

Section
6

Transfer and Proliferation of Weapons of Mass Destruction

The transfer and proliferation of weapons of mass destruction (WMDs), such as nuclear, biological and chemical (NBC) weapons, and ballistic missiles that deliver such weapons, have 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 which traditional deterrence works less effectively, could acquire and use WMDs.

1 Nuclear Weapons

During the Cold War, the Cuban Missile Crisis of 1962 raised awareness of the danger of a full-scale nuclear war between the United States and the Soviet Union. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) that took effect in 1970 prohibited countries other than those that exploded a nuclear weapon or other nuclear explosive device in or before 1966¹ from having nuclear weapons, and provided that arms control and disarmament of nuclear forces would be pursued through two-way negotiations.²

The NPT is currently signed by 191 countries and regions.³ While some countries that had previously possessed nuclear weapons became signatories of this treaty as non-nuclear weapon states by abandoning these weapons,⁴ India, Israel, and Pakistan still refuse to accede to this treaty as non-nuclear weapon states. Meanwhile, North Korea has conducted six nuclear tests, and declared the development and possession of nuclear weapons.⁵

The Nuclear Posture Review (NPR) released by the Trump administration in February 2018 states that the United States “remains committed to its efforts in support of the ultimate global elimination of nuclear, biological and chemical weapons.” It also confirms that NPT is a cornerstone of the nuclear non-proliferation regime and that the United States continues to abide by its obligations under the NPT and will work to strengthen the NPT regime.

The Trump administration has expressed its intention to continue to implement the New Strategic Arms Reduction Treaty⁶ that was signed by the presidents of the United States and Russia in April 2010 and took effect in February 2011. However, it has not clarified what to do with the treaty after its scheduled expiration in 2021, including whether to extend it. The United Kingdom stated in the Strategic Defence and Security Review (SDSR) in October 2010 that the country

would decrease the number of its nuclear warheads, and the NSS-SDSR 2015 released in November 2015 confirmed that there is no change in this policy to reduce the number of nuclear warheads.

In the area of “nuclear security” which addresses terrorist activities that utilize nuclear and other radioactive materials, the Nuclear Security Summit that commenced at the proposal of then President Obama has been held on four occasions. The fourth Nuclear Security Summit that was held in Washington, D.C. in March-April 2016 adopted a Communiqué, which shared the recognition that the threat of nuclear terrorism remains an imminent challenge to the international community, and which outlined the need for continuous efforts to prevent nuclear materials from getting into the hands of non-state actors even after the summit.⁷ The Trump administration has indicated it will promote cooperation with allies, partners and international institutions to combat nuclear terrorism.

In February 2019, the Trump administration vowed to suspend the United States’ obligations under the Intermediate-Range Nuclear Forces (INF) Treaty (which is a treaty that was concluded between the United States and the Union of the Soviet Socialist Republics to abolish intermediate- and short-range missiles) with Russia and secede from it in six months for the reason of Russia’s violation of the treaty. Following the announcement of withdrawal by the United States, in March 2019, Russia revealed that it announced to the United States the suspension of Russia’s obligations under the INF Treaty. On August 2, 2019, Secretary of State Pompeo announced that the U.S. withdrawal pursuant to Article XV of the treaty took effect that day because Russia failed to return to full and verified compliance. On the same day, Secretary of Defense Esper announced that the DoD

1 The United States, the then Soviet Union (now Russia), the United Kingdom, France, and China. France and China acceded to 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 May 2019

4 South Africa, Ukraine, Kazakhstan, and Belarus

5 After North Korea announced its withdrawal from the NPT in 1993, it announced that it would temporarily suspend the validity of that announcement. However, in January 2003, North Korea gave a notice of the termination of the suspension. In the Joint Statement of the Six-Party Talks adopted in September 2005, North Korea pledged to return to the NPT at an early date. Nonetheless, North Korea subsequently announced the implementation of six nuclear tests.

6 The treaty stipulates that each country would reduce the number of deployed strategic warheads to 1,550 and the number of deployed delivery vehicles to 700 in seven years following the treaty's entry into force. Both the United States and Russia have claimed that they accomplished the reduction target by February 2018. As of March 2019, the United States had 1,365 deployed strategic nuclear warheads and 656 deployed delivery vehicles, while Russia had 1,461 deployed strategic nuclear warheads and 524 deployed delivery vehicles.

7 At the Nuclear Security Summit, it was confirmed that the IAEA would play a central role in international nuclear security initiatives. Accordingly, the IAEA hosted the International Conference on Nuclear Security in Vienna, Austria in December 2016, which was attended by more than 2,000 people from 130 countries and 17 international organizations and groups.

will fully pursue the development of intermediate-range, conventional, ground-launched cruise and ballistic missile systems, whose test launches, the production and possession have been restricted by the treaty. Meanwhile, Russia confirmed that the treaty ceased to have effect due to the United States' complete withdrawal, and criticized the United States by saying that all the responsibility for escalating tensions across the world will rest with Washington. Furthermore, Russia stated that it is essential to resume full dialogues to safeguard strategic stability and security, and that Russia is open to that.

The future course of the bilateral New Strategic Arms

Reduction Treaty scheduled to expire in 2021 is still uncertain. In this situation, nuclear control and disarmament trends regarding the United States and Russia will have to be watched carefully.⁸ Meanwhile, China is deemed to have increased its inventory of nuclear warheads as well as developed and deployed their means of delivery,⁹ and thereby, continued to enhance the capability of its nuclear force. In the future, it may be important to launch some international arms control and disarmament initiative in a manner to include not only the United States and Russia but also China and others.

2 Biological and Chemical Weapons

Biological and chemical weapons are easy to manufacture at relatively low cost and are easy to disguise as most materials, equipment, and technology needed to manufacture these weapons can be used for both military and civilian purposes. For example, water purification equipment used to desalinate sea water can be exploited to extract bacteria for the production of biological weapons, and sodium cyanide used for the process of metal coating can be abused for the production of chemical weapons.¹⁰ Biological and chemical weapons are attractive to states and non-state actors, such as terrorists, seeking asymmetric means of attack.¹¹

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 mass casualties and injuries depending on the circumstances of use and the type of weapon.¹²

As has been pointed out, advancements in life science could be misused or abused for the development of biological weapons. In view of these concerns, in November 2009,

the United States established guidelines¹³ on responding to the proliferation of biological weapons and their use by terrorists. The guidelines set out that the United States would take measures to ensure the thorough management of pathogens and toxins.¹⁴

As for chemical weapons, Iraq repeatedly used mustard gas, tabun, and sarin¹⁵ in the Iran-Iraq War.¹⁶ It is believed that other chemical weapons¹⁷ that were used included VX, a highly toxic nerve agent, and easy-to-manage binary rounds.¹⁸ In August 2013, sarin was used in the suburbs of Damascus, Syria, where Syrian troops clashed with anti-government groups.¹⁹ The Syrian Government denied using chemical weapons, but entered into the Chemical Weapons Convention (CWC) in line with an agreement between the United States and Russia. Subsequently, international efforts were undertaken for the overseas transfer of chemical agents and other measures based on the decisions made by the Organization for the Prohibition of Chemical Weapons (OPCW)²⁰ and a UN Security Council resolution.²¹ In June 2015, the operation to destroy Syria's sarin, VX gas, and other chemical weapons on the U.S. Navy transport vessel

8 In May 2019, at a joint press conference after the U.S.-Russia foreign ministers' meeting, U.S. Secretary of State Pompeo stated that the United States and Russia had agreed to hold consultations on arms control in a broader range of fields in addition to the extension of the New Strategic Arms Reduction Treaty. At the U.S.-Russia summit meeting held in June 2019, the leaders confirmed that the two countries will continue discussion to establish a new framework for disarmament. It is reported that President Trump insisted that China should join the framework.

9 See Part I, Chapter 2, Section 2-2 for China's ballistic missile development

10 The export of related dual-use items and technologies that can be used to develop and produce these biological and chemical weapons is controlled by the domestic laws of member states, including Japan, pursuant to the framework for international export control of the Australia Group.

11 They refer to means of attack to strike an adversary's vulnerable points and are not conventional means. They include WMDs, ballistic missiles, terrorist attacks, and cyber attacks

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

13 In November 2009, the National Strategy for Countering Biological Threats was released. It presents guidelines on responding to the proliferation of biological weapons and their use by terrorists. In the State of the Union Address in January 2010, then President Obama said that the United States was launching a new initiative to respond promptly and effectively to bioterrorism and infectious diseases.

14 U.S. Executive Order (July 2, 2010)

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

16 In the late 1980s, Iraq used chemical weapons to suppress Iraqi Kurds. In particular, it has been reported that a chemical weapons attack against a Kurdish village in 1988 killed several thousand people at once.

17 A weapon in which two types of relatively harmless chemicals that serve as ingredients for a chemical agent are contained separately within the weapon. It was devised so that the impact of the firing of the weapon or other action mixes the chemical materials in the warhead, causing a chemical reaction and thereby synthesis of the chemical agent. Binary rounds are easier to store and handle than weapons containing chemical agents from the outset.

18 Iraq joined the Chemical Weapons Convention (CWC) in February 2009

19 "United Nations Mission to Investigate Allegations of the Use of Chemical Weapons in the Syrian Arab Republic: Final Report" (December 12, 2013).

20 (The 33rd and 34th) meeting of the Executive Council of OPCW.

21 UN Security Council Resolution 2118.

Cape Ray was completed.²² In August 2015, in order to identify users of chemical weapons in Syrian civil war, the UN Security Council adopted a resolution that establishes a Joint Investigative Mechanism of the UN and OPCW, and investigations under this mechanism have been carried out. In November 2016, the term of this investigative mechanism was extended for one more year, and efforts have continued to be made to ensure that chemical weapons would not be used ever again by identifying those responsible for the use of chemical weapons. This joint investigation mechanism has specified persons responsible for six incidents of chemical weapons use in Syria. It has been reported that four of these are attributed to the Syrian Army, while the remaining two incidents were initiated by ISIL.^{23, 24} In particular, the report published in October 2017 finds that the Syrian government was responsible for the use of sarin once again in Khan Sheikhun, Syria in April 2017. This investigative mechanism ended its activities in November 2017 after the UN Security Council failed to adopt a resolution to renew its mandate.

Meanwhile, even after this, there continues to be incidents where chemical weapons were used in Syria, as suspicions have been pointed out that chemical weapons were used in Eastern Ghouta in April 2018.²⁵ In the same month, the United States, United Kingdom and France launched missile strikes on chemical weapons related facilities in Syria after they determined the Assad regime had used chemical weapons.²⁶

North Korea is an example of an actor that is still presumed to possess these chemical weapons and which has not entered into the CWC. In addition, 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, showed that the threat of the use of WMDs by terrorists is real and that these weapons could cause serious damage if used in cities. Furthermore, the Malaysian police announced that a VX nerve agent whose production and use are banned by the CWC was found on the body of Kim Jong-nam who was assassinated in February 2017. The United Kingdom criticized Russia over its highly likely involvement in the use of Novichok, a military-grade chemical weapon developed by Russia, in the attack on a former Russian intelligence agent that occurred in the United Kingdom in March 2018. As punishment, countries including European countries and the United States expelled Russian diplomats. In September 2018, the United Kingdom released its joint statement with the United States, France and Germany, emphasizing Russia's involvement in the attack anew by contending that two suspected participants in the attack were identified as officials of the Main Intelligence Directorate of the General Staff of the Armed Forces of the Russian Administration and that the attack could have been approved by top Russian government officials.

3 Ballistic Missiles and Other Missiles

Ballistic missiles enable the projection of heavy payloads over long distances and can be used as a means of delivering WMDs, such as nuclear, biological, and chemical weapons. Once launched, ballistic missiles follow an orbital flight trajectory and fall at a steep angle at high speed. As such, effectively countering them requires a highly accurate interceptor missile system.

The deployment of ballistic missiles in a region where armed conflict is under way runs the risk of intensifying or expanding the conflict. Additionally, it has the risk of further heightening tension in a region where military confrontation is ongoing, leading to the destabilization of that region. Furthermore, ballistic missiles are used as a means of

attacking from a distance or threatening another country that has superior conventional forces.

In recent years, along with the threat of ballistic missiles, analysts have pointed to the threat of cruise missiles as a weapon which is comparatively easy for terrorists and other non-state actors to acquire and which has the potential for proliferation.²⁷ Because cruise missiles are cheaper to produce compared to ballistic missiles and are 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.²⁸ Moreover, because they are smaller than ballistic missiles, cruise missiles can be concealed on a

²² According to OPCW, 600 tons of Category 1 extremely toxic chemical materials, including sarin and VX gas, were disposed of (August 19, 2014, Statement by the OPCW Director-General). In January 2016, OPCW reported that destruction of all of the chemical weapons reported by the Syrian Government was completed.

²³ See Part I, Chapter 3, Section 7 for ISIL.

²⁴ In a report by the joint investigation mechanism (JIM) involving the UN and OPCW, it was determined that the Syrian Government used chlorine gas in Talmenes (April 2014), in Sarmin (March 2015), and in Qmenas (March 2015), and also used sarin in Khan Sheikhun (April 2017). The report also found that ISIL used mustard gas in Marea (August 2015) and in Umm Hawsh (September 2016). The U.S. Director of National Intelligence's "Worldwide Threat Assessment" of February 2016 referred to ISIL's contribution to this incident, and assessed that non-state actors are using chemicals in warfare in Syria.

²⁵ The draft Security Council resolution to establish a UN independent investigative mechanism for identifying users of chemical weapons, proposed by the United States on April 10, 2018, was vetoed by Russia.

²⁶ See Part I, Chapter 3, Section 7 for general information about the Syria situation, including military actions taken by the United States, United Kingdom and France.

²⁷ 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 among other items on cargo ships subject to inspection.

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

ship to secretly approach a target, and present a serious threat

if they carry WMDs in their warheads.²⁹

4 Growing Concerns about Transfer and Proliferation of WMDs and Other Technologies

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 WMDs and related technologies to other states that cannot afford to invest resources in conventional forces and attempt to offset this with WMDs. Some of these states that seek WMDs do not hesitate to put their land and people at risk, and furthermore, due to their weak governance, terrorist organizations are active in their countries. Therefore, it is conceivable that in general, the possibility of actual use of WMDs would increase.

Moreover, since it is uncertain whether such states can effectively manage the related technology and materials, there is a concern that chemical or nuclear substances will be transferred or smuggled out from these states with high likelihood. For example, there is a danger that even terrorists who do not possess related technologies would use a dirty bomb³⁰ as a means of terrorist attack so long as they gain access to radioactive materials. Nations across the world share concerns regarding the acquisition and use of WMDs by terrorists and other non-state actors.³¹

The proliferation of WMDs and other related technologies has been noted in numerous instances. For example, in February 2004, it came to light that nuclear-related technologies, mainly uranium enrichment technology, had been transferred to North Korea, Iran, and Libya by Dr. A.Q. Khan and other scientists in Pakistan. It has also been suggested that North Korea supported Syria's secret nuclear activities.³²

Furthermore, there has been significant transfer and proliferation of ballistic missiles that serve as the means of delivery of WMDs. The former Soviet Union and other countries 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 addition, Pakistan's Ghauri and Iran's Shahab-3 missiles are said to be based on North Korea's Nodong missiles. Furthermore, North Korea is alleged to have provided conventional arms and ballistic missiles to the Houthis of Yemen, have sent ballistic missile engineers to Syria, have transferred special tiles used for chemical weapon production facilities to Syria, and have continued military relations with Myanmar, including ballistic missile system trade.³³

North Korea has made rapid strides in the development of its ballistic missiles with only a few test launches. It is believed that an underlying factor of this fact was North Korea's imports of various materials and technologies from outside of the country. It is also noted that North Korea transfers and proliferates ballistic missile airframes and related technologies, and that it promotes the further development of missiles using funds procured by such transfer and proliferation.³⁴

The international community's uncompromising and decisive stance against the transfer and proliferation of WMDs and other technologies has put significant pressure on countries engaged in related activities, leading some of them to accept inspections by international organizations or abandon their WMD and other programs altogether.³⁵ Meanwhile, it is pointed out that, in recent years, states in which proliferation is a concern have sustained their proliferation activities by averting international monitoring, through illicitly exporting WMDs and other technologies overseas by falsifying documentation, diversifying transport routes, and utilizing multiple front companies and intermediaries. Additionally, intangible transfer of technology has arisen as a cause for concern. Namely, those states have obtained advanced technologies which could be adapted for the development and manufacturing of WMDs and other technologies via their nationals—researchers and

²⁹ The MDR 2019 released by the DoD vowed to counter threats posed by ICBM missiles under development by North Korea as well as Russian and Chinese ballistic missiles, hypersonic weapons and cruise missiles to the United States and its allies.

³⁰ Dirty bombs are intended to cause radioactive contamination by spreading radioactive materials.

³¹ Based on these concerns, the UN Security Council adopted Resolution 1540 in April 2004, which sets forth the decision that all UN member states would refrain from providing support to non-state actors that attempt to develop, acquire, manufacture, possess, transport, transfer, or use WMDs and their means of delivery, as well as adopt and enforce laws that are appropriate and effective for prohibiting these activities. The International Convention for the Suppression of Acts of Nuclear Terrorism also entered into force in July 2007.

³² DNI "Worldwide Threat Assessment" from January 2014 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 IAEA report of May 2011 states that the destroyed building was very likely a nuclear reactor that Syria should have declared to the IAEA.

³³ Reports released by the Panel of Experts of the UN Security Council Democratic People's Republic of Korea (DPRK) Sanctions Committee in March 2018 and March 2019

³⁴ In addition, concerning the proliferation of WMDs and ballistic missiles by North Korea, the "Worldwide Threat Assessment" of the U.S. Director of National Intelligence of January 2014 pointed out that "North Korea's export of ballistic missiles and associated materials to several countries, including Iran and Syria, and its assistance to Syria's construction of a nuclear reactor, destroyed in 2007, illustrate the reach of its proliferation activities." Moreover, the report titled "Military and Security Developments Involving the Democratic People's Republic of Korea," which was submitted by the U.S. DoD to Congress in May 2018, pointed out that missile and other weapon sales have become a key foreign currency revenue source and that North Korea uses various techniques to circumvent measures taken by each country on the basis of UN Security Council resolutions, including sending cargo through multiple front companies and intermediaries.

³⁵ Extensive behind-the-scenes negotiations began in March 2003 among Libya, the United States and the United Kingdom. In December 2003, Libya agreed to dismantle all of its WMDs and to accept inspections by an international organization. Later, in August 2006, Libya ratified the IAEA Additional Protocol. Meanwhile, after the military campaign against Libya by a multinational force, in March 2011, North Korea denounced the military attacks against Libya, saying that attacking after disarmament was an "armed invasion."

students who have been dispatched to leading companies and

academic institutions in developed countries.³⁶

5 Iran's Nuclear Issues

The nuclear issues of Iran are a serious challenge to the international non-proliferation regime. In 2002, it was 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. Since 2003, Iran has continued with its uranium enrichment activities despite resolutions adopted by the IAEA Board and the UN Security Council urging Iran to stop its uranium enrichment and other activities.

However, with Hassan Rouhani winning the presidential election in Iran in June 2013, the discussions with the E3+3 (the United Kingdom, France, Germany, the United States, China, and Russia) were advanced, resulting in the announcement of the Joint Plan of Action (JPOA) towards the comprehensive resolution of nuclear issues in November 2013. The execution of the first step measures of the JPOA commenced in January 2014.³⁷

On April 2, 2015, consultations held in Lausanne, Switzerland, resulted in an agreement regarding the key parameters of the final agreement. On July 14, 2015, the final agreement concerning the nuclear issues of Iran, the Joint Comprehensive Plan of Action (JCPOA), was announced in Vienna. Following this, on July 20, 2015, UN Security Council Resolution 2231 approving the JCPOA was adopted. In the agreement, it was decided that Iran would reduce its enriched uranium stockpile and number of centrifuges, ban the production of weapons grade plutonium, and accept IAEA inspections, among other measures, in exchange for ending the sanctions of previous UN Security Council resolutions and the U.S. and EU's nuclear-related sanctions.³⁸

On January 16, 2016, the IAEA released a report confirming Iran's completion of the necessary preparatory steps to start the implementation of the JCPOA. Accordingly, the United States suspended its nuclear-related sanctions against Iran.

In addition, the EU terminated some of its sanctions, and the sanctions imposed by previous UN Security Council resolutions concerning the nuclear issues of Iran ended, in accordance with UN Security Council Resolution 2231.

Subsequently, the IAEA has repeatedly confirmed that Iran is complying with the agreement. However, in May 2018, President Trump pointed out that with the current agreement, Iran can still be on the verge of a nuclear breakout in a short period of time even if Iran fully complies with the agreement, and also the agreement fails to address Iran's development of ballistic missiles. He then announced that the United States will withdraw from the agreement. In November 2018, the Trump administration resumed all sanctions that had been lifted under JCPOA³⁹ and emphasized its readiness to cut a more comprehensive deal with Iran, urging Iran to sit down on the negotiating table. Meanwhile, Iran opposed the sanction resumption by the United States and announced in May 2019 that it would not observe some of the obligations under JCPOA, while denying an intention to withdraw from JCPOA. In response, the United States made clear its intention to impose new sanctions against Iran in fields such as steel and aluminum. In the same month, in order to respond to threats from Iran to the U.S. forces and interests, the United States deployed an aircraft carrier strike group, a bomber task force, and others to the U.S. Central Command, which raised tensions between the two countries.⁴⁰ In this situation, the EU, the United Kingdom, Germany and France urged Iran to avoid further steps away from JCPOA, and to keep compliance with JCPOA. Meanwhile, Prime Minister Abe visited Iran from June 12 to 14, 2019. He had meetings with President Rouhani and Supreme Leader Khamenei, and encouraged them to ease tensions and stabilize the situation. It is necessary to keep a close watch on future developments regarding the Iran situation.

³⁶ The February 2016 report of the Panel of Experts of the UN Security Council DPRK Sanctions Committee states that over the past 20 years since 1996, North Korea has dispatched more than 30 engineers to the Centre for Space Science and Technology Education in Asia and the Pacific, which receives technical support from the UN Office for Outer Space Affairs. These engineers participate in research programs concerning topics such as satellite communications, space science and atmospheric chemistry, and satellite navigation systems. The report notes that such knowhow regarding space science and satellite systems contributes to improving North Korea's ballistic missile technology.

³⁷ First step measures include the limited relaxation of sanctions by the E3+3, provided that for six months, Iran: (1) retains half of its existing uranium enriched to approximately 20% as oxide and dilutes the remaining half to less than 5%; (2) does not enrich uranium over 5%; (3) does not advance activities at uranium enrichment facilities and heavy water reactors; (4) accepts enhanced monitoring by the IAEA.

³⁸ The major nuclear-related restrictions on Iran in the JCPOA include the following: with regard to uranium enrichment, limiting the number of centrifuges for uranium enrichment to 5,060 or less, keeping the level of uranium enrichment at up to 3.67%, and restricting Iran's enriched uranium stockpile to 300 kg; and with regard to plutonium production, redesigning and rebuilding the Arak heavy water reactor to not produce weapons grade plutonium, and shipping spent fuel out of Iran, and not engaging in reprocessing spent fuel including R&D and not constructing reprocessing facilities. According to then U.S. Secretary of State Kerry, with this agreement Iran's breakout time (the time it takes to manufacture nuclear fuel for a single nuclear weapon) will be extended from 90 days or less before the JCPOA to a year or more. Furthermore, the JCPOA is an agreement pertaining to nuclear issues and does not suspend or lift sanctions related to international terrorism, missiles, human rights, among other issues. In response, Prime Minister Benjamin Netanyahu of Israel, in his address to the UN General Assembly in October 2015, strongly criticized the Iranian nuclear agreement for making war more likely. In the United States, while the Republican Party that makes up the majority of Congress had been opposed to the agreement, the motion of disapproval was not supported by two-thirds majority vote of both the House of Representatives and the Senate necessary to override the President's veto. Thus, the disapproval of the agreement was avoided.

³⁹ The sanctions include a ban on the Iranian government's purchases of U.S. dollars, a prohibition on purchases of oil, petroleum products and petrochemical products from Iran, and a ban on transactions with Iranian financial institutions, including the central bank. In May 2019, Significant Reduction Exceptions, which relate to a ban on some countries and regions' purchase of Iranian oil, etc., were also abolished.

⁴⁰ In June 2019, commercial vessels, including one related to Japan, were attacked near the Straits of Hormuz. While the United States pointed out that Iran or its proxy was responsible for the attacks, Iran denied it. In the same month, a U.S. drone was shot down by an Iranian surface-to-air missile over the Straits of Hormuz. The United States insisted that the drone was shot down over international airspace, while Iran insisted that the drone intruded into Iran's territorial airspace.