Part I

Security Environment Surrounding Japan

Chapter 1

Issues in the International Community

Leaders participating in the Nuclear Security Summit in Washington, D.C. (April 13, 2010) [Cabinet Public Relations Office]

Section 1. Transfer and Proliferation of Weapons of Mass Destruction

The transfer or proliferation of weapons of mass destruction, such as nuclear, biological and chemical (NBC) weapons, or ballistic missiles carrying such weapons, has been recognized as a significant threat since the end of the Cold War. In particular, there still remain strong concerns that non-state actors, including terrorists, against whom traditional deterrence works less effectively, could acquire and use weapons of mass destruction.

1. Nuclear Weapons

During the Cold War between the United States and the Soviet Union, the Cuban Missile Crisis of 1962 made it clear that a nuclear war between the United States and the Soviet Union could take place. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) that took effect in 1970 prohibited countries other than those that had conducted nuclear tests in or before 1966[1] from having nuclear weapons, and required nuclear-armed countries to control and reduce nuclear weapons through bilateral negotiations[2].

The NPT is currently signed by 190 countries[3]. While some countries that had previously possessed nuclear weapons became signatories of this treaty by abandoning these weapons, India, Israel, and Pakistan still refuse to sign this treaty[4]. There are other countries that have declared the development and possession of nuclear weapons, such as North Korea, which announced it had conducted a nuclear test in October 2006 and May 2009[5].

U.S. President Obama's speech pertaining to aims for a world without nuclear weapons in April 2009, acknowledging that the abolition of nuclear weapons would not be achieved soon[6], expressed his intention to take concrete steps towards the realization of a future world without nuclear weapons, including the reduction of the role of nuclear weapons in U.S. national security, while maintaining nuclear deterrence as long as these weapons exist. The measures include; the signing of a new, legally binding treaty to reduce and limit strategic offensive weapons to replace the Strategic Arms Reduction Treaty I (START I)[7] between the United States and Russia; the pursuit of ratification of the Comprehensive Nuclear-Test-Ban Treaty (CTBT)[8] by the U.S. government; the announcement of the intention to start negotiations for the Fissile Material Cut-off Treaty (FMCT)[9]; and the start of a new international effort to secure nuclear materials in order to prevent nuclear proliferation to terrorists.

This determination to achieve a world without nuclear weapons was reflected in the U. N. Security Council Summit on Nuclear Non-proliferation and Nuclear Disarmament held in September the same year. The U.N. Security Council Resolution 1887 for nuclear non-proliferation and nuclear disarmament adopted in the Summit called for the following measures, thereby encouraging efforts towards nuclear non-proliferation and nuclear disarmament; 1) the creation of conditions for a world without nuclear weapons; 2) the establishment of realistic and achievable goals in all three pillars of the NPT: nuclear non-proliferation, nuclear disarmament, and the peaceful use of nuclear energy; 3) the early entry into force of the CTBT; 4) the early start of negotiations for a FMCT at the Conference on Disarmament; and 5) the improvement of securing nuclear materials to prevent nuclear proliferation to terrorists.

U.S. President Obama and Russian President Medvedev signed a new strategic arms reduction treaty to replace START I on April 2010. This treaty requires both parties, within seven years after entry into force of the treaty, to reduce the number of deployed strategic warheads [10] to 1,550 and to reduce deployed delivery platforms to 700. In addition, the Nuclear Security Summit, held by the United States in April 2010, adopted measures to strengthen the security of nuclear materials by each nation to reduce the threat of nuclear terrorism. Furthermore, the NPT Review Conference held in May 2010 adopted the final document which includes concrete action plans for the future for non-proliferation, nuclear disarmament, and the peaceful use of nuclear energy, which are the NPT's three pillars [11].

Thus, the international society has begun to take steady, major steps forward toward nuclear non-proliferation and nuclear disarmament. This direction is welcome, as it contributes to improving the international security environment.

2. Biological and Chemical Weapons

Biological and chemical weapons are easy to manufacture at a relatively low cost and easy to disguise because most of the materials, equipment, and technology needed to manufacture these weapons can be used for both military and civilian purposes. Accordingly, biological and chemical weapons are attractive to states or terrorists who seek asymmetric means of attack [12].

Biological weapons have the following characteristics: 1) manufacturing is easy and inexpensive, 2) there is usually an incubation period of a few days between exposure and onset, 3) their use is hard to detect, 4) even the threat of use can create great psychological effects, and 5) they can cause heavy casualties depending on circumstances and the type of weapons [13].

As for chemical weapons, Iraq repeatedly used mustard gas, tabun, and sarin [14] in the Iran-Iraq War. In the late 1980s, Iraq used chemical weapons to suppress Iraqi Kurds [15]. It is believed that other chemical weapons [16] that were used included VX, a highly toxic nerve agent, and easy-to-manage binary rounds [17].

North Korea is, for example, one of the countries seeking such weapons. The Tokyo subway sarin attack in 1995, as well as incidents of bacillus anthracis being contained in mail items in the United States in 2001 and that of ricin being contained in a mail item in February 2004, have shown that the threat of the use of weapons of mass destruction by terrorists is real and that these weapons could cause serious damage if used in cities.

3. Ballistic Missiles

Ballistic missiles enable the projection of heavy payloads over long distances and can be used as a means of delivering weapons of mass destruction, such as nuclear, biological, and chemical weapons. Once launched, a ballistic missile makes a trajectory flight and falls at a steep angle at high speed, which makes it difficult to effectively defend against the missile.

If ballistic missiles are deployed in a region where military confrontation is underway, the conflict could intensify or expand, and tension in a region where armed antagonism exists could be further exacerbated, leading to the destabilization of that region. Furthermore, a country may use ballistic missiles as a means of attacking or threatening another country that is superior in terms of conventional forces.

In recent years, in addition to the threat of ballistic missiles, attention has been increasingly paid to the threat of cruise missiles, because they are comparatively easy for terrorist and other non-state entities to procure [18]. Although the speed of a cruise missile is slower than that of a ballistic missile, it is difficult to detect when a cruise missile is launched and while in flight [19]. Because they are smaller than ballistic missiles, cruise missiles

can be concealed on a ship to secretly approach a target, and if they carry weapons of mass destruction on their warheads, they present an enormous threat.

4. Growing Concerns about Transfer or Proliferation of WMDs

Even weapons that were purchased or developed for self-defense purposes could easily be exported or transferred once domestic manufacturing becomes successful. For example, certain states that do not heed political risks have transferred weapons of mass destruction and related technologies to other states that cannot afford to invest resources in conventional forces and instead intend to compensate for this with weapons of mass destruction. Some of these states seeking weapons of mass destruction do not hesitate to put their land and people at risk, and allow terrorist organizations to be active due to their poor governance. Therefore, the possibility of actual use of weapons of mass destruction may generally be high in these cases.

In addition, since there is a concern that such states may not be able to effectively manage the related technology and materials, the high possibility that chemical or nuclear substances will be transferred or smuggled out from these states has become a cause for concern. For example, because there is a danger that even terrorists who do not possess related technologies can use a dirty bomb[20] as a means of attack once they acquire a radioactive substance, nations across the world share the concern regarding the acquisition and use of weapons of mass destruction by terrorists and other non-state entities[21].

Pakistan is suspected to have started its nuclear program in the 1970s. In February 2004, it came to light that nuclear-related technologies, including uranium enrichment technology, had been transferred to North Korea, Iran, and Libya by Dr. A.Q. Khan and other scientists[22]. It is pointed out that these transfers were carried out secretly using global networks covering Europe, Africa, the Middle East and Southeast Asia, and the International Atomic Energy Agency (IAEA), then Director-General Mohammad El Baradei, stated that this network reportedly involves more than 30 countries[23].

When then U.S. Assistant Secretary of State James Kerry visited North Korea in October 2002, the United States announced that North Korea had admitted the existence of a project to enrich uranium for use in nuclear weapons, pointing out the possibility that North Korea had pursued development not only of plutonium-based weapons but also of uranium-based nuclear weapons. North Korea announced in 2009[24] that it had entered the completion phase of uranium enrichment tests as well as weaponizing extracted plutonium. In addition, it was also pointed out that North Korea had given support to Syrian secret nuclear activities[25].
(See Chapter 2, Section 2)

The international community's uncompromising and decisive stance against the transfer and proliferation of weapons of mass destruction has put enormous pressure on countries engaged in related activities, leading to some of them accepting inspections by international institutions or abandoning their WMD programs altogether[26].

Ballistic missiles have been significantly proliferated or transferred as well. The former Soviet Union exported Scud-Bs to many countries and regions, including Iraq, North Korea, and Afghanistan. China and North Korea also exported DF-3 (CSS-2) and Scud missiles, respectively. As a result, a considerable number of countries now possess ballistic missiles. In particular, Pakistan's Ghauri and Iran's Shahab-3 missiles are said to be based on North Korea's Nodong missiles. Libya, which agreed to abandon its weapons of mass destruction programs, reportedly disclosed production lines for Scud-Cs and other facilities built with technological assistance from North Korea[27]. It has been reported that Ukraine illegally exported cruise missiles capable of carrying nuclear warheads to Iran and China around 2001[28].

5. Iran's Nuclear Issue

Since the 1970s Iran has been pursuing a nuclear power plant construction project with cooperation from abroad, claiming that its nuclear-related activities would be for peaceful purposes in accordance with the NPT. In 2002, however, Iran's covert construction of facilities including a large-scale uranium enrichment plant was exposed by a group of dissidents. Subsequent IAEA inspection revealed that Iran, without notifying the IAEA, had been engaged for a long time in uranium enrichment and other activities potentially leading to the development of nuclear weapons. In September 2005, the IAEA Board of Governors recognized Iran's breach of compliance with the NPT Safeguards Agreement.

The international community expressed strong concerns about the lack of concrete proof regarding Iran's claim that it had no intent to develop nuclear weapons and that all of its nuclear activities were for peaceful purposes, and has demanded that Iran suspend all of its enrichment-related and reprocessing activities through a series of Security Council Resolutions and IAEA Board of Governors Resolutions.

After concluding an accord (the Paris Accord) in November 2004 with the EU-3 (the United Kingdom, France, and Germany), which is working for the settlement of the issue, Iran suspended its enrichment related activities. However, in August 2005, it resumed uranium conversion activities — a prior step to uranium enrichment — and in February 2006, resumed uranium enrichment activities. In response, a special session of the IAEA Board of Governors adopted a resolution to report the issue to the U.N. Security Council, and in March 2006, the U.N. Security Council approved a Presidential Statement calling on Iran to halt its uranium enrichment and reprocessing activities. In June 2006, the EU-3, and the United States, China, and Russia (EU3+3) agreed on and presented to Iran a comprehensive proposal, including possible cooperation in the event that Iran sufficiently resolves the international concerns[29]. However, Iran continued its nuclear activities. In response to these actions by Iran, in July 2006 the Security Council adopted Resolution 1696 demanding that Iran suspend all of its uranium enrichment-related and reprocessing activities. The Security Council thereafter adopted a series of resolutions[30] to impose stricter sanctions under Article 41 of Chapter VII of the Charter of the United Nations[31].

The IAEA announced in September 2009 that it had received notification from Iran pertaining to the construction of a new uranium enrichment plant[32]. The United States assesses that the size and configuration of this facility is inconsistent with a peaceful program[33]. Iran also decided in November of that year to build 10 new nuclear sites, and further announced in February 2010 that it began to enrich uranium from below 5% to near 20%, and that completed the production of the first batch[34]. The IAEA has expressed concerns that these Iranian nuclear development activities may be related to the development of a nuclear payload for a missile, and they point out that they have been unable to obtain confirmation that the objectives are peaceful. The Iranian nuclear issue remains unresolved as of yet, and U.N. Security Council Resolution 1929, imposing additional sanctions on Iran, which continues to enrich uranium despite the Security Council resolutions, was adopted at the U.N. Security Council[35]. The international community, including the U.N. Security Council, continues to pursue a peaceful and diplomatic resolution of the issue through negotiation.