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Chapter 1. Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

Section 1. Overview of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) designates the United States, Russia, the United Kingdom, France and China, which manufactured and exploded nuclear weapons or other nuclear explosive devices prior to 1 January 1967, as the "nuclear weapon states." (Article 9-3) 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 treaty in February 1970, and ratified it in June 1976.)

The number of state parties that are signatories to the treaty has increased to 189 as of October 2003, and it is fair to say that the universality of the NPT has prevailed. Among the UN member nations (191), only three countries, namely India, Pakistan, and Israel are not yet states parties to the treaty.

The NPT is composed of the preamble, 11 articles and the concluding text. Roughly divided, the treaty stipulates the following four items:

1. Obligation of nuclear non-proliferation

The NPT prohibits nuclear weapon states from transferring nuclear weapons (Article I), and prohibits non-nuclear weapon states from receiving and manufacturing nuclear weapons (Article II). The treaty obliges non-nuclear weapon state parties to the NPT to accept the International Atomic Energy Agency (IAEA) safeguards (Article III).

(Reference) IAEA Safeguards

The IAEA safeguards are a means of preventing nuclear materials or facilities from being diverted from activities for peaceful purposes to military pur-

poses. The IAEA, in line with the safeguards agreement, verifies whether or not the diversion occurs by accurately controlling the amount of nuclear materials stockpiled at, transferred into or out of, lost from or remaining in a nuclear facility. This method of controlling the accurate quantity is called "a system of accounting for and control of all nuclear material." Non-nuclear weapon state parties to the NPT shall conclude the Comprehensive Safeguards Agreements with the IAEA that are applied to all nuclear materials, and are obliged to accept the IAEA safeguards in accordance with the agreements.

After the Gulf War of 1991, however, it was revealed that Iraq, which had been a State Party to the NPT and accepted the Comprehensive Safeguards Agreement, had secretly conducted nuclear weapons development. This was seen as the limitation of the Comprehensive Safeguards Agreement whose measure is basically based on declaration. To offset the limitation, the Model Additional Protocol was adopted at the special session of the Board of Governors in May 1997 to grant the IAEA enhanced power mainly in order to confirm non-existence of undeclared nuclear activities. Although non-nuclear weapon states of the NPT regime are not obliged to conclude the Additional Protocol, the universalization of the IAEA Additional Protocol is strongly urged in the Final Document of the 2000 Review Conference of the Parties to the NPT. (See "IAEA safeguards system" Chapter 2, Part III.)

2. Rights to use nuclear energy for peaceful purposes

The NPT aims to prevent non-nuclear weapon states from diverting nuclear 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 the Parties to the Treaty" to develop research, production and use of nuclear energy for peaceful purposes (Article IV-1). It acknowledges that all the 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 by the nuclear weapon states

The NPT obligates the state parties to pursue negotiations in good faith on nuclear disarmament (Article VI), while preventing non-nuclear weapon states from diverting nuclear energy for military ends.

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.

Section 2. Progress in international nuclear non-proliferation regime

1. Progress to date

The NPT has been one of the most successful disarmament and non-proliferation treaties, and has greatly contributed to the maintenance of international peace and security as one of the main pillars of the nuclear non-proliferation regime since it entered into force in 1970.

The universality of the treaty has drastically increased especially in the past decade. South Africa abandoned its nuclear weapons, and acceded to the treaty as a non-nuclear weapon state in 1991. France and China acceded to the treaty 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). Also, Cuba and East Timor ratified the NPT in 2002 and in 2003 respectively.

While the universality was being almost established, several serious challenges emerged in the 1990s that threatened the international nuclear non-proliferation

State Parties to the NPT and the Safeguard Agreements

The NPT State Parties (189 countries)

(as of April 2004)

Countries and regions acceded to the Comprehensive Safeguard Agreements (134 countries)

(as of April 2004)

Far east
★☆ROK
★ North Korea
★☆Japan
★☆Mongolia

Southeast Asia
★☆Indonesia
Cambodia
★ Singapore
★ Thailand
★ Philippines
★ Brunei
★ Vietnam
★ Malaysia
★ Myanmar
Laos

Oceania
★☆Australia
Kiribati
Samoa
Solomon
Tuvalu
Tonga
Nauru
★☆New Zealand
Papua New Guinea
Fiji

Middle East/ South Asia
★ Afghanistan
★ Yemen
★ Iraq
★ Iran
★☆Kuwait
★ Syria
★ Sri Lanka
Nepal
★☆Bangladesh
Bhutan
Maldives
★☆Jordan
★ Lebanon

Eastern Europe
★☆Azerbaijan
★ Albania
★ Armenia
★ Ukraine
★☆Uzbekistan
★ Estonia
★ Kazakhstan
★☆Georgia
★☆Croatia
★ Slovakia
★☆Slovenia
★ Serbia Montenegro
★☆Czech Republic
★☆Hungary
★☆Bulgaria
★ Belarus
★☆Poland
★ Bosnia Herzegovina
★ Macedonia
★☆Latvia
★☆Lithuania
★☆Rumania

Western Europe
★☆Iceland
★☆Ireland
★☆Italy
★☆Austria
★☆Holland
★☆Greece
★☆Cyprus
San Marino
★ Switzerland
★☆Sweden
★☆Spain
★☆Denmark
★☆Germany
★☆Turkey
★☆Norway
★☆Holly See
★☆Finland
★☆Belgium
★☆Portugal
★ Malta
★☆Monaco
★ Lichtenstein
★☆Luxemburg

Africa
★ Algeria
★ Egypt
★ Ethiopia
★ Ghana
Gambia
★ Cote d'Ivoire
★☆Congo
★ Zambia
★ Zimbabwe
★ Sudan
Swaziland
★ Senegal
★ Tunisia
★ Nigeria
★ Namibia
★☆Burkina Faso
★☆Madagascar
Malawi
★☆Mali
★☆South Africa
★ Mauritius
★ Morocco
★ Libya
Lesotho

North/South America
★ Argentina ◆
Antigua GFC ◆
★☆Uruguay ◆
★☆Ecuador ◆
★ El Salvador ◆
Guyana ◆
★☆Canada
★ Guatemala ◆
Grenada ◆
★ Costa Rica ◆
★ Columbia ◆
★☆Jamaica ◆
★ Surinam ◆
★ Saint Christopher and Nevis◆
★ Saint Vincent and Grenadines◆
★ Saint Lucia ◆
★☆Chili ◆
Commonwealth of Dominica◆
★ Dominican Republic ◆
★ Trinidad Tobago ◆
★ Nicaragua ◆
★☆Panama ◆
Bahamas ◆
★ Paraguay ◆
★ Barbados ◆
★ Brazil ◆
★ Venezuela ◆
★ Belize ◆
★☆Peru ◆
★ Bolivia ◆
★ Honduras ◆
★ Mexico ◆

Oceania
Vanuatu
Palau
★ Marshall Islands
Micronesia

Southeast Asia
East Timor

Middle East/ South Asia
★United Arab Emirates
Oman
★ Qatar
★Saudi Arabia
Bahrain

Eastern Europe
★ Kyrgyzstan
★ Tajikistan
Turkmenistan
★ Moldova

Western Europe
Andorra

Africa
★ Angola
★ Uganda
★ Eritrea
★Cape Verde
★Gabon
★Cameroon
Guinea
Guinea-Bissau
★Kenya
Comoros
Republic of Congo
Sao Tome and Principe
★Sierra Leone
Djibouti
★Seychelles
Equatorial Guinea
Somalia
★Tanzania
Chad
★Central
African Republic
Togo
★ Niger
Burundi
★Benin
★Botswana
Mauritania
Mozambique
★ Liberia
Rwanda

North/ South America
★ Haiti ◆

State Parties of the Voluntary safeguard agreements

★ U.S.A
★☆United Kingdom
★☆France
★ Russia
★☆China

Countries and regions acceded to other safeguard agreements

★ Cuba ◆

★Israel
★India
★Pakistan

★: State Parties of the IAEA (137 countries as of November 2003)
◆: State Parties of the Tolatelolco Treaty (33 countries as of November 2003)
☆: Signatories of the Additional Protocol

: Designated members of the IAEA Board of Governors in 2003
: Elected members of the IAEA Board of Governors in 2002
: Elected members of the IAEA Board of Governors in 2003

regime founded on the NPT.

One of such issues is the nuclear capacity of non-state parties. India and Pakistan, neither signatory to the NPT, conducted nuclear tests one after another in May 1998, and these two countries continue to have a capacity to manufacture nuclear weapons. In addition, Israel takes the stance that it neither denies nor confirms that it has nuclear weapons. It is extremely difficult to persuade these countries to accede to the NPT; however, Japan has been calling these three NPT non-state parties for an early accession to the treaty. (See "Regional non-proliferation issues and Japan's efforts," Part II.)

The non-compliance issue exemplified by the nuclear problem of North Korea has been of a particular concern in recent years. The non-compliance issue not only has a negative impact on the credibility of the NPT but may jeopardize the NPT regime from within, and therefore it will 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 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 at five-year intervals 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 inspect the compliance with the NPT among themselves, for the sake of better transparency and confidence building. Japan also regards this perspective as important.

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 by consensus without voting that the NPT would be extended indefinitely, and the decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament" and "Strengthening the Review Process for the Treaty" was concurrently adopted. Also adopted was the "Resolution on the Middle East."

The "Principles and Objectives" adopted at the conference listed the future nuclear disarmament measures to be taken mainly by the nuclear weapon states, such as: the nuclear weapon states are to pursue efforts for nuclear disarmament with the goal of ultimate elimination of nuclear weapons; negotiations on the Comprehensive Nuclear-Test-Ban Treaty (CTBT) should be completed no later than 1996; pending the entry into force of the CTBT, the nuclear weapon states should exercise the utmost restraint not to conduct a nuclear test; and the immediate commencement and early conclusion of negotiations on the Cut-off Treaty. Thus, nuclear disarmament measures to be taken by the nuclear weapon states were stipulated in the adopted resolution as well as the decision to extend the treaty indefinitely. Behind these achievements was the fear on the past of the non-nuclear weapon states which thought the indefinite extension of the NPT would perpetuate the distinction between the nuclear weapon states and the non-nuclear weapon states which is clearly drawn in the NPT, and therefore they were firmly determined to have the nuclear weapon states commit themselves to the objectives of nuclear disarmament as unambiguously as possible, in return for supporting the indefinite extension of the treaty.

In addition, Japan presented to the First Committee of the UN General Assembly, the "Draft Resolution on the 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 be engaged. The substance of this resolution was reflected in the "Principles and Objectives" mentioned above.

3. The 2000 NPT Review Conference

Subsequent to the decision of indefinite extension of the NPT in 1995, the next Review Conference was held in New York from April to May 2000. The situations surrounding disarmament and nonproliferation at that time were severe, in which the progress of nuclear disarmament was in 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 the Final Document, which included thirteen "practical steps" toward future nuclear disarmament and non-proliferation. It was adopted by consensus after overcoming several crises when negotiations almost broke down in the course of four weeks of discussions.

The main "practical steps" agreed upon at this conference are listed below. They include a range of measures, some of which should be carried out immediately while others should be fully considered over a long period of time.

Especially notable were the activities of the New Agenda Coalition (NAC) consisting of the following non-nuclear weapon states: Sweden, Ireland, New Zealand, South Africa, Egypt, Mexico and Brazil. The NAC stated its position in the 8 countries' Joint Declaration in June 1998. (The NAC at that time consisted of eight countries including Slovenia.) In contrast to Non-Aligned Members aiming at the elimination of nuclear weapons with a limited timeframe, the Joint Declaration stated that feasible "practical steps" should be implemented immediately, while aiming at the total elimination of nuclear weapons.

The NAC advocated that the nuclear weapon states should make an unequivocal undertaking to accomplish the total elimination of their nuclear arsenals. This position was reflected in the outcome of conference, and made the nuclear elimination.

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 Proposals" covering measures designed to advance nuclear disarmament and non-proliferation, and which provided a foundation for consensus building.

(Reference) "Practical steps" toward future nuclear disarmament and non-proliferation (Adopted at the 2000 NPT Review Conference)

○Early entry into force of the CTBT;
○A Moratorium on nuclear testing pending the entry into force of the CTBT;
○To urge the Conference on Disarmament to agree on a program of work which includes the immediate commencement of negotiations on the Cut-off Treaty with a view to their conclusion within five years;
○To urge the Conference on Disarmament to immediately establish an appropriate subsidiary body with a mandate to deal with nuclear disarmament;
○An unequivocal undertaking by the nuclear weapon states to accomplish the total elimination of nuclear weapons;
○To apply the "principle of irreversibility" to nuclear and other related arms control and reduction measures;
○Early entry into force of and full compliance with the START II Treaty, enforcement and maintenance of the AMB, and early ratification of the START III;
○Conclusion and implementation of the Three Party Initiatives (the U.S., Russia and the IAEA);
○Steps by nuclear weapon states leading to nuclear disarmament in a way that promotes international stability, and based on the principle of undiminished security for all (such as, further efforts by the nuclear weapon states to reduce their nuclear weapon arsenals unilaterally, increased "transparency," the further reduction of non-strategic nuclear weapons, and the engagement of all nuclear weapon states in the process leading ultimately to the total elimination of nuclear weapons);
○International control of surplus fissile materials by the IAEA, etc., and their disposition;
○Reaffirmation that the ultimate objective of disarmament is the comprehensive and complete disarmament under effective international control;
○Regular reports on the implementation of nuclear disarmament as stipulated in article VI of the NPT and the "Principles of Objectives" (efforts for nuclear disarmament); and
○Further development of the verification capabilities for nuclear disarmament.

Section 3. The 2005 Review Conference Process

In accordance with the provision of the treaty, the next Review Conference is to be held in 2005, with preparations beginning in 2002. The "Strengthening the Review

Process" adopted in 1995 and the Final Document of the 2000 Review Conference specify that the Preparatory Committee was to be held once a year for three years, thus three meetings in total, prior to the Review Conference. (If necessary, a fourth preparatory meeting may be held in the year of the Conference.)

Japan is determined to actively contribute to the 2005 Review Process. As a first step, Japan held a workshop entitled the "International Workshop on the Perspective on the NPT in the 21st Century-Towards the 2005 Review Conference" in February 2002. Non-governmental experts, government officials and others from several countries were invited to Tokyo to sort out issues regarding the NPT and provide the first Preparatory Committee with materials for discussion.

The first Preparatory Committee for the 2005 Review Conference of the NPT was held in New York in April 2002. Japan pointed out to the Chairman the importance of the early entry into force of the CTBT and the reinforcement of the IAEA Safeguards measures at this meeting, and these points were included in the Chairman's Summary.

The second Preparatory Committee was convened in Geneva from April 28 to May 9, 2003. It was held under a severe international environment where North Korea declared its intension to withdraw from the NPT, and the international community was facing growing concerns over Iran's nuclear issue. Then, the main theme of the meeting was maintaining and strengthening the NPT regime by facilitating the NPT implementation toward the 2005 Review Conference. During ten days of the conference, various concerns were expressed over the nuclear issues of North Korea. The NPT state parties felt that North Korea's decision to withdraw from the treaty represented a serious challenge to the global non-proliferation regime, and called upon North Korea to dismantle its nuclear weapons program in a prompt, verifiable and irreversible way, and to comply with all safeguards obligations pursuant to the Treaty. Also addressed was that the North Korean nuclear issue should be peacefully resolved. From that perspective, it welcomed the outcome of the Three-Party Talk involving the US, China and North Korea held in Beijing prior to the Preparatory Committee. The view was also widely shared among state parties that efforts should be made to resolve the issue through multilateral talks involving relevant countries. With respect to the

nuclear issue of Iran, many state parties called upon Iran to sign an Additional Protocol and to ensure full and forthcoming cooperation with the IAEA in order to increase confidence in Iran as one of the state parties and to eliminate any concerns.

Japan submitted a working document comprehensively describing Japan's stance and reports on the implementation of the nuclear disarmament as well as on that of the 1995 Middle East resolution, in addition to making a general speech and providing a statement on each agenda. As for the issues on North Korea, Japan coordinated with some of the countries concerned such as the US, the ROK and China from an early stage. As a result of extensive consultation with countries concerned and the Chairman, the Japanese basic policy was roughly reflected in the Chairman's Summary. In addition, Japan was appointed as a coordinator of co-sponsors of a working paper on disarmament education, and Ambassador Inoguchi, Permanent Representative to the Conference on Disarmament, introduced the working paper.

As described above, the Second Preparatory Committee had to deal with serious issues such as the North Korean nuclear issue. State parties, while taking up these urgent issues related to the international affairs, exchanged various opinions on the traditional issues such as universalization of the treaty, disarmament, non-proliferation, peaceful use of the nuclear energy, and so on, thus making the conference fairly balanced as a whole. The number of reports submitted to the Second Preparatory Committee increased from the previous meeting, and based on these reports and statements from countries, more active discussions were held than before, thus contributing to the deepening of mutual understanding and the improvement of transparency.

Final Document of the 2000 Review Conference stipulates that the objective of the First and Second Preparatory Committee shall be "to examine principles, objective and measures to promote full implementation and universalization of the treaty," and in the meantime, the objective of the Third (or Fourth to be held if necessary) Conference shall be "to exert every possible effort to formulate a report by consensus, which includes recommendations to the 2005 Review Conference." Japan takes the policy that it will continue to actively contribute to the success of the 2005 Review Conference in the review conference process.

Chapter 2. IAEA safeguards system

Section 1. Overview of the IAEA safeguards system

1. IAEA safeguards system

Safeguards are a set of activities by which the Agency verifies that a state is not using its nuclear materials such as uranium and plutonium in a way which would help develop nuclear weapons.

Article III-A5 of the IAEA Statute (note), which came into force in 1957, stipulates that the implementation of such safeguards measures is the responsibility of the International Atomic Energy Agency (IAEA). Within the international non-proliferation framework such as the IAEA Statute and the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the IAEA assumes the role of verifying the nuclear activities of the state in question, in line with the Safeguards Agreement concluded between that State and the IAEA.

IAEA safeguards support the NPT regime from the aspect of nuclear material control and are an indispensable system for the international nuclear non-proliferation regime of today. It is important for Japan to pursue further transparency of its own nuclear activities as one of the leading nuclear energy countries in the world, in addition to listing the reinforcement of the nuclear non-proliferation regime as one of its major diplomatic issues. Contribution in the area of the IAEA safeguards system to ensure a balance between these two conflicting issues carries a great importance not only for the international community but also for Japan itself.

(Note) Article III-A5 of the IAEA Statute

The Agency is authorized to establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose; and to apply safeguards, at the request of the parties, to any bilateral or multilateral arrangement, or at the request of a state, to any of that state's activities in the field of atomic energy.

2. Comprehensive safeguards agreement

Article III-1 of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) stipulates that each non-nuclear weapon state party to the treaty undertakes to accept safeguards to prevent diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices, as set forth in agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system. Furthermore, the safeguards required by this article shall be applied to all source or special fissionable material 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 call the agreement with the IAEA the "comprehensive safeguards agreement" (also called "INFCIR/153 type safeguards agreement" from the IAEA document number or "full-scope safeguards agreement"). As far as Japan is concerned, "Agreement between the Government of Japan and the International Atomic Energy Agency in Implementation of Article III-1 and 4 of the implementation agreement of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)" entered into force on December 2, 1977.

An objective of the safeguards measures under the comprehensive safeguards agreement is the timely detection of diversion of significant quantities of nuclear material 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 material with which used manufacturing nuclear explosive devices cannot be ruled out: for example, 8 kg of plutonium or U-233, or 25kg of highly enriched uranium containing U-235.

Specific measures of safeguards are mainly based on the "nuclear material accountancy," which verifies the accountancy records of nuclear materials formulated by facility operators, and these measures are complemented by "containment" and "surveillance." The purpose of accountancy is to control the stock of nuclear materials at nuclear facilities and the quantities of received or

removed inventory. In addition to the control by the facility operators and by the state, there is a control by the IAEA to verify whether a declaration by the relevant state is appropriate or not. Furthermore, "containment" means that nuclear materials are physically sealed and contained, enabling the IAEA to detect if the container is tampered with. And "surveillance" means that video cameras, radioactive measuring devices and monitors, etc. are installed to prevent illicit removal of nuclear materials.

3. Other safeguards agreements

The safeguards agreement based on the IAEA documents prior to the comprehensive safeguards agreement based on the NPT is called the "INFCIR/66-type safeguards agreement" or "individual safeguards agreement." It targets nuclear materials or equipment within the scope of the agreement. Although the five nuclear weapon states (the US, the UK, France, China and Russia) have no obligation to accept safeguards based on the NPT, they, in light of the importance of nuclear non-proliferation, voluntarily have accepted safeguards on the nuclear materials used for non-military purposes. The safeguard agreements concluded between these nuclear weapon states and the IAEA are called "voluntary submission."

Section 2. Strengthened safeguards and the additional protocol

1. Strengthened safeguards

At the beginning of the 1990s, a problem emerged that the existing comprehensive IAEA safeguards system against suspected nuclear weapon development by Iraq and North Korea was not able to detect undeclared nuclear activities and to prevent 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 system are the nuclear materials declared by the state parties, although, in principle, it assumes all nuclear materials in the territory of the relevant state. In response, the IAEA started to seek ways to strengthen safeguards measures, aiming at improving detection capabilities of undeclared nuclear materials and activities.

The IAEA Board of Governors adopted a resolution in March, 1993 to urge the

IAEA Director General to promote effectiveness and efficiency of IAEA safeguards, followed by the announcement of "Program 93+2" in December, 1993, a reform measure to strengthen and improve efficiency of the IAEA safeguards. This hard-hitting measure comprises two parts: Part One includes implementable measures within the existing framework of the comprehensive safeguards agreement, and Part Two includes a list of new measures to be implemented within a new framework. Those measures in Part One have been implemented in sequence. With respect to Part Two, a model protocol, which was to be added to the existing comprehensive safeguards agreement, was adopted at the IAEA's Special session of Board of Governors meeting held in May 1997. This resolution is called "Additional Protocol" due to its relation with the existing comprehensive safeguards agreement.

2. Additional Protocol

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 exists no indication of undeclared nuclear activities in addition to the inspections conducted under the existing comprehensive safeguards regime. Specifically, a state with the "Additional Protocol" is requested to provide the IAEA with information on research activities on nuclear fuel cycle without using nuclear material, on operation of nuclear facilities, and on exporting and importing of specific equipment and materials. The expansion of the accessible sites by the IAEA inspectors results in conjunction with this expansion of the declared information. Furthermore, the IAEA is granted a shorter notice inspection (two hours or 24 hours in advance) (complementary access), and a right to collect environmental sampling at all places.

In consideration of the recent challenges to the nuclear non-proliferation regime, interests in the IAEA's activities are growing, and the importance of the IAEA safeguards, as indispensable to maintaining the non-proliferation regime has been broadly recognized. It is of great importance for as many state parties to conclude both the "comprehensive safeguards agreement" and "Additional Protocol" as possible in

order to strengthen the nuclear non-proliferation regime and to maintain peace and security in the world. However, as far as the "Additional Protocol" is concerned, only 37 countries have concluded the "Additional Protocol" as of December 2003, although 79 countries of the 137 IAEA state parties have signed it. It is important to further universalize the "Additional Protocol."

Section 3. Efforts of Japan

1. Universalization of the Additional Protocol

Japan has accepted the IAEA safeguards measures based on the comprehensive safeguards agreement and its additional protocol, and has been working to ensure transparency of nuclear activities including the use of plutonium. In particular, Japan is one of the advanced nuclear industrial countries and has sufficient knowledge as a country accepting the safeguards. Japan not only has been playing an active role in the process of formulating the additional protocol, but also has been accepting many complementary accesses based on the additional protocol since 2000, following the conclusion in December 1999, as the first country to do so among those engaged in nuclear power generation. In order to secure the international nuclear non-proliferation regime, Japan, under the recognition that it is important to include as many countries as possible in the "Additional Protocol," has been actively promoting the "universalization of the Additional Protocol." As a part of such efforts, Japan held an international symposium for 15 countries from the Asian-Pacific region in Tokyo in June 2001. Furthermore, Japan has made substantial financial and personal contributions to a series of regional seminars hosted by the IAEA targeting Central and South America, Central Asia, three Baltic countries and African regions from December 2001 to June 2002. And finally, in order to wrap up the outcome of the regional seminars thus far and to propose the direction of future action, Japan held the "International Conference on Wider Adherence to Strengthen IAEA Safeguards" in Tokyo on December 9 and 10, 2002. This conference was attended by IAEA Director General ElBaradei and 82 Director-General level officials in charge of non-proliferation and peaceful use of nuclear power from 36 countries, which are

interested in reinforcing the IAEA safeguards. Specific achievements of this conference include the sharing, among all the participants, of the outcomes of previous regional seminars for promotion of the conclusion of the "Additional Protocol," and the compilation, by consensus of all the participants, of the chairman's summary, which will be the guideline for the universalization of the Additional Protocol.

2. Making the safeguards measures more efficient

The regular budget of the IAEA has been zero real growth for more than 10 years, and it has been difficult for the IAEA to implement its measures effectively, while the measures have been expanding. The budget for them accounted for about 40% of the regular budget. To counteract the situation, a new budget was adopted at the 47th IAEA General Conference in 2003 to mark the significant increase in the regular budget with the bulk of the increase for the IAEA safeguards measures. Japan accepted the increase, holding the view that securing the financial foundation of the safeguards measure contributes to the enforcement of the safeguards measures. Japan also emphasizes the efficiency of the safeguards measures and has been making efforts toward application of the "Integrated Safeguards" which rationally and organically unifies the existing safeguards system and the "Additional Protocol," and realization of the resultant reduction in burden and expenses. At the same time, Japan has urged the IAEA Secretariat to work harder in improving efficiency in safeguards activities and reducing the costs.

Photo: Mr. Yukio Takasu, Ambassador to the Permanent Mission of Japan to the International Organizations in Vienna, elected Conference President of the 47th IAEA General Conference. (In Vienna, September 2003, PHOTO CREDITS: Dean Calma /IAEA)

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

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

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.

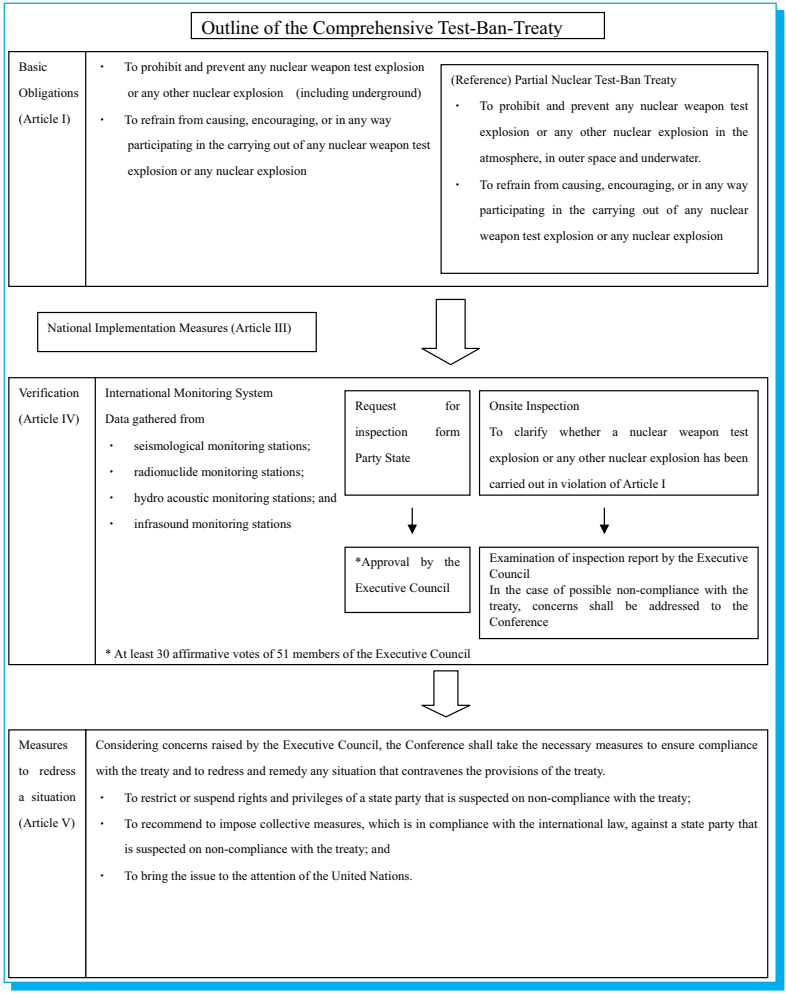
Nuclear tests are considered indispensable for the development or improvement of nuclear weapons. Therefore, to ban nuclear tests is of great significance for promoting both nuclear disarmament and non-proliferation. It is said to be the largest obstacle for a new country aspiring to develop nuclear weapons to acquire nuclear fissile materials for weapons. Even if they acquire such materials, it is necessary to conduct nuclear tests to assure the credibility and practicality in using them as weapons. Therefore, the development of nuclear weapons can be prevented by banning nuclear testing, which contributes to the non-proliferation of nuclear weapons. Furthermore, banning nuclear testing contributes to the disarmament by prohibiting the nuclear weapon states from conducting nuclear test explosion for the quality improvement of nuclear weapons including the technical advancement of nuclear warheads.

Negotiations on the CTBT were commenced at an Ad Hoc Committee on a Nuclear Test Ban, established under the Conference on Disarmament in Geneva, from January 1994. However, since any decision made at the Conference on Disarmament has to be by consensus, after two and a half years of difficult negotiations, the CTBT was not adopted in the end due to the opposition by countries such as India.

Then, the draft CTBT made at the Conference on Disarmament 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: Cube, Syria, Lebanon, Tanzania and 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 explosion (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 measure in conformity with international law.

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) on-site 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), hydro acoustic monitoring stations (Note 4) and infrasound monitoring stations (Note 4). 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.

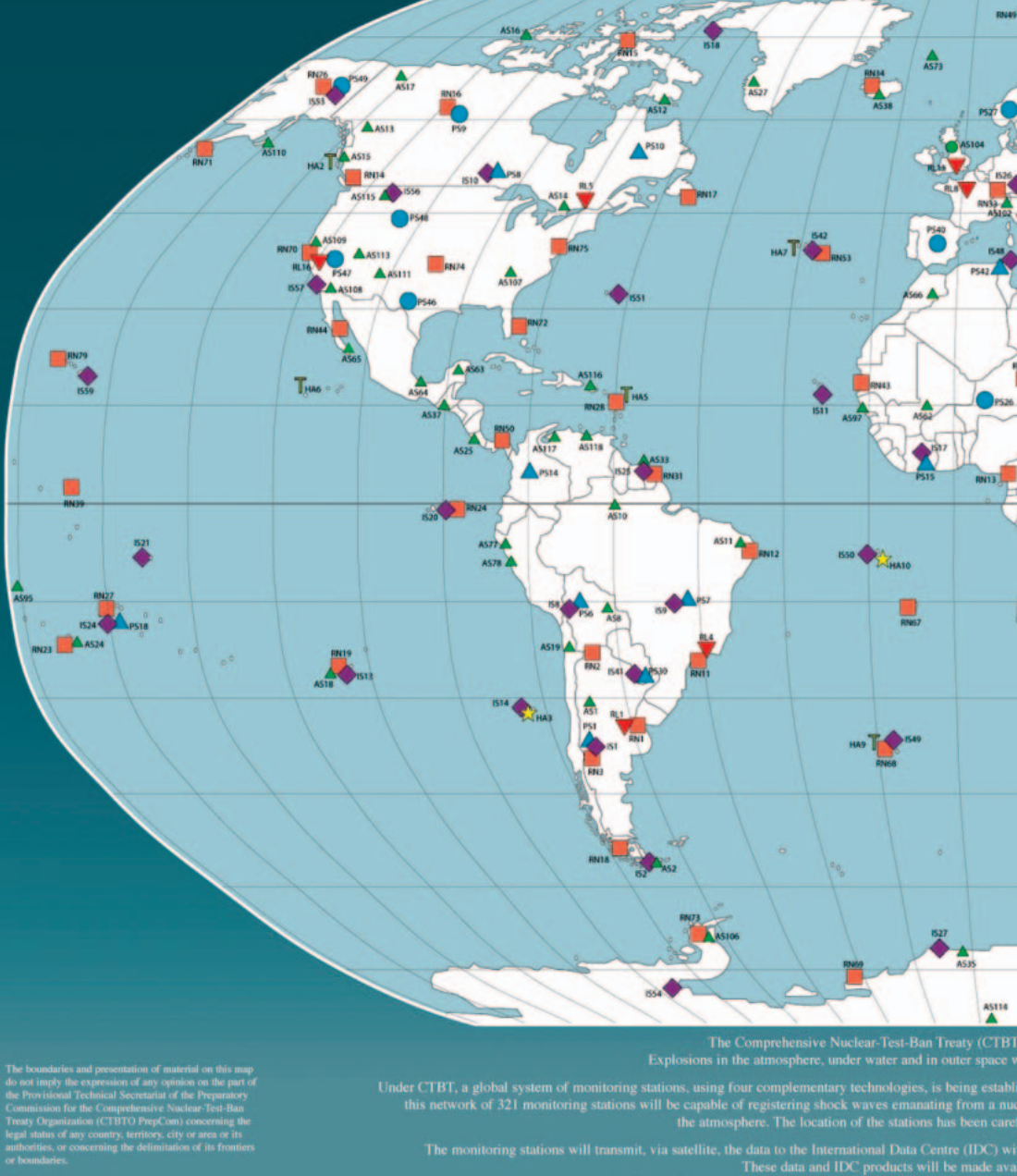
(Note 4) Nuclear explosions in the atmosphere are monitored through the observation of very low-frequency sound waves in the atmosphere.

(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.

INTERNATIONAL M



The Comprehensive Nuclear-Test-Ban Treaty (CTBT
Explosions in the atmosphere, under water and in outer space w

Under CTBT, a global system of monitoring stations, using four complementary technologies, is being establ
this network of 321 monitoring stations will be capable of registering shock waves emanating from a nuc
the atmosphere. The location of the stations has been care

The monitoring stations will transmit, via satellite, the data to the International Data Centre (IDC) wi
These data and IDC products will be made ava
Overleaf is a listing of the 337 facilities of the international monitorin

Chart I, revised July 2003

CTBTO PREPARATORY COMMISSION | preparatory commission for the comprehensive nuclear-test-ban treaty organization

ONITORING SYSTEM

) of 1996 bans nuclear explosions in all environments.
ere banned in 1963. CTBT prohibits them underground as well.

shed to record data necessary to verify compliance with the Treaty. Supported by 16 radionuclide laboratories,
lear explosion underground, in the seas and in the air, as well as detecting radioactive debris released into
fully chosen for optimal and cost-effective global coverage.

hin CTBTO PrepCom in Vienna, where the data will be used to detect, locate and characterize events.
lable to the States Signatories for final analysis.
g system and brief descriptions of their characteristics and capabilities.

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

1. Current status of signature and ratification

The CTBT has been signed by 170 states and ratified by 108 states as of November 2003. Of 44 Annex 2 States, 41 have signed and 32 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, Columbia, the Democratic Republic of Congo, Egypt, Indonesia, Iran, Israel, the US and Vietnam.

2. Significance of the efforts in the promotion of the entry into force of the CTBT

As described below, prospect of the entry into force of the CTBT is not yet in sight. However, the political cost to carry out a nuclear test explosion is becoming increasingly prohibitive under the circumstances where the majority of the nations of the world is politically calling for the entry into force of the CTBT. Thus, 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. There has been no nuclear test explosion since 1998 to this day. 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 since the end of the Second World War until 1996, and at its prime, 178 tests were conducted in a year. Japan, has been spearheading international efforts to facilitate the entry into force of the CTBT, with an aim to boost the political momentum to maintain and strengthen such deterrent effects.

3. 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 three times so far, in October 1999, November 2001, and September 2003, pursuant to this provision.

The 3rd Conference, convened in Vienna in September 2003, attended by 107 states, adopted the Final Declaration unanimously, including calling for early signature and ratification by states. The US, which has been opposing treaty ratification due to the necessity of maintaining the reliability and safety of its nuclear weapons, did not attend the conference (same as last time). Both India and North Korea, which have yet to sign the treaty, also did not participate in the conference. (Pakistan, another non-signatory state, attended the conference as an observer.)

4. Prospects for the treaty's entry into force

Though some progress has been made with ratification by some CTBT of Annex 2 States such as Turkey, Russia, Ukraine, Chile, Bangladesh and Algeria, the outlook for the entry into force of the CTBT still remains grim. Of Annex 2 States, India and Pakistan are committed to continuing the moratorium on nuclear tests 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.

5. Attitude of the US to the CTBT

The US 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.

For example, in August 2001, Secretary of State Powell explained in his reply to a letter from then Japanese Minister for Foreign Affairs Makiko Tanaka, who urged the early ratification of the CTBT, that the US Government did not intend to request the US Senate to reconsider its negative decision about the CTBT. From 2001, the US voted against the Draft Resolution on Nuclear Disarmament proposed by Japan to the UN General Assembly because the early entry into force of the CTBT was mentioned in it. The US did not attend the Third Conference on Facilitating the Entry into Force of the CTBT in September 2003, as mentioned above.

Furthermore, the US manifested its position "to oppose the ratification of the CTBT" in the explanatory material of the Nuclear Posture Review (NPR) in January 2002.

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) At the First Conference on Facilitating the Entry into Force of the CTBT in 1999, the former 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, the Progress Report was presented by the representative of Japan Nobuyasu Abe (currently the 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.

(2) In September of 2002, the year when the Conference on Facilitating the Entry into Force of the CTBT was not convened, the "Friends of the CTBT Foreign Ministers" 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 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 tests to be continued. This statement was originally signed by the foreign ministers of 18 countries including three nuclear weapon states, namely the UK, France and Russia, and went on to win the approval of the foreign ministers of more than 50 countries.

(3) Prior to the Third Conference on Facilitating the Entry into Force of the CTBT in September 2003, a joint ministerial letter was sent to invited countries by the Foreign Ministers of Finland, the presidency holder, Austria, the host nation, and Japan, the presidency holder of the First Conference, calling for the participation of the ministerial delegations in the conference and the early signature and ratification of the CTBT. Efforts were also made to call for the participation of the ministerial delegations in the conference and the early signature and ratification of the CTBT at the capital cities of eleven non-ratification countries among 44 Annex 2 States, excluding North Korea, by presenting the ministerial letter in cooperation with the above-mentioned three countries.

Foreign Minister Yoriko Kawaguchi of Japan attended the Third Conference

on Facilitating the Entry into Force of the CTBT and delivered an address as a first speaker, emphasizing the importance of early entry into force of the CTBT.

Photo: Foreign Minister Yoriko Kawaguchi making a speech at the Conference on Facilitating the Entry into Force of the CTBT (in Vienna, September 2003)

2. Efforts to facilitate the entry into force at the bilateral talks and multilateral forums

Japan has been calling for the early entry into force, signature and ratifications 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 since 2002.

(1) Commitments at bilateral meetings

At the Japan-US Foreign Minister's Meeting (Tokyo) in January 2002, Japan again requested that the US ratify the CTBT. Prime Minister Junichiro Koizumi called on Pakistani President Pervez Musharraff to promptly sign the CTBT at the Japan-Pakistan summit talks in March 2002. Prime Minister Junichiro Koizumi also urged 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 Yoriko Kawaguchi called on Indian Foreign Minister Singh

and Israeli Foreign Minister Shalom to urgently ratify the CTBT in January and April 2003 respectively. Foreign Minister Kawaguchi and Vice-Minister Yano (then) urged the Vietnamese Vice Prime Minister Khiem for early ratification in September. Foreign Minister Kawaguchi also urged the Foreign Minister of Indonesia Hassan and the Egyptian Foreign Minister Maher for early ratification of the CTBT at the APEC Ministerial Meeting and on her visit to Egypt respectively in October 2003.

(2) Commitments at the multilateral forums

Foreign Minister Yoriko Kawaguchi called on ASEAN nations for early ratification of the CTBT at the ASEAN + 3 Foreign Minister's Meeting in August 2002 in Brunei.

Foreign Minister Kawaguchi also encouraged high-level participation at the Conference on Facilitating the Entry into Force of the CTBT, scheduled in September, at the ARF Ministerial Meeting in June 2003 held in Phnom Penh.

3. Initiatives 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 (86 trainees by FY 2003), and supplied seismological observation instruments (17 cases by FY 2003). Japan has been deploying much efforts 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 Preparatory Commission of the CTBT Organization and other states. Particularly, a report that contains the expression of gratitude for Japan's contribution was adopted by consensus at the Working Group on verification technology of the Preparatory Commission for the CTBT Organization in February 2002.

Photo: JICA's participants receive technical guidance on a seismological observation instrument in the global seismological observation-training course.

4. Commitment 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 these facilities.

(1) Primary Seismological Station: Matsushiro

(2) Auxiliary Seismological Station: Oita, Kunigami, Hachijojima, Kamikawa Asahi, Chichijima

(3) Infrasound Station: Isumi

(4) Radionuclide Station: Okinawa, Takasaki

(5) Radionuclide Laboratories: Tokai

Though they have yet to satisfy the requirements for IMS monitoring stations under the treaty, many seismological stations have already been installed in Japan. Data collected from the stations mentioned (1) and (2) above are being transmitted to the International Data Center in Vienna as of November 2003.

Chapter 4. The Fissile Material Cut-off Treaty (Cut-off Treaty)

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

The Fissile Material Cut-off Treaty is generally called the FMCT of the 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 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 nuclear weapon states to non-nuclear weapon states, and to suppress the emergence of new nuclear weapons states by banning the development and acquisition of nuclear weapons by non-nuclear weapon states. The FMCT aims to suppress the emergence of new nuclear weapons 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 a great significance from the perspective of both nuclear disarmament and non-proliferation.

If the Cut-off Treaty is concluded, it would support the reduction of nuclear weapons by the nuclear weapon states such as the US and Russia and prevent non-nuclear weapon states from acquiring nuclear weapons. Also, it will make it possible to bring a nuclear arms race to a halt. The conclusion of the 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 also supports the commencement of negotiation on the Cut-off Treaty.

The assumed provisions under the treaty are: (1) not to produce fissile material for nuclear weapons with the aim of research, production and use of nuclear

weapons and other nuclear explosive devices; (2) not to assist other states in the production of fissile material for nuclear weapons and; (3) to accept measures to verify compliance with the treaty.

Section 2. Background

The Cut-off Treaty was initially proposed by the then US President Bill Clinton 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 Conference on Disarmament would be the forum for negotiations.

It was agreed that an Ad Hoc Committee on the FMCT would be established to negotiate the Cut-off Treaty within the CD, following the adoption of a negotiation mandate drafted by the Special Coordinator, Ambassador Shannon of Canada, in 1995. At the CD it is necessary to establish an Ad Hoc Committee to negotiate; however, it was only in 1995 and 1998 when Ad Hoc Committees were established at the CD. Even then, negotiations on the Cut-off Treaty have not gotten underway at the Ad Hoc Committee in 1995 as the chair was not appointed.

The 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 a Chair of the Ad Hoc Committee. Under the leadership of the Chairman, two meetings of the Ad Hoc Committee were convened during August 27 and September 1, 1998. However, no substantial negotiations for the treaty were conducted except some exchanges of opinions among the participants, mainly because it was near the end of the 1998 session of the CD. The re-establishment of the Ad Hoc Committee failed at the 1999 session of the CD due to the repeated disagreement over the program of work. At the 2000 NPT Review Conference, the CD was urged in the Final Document to agree on a program of work that included the immediate commencement of negotiations on the Cut-off Treaty with a view to their conclusion within five

years. This raised the expectation for new progress in negotiations on the Cut-off Treaty during the 2000 session. China, however, insisted that the negotiations on the Prevention of Arms Race in Outer Space (PAROS) must be concurrently commenced with that of the Cut-off Treaty, while the US stated that it would not accept the commencement of negotiations on PAROS. Due to this divergence of views between the US and China, an Ad Hoc Committee failed to be reestablished and negotiations on the Cut-off Treaty did not commence.

Many countries have repeatedly advocated the importance of the commencement of negotiations on the Cut-off Treaty including Japan, and have made various efforts to obtain consensus among the countries concerned. Despite these efforts, the negotiations on the treaty have not yet commenced as of the end of the 2003 session. (See Chapter 2, Part VII)

Section 3 Basic stance of Japan

Japan considers it important to immediately commence and conclude negotiations on the Cut-off Treaty, and continues to make efforts in this direction. This stance of Japan is clearly defined in the speech delivered by Foreign Minister Yoriko Kawaguchi at the Conference on Disarmament in September 2003.

It may take a long time for the treaty to enter into force even if negotiations on the treaty are concluded. Japan, therefore, asserts that nuclear weapons states should unilaterally declare a moratorium on the production of fissile material for nuclear weapons pending the entry into force of the treaty. In fact, four nuclear weapon states other than China have already declared the production moratorium. Japan referred to this point in its draft resolution on nuclear disarmament, which was adopted by the overwhelming majority at the UN General Assembly in 2003. Japan also urged China to commit herself to the production moratorium (at the Japan-China Consultation on Disarmament and Non-proliferation in August 2003).

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

Japan has been advocating the early commencement of negotiations on the 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 the treaty once negotiations have commenced. For example, Japan hosted a seminar on the Cut-off Treaty in Geneva in May 1998 (chaired by Mr. Hiroyasu Kurihara, Senior Counselor, Special Assistant to the Ministry of Foreign Affairs), 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 of negotiations on the Cut-off Treaty. Ambassador Kuniko Inoguchi, Permanent Representative of Japan to the Conference on Disarmament, made a speech on the Cut-off Treaty at the Conference on Disarmament in February 2003, emphasizing the urgent task of controlling the fissile materials which are not placed under the IAEA (International Atomic Energy Agency) Safeguards, in order to maintain peace and security of the international community. 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. About 120 participants in this workshop comprised government representatives of the countries concerned, relevant international organizations and non-governmental organizations, including representatives from China and Pakistan, which did not attend the previous seminar on the Cut-off Treaty of 2001. They had conducted discussions from multiple perspectives concerning "verification," which is a vital issue in the area of arms control, disarmament and non-proliferation treaties.

Furthermore, eyeing the appointment of Ambassador Kuniko Inoguchi, Permanent Representative of Japan to the Conference on Disarmament as the President of the 3rd session of the Conference on Disarmament in August 2003,

Japan presented a working paper to the CD, in which major points of argument are comprehensively clarified, in order to activate discussions on the Cut-off Treaty (which clarifies the scope of the treaty's coverage, and points of argument concerning technical discussion including verification and organizational and legal items).

In addition, taking every opportunity, Japan has appealed the importance of the Cut-off Treaty to the governments of countries concerned and the international public opinion. Japan takes the policy to continue these diplomatic efforts toward the early commencement of negotiations on the Cut-off Treaty.

Chapter 5. Assisting denuclearization of the former Soviet Union

Section 1. Overview

The US and Russia signed START I (Strategic Arms Reduction Treaty I) and agreed to eliminate 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 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 represented 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 US, the UK, 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 environmental problems. For example, Japan concluded a bilateral framework agreement with the four former Soviet 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 committee between October 1993 and March 1994.

At the G8 Summit Meeting in Cologne in 1999, Japan pledged funds amounting to US$200 million (a portion of it was to be allotted from funds that had already been contributed under the previous arrangements) to the four former Soviet Union countries to further promote the projects. (See Section 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, the related materials, etc.

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

Under this concept, G8 nations formulate a "guideline" 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.

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, dismantlement of chemical weapons and security of nuclear power plants, 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.

This 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 the projects rests with 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 and liability exemption, 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 the project to make concerted efforts in solving problems as well as 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 project, and pledged to contribute a little more than $200 million to projects under the G8 Global Partnership. Specifically, a little bit 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).

Japan named the dismantling project of the decommissioned nuclear submarines "Star of Hope," and commenced the project to dismantle a Victor III class nuclear submarine. (See Section 3-2)

4. Efforts of other countries

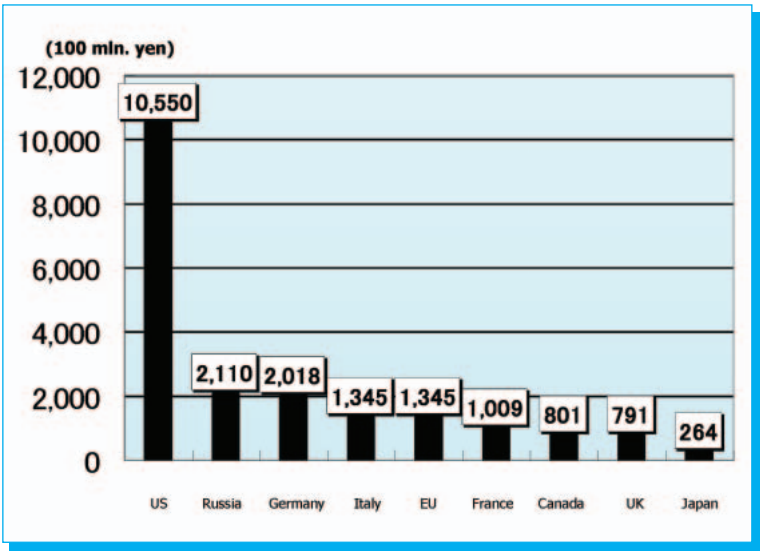
The governments of G8 countries announced the following assistances under the G8 Global Partnership by October 2003:

The US: US$ 10 billion, Russia: $ 2 billion, Germany: 1.5 billion euro, Italy: 1 billion euro, EU: 1 billion euro, the UK: US$ 750 million, France: 1 billion euro, Canada: 1 billion Canadian dollars

The Global Partnership has been broadened to include five more nations (Norway, Sweden, Finland, Switzerland, and Poland) at the G8 Evian Summit in France from June 1 to 3, 2003. (The Netherlands decided on its participation later.)

The 2003 G8 Evian Summit also endorsed the G8 Action Plan on the Global Partnership to follow up the Global Partnership. The G8 Action Plan valued the outcomes of the past year such as decisions made by Russia on tax exemption

measures, the commencement of several important projects and new participants in the projects under the G8 Global Partnership. It also advocates the achievement of the commitment in funding made at the Kananaskis Summit, expansion of the projects, resolution of implementation problems, and enlargement of participants, etc., in order to achieve practical results.



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 dispose of low-level liquid radioactive 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 suspend the ocean dumping and decided to design a facility for disposing 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 Russia.

"SUZURAN" is the floating treatment facility constructed on a barge with a capacity to treat up to 7,000 cubic meters of liquid radioactive waste per year. It is capable of treating liquid radioactive waste (about 5,000 cubic meters) that is currently stored in the Far East, and liquid radioactive waste which will be generated by the dismantlement of nuclear submarines conducted in the Far East (abut 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 the coordination within Russia. The facility is currently moored at a submarine dismantling factory in Bolshoi Kamen city near Vladivostok, and it is treating liquid radioactive waste generated by the dismantlement of nuclear submarines. According to the Russian source, not even a drop of liquid radioactive waste has been dumped in the Sea of Japan after "SUZURAN" started to operate.

Photo: The liquid radioactive waste treatment facility "SUZURAN" constructed with the assistance of Japan

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

In the Russian Far East region, facing with Japan across the Sea of Japan, more than 40 nuclear-powered submarines decommissioned from the Russian Pacific Fleet are moored. Many of them are still carrying nuclear fuel 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 the 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 of nuclear materials being taken out of the submarine illegally and falling into the hands of terrorists.

Therefore, the safe and immediate dismantlement of the decommissioned nuclear submarines has become an important and urgent matter, not only from a nuclear disarmament standpoint but also from a perspective of non-proliferation and the protection of the environment of the Sea of Japan. Russia should assume primary responsibility for the dismantlement of the decommissioned submarines, and Russia itself makes efforts to this end. However, it takes time for Russia alone to dismantle all the nuclear submarines and there is a risk of environmental contamination. Thus cooperation from other countries is requested.

While coordinating with the US, Japan issued the "Japan-Russia Operational Project for Disarmament and Environment Protection" in May 1999 and the "Memorandum between the Government of Japan and the Government of the Russian Federation on Promoting Disarmament and Non-proliferation and Disposition of the Nuclear Arms Subject to Reduction in the Russian Federation" (September 2000). Japan carried out feasibility studies towards the implementation of the projects related to the dismantlement of decommissioned nuclear submarines in the Far East. In addition, Mr. Yoshitaka Shindo, then Parliamentary Secretary for Foreign Affairs, visited Vladivostok to hold discussions directly with

concerned personnel of Russia in November 2002.

To accelerate the implementation of projects the reinforcement of activity coordination mechanism and steady implementation of the dismantlement project of decommissioned nuclear submarines were specified in the "Japan-Russia Action Plan" adopted by leaders of Japan and Russia on January 2003 when Prime Minister Junichiro Koizumi visited Russia. In the Prime Minister's speech delivered on the occasion of his visit, this project was named "Star of Hope" after the Zvezda (meaning "Star" in Russian) Shipyard where the dismantling of submarines takes place. In addition, "Executive Task Force," consisting of responsible officials of both Japan and Russia, was set up within the Japan-Russia Committee on Cooperation to Assist the Destruction of Nuclear Weapons in order to strengthen the implementation regime.

Photo: Then Parliamentary Secretary for Foreign Affairs Yoshitaka Shindo making a speech at the Zvezda Shipyard (June 2003)

Based on the results of the studies conducted thus far, Japan made a decision in February 2003 to cooperate in dismantling a Victor III-class decommissioned nuclear submarine at the Zvezda Shipyard. A basic document on this project was

signed between the Japan-Russia Committee on Cooperation to Assist the Destruction of Nuclear Weapons and the Ministry of Atomic Energy of Russia in June 2003, and specific contracts were drawn up in November 2003 (signed in December of the same year), followed by the commencement of the dismantlement activities.

Photo: Dismantling of submarine at the Zvezda Shipyard

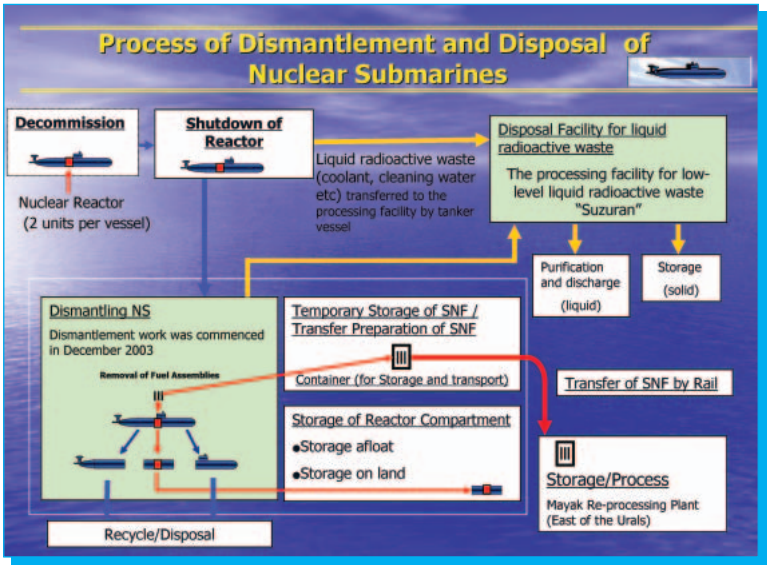
3. Control and disposition of surplus weapons-grade plutonium in Russia

(1) The locus of the problem

In the process of nuclear disarmament involving both the US and Russia, a large quantity of plutonium is extracted from dismantled nuclear weapons. Particularly in Russia, where the national control regime was weakened and funding is not sufficient, the prevention of surplus weapon-grade plutonium from being reused for military purposes or being handed to other countries or entities has become an urgent task from the following two points of view: (a) to further facilitate the progress of the US's and Russia's 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.

The US and Russia, as the parties concerned, have been endeavoring to cope with this issue. However, assistance in terms of funding and technologies from other major nations are strongly demanded. Thus providing assistance is now under consideration as a key agenda item in the G8 process.



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

In 2000, the US and Russia signed the Plutonium Management and Disposition Agreement committing each country to dispose of 34 tons of weapons-grade plutonium. However, Russia, facing economic difficulties, asked other G8 nations for assistance. The discussions have been conducted concerning the establishment of a multilateral framework for the funding plan and for the coordination of the partnership.

The G8 Global Partnership at the Kananaskis Summit in June 2002 identified

the disposition of surplus weapons-grade plutonium as one of the key areas. In response to this, Prime Minister Junichiro Koizumi announced a contribution of $100 million for disposition of the surplus weapon-grade plutonium program.

Meanwhile, about 20 kg of weapons-grade plutonium, which is equivalent to 2 to 3 atomic bombs, was successfully processed into vipack (vibro-packing) fuel and irradiated in a fast reactor through research cooperation between the Japan Nuclear Cycle Development Institute and Russian research institutions. Thus, Japan expects the financial contribution of $100 million mentioned above to lead to the further development of the Japan-Russia research cooperation.

Currently, discussions are taking place among G8 nations and other concerned states about the method of disposition of surplus weapons-grade plutonium and the fundamentals of multilateral framework, etc.

Section 4. Other assistance of Japan for denuclearization

1. Ukraine

(1) Assistance for the establishment of a State System for Nuclear Material Accountancy and Control (SSAC)

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 material in order to prevent any illicit outflow of such material. 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 agreement 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 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 Research Institute, and also provided another

systems for nuclear material accountancy and control for the Ministry of Environment Protection and Atomic Power, and the Kiev Research Institute.

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

In June 1995, Japan supplied Ukraine with medical equipment and medicines for the examination and treatment of military personnel exposed to radioactive contamination during the process of dismantling nuclear weapons or non-radioactive contamination from leakage of toxic missile fuels. Japan supplied additional reagents for a range of analyzers in August 1997. Japan supplied additional medical equipment to army hospitals at the request of the Ministry of Defense, and this was completed in August 1998. It also supplied other items including reagents in March 2000. These supplies have also been used for the victims of the nuclear power accident that occurred at the Chernobyl Nuclear Power Plant (which accounted for 34% of the people receiving medical treatment). Additional medical equipment was supplied in June 2001.

2. Kazakhstan

(1) Assistance for the establishment of a State System for Nuclear Material Accountancy and Control (SSAC)

In order to establish the SSAC that 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 a nuclear material protection system to the Atomic Energy Agency and the Atomic Energy Research Institute.

(2) Measures against radioactive contamination of the areas surrounding the Semipalatinsk Nuclear Test Site

The nuclear test site was set up in Semipalatinsk during the Soviet era, and

around 200,000 victims of nuclear radiation still reside in this area. The project was carried out with the full cooperation of the Medical Department at Nagasaki University, at the request of the Kazakhstan Public Health Committee. In August 1999, Japan provided a remote medical diagnostic system and various other study equipment to the Semipalatinsk Medical College and Semipalatinsk Nuclear Medicine and Environment Research Institute, and upgraded their performance in April 2001.

Japan also supplied medical equipment and medicines to the Homeland War Victims Hospital, which treated radioactive 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 is engaged in a radioactive contamination survey in the Semipalatinsk district.

3. Belarus

(1) Assistance for the establishment of a State System for Nuclear Material Accountancy and Control (SSAC)

Japan has provided the Sosny Research Institute, located near Minsk, the capital city of Belarus, with a nuclear material protection system and an accountancy and control system to establish the SSAC that is a prerequisite for the IAEA safeguards to be applied to a non-nuclear weapon state.

(2) Supply of equipment to the vocational training center for discharged soldiers

Japan supplied equipment, including computers, in February 1999, to the vocational training center in Rider City (an old missile base of the former Soviet Union) to assist former soldiers (discharged upon the disbanding of the strategic nuclear missile force) to find a job in the civilian sector.

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 on weapons of mass destruction in the former Soviet Union, to provide such scientists and researchers with opportunities to participate in research projects with peaceful applications so as to expedite the military-to-civilian conversion of human resources. Japan signed the "Agreement Establishing an International Science and Technology Center (ISTC)" with the US, 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.

ISTC is a successful 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 US, the EU, Russia, the Republic of Korea, Norway, Belarus, Kazakhstan, Armenia, Georgia, Kyrgyz, and Tajikistan. Assistance with 570 million dollars has been approved for more than 1910 projects involving more than 51,000 scientists and researchers from the former Soviet Union states (as of November 2003). Japan has provided assistance for the projects amounting to about 57 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 (1) prohibits regional states from manufacturing, acquiring, possessing, deploying or controlling any nuclear weapons in the region, and by a protocol under which (2) all nuclear weapon states (the US, Russia, the UK, France and China) shall undertake not to use nuclear weapons against the states in the zone (negative security assurances).

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 nuclear-weapon-free zone "practical" are, among others: (1) all the states concerned, including the nuclear weapon states, agree to the proposal; (2) it contributes to the peace and security not only of the states within the zone but of the world as a whole; (3) appropriate inspection/verification measures are provided; and (4) 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, and Africa, 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 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 November 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 Rarontonga (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-weapon-free zone in the South Pacific was adopted at the UN General Assembly in 1975.

Moves toward the establishment of the nuclear-weapon-free zone accelerated when the Labour Party took office in Australia in 1983. 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 October 2003 (it has not yet been signed by the Federated States of Micronesia, Republic of the Marshall Islands, and 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 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 UK, and France have already ratified the Protocol, the US has signed but not yet ratified the treaty.

3. The Treaty of Bangkok (the Southeast Asia Nuclear-Weapon-Free Zone Treaty, 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-free-zone concept at the ASEAN Standing Committee, which was followed by meetings for the draft of a treaty; however, no substantial progress was made.

The movement to formulate the draft started to develop after the end of the Cold War. The Southeast Asia Nuclear-Weapons Free Zone Treaty was signed by the leaders of ten states in 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 ASEAN, and all of them have already ratified 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 in their territories (including high seas) or discharging the same into the atmosphere. Furthermore, it prohibits the states parties from allowing any other states to engage in any of the above activities (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. None of the nuclear-weapon states has signed the protocol yet. However, China and Russia, which had been reluctant to sign the protocol, expressed their willingness to sign it at the ASEAN Post-Ministerial Conference in July 1999, on the condition that disputes over the scope of application are resolved. No particular progress has been made to date, although a working-level consultation was held between ASEAN and the nuclear-weapon states in May 2001.

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. However, drafting of the treaty had been deferred because it was suspected that South Africa had been developing nuclear weapons. 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 17 states as of October 2003. 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 the zone (excluding high seas). Among the nuclear-weapon states, France, China and the UK have already ratified the protocol, while the US and Russia have signed but not ratified 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. The Central Asia Nuclear Weapon-Free Zone

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 the Regional Center for Peace and Disarmament in Asia and the Pacific, UN Department of Disarmament, started drafting the treaty in 1998. A conference of the expert group was held in Sapporo, Japan, in October 1999, and the drafting was almost finished. However, agreement among the five countries could not be obtained, as Tajikistan and Turkmenistan were absent from the conference. Another conference of the expert group was convened in Sapporo in April 2000, but they failed to reach an agreement as Turkmenistan did not participate in the conference once again. The expert group meeting of five Central Asian states, which was held in Samarkand in September 2002, finalized the negotiations on the drafting of the treaty.

Japan has been providing various logistical and financial assistances to support the two conferences held in Sapporo. Japan also supports the conclusion of the Central Asia Nuclear Weapon-Free Zone Treaty, by making financial contributions to the Global Regional Disarmament Activity Trust Fund for the negotiations of the treaty. Also at the UN General Assembly, a resolution to establish the Central Asia Nuclear Weapon-Free Zone has been adopted every year, and Japan has joined the consensus.

2. 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 parties to take necessary steps for the implementation of the proposal have been adopted every year. The "Principles and Objectives for Nuclear Non-Proliferation and Disarmament" was adopted at the 1995 NPT Review and Extension Conference in 1995, in which the establishment of the Nuclear-Weapon-Free Zone in the Middle East was encouraged. However, there remains some problems; the Middle East peace

process remains stagnant; Iraq has been suspected of developing nuclear weapons; Israel, which seems to have a highly advanced nuclear capability, has not yet acceded to the NPT. President Mubarak of Egypt proposed the elimination of all weapons of mass destruction from the Middle East in April 1990, but positions toward this proposal differ, even among the Arab states.

The resolutions on the establishment of a Nuclear-Weapon-Free Zone in the Middle East have been adopted at the UN General Assembly every year; however, Israel contends that it has to be taken up within the scope of the Middle East peace process.

3. 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 by 1960.)

The treaty stipulates in Article I that "Antarctica shall be used for peaceful purposes only. There shall be prohibited, inter alia, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapon and others."

2. Outer Space Treaty (Adopted in 1967, entered into force in 1967. Ratified by Japan in 1967.)

The treaty stipulates in Article IV that "State 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 stipulates in Article I that "The State 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, as defined in Article II, any nuclear weapons or any other types of weapons of mass destruction as well as 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 "State 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."