Section 2. 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 (including radioactive materials).

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 1966¹⁹ from having nuclear weapons, and required nuclear-armed countries to control and reduce nuclear weapons through bilateral negotiations²⁰.

The NPT is currently signed by 190 countries²¹. While some countries that had previously possessed nuclear weapons became signatories of this treaty by abandoning these weapons²², other countries still refuse to sign this treaty²³. 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. (See Reference 1) (See Chapter 2, Section2)

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 attack²⁴.

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 weapons²⁵.

As for chemical weapons, Iraq repeatedly used mustard gas, tabun and sarin²⁶ in the Iran-Iraq War. In the late 1980s, Iraq used chemical weapons to suppress Iraqi Kurds²⁷. It is believed that other chemical weapons²⁸ included VX, a highly toxic nerve agent, and easy-to-manage binary rounds²⁹.

North Korea is, for example, one of the countries seeking such weapons. The Tokyo subway sarin attack in 1995, as well as incidents of anthrax bacillus being contained in a mail item in the United States in 2001 and those of ricin being contained in a mail item in February 2004, have showed 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 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 procure³⁰. Although the speed of a cruise missile is slower than that of a ballistic missile, it is difficult to detect when the cruise missile is launched and while in flight³¹. 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. (See Reference 2)

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 chance 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 bomb³² 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 entities³³.

Pakistan is suspected to have started its nuclear program in the 1970's. 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 scientists³⁴. 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) Director-General Mohammad El Baradei stated that this network reportedly involves more than 30 countries³⁵.

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 uranium-based nuclear weapons³⁶. It was also pointed out that North Korea had given support to Syrian secret nuclear activities³⁷. (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 international institutions' inspections or abandoning their WMD programs altogether.³⁸



The Iranian Shahab-3 medium-range ballistic missile [EPA/JIJI]

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 of North Korea³⁹. It has been reported that Ukraine illegally exported cruise missiles capable of carrying nuclear warheads to Iran and China around 2001⁴⁰.

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 a large-scale uranium enrichment facility was exposed by a group of dissidents. Subsequent IAEA inspection revealed that Iran, without notifying the IAEA for a long time, had engaged in uranium enrichment and other activities potentially leading to the development of nuclear weapons. In September 2005, the IAEA Board of Governors found Iran's breach of compliance with the NPT Safeguards Agreement in its resolution.

The international community expressed strong concerns about the lack of concrete proof regarding Iran's claim that it has no intent to develop nuclear weapons and that all of its nuclear activities are 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 are engaging for the settlement of the issue, Iran suspended its enrichment-related activities. However, in August 2005, it resumed uranium conversion activities - a precursor 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 U.S., China and Russia (EU3+3) agreed and presented to Iran a comprehensive proposal, including possible cooperation in the event that Iran sufficiently resolves the international concerns⁴¹. However, Iran continued its nuclear activities. In response to these actions by Iran, the Security Council in July 2006 adopted Resolution 1696 demanding Iran suspend all of its uranium enrichment-related and reprocessing activities. The Security Council thereafter adopted a series of resolutions⁴² to impose stricter sanctions in accordance with Article 41, Chapter VII of the U.N. Charter⁴³.

However, Iran's nuclear issue remains unresolved⁴⁴. For example, IAEA Director-General Mohammad ElBaradei stated in the IAEA Board of Governors Meeting in March 2009 that Iran continues to be engaged in uranium enrichment activities. The international community including the U.N. Security Council is continuing to pursue peaceful and diplomatic solutions through negotiations.