Section 2. Transfer and Proliferation of Weapons of Mass Destruction

The transfer or proliferation of weapons of mass destruction, such as nuclear, biological or chemical weapons (NBC), or ballistic missiles carrying such weapons has been regarded as a significant threat since the end of the Cold War. In particular, there have been growing threats 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 1966 from having nuclear weapons, and required nuclear-armed countries to control and reduce nuclear weapons through bilateral negotiations.

Under the NPT signed by 190 countries, the United States, Russia, the United Kingdom, France, and China are designated as nuclear-armed countries. While some countries that previously had nuclear weapons became signatories of this treaty by abandoning these weapons, some countries still refuse to sign this treaty. In addition to the five countries permitted to have nuclear weapons, there are other countries that have declared the development and possession of nuclear weapons. North Korea announced it had conducted a nuclear test in October 2006.

2. Biological and Chemical Weapons

It is easy to manufacture biological and chemical weapons at a relatively low cost. Because most of the materials, equipment and technology needed to manufacture these weapons can be used for both military and civilian purposes, it is also easy to disguise them. Accordingly, biological and chemical weapons are attractive to states or terrorists who seek asymmetric means of attack.

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 pressures, and 5) they can cause heavy casualties depending on circumstances and the type of weapons.

As for chemical weapons, asphyxiants such as phosgene have been known since World War I. In the Iran-Iraq War, Iraq repeatedly used mustard gas as an erosion agent and tabun and sarin as nerve agents against Iran. In the late 1980s, Iraq used chemical weapons to suppress Iraqi Kurds. Other chemical weapons include VX, a highly toxic nerve agent, and easy-to-manage binary rounds.

North Korea (See Chapter 2, Section 2) is one country seeking such weapons. The Tokyo subway sarin attack in 1995, and mail incidents in the United States containing anthrax bacillus in 2001 and ricin 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 can carry heavy payloads over long distances and can be used as a means of projecting weapons of mass destruction, such as nuclear, biological or 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 procure. 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 flight. Because cruise missiles are smaller than ballistic missiles, they can be concealed on a ship to secretly approach a target. Furthermore, a cruise missile carrying a weapon of mass destruction could present an enormous threat.

4. Growing Concerns about Transfer or Proliferation of WMDs

Weapons that were originally purchased or developed for self-defense purposes could be easily exported or transferred once domestic manufacturing became 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 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 it is unlikely that such states can 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. Terrorists without related technology can use a dirty bomb as a means of attack once acquiring a radioactive substance.

There are shared concerns among countries regarding the acquisition and use of weapons of mass destruction by terrorists and other non-state entities. Based on these concerns, the United Nations Security Council adopted Resolution 1540 in April 2004, declaring that all states should adopt and enforce appropriate and effective laws to prohibit non-state actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using weapons of mass destruction and the means of delivery thereof, as well as to refrain from assisting such non-state actors. (See Chapter 3, Section 3) The International Convention for the Suppression of Acts of Nuclear Terrorism was also adopted by the U.N. General Assembly in April 2005 and entered into force in July 2007.

Activities related to weapons of mass destruction were secretly pursued in some countries. Such activities have come to light since 2002, revealing the fact that nuclear weapon technologies have been transferred and proliferated. Meanwhile, 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 activities related to such weapons, leading some of them to accept inspection by international institutions or to abandon their programs to develop weapons of mass destruction.

When 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 weapons. It was also pointed out that North Korea had given support to Syrian secret nuclear activities. (See Chapter 2, Section 2)

It became clear in 2002 that Iran had been long engaged in uranium enrichment-related activities without a declaration for the IAEA and the international community has made an effort to resolve this issue. (See Section 5)

As a result of behind-the-scenes discussions with the United States and the United Kingdom since March 2003, Libya abandoned all programs of its weapons of mass destruction in December 2003 and accepted inspections by
international organizations. Subsequently, in August 2006, the country ratified the additional IAEA protocol.

Pakistan seems to have launched its nuclear development program in the 1970s, and nuclear-related activities of Iran and Libya have been pointed at to be supported by suspicious technology transfers from Pakistan since 2003. 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 for personal gain. These transfers have been shown to have been secretly conducted using global networks covering Europe, Africa, the Middle East and Southeast Asia. IAEA Director-General Mohammad ElBaradei has reportedly stated that this network involves more than 30 countries.

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. Pakistan’s Ghauri and Iran’s Shahab-3 missiles are said to be based on North Korea’s No-Dong 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 Korea. It has been reported that Ukraine illegally exported cruise missiles capable of carrying nuclear warheads to Iran and China around 2001.

5. Iran’s Nuclear Issue
Since the 1970s Iran has been pursuing a nuclear power plant construction project with cooperation from abroad, stating that its activities would be for peaceful purposes in accordance with the NPT. In 2002, however, it was announced by a group of dissidents that Iran was secretly constructing a large-scale uranium enrichment facility. 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 found Iran’s non compliance with NPT Safeguards Agreement in its resolution. Since Iran’s nuclear activities were revealed, Iran has insisted that it has no intent to develop nuclear weapons and that all of its nuclear activities are for peaceful purposes. On the other hand, the international community has expressed strong concerns about obtaining assurances of Iran’s claims, and has demanded that Iran suspend all of its enrichment related and reprocessing activities until it can confirm that its nuclear development activities are exclusively for peaceful purposes.

The EU-3 (the United Kingdom, France and Germany) held discussions with Iran in hopes of resolving this issue; an accord (the Paris Accord) was reached in November 2004 on issues including the halt of uranium enrichment related activities; and Iran accordingly ceased its nuclear-related activities. However, Iran rejected as unsatisfactory the proposal for a Long-Term Agreement presented by the EU-3 in August 2005, and resumed uranium conversion activities which are at the precursory stage of uranium enrichment. It announced the start of preparations for the resumption of uranium enrichment in January 2006 (Iran resumed uranium enrichment in February). The IAEA then convened an emergency Board of Governors meeting in February 2006 and by a majority vote adopted a resolution to report the issue to the U.N. Security Council. In March 2006, the U.N. Security Council approved a Presidential Statement calling on Iran to halt its uranium enrichment and reprocessing activities, but in April, Iran announced that it had successfully achieved low-grade (3.5%) uranium enrichment and pursued its policy to continue uranium enrichment-related activities.

In June 2006, a comprehensive proposal was presented to Iran as an agreement with the EU-3, and U.S., China and Russia (EU3+3). The proposal included cooperation in the event that Iran sufficiently resolved international concern; however Iran continued its nuclear activities. In view of these responses, the U.N. Security Council in July adopted Resolution 1696 demanding Iran to suspend all of its uranium enrichment-related and reprocessing activities. Since Iran continued its enrichment-related activities, the U.N. Security Council adopted Resolution 1737 in December 2006 and Resolution 1747 in March 2007, followed further by Resolution 1803 in March.
2008, to impose stricter sanctions in accordance with Article 41, Chapter VII of the U.N. Charter. Meanwhile, the U.S. released a National Intelligence Estimate, "Iran: Nuclear Intentions and Capabilities." Judgments of the report included “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.”

Despite the demands by the international community including the U.N. Security Council Resolutions, Iran’s nuclear issue remains unresolved. For example, in April 2008 President Mahmoud Ahmadinejad announced that Iran had started tests of new centrifuges which are five times faster than the present models. The international community including the U.N. Security Council is continuing to pursue peaceful and diplomatic solutions through negotiations in order to resolve the issue.