Chapter 2 Issues in the International Community

Section 1 Transfer and Proliferation of Weapons of Mass Destruction

Transfer and proliferation of weapons of mass destruction, such as nuclear, biological and chemical (NBC) weapons, or of 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, the Cuban Missile Crisis of 1962 demonstrated 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 as non-nuclear weapon states by abandoning these weapons, India, Israel, and Pakistan still refuse to sign this treaty as non-nuclear weapon states[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 for a world without nuclear weapons in April 2009 promoted efforts in the international community for nuclear non-proliferation and disarmament, showing the United States' resolution to take concrete steps towards the goal: specifically, the reduction of the role of nuclear weapons in U.S. national security while maintaining nuclear deterrence, the signing of a new treaty to replace the Strategic Arms Treaty I between the United States and Russia, and pursuit of ratification of the Comprehensive Nuclear-Test-Ban Treaty (CTBT)[6] by the U.S. government[7].

In April 2010, Presidents of the U.S. and Russia signed

1 The United States, the former Soviet Union, the United Kingdom, France, and China. France and China signed the NPT in 1992

2 Article 6 of the NPT sets out the obligation of signatory countries to negotiate nuclear disarmament in good faith

3 As of April 2012.

4 South Africa, Ukraine, Kazakhstan, and Belarus.

5 After North Korea announced to withdraw from the NPT in 1993, it promised to remain as a contracting state, but it again declared to withdraw from the NPT in January 2003. In the Joint Statement adopted after the six-party talks in September 2005, North Korea promised to return to the NPT soon, but after that it announced two nuclear tests. North Korea's nuclear tests constitute a major challenge to the NPT.

6 Adopted in 1996, this treaty bans nuclear test explosions in all places. Of the 44 nations that are required to ratify it for the treaty to enter into force, 8 nations have not done so yet (United States, China, India, Pakistan, Iran, Israel, Egypt, North Korea). Indonesia ratified the CTBT in February 2012. The United States participated in the Conference on Facilitating the Entry into Force of the CTBT in September 2011, following in 2009 which marked the first time in 10 years that the United States participated in the Conference.

7 In addition to these, the President expressed his intentions to launch negotiations on the Fissile Material Cut-off Treaty (FMCT) and indicated that new international undertakings on managing nuclear materials would be started with the aim of preventing nuclear proliferation to terrorists. The FMCT would, by banning the production of fissile materials for nuclear weapons (highly enriched uranium and plutonium, etc., for nuclear weapons), prevent the emergence of new nuclear-armed nations and limit the production of nuclear weapons by nuclear-armed nations.

a new strategic arms reduction treaty to replace START I, which was issued in February 2011[8]. In addition, the Nuclear Security Summit held in Washington, D.C. in April 2010 adopted measures to ensure thorough control of all vulnerable nuclear materials within four years to reduce the threat of nuclear terrorism. Furthermore, the NPT Review Conference held in May 2010 adopted the final document[9], which includes specific future action plans consisting of three pillars: nuclear disarmament, nuclear nonproliferation, and the peaceful use of nuclear energy. The second Nuclear Security Summit convened in Seoul in March 2012 adopted approaches to nuclear security issues to be addressed by the international community, such as management, transportation and illicit trade of nuclear materials, as well as nuclear forensics[10].

The international society has begun to take steady and major steps 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 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 non-state actors, such as terrorists, who seek asymmetric means of attack[1].

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[2].

Concerning the response to biological weapons, it has also been pointed out that there is a possibility that advancements in life sciences will be misused or abused. With these concerns, in November 2009 the United States decided on a policy[3] to respond to the proliferation of biological weapons and the use of these weapons by terrorists, and took measures to thoroughly manage pathogens and toxins as well[4].

As for chemical weapons, Iraq repeatedly used mustard gas, tabun, and sarin[5] in the Iran-Iraq War. In the late 1980s, Iraq used chemical weapons to suppress Iraqi Kurds[6]. It is believed

1-8 The treaty stipulates that both countries are to reduce the number of deployed strategic warheads to 1,550 and the number of deployed delivery vehicles to 700 by seven years following the treaty's enactment. The United States released the latest data in April 2012. As of March 1, the U.S. has 1,737 deployed strategic warheads and 812 deployed strategic delivery vehicles. Russia's numbers show that it has 1,492 strategic warheads and 494 delivery vehicles.

9 Major achievements in this Conference are as follows: ① the agreement on realistic measures regarding the implementation of the Resolution on the Middle East (e.g., to support convening an international conference in 2012); ② the reconfirmation of clear commitment to nuclear disarmament; and ③ it was agreed that the nuclear-weapon states will be called upon to report to the Preparatory Committee of the NPT Review Conference in 2014 on progress with regard to concrete nuclear disarmament measures.

10 Nuclear forensics aims to provide evidence for prosecution of perpetrators of illicit trade or malicious use through identification of the source of detected nuclear materials and other radioactive substances.

2-1 A means of attacking the counterpart's most vulnerable points other than by conventional weapons of war. (e.g., weapons of mass destruction, ballistic missiles, terrorist attacks, and cyber attacks)

2 Japan Defense Agency, "Basic Concept for Dealing with Biological Weapons" (January 2002)

3 In November 2009, the National Strategy for Countering Biological Threats was released in order to dictate a response to the proliferation of biological weapons and their use by terrorists. At the State of the Union Address in January 2010, President Obama said that the United States was launching a new initiative to promptly and effectively respond to bioterrorism and infectious diseases.

4 U.S. Presidential order (2 July 2010)

5 Mustard gas is a slow-acting erosion agent. Tabun and sarin are fast-acting nerve agents

6 It was reported that a Kurdish village was attacked with chemical weapons in 1988, killing several thousand people.

7 It is a weapon whose two types of relatively harmless chemical materials, materials for a chemical agent, are separately filled in it. It is devised so that these materials are mixed by the impact of firing in the warhead, causing a chemical reaction and synthesizing the chemical agent. The handling and storage of this weapon is easier compared to one that is filled with a chemical agent beforehand.

that other chemical weapons[7] that were used included VX, a highly toxic nerve agent, and easy-to-manage binary rounds[8].

North Korea is also 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 generally 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 as a weapon with potential for proliferation because they are comparatively easy for terrorists and other non-state actors to acquire[1]. Because cruise missiles are cheaper to produce compared to ballistic missiles and easy to maintain and train with, many countries either produce or modify cruise missiles. At the same time, it is said that cruise missiles have a higher degree of target accuracy and that they are difficult to detect while in flight[2]. Moreover, 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[3].

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[1] 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[2].

Pakistan is suspected to have started its nuclear program in the 1970s. In February 2004, it became clear that nuclear-related technologies, including uranium enrichment technology,

2-8 Iraq joined the Chemical Weapons Convention (CWC) in February 2009.

3-1 In the July 2006 conflict between Israel and Lebanon, it is believed that Hezbollah used a cruise missile to attack an Israeli naval vessel. Israel announced in March 2011 that it had uncovered six anti-ship cruise missiles amongst other things on cargo ships subject to inspection.

2 United States Congressional Research Service, "Cruise Missile Proliferation" (28 July 2005)

3 The United States is concerned about the possibility of a threat to its forward-deployed forces from the development and deployment of ballistic and cruise missiles by countries including China and Iran.

4-1 Dirty bombs are intended to cause radioactive contamination by spreading radioactive substances

2 With these concerns, the U.N. Security Council adopted Resolution 1540 in April 2004, which provided to make decisions regarding adoption and enforcement of laws that are adequate and effective in making all states to refrain from providing any form of support to non-state entities that attempt to develop, acquire, manufacture, possess, transport, transfer or use weapons of mass destruction and their means of delivery. The International Convention for the Suppression of Acts of Nuclear Terrorism also entered into force in July 2007.

had been transferred to North Korea, Iran, and Libya by Dr. A.Q. Khan and other scientists[3].

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, which indicated the possibility that North Korea had pursued development not only of plutonium-based weapons but also of uranium-based nuclear weapons. In November 2010, North Korea revealed a uranium enrichment facility to U.S. experts visiting the country[4]. North Korea also announced that a uranium enrichment plant equipped with several thousand centrifuges for fueling light-water reactors was in operation. In addition, it was also pointed out that North Korea had given support to Syrian secret nuclear activities[5].

See Chapter 1, 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[6].

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 believed to be based on North Korea's Nodong missiles.

5 Issues over Iran's Nuclear Program

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[1] and IAEA Board of Governors Resolutions.

In September 2009, it became clear that Iran had failed to

4-3 In February 2004, the President of Pakistan Musharraf (then) revealed an involvement of Dr. Khan and others in proliferation of nuclear technologies while denying the involvement of the government of Pakistan. The U.S. President Bush (then) said in a speech in February 2004: "Khan and his associates provided Iran and Libya and North Korea with designs for Pakistan's older centrifuges, as well as designs for more advanced and efficient models. The network also provided these countries with components of centrifuges and, in some cases, with complete centrifuges." It is reported that in September 2005, the then Pakistani President Musharraf stated that the Khan network provided "probably a dozen" centrifuges to Pyongyang. It is also reported that a high court in Pakistan ordered Dr. Khan to refrain from making comment on the nuclear program of the country.

4 In January 2012, "Worldwide Threat Assessment" by the U.S. Director of National Intelligence (DNI) points out that the North's disclosure (of uranium enrichment facilities) supports the United States' longstanding assessment that North Korea has pursued uranium enrichment capability. North Korea also mentioned its implementation of uranium enrichment in a June 2009 Ministry of Foreign Affairs statement, a September 2009 letter sent from the Permanent Representative of the Democratic People's Republic of Korea to the United Nations to the President of the United Nations Security Council, news reports made November 2010, and in other ways.

5 DNI "Worldwide Threat Assessment" by the DNI January 2012 states "North Korea's assistance to Syria in the construction of a nuclear reactor (destroyed in 2007) illustrates the reach of the North's proliferation activities." The International Atomic Energy Agency (IAEA) report of May 2011 states that the destroyed reactor was very likely a nuclear reactor that Syria should have declared it.

6 Extensive behind-the-scenes negotiations began in March 2003 between Libya and the United States and the United Kingdom, and in December 2003, Libya agreed to dismantle all of its weapons of mass destruction and to allow an international organization to carry out inspections. Later, in August 2006, Libya ratified the IAEA Additional Protocol. However, after the military activity against Libya by multilateral force, in March 2011North Korea denounced the military attacks against Libya saying that attacking after disarmament was an "armed invasion."

5-1 U.N. Security Council Resolution (UNSCR) 1696 adopted in July 2006, UNSCR 1737 in December 2006, UNSCR 1747 in March 2007, UNSCR 1803 in March 2008, and UNSCR 1929 in June 2010. Resolutions 1737, 1747, 1803 and 1929 oblige the prevention of the supply, sell, or transfer to Iran of materials and technology that could contribute to Iran's enrichment, reprocessing, or heavy water-related activities or to the development of nuclear weapon delivery systems, and oblige a freeze on financial assets of persons or entities supporting Iran's proliferation-sensitive nuclear activities or the development of nuclear weapon delivery systems. These resolutions also include: preventing the supply, sale, or transfer of equipment such as battle tanks, combat aircraft, or missile systems to Iran; prohibiting any activity related to ballistic missiles capable of delivering nuclear weapons (including launches using ballistic missile technology); calling upon all States to inspect all cargo to and from Iran in their territory if it has information that provides reasonable grounds to believe the cargo contains items the supply, sale, transfer, or export of which is prohibited; noting that States may request inspections of vessels on the high seas with the consent of the flag State; and calling upon States to take appropriate measures that prohibit in their territories the opening of new branches of Iranian banks if they have information that provides reasonable grounds to believe that these activities could contribute to Iran's proliferation-sensitive nuclear activities or the development of nuclear weapon delivery systems.

abide by reporting duties based on the Safeguards Agreement with the IAEA and was constructing a new uranium enrichment plant near Qom in central Iran[2]. Moreover, in February 2010, Iran began enriching uranium to increase the enrichment level from below 5% to up to 20%, saying that it is to supply fuel to a research reactor for medical isotope production. And in December 2011, Iran started the enrichment process at the above-mentioned new enrichment plant[3]. The IAEA has expressed concerns that these Iranian nuclear development activities may have military dimensions including those related to the development of a nuclear payload for a missile[4], and they point out that they have been unable to obtain confirmation that the objectives are peaceful since Iran has not provided the IAEA with an access to military sites, which could be relevant to experiments using high explosives, and other necessary cooperation to clear up concerns above.

To deal with this issue, the United States and the European Union (EU) have taken individual measures to tighten sanctions against Iran. The United States enacted a bill that would prohibit foreign financial institutions, which conduct significant transaction with the Central Bank of Iran or another Iranian financial institution, from opening or maintaining bank accounts in the U.S.[5]. The EU decided to ban imports of Iranian crude oil and petroleum products in January 2012[6]. Iran, meanwhile, has intensified diplomatic bargaining[7]: accepting IAEA inspectors[8]and resuming talks with EU3+3 (U.K. France, Germany, U.S. China, and Russia) on its nuclear program[9], while alluding to the possibility of closing the Strait of Hormuz[10]. The international community, including the U.N. Security Council, continues to pursue peaceful and diplomatic solution to this issue through negotiation.

Although there is no significant sign of military escalation in Iran and surrounding region, Iranian Navy conducted military training in the surrounding waters, including the Strait of Hormuz from December 2011 to January 2012, while the U.S has maintained its naval presence in the surrounding waters.

Peace and stability in the Middle East is critical for Japan because, for example, around 80% of its crude oil import is from the region. Thus, it is necessary to continue paying close attention to this issue.

2 The U.S. assesses that the size and configuration of this facility is inconsistent with a peaceful program. Iranians began this facility with the intent that it be secret, but secrecy of the facility was compromised, so they came to believe that the value of the facility as a secret one was no longer valid and declare it to the IAEA (The Background Briefing by Senior Administration Officials on Iranian Nuclear Facility in September 2009, and the statements by U.S. President Obama, then French President Sarkozy, and then British Prime Minister Brown on Iranian Nuclear Facility in September 2009).

3 The May 2012 IAEA report by the Director General estimated that by May 2012 Iran had produced a total of 145.6kg of uranium enriched up to 20%. U-235 enriched to 20% or higher is considered highly enriched uranium, and is usually used for research purposes. For use in weapons, the same material is enriched to 90% or higher.
The report also stated the results of analysis of samples taken at the uranium enrichment facility near Qom showed the presence of particles with enrichment levels of up to 27% U-235, which are higher than the level stated by Iran. Iran indicated that the production of such particles above the target value may happen for technical reasons beyond the operator's control. The IAEA requested further details and took further samples from the site, which are currently being analyzed.

4 In November 2011, the IAEA released a report listing the details of the possibility of military dimensions of Iran's nuclear program, such as the presence of information on initiation of high explosives. The U.S. published its assessment as follows: "Iranian military entities were working under government direction to develop nuclear weapons. In fall 2003, Tehran halted its nuclear weapons program. Tehran at a minimum is keeping open the option to develop nuclear weapons." (National Intelligence Estimates, National Intelligence Conference, December 2007; Worldwide Threat Assessment, Director of National Intelligence, January 2012).

5 It is applied to any financial transaction on or after the date that is 180 days after the date of the enactment of the Act (December 31, 2011). It includes a clause providing an exception from sanctions in the case where a foreign country has significantly reduced its volume of crude oil purchases from Iran.

6 Already concluded contracts can still be executed until July 1, 2012.

7 In his State of the Union Address in January 2012, President Obama stated that America was determined to prevent Iran from getting a nuclear weapon and he would take no options off the table to achieve that goal, while a peaceful resolution was still possible and far better. Israeli Defense Minister, Ehud Barak, is reported to have said in February 2012 that if sanctions on Iran failed to stop Iran's nuclear program, there would be a need to consider taking actions, while Israel would continue supporting the international community to work toward halting Iran's nuclear program without taking any option off the table.

8 The IAEA held talks with Iran in an effort to solve the outstanding issues on Iran's nuclear program in January, February and May of 2012.

9 The talks between Iran and EU3+3 had been suspended after the one in Turkey in January 2011. It resumed in Turkey in April 2012 for the first time in 15 months and they have agreed that the NPT would be a key basis for future negotiations. Subsequent meetings were held in Iraq in May 2012 and in Russia in June 2012, but Catherine Ashton, High Representative of the EU for Foreign Affairs and Security Policy, said in statements that there were significant gaps between both parties' positions. Successive talks are to be held.

10 Iran's Navy commander is reported to have told in December 2011 that Iran had comprehensive control over the Strait of Hormuz and closing the Strait of Hormuz would be easier than drinking a glass of water.