apparent throughout the international community due partly to the terrorist attacks on the United States in September 2001. Under such circumstances, G8 countries have taken a cooperative stance to prevent the proliferation of weapons of mass destruction and related materials and technologies, which were left in vast quantities in the former Soviet Union countries including Russia. At the Kananaskis Summit in 2002, G8 leaders launched "The G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction."

Section 2. G8 Global Partnership

1. Background

At the Kananaskis Summit in Canada on June 26 and 27, 2002, G8 leaders launched "The G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction," aiming mainly to

prevent the proliferation of weapons of mass destruction: namely, nuclear, chemical and biological weapons, and related materials, etc.

It contains the cooperation in the implementation of projects for nuclear safety, initially in Russia, including non - proliferation, disarmament, counter - terrorism and preservation of the environment. Specific priorities are placed on the following four areas: dismantlement of the decommissioned nuclear submarines, destruction of chemical weapons, disposition of fissile materials, and employment of former WMD - related scientists.

Under this concept, G8 countries formulated "Guidelines" for the smooth implementation of cooperation projects in order to solve practical difficulties in implementation of these projects. G8 leaders also stated that they would commit to raise financial assistance up to $20 billion to support such projects over the next 10 years.

At the Summit meetings in and after 2003, an annual report has been adopted every year so as to follow up the G8 Global Partnership. The annual report compiles the progress of related projects over the past one year and refers to possible means to resolve problems for achieving substantive performances and the further expansion of countries acceding to the G8 Global Partnership.

At the Heiligendamm Summit in 2007, a review document was prepared, deeming the year 2007 to be the halfway point of the G8 Global Partnership. This review document assessed the progress of cooperation projects implemented so far and, recognizing the performances achieved since 2002 and the necessity of further efforts for enhancing projects' efficiency, reconfirmed the commitment for achieving the goal of the G8 Global Partnership agreed on at the Kananaskis Summit. Furthermore, as the areas member countries are to cope with in the future under the framework of the G8 Global Partnership, the review document referred to an interest in the implementation and universality of the revised Convention on the Physical Protection of Nuclear Material, IAEA Comprehensive Safeguards agreement and Additional Protocols, UN Security Council Resolution 1540, International Convention for the Suppression of Acts of Nuclear Terrorism, and Global Initiative to Combat Nuclear Terrorism. The document also reconfirmed that G8 Global Partnership member countries are determined to address the threat of proliferation of weapons of mass destruction on a global basis and admitted that some countries had shown certain progress in this sense.

2. Significance

The G8 Global Partnership aims at making cooperative efforts in the projects to remove various sources of threat left in Russia and other countries. The concept has a historical significance of wiping clear the negative legacy of the Cold War and a practical significance in three aspects, namely, security, non - proliferation including counter - terrorism measures, and environmental conservation.

Even before the announcement of the G8 Global Partnership, countries including Japan had made cooperative efforts to tackle such issues as disposition of nuclear weapons, destruction of chemical weapons and the safety of nuclear power plants in countries such as Russia, within the framework of bilateral cooperation. The G8 Global Partnership is to establish a comprehensive framework of G8 by encompassing all of these issues, specifying the scale of funding, and clarifying rules and mechanisms of implementation of the projects. At the same time, in order to remove difficulties in the implementation of the projects, the Guideline was formulated with Russian consent to set the direction for problem - solving. The G8 Global Partnership is not a simple political message, but can be regarded as a manifestation of the strong will of the G8 to realize practical achievements.

The G8 Global Partnership carries a great significance for Japan as well.

First, the Guideline on the implementation of projects affirms that the primary responsibility for the implementation of projects rests on Russia, and it also specifies that Russia cooperates fully with other countries in the implementation of the projects. This Guideline clarifies the focus of responsibility, necessity of substantial cooperation, and the establishment of the G8 coordination mechanism for assessment. At the same time, the Guideline also provides for the necessary measures to ensure, among others, access to the project sites, tax exemption and indemnity, etc., which adequately reflects the views of Japan.

Second, the establishment of the cooperative framework to promote coordination among G8 countries and Russia enables each country having common difficulties in implementing projects to make concerted efforts for solving problems and to coordinate with Russia.

3. Japan's efforts

At the Kananaskis Summit, Japan stated that the prerequisite for the cooperation would be the resolution of difficulties in implementing concrete projects, and pledged to contribute a little more than $200 million to projects under the G8 Global Partnership. Specifically, slightly more than $100 million would be spent on dismantling decommissioned nuclear submarines (See Section 3 below), and the remaining $100 million would go to the disposal plan of surplus weapon - grade plutonium (See Section 3 - 3 below).

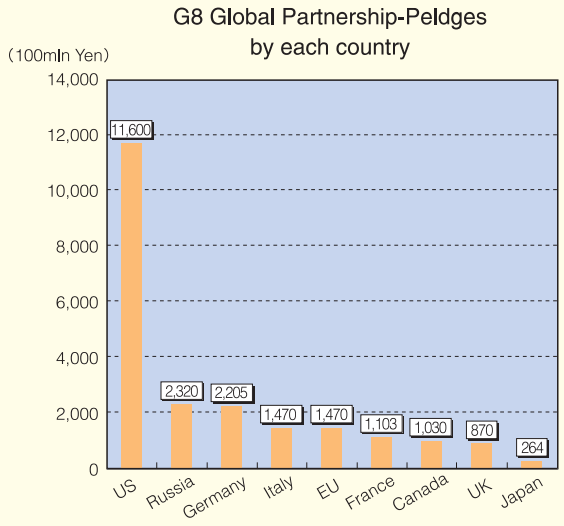
4. Efforts of other countries

The governments of other G8 countries announced the following assistance under the G8 Global Partnership:

The US: US$ 10 billion; Russia: $2 billion; Germany: 1.5 billion euro; Italy 1 billion euro; EU: 1 billion euro; the UK: US$ 0.75 billion; France: 0.75 billion euro; Canada: 1 billion Canadian dollars.

The Global Partnership was broadened to include the following nations: in 2003, Norway, Sweden, Finland, Switzerland, Poland, and the Netherlands; in 2004, Australia, Belgium, the Czech Republic, Denmark, Ireland, Korea, New Zealand, and Ukraine. After acceding to the G8 Global Partnership, Australia and Korea offered 10 million Australian dollars and US$ 0.25 million, respectively, to the Committee on Cooperation to Assist the Destruction of Nuclear Weapons Reduced in the Russian Federation in June 2004 and in December 2006, respectively.

Korea provided another US$ 0.25 million in October 2007 and New Zealand announced to contribute 0.68 million NZ dollars in November 2007.



Note : Pledges are calculated using the following exchange rates.
① US, Russia, UK, Japan, US$ 1.00 = 116
② Germany, Italy, EU, France 1Euro = 147
③ Canada CA$1 = 103

Section 3. Assistance of Japan for denuclearization of Russia ("Star of Hope" etc.)

The following are the details of assistance from Japan for denuclearization of Russia.

1. Construction of a facility to process low - level radioactive liquid waste "SUZURAN" (Lily of the Valley)

Serious concerns were raised when it was discovered that Russia had been dumping radioactive waste into the Sea of Japan in 1993. Japan strongly urged Russia to cease the dumping and decided to design a facility for processing of liquid radioactive waste, "SUZURAN", as a practical measure to prevent such dumping through the Japan - Russia Committee on Cooperation to Assist the Destruction of Nuclear Weapons Reduced in the Russian Federation.

"SUZURAN" is the floating treatment facility constructed on a barge with a capacity to treat up to 7,000 cubic meters of radioactive liquid waste per year. It is capable of treating radioactive liquid waste (about 5,000 cubic meters) that is currently stored in the Russian Far East, and radioactive liquid waste which will be generated from the dismantlement work of nuclear submarines conducted in the region (about 300 cubic meters per submarine). The construction of "SUZURAN" started in January 1996 and was completed in April 1998, and it was handed over to the Russian government in November 2001 after the trial running required for the full operation and coordination within Russia. The facility is currently moored at the Zvezda Shipyard in the Bolshoi Kamen city near Vladivostok, and it processes liquid radioactive waste generated from the dismantlement work of nuclear submarines. According to Russia, not even a drop of liquid radioactive waste has been dumped in the Sea of Japan since "SUZURAN" started to operate.

The low-level liquid radioactive waste treatment facility "SUZURAN" constructed and provided within the framework of the Japan-Russia Cooperation for Destruction of Nuclear Weapons Reduced in the Russian Federation

2. Dismantlement project of decommissioned nuclear submarines: "Star of Hope"

In the Russian Far East, facing Japan across the Sea of Japan, about 15 nuclear - powered submarines decommissioned from the Russian Pacific Fleet are moored. Many of them are still carrying nuclear fuel on board and if they are left as they are, there is a potential danger of serious radioactive contamination from the submarines suffering from corrosion due to years of immersion in seawater. Therefore, this has become a potential threat to environment of the Sea of Japan and the safety of the fishery. (In fact, a critical nuclear submarine incident occurred in the 1980s in this region, causing radioactive contamination in the area, and this submarine is still left untreated). Moreover, there is also a risk that nuclear materials on board may fall into the hands of terrorists.

Russia should assume primary responsibility for the dismantlement of the decommissioned submarines, and Russia itself makes efforts to this end. However, the safe and immediate dismantlement of the decommissioned nuclear submarines has become an important and urgent matter, from a the riewpoint of nuclear disarmament, non - proliferation and the preservation of the environment of the Sea of Japan.

While coordinating with the United States, Japan issued the "Japan - Russia Operational Project for Disarmament and Environment Protection" in May 1999 and the "Memorandum between the Government of the Russian Federation on Promoting Disarmament and Non - Proliferation Disposition of the Nuclear Arms Subject to Reduction in the Russian Federation" in September 2000. Japan carried out, through the Japan - Russia Committee on Cooperation to Assist the Destruction of Nuclear Weapons Reduced in the Russian Federation, feasibility studies towards the implementation of projects related to the dismantlement of decommissioned nuclear submarines in the Far East. In addition, Mr. Yoshitaka Shindo, ParliamentaryVice - Minister for Foreign Affairs (then), visited Vladivostok to hold discussions directly with Russian personnel concerned in November 2002.

The "Japan - Russia Action Plan" which was adopted by the leaders of Japan and Russia in January 2003, when Prime Minister Junichiro Koizumi (then) visited Russia, specifies the reinforcement of the coordination mechanism in order to accelerate the implementation of the program and steady implementation of dismantlement projects of decommissioned nuclear submarines in the Russian Far East. In the

Mr. Koizumi's speech delivered on the occasion of his visit there, this program was named "Star of Hope" after the Zvezda (meaning "Star" in Russian) Shipyard where the dismantling of submarines was taking place.

The Japan - Russia Committee made a decision in February 2003 to cooperate in dismantling a Victor III - class decommissioned nuclear submarine. A basic document on this project was signed by the Committee and the Ministry of Atomic Energy of Russia (then) in June 2003. Specific contracts for the dismantlement work were signed in December of the same year and the dismantlement project commenced. It was completed in December 2004.

Dismantling of a submarine (Victor III-class decommissioned nuclear submarine) at the Zvezda Shipyard

In January 2005, the Committee decided to consider cooperation for dismantlement of another five decommissioned submarines, and in November of the same year, when Russian President Vladimir Putin visited Japan, the Implemnting Arrangement on the cooperation was signed. The contract for the cooperation for the dismantlement of one (Victor I class decommissioned nuclear submarine) of said five submarines was signed in September 2006 and the dismantlement work began (completed in August 2007). Regarding three (Victor III class nuclear submarines) out of the remaining four submarines, the contract for the dismantlement was signed in August 2007 and the dismantling work has sequentially been underway. The dismantlement work will also begin with regard to the last one (Charlie I class nuclear submarine) in the near future.

At present, the reactor compartment units of dismantled nuclear submarines are stored on the sea, but Russia is now constructing a long - term on - shore storage facility for safer and more stable storage. The Committee decided to offer cooperation for the construction of said facility in January 2007.

Construction site of the long-term on-shore storage facility for the reactor compartment units of dismantled nuclear submarines (Razboynik Bay)

3. Control and disposition of surplus weapon - grade plutonium in Russia

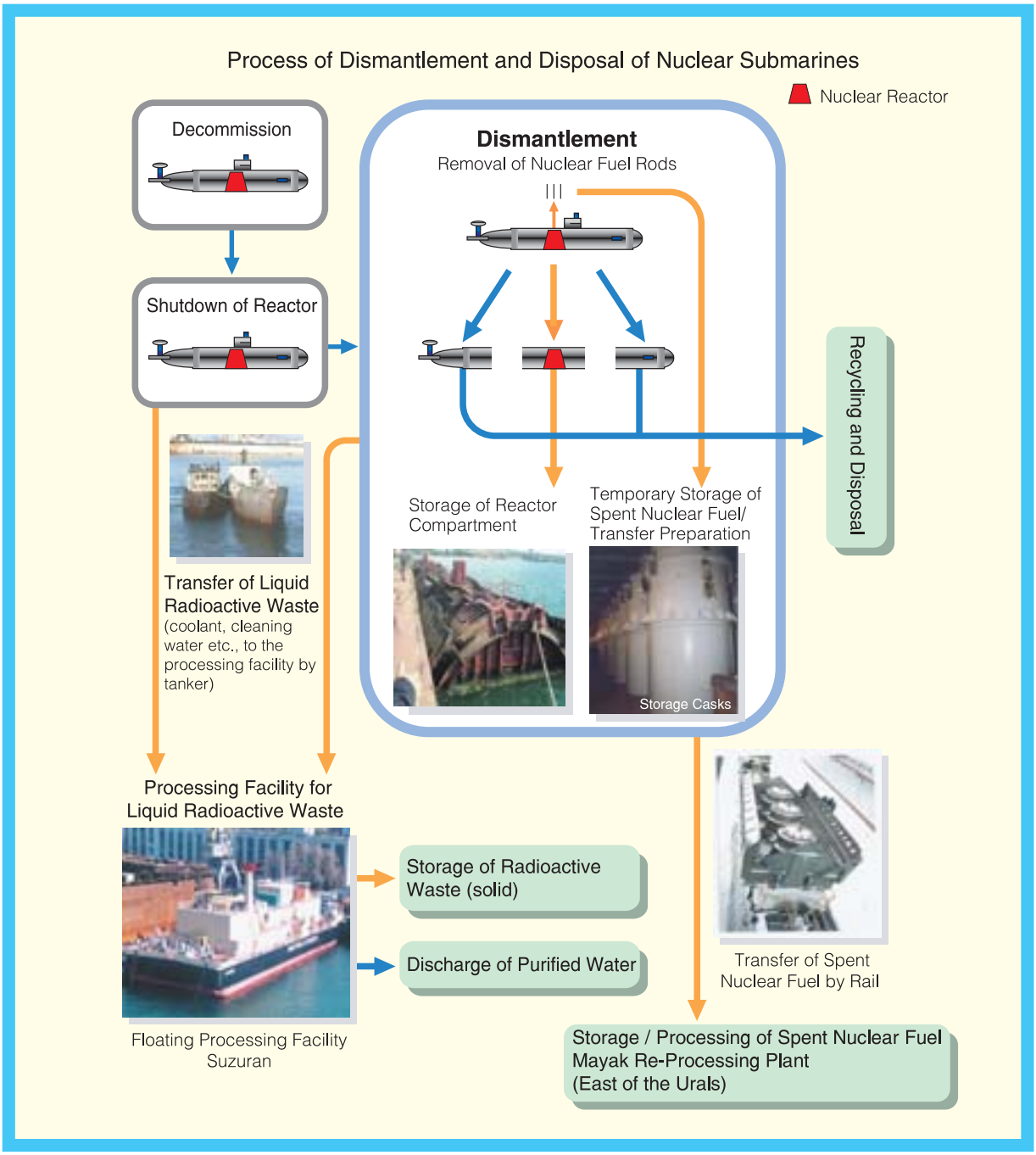
(1) The locus of the problem

In the process of nuclear disarmament involving the United States and Russia, a large quantity of plutonium is extracted from dismantled nuclear weapons. (See Reference "Arms control and nuclear disarmament of nuclear - weapon states" Section 2 - 1.) The prevention of such surplus weapon - grade plutonium from being reused for military purposes or being handed to others has become a critical issue, particularly in Russia, where the national control regime was weakened, from the following two points: (a) to further facilitate the progress of US and Russian nuclear disarmament by securing irreversibility (to make sure plutonium is not reused for the manufacturing of nuclear weapons), and (b) to strengthen counter - terrorism and nuclear non - proliferation measures.

(2) Discussions in the process of the G8 Summit and Japan's efforts

In 2000, the United States and Russia agreed that each country would dispose of 34 tons of surplus weapon - grade plutonium. With regard to the disposition of surplus weapon - grade plutonium on the Russian side, the modality of multilateral cooperation was discussed in the process of the G8 Summit. Later in November 2007, the United States and Russia bilaterally agreed on the means of disposition (burning in fast reactor) and jointly announced that the United States would offer financial contribution up to 400 million dollars to Russia and that both countries would also call for financial cooperation for this disposition project from other countries.

During the period between 1999 and 2004, the Japan Nuclear - Cycle - Development Institute (then) succeeded, in cooperation with Russian research institutes, in processing nearly 20 kg of weapon - grade plutonium (equivalent to the amount to produce two or three nuclear bombs) into vibro - packed (vibration compaction) fuel and disposing it in a fast reactor. Also in and after 2004, the Japan Atomic Energy Agency has continued to provide Russian research institutes with cooperation for research on technology development of vibro - packed (vibration compaction) fuel using surplus weapon - grade plutonium, contributing significantly to the control and disposition of surplus weapon - grade plutonium in Russia.



Section 4. Other assistance of Japan for denuclearization

1. Ukraine

(1) Assistance related to nuclear security including the State System for Nuclear Material Accountancy and Control (SSAC) and physical protection of nuclear materials

The SSAC is a system to accurately account for and control the categories and respective quantities, the inflow and outflow over a specific period, as well as the present inventories of nuclear and related materials. At the same time, its purpose is to contain and monitor nuclear materials in order to prevent any illicit outflow of such materials. This system needs to be developed as a prerequisite for the effective and credible application of the IAEA Safeguards.

Ukraine was obliged to accept the IAEA Safeguards Agreements by acceding to the NPT as a non - nuclear - weapon state after becoming independent from the former Soviet Union. It

was difficult, however, for Ukraine to establish a necessary SSAC, and Japan has provided necessary assistance for Ukraine through coordination with the IAEA. To be more specific, Japan has supplied systems for nuclear material accountancy and control, and physical protection of nuclear and other materials to the Kharkov Institute of Physics and Technology, and also provided systems for nuclear material accountancy and control to the State Nuclear Regulatory Committee of Ukraine and the Kiev Institute for Nuclear Research. This equipment includes radiation measuring instruments used at the site of nuclear weapon dismantlement and devices to detect toxic gas generated from solid rocket fuel used for nuclear weapons. Japan contributes to the promotion of the safe disposal of nuclear weapons.

(2) Supply of medical equipment for nuclear weapon disposal personnel

Japan supplied medical equipment and medicine to 21 military hospitals attached to the Ministry of Defense four times during the period between 1994 and 2001. They were used for the examination and treatment of military personnel who had been exposed to radioactive contamination during the process of dismantling nuclear weapons, military personnel who had been injured by leakage of toxic missile fuels and those who had been engaged in the dismantlement of the Chernobyl Nuclear Power Plant.

2. Kazakhstan

(1) Assistance related to nuclear security including the State System for Nuclear Material Accountancy and physical protection of nuclear materials

In order to establish the SSAC, which is a prerequisite for the IAEA Safeguards to be applied to a non - nuclear - weapon state, Japan supplied Kazakhstan with flow monitor equipment, a nuclear material protection system, and an accountancy and control system for the Aktau fast breeder reactor (BN - 350), as well as providing a nuclear material protection system to the Atomic Energy Agency (then) and the Atomic Energy Research Institute.

In April 2007, the Committee on Cooperation for the Destruction of Nuclear Weapons Reduced in the Republic of Kazakhstan decided to provide nuclear - related facilities in Kazakhstan with cooperation totaling 500 million yen for improving nuclear security.

(2) Measures against radioactive contamination in the vicinity of the Semipalatinsk Nuclear Test Site

The nuclear test site was set up in Semipalatinsk during the Soviet era, and some 820,000 local residents were exposed to radiation according to statistics by the Kazakhstan Ministry of Health. After the collapse of the Soviet Union, it was not necessarily clear that there was a causal relationship between the health of the exposed population and radioactive contamination. Still, medical devices were provided for the purpose of contributing to the environmental issues of the vicinity of Semipalatinsk, including treatment of the exposed individuals and study of a causal relationship, in response to the request of the Kazakhstan Public Health Committee (then). Specifically, in August 1999, Japan provided a remote medical diagnostic system to Semipalatinsk Medical University and radiation measurement devices to the Semipalatinsk Research Institute of Radiology and Environment. This project was carried out with the full cooperation of the Medical Department of Nagasaki University.

Japan also supplied medical equipment and medicines to the Republican Clinical Hospital

for War Injuries, which treated radiation survivors in Almaty, in response to the request made by the Kazakhstan Ministry of Health.

Furthermore, Japan supplied equipment to measure the radiation levels of sampled teeth to the National Nuclear Center, which was engaged in a radioactive contamination survey in the Semipalatinsk district.

3. Belarus

(1) Assistance related to nuclear security including the State System for Nuclear Material Accountancy and physical protection of nuclear materials

Japan has provided the Department for Supervision of Industrial and Nuclear Safety, which falls under the Belarus Ministry of Emergency, with radiation measurement devices and other equipment and the Academic Scientific - Technical Center "Sosny," located near the capital city Minsk, with a nuclear material protection system and an accountancy and control system, to establish the SSAC which is a prerequisite for the IAEA Safeguards to be applied to a non - nuclear - weapon state.

(2) Supply of equipment to the Vocational Retraining Center for Ex - Military Personnel

Japan supplied equipment, including vehicle maintenance equipment and computers, in January 2000, to the Vocational Retraining Center for Ex - Military Personnel in Lida City (a former missile base of the former Soviet Union) to promote the re - employment of former soldiers who had been discharged by the disbandment of the strategic nuclear missile force and to prevent the nuclear - related technical expertise of former soldiers from being leaked.

4. International Science and Technology Center (ISTC)

The International Science and Technology Center (ISTC) is an international organization whose purpose is to prevent the outflow of scientists and researchers formerly engaged in research and development on weapons of mass destruction in the former Soviet Union, by providing such scientists and researchers with opportunities to participate in research projects with peaceful application so as to facilitate their military - to - civilian conversion. Japan signed the "Agreement Establishing an International Science and Technology Center (ISTC)" with the United States, the EU and Russia in 1992, and has been actively supporting the projects since the inauguration of the ISTC head office in Moscow in March 1994.

The ISTC is a framework whose objectives are non - proliferation and denuclearization in the former Soviet Union through scientific and technological cooperation on a multilateral basis, and now includes Japan, the United States, the EU, Canada, Russia, Korea, Norway, Belarus, Kazakhstan, Armenia, Georgia, Kyrgyz and Tajikistan. Assistance worth over 740 million dollars has been approved for more than 2,400 projects involving more than 67,000 scientists and researchers from the former Soviet Union states (as of December 2006). Japan has provided assistance for projects amounting to about 60 million dollars.

Reference: Nuclear-Weapon-Free Zones

Section 1. Overview

A "nuclear - weapon - free zone" is defined in general as a "zone free from nuclear weapons" created by an international agreement which (i) prohibits regional states from manufacturing, acquiring, possessing, deploying or controlling any nuclear weapons in the region, and by a protocol under which (ii) all nuclear - weapon states (the United States, Russia, the United Kingdom, France and China) shall undertake not to use nuclear weapons against the states in the zone (negative security assurance).

Initially, the concept of a nuclear - weapon - free zone was considered to be a complementary measure on the part of the international community to establish a global nuclear non - proliferation regime, and, during the Cold War, it was taken as a regional approach initiated by non - nuclear - weapon states that were concerned by the prospect of a confrontation between the eastern and western blocs developing into a nuclear war.

Section 2. Japan's stance

Japan's basic stance on a nuclear - weapon - free zone is that the establishment of a nuclear weapon - free zone proposed by the states in the region where appropriate conditions are generally met will contribute to the objectives of nuclear non - proliferation and others.

Conditions to make the proposal on the nuclear - weapon - free zone "practical" are, among others: (i) all states concerned, including the nuclear - weapon states, agree to the proposal; (ii) it contributes to the peace and security not only of the states within the zone but of the world as a whole; (iii) appropriate inspection/verification measures are provided; and (iv) it is consistent with the principles of international law including the freedom of navigation on the high seas.

Section 3. Nuclear-weapon-free zone treaties concluded to date

Nuclear - weapon - free zone treaties have been formulated in Latin America, South Pacific, Southeast Asia, Africa and Central Asia, and the treaties in the former three regions have already entered into force.

1. The Treaty of Tlatelolco (The Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, adopted in 1967 and entered into force in 1968)

This treaty is the first nuclear - weapon - free zone treaty in the world. With the Cuban Crisis in 1962, the idea of the denuclearization of Latin America was developed and a UN resolution calling for the denuclearization of this region was adopted in April 1963. Drafting of the treaty was initiated by Mexico and the treaty was opened for signature in February 1967, and entered into force in April 1968.

The treaty applies to 33 countries in Latin America, all of which have already ratified (Cuba was the last to ratify the treaty in October 2002).

The treaty prohibits testing, use, manufacture, production, acquisition, storage, and deployment of nuclear weapons in the territories of the state parties.

The protocol, which was ratified by all nuclear - weapon states, prohibits the nuclear - weapon states from acting in a way that would contribute to a violation of the obligations of denuclearization as well

as from using or threatening to use nuclear weapons against the state parties to the treaty.

At the UN General Assembly, resolutions have been adopted regularly to strengthen the Treaty of Tlatelolco, and Japan has joined the consensus.

2. The Treaty of Rarotonga (The South Pacific Nuclear Free Zone Treaty, adopted in 1985 and entered into force in 1986)

Against the background in which France commenced nuclear testing in the South Pacific in 1966, the momentum to oppose nuclear testing increased in this region. The resolution supporting the establishment of a nuclear - free zone in the South Pacific was adopted at the UN General Assembly in 1975. The treaty was adopted at the plenary meeting of the South Pacific Forum (SPF) and opened for signature in 1985. The treaty entered into force in December 1986.

The treaty applies to all 16 member states and areas (self - governing domains) of the Pacific Islands Forum (PIF, formerly SPF). Thirteen states and areas have signed the treaty as of November 2007 (it has not yet been signed by the Federated States of Micronesia, Republic of the Marshall Islands, and the Republic of Palau).

The treaty prohibits the states parties from manufacturing, acquiring, possessing and having control of nuclear explosive devices, and bans the stationing and testing of nuclear explosive devices in their territories. It also prohibits the dumping of radioactive material at sea anywhere within the South Pacific Nuclear Free Zone (including the high seas).

The protocol prohibits the nuclear - weapon states from using or threatening to use nuclear weapons against the parties to the treaty and from testing any nuclear explosive devices within the zone (including high seas). Of the nuclear - weapon states, while Russia, China, the United Kingdom, and France have already ratified the protocol, the United States has signed but not yet ratified it.

3. The Treaty of Bangkok (The Treaty of the Southeast Asia Nuclear - Weapon - Free Zone, adopted in 1995 and entered into force in 1997)

The "Zone of Peace, Freedom and Neutrality" (ZOPFAN), to create a free, peaceful and neutral zone to exclude any interference of countries outside the region, was first envisioned in the Kuala Lumpur Declaration of 1971 at the ASEAN (Association of Southeast Asian Nations, established in 1967) Foreign Ministers' Meeting. As one of the elements to realize this concept, it was agreed to discuss the nuclear - weapon - free - zone concept at the ASEAN Standing Committee in 1984. The movement to formulate the draft started to develop after the end of the Cold War. The Southeast Asia Nuclear - Weapon - Free - Zone Treaty was signed by the leaders of ten states in the Southeast Asia at the ASEAN Summit Meeting in December 1995, and the treaty entered into force in March 1997. The treaty applies to the ten states of the ASEAN, and all of them have already ratified the treaty. In 2007, ten years after the entry into force of the treaty, the Plan of Action up until 2012 was adopted with a view to further ensuring the implementation of obligations imposed under the treaty.

The treaty stipulates that the states parties undertake not to develop, manufacture, acquire, possess, control, station, transport, or test any nuclear weapons. It also prohibits the states parties from dumping any radioactive material or discharging the same into the atmosphere anywhere within the zone (including high seas). Furthermore, it prohibits the states parties from allowing any other states to engage in any of the above activities in their territories (except for the transportation of nuclear weapons).

The protocol prohibits the nuclear - weapon states from using or threatening to use nuclear

weapons within the zone, (including continental shelves and exclusive economic zones in addition to the states parties' territories). It also stipulates that the nuclear - weapon states undertake to respect the treaty, and not to contribute to any act that constitutes a violation of the treaty or its protocol.

Although a working - level consultation was held between ASEAN and the nuclear - weapon states in May 2001, none of the nuclear - weapon states has signed the protocol yet.

4. The Treaty of Pelindaba (The African Nuclear - Weapon - Free Zone Treaty, adopted in 1996, but not yet entered into force)

The Declaration on the Denuclearization of Africa was adopted at the UN in 1961. In 1964 the Assembly of Heads of State and Government of the Organization of African Unity (OAU) adopted the Cairo Declaration, declaring Africa to be a nuclear - weapon - free zone. The move toward realization of the treaty gained momentum when South Africa abandoned its nuclear weapons in 1991 and acceded to the NPT as a non - nuclear - weapon state. The final draft of the African Nuclear - Weapon - Free Zone Treaty was adopted at the OAU Summit Meeting in June 1995. The treaty was signed by 42 African States in April 1996.

The treaty applies to 54 African states (including West Sahara which Japan has not yet recognized as a state), and has been ratified by 24 states as of October 2007. The treaty has not yet entered into force, since its entry into force requires the ratification of 28 states. Resolutions calling for early ratification have been adopted biennially at the UN General Assembly, and Japan has joined the consensus.

The treaty prohibits the states parties from conducting research on, developing, manufacturing, stockpiling, acquiring, possessing, controlling or testing of any nuclear explosive devices, and from stationing, transporting or testing thereof in the territory of each state.

The protocol prohibits the nuclear - weapon states from using or threatening to use nuclear explosive devices against the states parties to the treaty, and from testing thereof within. Among the nuclear - weapon states, France, China, and the United Kingdom have already ratified the protocol, while the United States and Russia have signed but not ratified it.

5. The Central Asia Nuclear - Weapon - Free Zone (adopted in 2006, but not yet entered into force)

This idea had derived from the Almaty Declaration adopted at the summit meeting convened in February 1997 among the leaders of five Central Asian states (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). The expert group organized by then UN Department for Disarmament Affairs (Regional Centre for Peace and Disarmament in Asia and the Pacific) started drafting the treaty in 1998. Subsequent to several meetings such as the expert group meeting in Sapporo in April 2000, the negotiations on the drafting of the treaty were finalized at the expert group meeting held in Samarkand in September 2002. At the intra - regional conference held in Tashkent in February 2005, agreement was reached on the Treaty and its protocol draft. On September 8, 2006, a signing ceremony was held in Semipalatinsk in Kazakhstan, and foreign minister - level representatives from the five states signed the treaty. As of August 2007, the treaty was ratified only by Uzbekistan and Kyrgyzstan.

The treaty prohibits the states parties from conducting research on, developing, manufacturing, stockpiling, acquiring, possessing, or controlling of any nuclear weapons and nuclear explosive devices, and from permitting any other state to dispose radioactive wastes in the territory of each state.

The protocol prohibits the nuclear - weapon states from using or threatening to use nuclear weapons against the states parties to the treaty, and from contributing to any act that constitutes a

violation of the treaty or its protocol. The protocol has not been opened for signature to the nuclear - weapon states at this time.

Japan has provided support for the establishment of the Central Asia Nuclear - Weapon - Free Zone Treaty, by making financial contributions to the United Nations for the drafting of the treaty.

Section 4. Planned and proposed nuclear-weapon-free zones

In addition to the above - mentioned nuclear - weapon - free zones, various nuclear - weapon - free zones are planned or proposed. The zones that have been proposed at the UN General Assembly are as follows.

1. A Nuclear - Weapon - Free Zone in the Middle East/ A Middle East Zone Free of Weapons of Mass Destruction

Since the resolution proposed by Egypt that welcomed an initiative on a nuclear - weapon - free zone in the Middle East was adopted at the UN General Assembly in 1974, UN resolutions that urge all states parties to take the necessary steps for the implementation of the proposal have been adopted every year. However, due to such problems as Israel, which seems to have highly advanced nuclear capability, having not yet acceded to the NPT, this vision has no prospect of realization.

At the 2005 NPT Review Conference, Japan submitted a report on the resolution on the Middle East of the 1995 NPT Review Conference, which called for the establishment of a nuclear - weapon - free zone in the Middle East.

The resolutions on the establishment of a nuclear - weapon - free zone in the Middle East have been adopted at the UN General Assembly by consensus every year. Israel contended at the 62nd General Assembly that a nuclear - weapon - free zone in the Middle East should be realized only through direct consultations within the region.

2. Mongolia's nuclear - weapon - free status

President Ochirbat of Mongolia declared its nuclear - weapon - free status at the UN General Assembly in 1992, and urged the nuclear - weapon states to respect the status and give Mongolia security assurances. The UN General Assembly adopted the Resolution (53/77D) in 1998 in which Mongolia's declaration was welcomed. Resolutions to welcome Mongolia's nuclear weapon - free status have been adopted biennially since then, and Japan has joined the consensus.

The five nuclear - weapon states issued a joint statement in October 2000 declaring that they would cooperate in the implementation of this Resolution and reaffirmed that they would provide negative security assurance to Mongolia, as enunciated in 1995 to non - nuclear - weapon states parties to the NPT. In September 2001, an expert group meeting was convened in Sapporo to examine Mongolia's nuclear - weapon - free status from the viewpoint of international law.

Section 5. Demilitarization of the Antarctic, the seabed, outer space, and the moon

In addition to the nuclear - weapon - free zones mentioned above, the deployment of nuclear weapons and other weapons of mass destruction has been banned in specific places by the following treaties:

1. Antarctic Treaty (Adopted in 1959, entered into force in 1961. Ratified by Japan in 1960)

The treaty stipulates in Article I that, "Antarctica shall be used for peaceful purposes only. There shall be prohibited any measures of a military nature, such as the establishment of military bases as well as testing of any types of weapons."

2. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Adopted in 1967, entered into force in 1967. Ratified by Japan in 1967)

The treaty stipulates in Article IV that "States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner."

3. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof (Adopted in 1971, entered into force in 1972. Ratified by Japan in 1971)

The treaty stipulated in Article I that "The States Parties to this Treaty undertake not to implant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the outer limit of a seabed zone (beyond 12 nautical miles), any nuclear weapons or any other types of weapons of mass destruction as well as any structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons."

4. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Adopted in 1979, entered into force in 1984. Japan has not signed)

The treaty stipulates in Article III, Paragraph 3 that "States Parties shall not place in orbit around or other trajectory to or around the moon objects carrying nuclear weapons or any other kinds of weapons of mass destruction or place or use such weapons on or in the moon."