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Progress in Nuclear Disarmament during the 50 Years of the NPT

*Mitsuru KUROSAWA**

Abstract

The purpose of this paper is to examine and evaluate the progress in nuclear disarmament in the 50 years since the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) entered into force. Article 6 of the treaty stipulates the obligation to pursue negotiations on nuclear disarmament. First, this paper analyzes and evaluates the bilateral treaties signed between the United States and the Soviet Union or Russia. Second, it analyzes and evaluates the signed multilateral treaties. Third, it examines the performance and outcome of the review conferences held every five years to review the operation of the treaty. Finally, it concludes that although 10 treaties were signed and the number of strategic offensive arms was substantially reduced, the results were insufficient.

Introduction

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) entered into force on March 5, 1970. The NPT has three pillars: nuclear non-proliferation, nuclear disarmament, and peaceful uses of nuclear energy. This is a grand bargain between the nuclear-weapon states and non-nuclear weapon states. On nuclear disarmament, Article 6 of the treaty stipulates that each of the parties undertakes to pursue negotiations in good faith on effective measures relating to cessation of nuclear arms race at an early date and to nuclear disarmament.

The purpose of this paper is to examine and evaluate the progress in nuclear disarmament in the last 50 years. The main research question is “Has the obligation under Article 6 of the NPT been implemented?” Since 1970, 10 treaties on nuclear disarmament, which will be examined here, were signed. The content, parties, and status of the 10 treaties are all different.

First, this paper will analyze and evaluate the bilateral treaties between the United States and the Soviet Union or its successor, the Russian Federation, by dividing them into three categories: SALT, INF, and START negotiations. Second,

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it will analyze and evaluate multilateral treaties: the CTBT and the TPNW. Third, it will survey the role of the NPT review conferences that have been held every five years to review the operation of the treaty in implementing the nuclear disarmament obligations. Finally, it will assess how far nuclear disarmament has progressed over the last 50 years.

I Bilateral Treaties

1 Strategic Arms Limitation Talks (SALT)

The SALT process was launched by the US president on the day the NPT was signed, and the negotiations started soon afterward. The first and most critical issue was how to deal with offensive arms and defensive arms. Based on the theory of mutual assured destruction (MAD), they agreed first to make the ABM Treaty of an unlimited duration. This means that without restrictions on defensive arms, it is impossible to negotiate limitations on offensive arms. This initial agreement was a particularly good starting point that built a foundation from which further negotiations on offensive arms would become possible.

There were some background reasons why it was possible to start the SALT negotiations at that juncture. First, from a strategic point of view, the condition of a rough parity between the US and the Soviet Union was confirmed. Second, from a political point of view, Article 6 of the NPT requires the parties to the NPT to work toward nuclear disarmament. Third, from a technical point of view, the verification of treaty obligations by satellites became available for them.¹⁾

(1) ABM Treaty

The Treaty on the Limitation of Anti-Ballistic Missile Systems provides in Article 1 that each party undertakes not to deploy ABM systems to defend the territory of its country. As an exception to this fundamental rule, the treaty permits each side to have one limited ABM system to protect its capital and another to protect an ICBM launch area. This provision was further restricted by permitting only one of them in the 1974 protocol. In addition, precise quantitative and qualitative limits are imposed on the ABM systems that may be deployed. The parties also agreed to limit the qualitative improvement of their ABM technology. Further, to decrease the pressures of technical change and its unsettling impact on the strategic balance, the treaty prohibits development, testing, or deployment of sea-based, air-based, or space-based ABM systems.

1) William C. Foster, "Strategic Weapons: Prospects for Arms Control," *Foreign Affairs* 47, no. 3 (April 1969): 413.

The ABM Treaty is considered an exceptionally good starting point for the future limitation and reduction of nuclear weapons, as it would prohibit a further nuclear arms race that would occur as defensive and offensive arms are interdependent.

(2) SALT I Interim Agreement

The Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms is valid only for five years, and its scope is also limited. The agreement essentially freezes the number of strategic ballistic missile launchers at the existing levels. The number of intercontinental ballistic missiles (ICBMs) is limited to 1,054 for the US and 1,618 for the Soviet Union. The limits on launchers for submarine-launched ballistic missiles (SLBMs) and modern ballistic missile submarines are 710 SLBM launchers on 44 ballistic missile submarines for the US and 950 SLBM launchers on 62 modern nuclear-powered submarines for the Soviet Union.

This is the first provisional step for five years, and both countries have a strong desire to continue negotiations for further limitations by covering all strategic offensive arms. The limitations of the agreement are not strict enough from a military point of view, but from a political point of view, it is a good start for strengthening strategic stability between the two states.

(3) SALT II Treaty

The SALT II Treaty, whose basic principles were agreed to at the Vladivostok meeting in November 1974, was signed in June 1979. First, it provides for an equal aggregate limit on the number of strategic nuclear delivery vehicles: ICBM and SLBM launchers, heavy bombers, and air-to-surface ballistic missiles (ASBMs). This ceiling was initially set at 2,400 and was to be lowered to 2,250 at the end of 1981.

Second, it has a special limitation on multiple independently-targetable reentry vehicles (MIRVs), namely an equal aggregate limit of 1,320 on the total number of launchers of MIRVed missiles and heavy bombers with long-range cruise missiles, an equal aggregate limit of 1,200 on the total number of launchers of MIRVed ballistic missiles, and an equal aggregate limit of 820 on launchers of MIRVed ICBMs.

The limitation on the total number of delivery systems is the ability to maintain the current level or reduce it to a lower level. However, the limitation of the MIRVed delivery vehicles is higher than the current level, permitting an already planned increase.

The significance of the SALT II Treaty is that, first, it includes all three pillars

of strategic delivery systems, and second, the same numerical limit is imposed on both countries. Furthermore, it is the first agreement to provide for the reduction of delivery systems. The Soviet Union must eliminate 254 delivery systems, and the US must eliminate 33 delivery systems.

However, from the viewpoint of the termination of the nuclear arms race or nuclear disarmament, as the limitation on the MIRVed systems is set higher than the current level, the number of MIRVed systems would substantially increase.

The Stockholm International Peace Research Institute analyzed the situation thus: “The SALT II Agreement has a relatively small impact on the nuclear forces of the USA and the USSR. For the most part, the ceiling set by the treaty will allow the relevant military programmes on both sides to continue with only minor restrictions.”²⁾

In January 1980, US president Jimmy Carter asked the Senate to delay the consideration of the treaty in view of the Soviet invasion of Afghanistan. As a result, the treaty did not enter into force, but both governments politically abided by the treaty regulations.

2 Intermediate-Range Nuclear Forces (INF) Negotiations

In the late 1970s, the INF issue attracted particular attention because the parity on strategic weapons systems was established between the US and the Soviet Union, the Soviet Union deployed new and big SS-20 missiles, and the US did not pay much attention to the security interests of Western European states. In November 1979, the NATO adopted a “dual track” strategy; one track was to start arms control negotiations, and the other track was to deploy intermediate-range nuclear weapons in Western Europe.

In 1985, President Reagan and General Secretary Gorbachev made a joint statement that a nuclear war could not be won and must never be fought. At the 1986 Reykjavik summit, they agreed to the total elimination of intermediate-range nuclear forces and the reduction to 6,000 of the warheads of strategic offensive nuclear weapons. However, President Reagan’s insistence on pursuing the Strategic Defense Initiative (SDI) prevented such agreements from being independently agreed upon.

On December 8, 1987, they signed the Intermediate-Range Nuclear Forces (INF) Treaty. It requires the destruction within three years of both sides’ ground-

2) Stockholm International Peace Research Institute, *SIPRI Yearbook on World Armaments and Disarmament 1980*, 240.

launched ballistic and cruise missiles with ranges of 500–5,500 km, their launchers, and associated support structures and support equipment. The number of destroyed missiles is 866 for the US and 1,752 for the Soviet Union, and the number of destroyed missile launchers is 283 for the US and 845 for the Soviet Union. The treaty also provides extremely strict verification measures mainly based on on-site inspection. It entered into force on June 1, 1988, and was completely implemented within three years.

From a military point of view, this treaty eliminated intermediate-range missiles, rather than limiting them as the SALT agreements did. It had significant importance from a political point of view, by changing the nature of US-Soviet relations from confrontation to cooperation, producing *détente* in the international community, and leading to the end of the Cold War.

3 Strategic Arms Reduction Talks (START)

(1) START Treaty

President Reagan expressed his intention to negotiate a deep reduction in the number of strategic arms and called these negotiations the “Strategic Arms Reduction Talks” (START) in November 1981. Although nuclear and space negotiations started in March 1985, the two sides were not able to sign the treaty during the Reagan administration.

The new administration of President George H. W. Bush signed the START Treaty with President Gorbachev on July 31, 1991. Article II sets forth the central limits: 1,600 deployed ICBMs and SLBMs and heavy bombers, including 154 deployed heavy ICBMs; 6,000 warheads attributed to deployed ICBMs and SLBMs and heavy bombers; 4,900 attributed to ICBMs and SLBMs; 1,100 attributed to mobile ICBMs; and 1,540 attributed to deployed heavy ICBMs. It also provides extremely strict measures for verification, including 13 types of on-site inspection.

To take into account the breakup of the Soviet Union, the Lisbon Protocol was signed by the US, the Russian Federation, Kazakhstan, Ukraine, and Belarus on May 23, 1992. Then the START Treaty entered into force on December 5, 1994.

This is the first treaty to substantially reduce nuclear warheads as well as nuclear delivery systems with strict verification measures. As the first step towards nuclear reduction, this treaty occupies a key position.

(2) START II Treaty

On January 3, 1993, President Bush and President Yeltsin signed the START II Treaty, which required them to reduce their nuclear delivery systems and warheads by January 1, 2003. Article I provides for the reduction in two stages to a

level of 3,000 to 3,500 warheads attributable to deployed ICBMs, SLBMs, and heavy bombers. Within such limitations, SLBMs are limited to 1,750, MIRVed ICBMs are limited to zero, and heavy ICBMs are limited to zero. Article II provides for the elimination or conversion of all MIRVed ICBMs to single-warhead ICBMs.

The significance of the treaty is that, first, it provides for the substantial reduction of warheads by two-thirds as it counts the real number of warheads, and second, it provides for the total elimination of MIRVed ICBMs.

At the summit meeting in March 1997, in a joint statement, President Clinton and President Yeltsin agreed that they would start negotiations of the START III Treaty when the START II Treaty entered into force, and they would agree to reduce the number of strategic nuclear warheads to 2,000–2,500 by December 31, 2007.

One of the critical issues that prevented the treaty's ratification by Russia was the development of theater missile defense (TMD) by the US. There were some agreed statements between the two states, and the Duma decided to ratify the treaty. However, in the end, the US withdrawal from the ABM Treaty prevented it from entering into force. As a result, there were no negotiations on the START III Treaty.

(3) SORT Treaty

In 2001, US President George W. Bush argued that it was necessary to go over the ABM Treaty and deeply reduce nuclear weapons unilaterally. At the summit meeting with President Putin, he offered to reduce the number of US strategic nuclear warheads to a level of between 1,700 and 2,200 over the next decade. As President Putin asked that the agreement be made into a treaty, President Bush agreed to codify his pledge in a formal legally binding agreement. The Strategic Offensive Reductions Treaty (SORT) was signed on May 4, 2002.

Article 1 states that each party shall reduce and limit strategic nuclear warheads, so that by December 31, 2012, the aggregate number of such warheads does not exceed 1,700–2,200 for each party.

This formal international treaty legally binds the two parties. However, the content of the obligations is expressed only in Article 1. There is no common definition of nuclear warheads, while each side uses a different definition. There is no rule for counting nuclear warheads. There is no provision for verification. The US understands that this treaty is what the US intended to do unilaterally. The treaty lacks the indispensable elements for disarmament, which are irreversibility, verifiability, and transparency.

The SORT Treaty is dealt with here for convenience as it regulates strategic

offensive arms, but the treaty is independent from and not included in the START process.

(4) New Strategic Arms Reduction Talks (New START)

President Obama and President Medvedev held the first summit meeting in April 2009 and agreed to start negotiations on the further reduction of strategic offensive arms. On April 9, 2010, they signed the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START Treaty).

Under Article II, each party shall reduce and limit delivery systems and warheads as provided below, so that seven years after the entry into force of this treaty, the aggregate numbers do not exceed:

- (a) 700 for deployed ICBMs, deployed SLBMs, and deployed heavy bombers;
- (b) 1,550 for warheads on deployed ICBMs, warheads on deployed SLBMs, and nuclear warheads counted for deployed heavy bombers;
- (c) 800 for deployed and non-deployed ICBM launchers, deployed and non-deployed SLBM launchers, and deployed and non-deployed heavy bombers.

Compared with the START Treaty, the deployed delivery systems are reduced from 1,600 to 700, and the warheads are reduced from 6,000 to 1,550.

The treaty provides for the two types of on-site inspection. Each party shall have the right to conduct Type One inspections at ICBM bases, submarine bases, and air bases. The purpose is to confirm the accuracy of the declared data on the numbers and types of deployed and non-deployed strategic arms and number of warheads. It can be performed 10 times a year.

Type Two inspections shall be conducted at various facilities to confirm the accuracy of the declared data of non-deployed strategic offensive arms. These inspections can be performed eight times a year.

The first significant feature of the treaty is that nuclear disarmament negotiations have returned to a central place in international politics. Ivan Oelrich states, “Whatever the actual reductions mandated by the treaty—and they are modest—it was vital to get the United States and Russia talking about nuclear weapons again.”³⁾

The second significant feature is the content of the treaty: a 30 percent

3) Ivan Oelrich, “Hardly a Jump START,” FAS Strategic Security Blog, March 29, 2010. <http://www.fas.org/blog/ssp/2010/03/hardly-a-jump-start.php>

reduction of nuclear warheads, and a deep reduction of delivery systems from the level of the START Treaty. The third element is that it provides for strict verification and inspection measures, and the fourth is that the US and Russia show evidence that they are implementing the obligations of Article 6 of the NPT.

Steven Pifer states that the new START Treaty offers significant benefits for US national security, noting that (i) it reduces the potential threat and makes the US more secure, (ii) the treaty provides transparency and predictability regarding Russian strategic forces, (iii) the US reduces them but maintains a strong and effective deterrent; (iv) the new treaty will bolster the basic bargaining of the NPT, (v) it contributes to resetting relations with Russia, and (vi) it sets the stage for further reductions.⁴⁾

4 Evaluation of the Bilateral Negotiations

(1) Strategic Offensive Arms

The negotiations of the limitation and reduction of strategic offensive arms have been conducted continuously through the negotiations of the SALT I Interim Agreement, the SALT II Treaty, the START Treaty, the START II Treaty, and the New START Treaty for nearly 50 years. This record of continuous negotiations of the SALT/START process should be praised and highly valued. In particular, the SALT process was transferred to the START process, and the START process reduced the number of warheads for the US and Russia from about 12,000 for each to 1,550 for each after the end of the Cold War.

This process succeeded in substantively reducing the number of strategic offensive arms. Although the SALT II Treaty did not enter into force because of the Soviet invasion of Afghanistan, and the START II Treaty did not enter into force because of the US withdrawal from the ABM Treaty, the process continued, as the parties followed the regulations and the next steps were agreed upon later.

The current issue of the extension of the New START Treaty is critical for the future course of nuclear disarmament and will affect the future of further reductions of strategic offensive arms. Russia argues that the treaty should be extended for five years, as provided for in the treaty. On the other hand, the US Trump administration originally argued for new conditions, namely that China should join the negotiations, thus making them tripartite negotiations. After meeting with strong opposition from China, the US withdrew this condition. Then

4) Steven Pifer, "New START: Good News for U.S. Security," *Arms Control Today* 40, no. 4 (May 2010): 8–14.

the US introduced new conditions stating that the negotiations should include non-strategic nuclear weapons and should include more stringent verification measures.

However, new President Joseph Biden will agree to extent the treaty, as he have strongly supported the extension of the treaty during his Presidential campaign.

(2) Strategic Defensive Arms

The first treaty concluded under the SALT/START process was concerned with strategic defensive arms, that is, the ABM Treaty. The preamble of the treaty considers that “effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons.”

The entry into force of the ABM Treaty was an extremely useful and effective measure for the strategic stability between the two states and the realization of mutual assured destruction theory. As a result, this treaty should be highly valued as a starting point for the subsequent SALT/START process.

During the bilateral negotiations in the late 1980s, General Secretary Gorbachev flatly refused to accept President Reagan’s SDI, although they agreed to a strategic arms reduction, which was later signed as the START Treaty.

Accordingly, President George W. Bush’s decision to unilaterally withdraw from the ABM Treaty in 2002 seems to have been a serious miscalculation that stopped the START process and invited an intense nuclear arms race. In fact, Russia prevented the entry into force of the START II Treaty, although Russia had ratified it. Then the START process was forced to stop for a while.

The New START Treaty of 2011 also emphasizes the interrelationship between offensive and defensive arms, as the preamble recognizes “the existence of the interrelationship between strategic offensive arms and strategic defensive arms, and that this interrelationship will become more important as strategic nuclear arms are reduced.”

Even now, President Putin states, “The withdrawal of the United States from the Anti-Ballistic Missile Treaty in 2002 forced Russia to start developing hypersonic weapons. We had to create these weapons in response to the deployment of the US strategic missile defense systems, which was capable of actually neutralizing our entire nuclear potential in the future.”⁵⁾

5) “Putin Says Russia Had to Create Hypersonic Weapons after US’ Pullout from ABM Treaty,” *Newsdesk*, September 19, 2020. <https://www.almasdarnews.com/article/putin-says-russia-had-to-create-hypersonic-weapons-after-us-pullout-from-abm-treaty>

The unilateral US withdrawal from the ABM Treaty by President Bush in 2002 still has extraordinarily strong repercussions. The fundamental policy on which Bush depended was “unilateralism.” This means that the US will do whatever it wants, with no regard to the opinion of other states and taking into consideration only its own short-term, selfish interests.

Trump argued for an “America First” policy, which was quite similar to Bush’s “unilateralism.” Presidents Trump and Bush have both rejected international interests, international cooperation, international law, and international organizations, and have pursued national interests in a short-sighted way. Furthermore, Trump also advocated much stronger military forces, particularly a new and wide-ranging space policy that he says would intercept and destroy any coming missile, including ballistic, cruise, and hypersonic missiles. It will only encourage nuclear arms races that need to be stopped as soon as possible.

(3) INF Treaty

The bilateral relations between the US and the Soviet Union in the early 1980s were sharply confrontational, as the US deployed many intermediate-range nuclear missiles in Western Europe to achieve parity with the Soviet Union. Since 1985, General Secretary Gorbachev radically changed the Soviet Union’s domestic policies and changed its international policies from confrontation to cooperation. President Reagan also adopted an attitude of cooperation. This was an important factor in the conclusion of the INF Treaty.

The two sides could not agree on the SDI program that President Reagan strongly clung to. However, they agreed to separate the two issues, so the INF Treaty was signed. The other reason for success came from Soviet concessions in some parts, including the type of weapons that were to be included, the number of missiles that were to be destroyed, and the area where the treaty was to be applied.

This historical event became possible because the two leaders were sincerely willing to cooperate in reducing nuclear weapons. Gorbachev in particular introduced new ideas such as perestroika and his new international policy with cooperation and concessions.

The INF Treaty was an epochal event that transformed international relations, particularly between the US and the Soviet Union, from confrontation to détente and cooperation. This was one of the most important events that ended the Cold War era.

From not only the military but also the political point of view, the INF Treaty should be highly valued for its contribution to international peace and security, including the total elimination of a class of nuclear weapons and the introduction

of the post-Cold War era. In three years, as provided for in the treaty, all intermediate-range missiles were destroyed.

Thirty years later, the Trump administration decided to withdraw unilaterally from the treaty on the grounds that Russia was developing and deploying the missiles that were prohibited under the treaty. Russia accused the US of violating the INF Treaty, as the Aegis Ashore system deployed in Europe could be easily changed to offensive intermediate-range missiles.

Unfortunately, the US made the statement on withdrawal without consulting with Russia, and now is developing and deploying missiles that were prohibited under the INF Treaty. Russia is also responsible for this outcome, as Russia did not respond positively to US criticism of Russia's violation. Relations between the two states are now confrontational in all aspects. One of the reasons is that the Trump administration behaves based on the principle of "America First," which means the US pursues its short-sighted national interest and abandons international interests and cooperation through international law or international organizations.

II Multilateral Treaties

1 CTBT

The start of the negotiations of the CTBT (Comprehensive Nuclear-Test-Ban Treaty) has been one of the most important measures to implement the obligations set down in Article 6 of the NPT since its entry into force. The CTBT was the most important measure during the discussions at the first four NPT review conferences from 1975 to 1990.

The negotiations of the CTBT started in 1994 because the Cold War ended around 1990, and the 1995 NPT review conference had to decide how to extend the duration of the NPT. The states in the Non-Aligned Movement (NAM) argued that signing the CTBT was a precondition for the indefinite extension of the NPT, and the nuclear-weapon states recognized that some progress in nuclear disarmament was necessary to realize the indefinite extension.

At the 1995 NPT review conference, the completion of the negotiations on CTBT no later than 1996 was agreed upon as one of the disarmament measures as a package deal with the decision to indefinitely extend the treaty.

During the negotiations, issues were discussed such as nuclear explosions for peaceful purposes, tests for safety and reliability, hydronuclear tests, the preparation of tests, the closure of test sites, and tests without an explosion. The president of the conference submitted a draft treaty in May 1996 for the first time, Article 1 of which provides for the following (which was later adopted in the

CTBT):

Each State Party undertakes not to carry out any nuclear weapon test explosion or any other nuclear explosion and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control⁶⁾.

The basic obligation of the CTBT is to prohibit nuclear weapon test explosions or any other nuclear explosion comprehensively and in any place. The treaty establishes the Comprehensive Nuclear Test-Ban Treaty Organization (CTBTO) to achieve the objectives and purposes of this treaty and ensure the implementation of its provisions. The CTBTO consists of the Conference of the State Parties, the Executive Council, and the Technical Secretariat. The verification regime consists of the international monitoring system, consultation and clarification, and on-site inspection. On-site inspection will be conducted with affirmative votes of 30 states among 51 members of the Executive Council.

The CTBT enters into force according to a unique method. The nuclear-weapon states generally considered the treaty to be a non-proliferation measure rather than a nuclear disarmament measure. They then decided that ratification by Israel, India, and Pakistan should be indispensable for the entry into force of the treaty. As a result, the treaty lists 44 states that are members of the Conference on Disarmament (CD) and possess a power reactor or research reactor and must ratify the treaty for it to enter into force. On the other hand, the NAM states argued that the CTBT must deal with both nuclear non-proliferation and nuclear disarmament.

2 TPNW

The Treaty on the Prohibition of Nuclear Weapons (TPNW) was signed at the UN conference on July 7, 2017. The two main elements that promoted treaty negotiations were the adoption of a humanitarian approach to nuclear disarmament and the lack of progress in nuclear disarmament with nuclear arms race among nuclear-weapon states. The TPNW is different from other nuclear disarmament treaties in the way that it was made. The negotiations were started mainly by non-nuclear-weapon states at the United Nations conference, which bases its decisions on a majority vote. Usually, negotiations are conducted by the initiative of the nuclear-weapon states and based on the rule of consensus.

The concept of security under the treaty is different from the traditional one. In traditional thinking, security refers to the national and military security of each

6) Chairman of the ad hoc Committee of a Nuclear Test Ban, Working Paper, Draft Comprehensive Nuclear Test-Ban Treaty, CD/NTB/WP.330, 28 May 1996.

state. However, the security under the TPNW is comprehensive security for all humanity, which means it includes not only military but also human, humanitarian, environmental, and other types of security.

In December 2016, the UN General Assembly adopted a resolution that “decides to convene in 2017 a United Nations Conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination.”

In the first session in March, the participants mainly discussed the principles and objectives that were to be included in the preamble and the fundamental obligations on actions that were to be prohibited. In the second session in June and July, the negotiations continued with the president of the conference presenting some draft treaties. On July 7, the draft treaty⁷⁾ was adopted, with 122 states supporting, one opposing, and one abstaining.

Under the treaty, each state party undertakes never under any circumstance to:

- (a) Develop, test, produce, manufacture, otherwise acquire, possess, or stockpile nuclear weapons;
- (b) Transfer nuclear weapons;
- (c) Receive nuclear weapons;
- (d) Use or threaten to use nuclear weapons;
- (e) Assist, encourage, or induce to engage in any activities prohibited;
- (f) Seek or receive any assistance to engage in any activities prohibited;
- (g) Allow any stationing of nuclear weapons in its territory.

The treaty, if compared with the contents of the obligations of the NPT, prohibits the use or the threat of using nuclear weapons or the stationing of nuclear weapons on one’s territory. It prohibits the testing of nuclear weapons, which is a much wider mandate than the CTBT, which prohibits only nuclear weapons test explosions.

The principal obligation of the treaty is the “prohibition” of certain activities concerning nuclear weapons, but it does not provide for the “destruction” or “elimination” of nuclear weapons directly. The treaty entered into force on January 22, 2021, 90 days after 50 states ratified the treaty.

7) Treaty on the Prohibition of Nuclear Weapons, A/CONF.229/2017/8, June 7, 2017. <https://www.undocs.org/A/CONF.229/2017/8>

3 Evaluation of the Multilateral Treaties

(1) CTBT

The CTBT was signed in September 1996 following the decision at the 1995 NPT Review and Extension Conference. It should be praised as an event of historic importance for nuclear disarmament. Since then, none of the nuclear-weapons states—the United States, the Russian Federation, the United Kingdom, France, and China—have conducted nuclear test explosions. Three of them, excluding the US and China, have ratified the treaty. The US and China should work for the ratification of the treaty.

On the other hand, from the viewpoint of nuclear non-proliferation, non-NPT states such as India, Pakistan, and North Korea have conducted nuclear tests. Thus it can be said that the CTBT's mission of non-proliferation has not succeeded.

The fact that the CTBT has been signed by many states, including all nuclear-weapon states, should be highly valued, because even a signatory state is obliged to refrain from the acts that would defeat the object and purpose of the treaty.

However, achieving the entry into force of this treaty is a challenge, especially compared to other disarmament-related treaties. For the treaty to enter into force, all 44 states listed in Annex II must ratify it. At present, the United States, China, India, Pakistan, Israel, Egypt, Iran, and North Korea have not ratified it. Accomplishing this in the near future would be extremely difficult. First, the US should ratify it, and then China should follow. Second, the security situation in South Asia must be improved before India and Pakistan will sign and ratify it. Third, the Middle East must be more peaceful before Israel, Egypt, and Iran will ratify it. Finally, peace on the Korean Peninsula is necessary before North Korea will sign and ratify it.

(2) TPNW

The TPNW entered into force in January 2021, when 50 states ratified it, and became a legally binding rule of international law.

The key aspect of the treaty is the division and confrontation between its supporters and opponents. Treaty negotiations were initiated and conducted by non-nuclear-weapon states, whose security does not depend on nuclear weapons. The opponents are the nuclear-weapon states and the non-nuclear-weapon states whose security depends on nuclear weapons, that is, so-called “nuclear umbrella states.”

The first criticism of the opponents is that the treaty serves no purpose, as the nuclear-weapons states would not join the treaty, and not even one nuclear weapon would be reduced. Second, this treaty is not acceptable because it has never taken into account the national security dimension. The third is that the treaty jeopardizes

the NPT and the NPT regime, which is the linchpin of international peace and security.

The response by the proponents to the first point is that the purpose of the treaty is not to reduce the number of nuclear weapons but to stigmatize and delegitimize them in the longer term. The response to the second point is that the supporters argue for a wider sense of security, including the security of humanity, which is the existence of humanity itself. The response to the third point is that the treaty itself is the implementation of the obligation under Article 6 of the NPT.

Divisions and confrontation mainly arise from the differences in the approach to nuclear disarmament. The opponents support the traditional approach, which emphasizes national and military security and strategic stability. However, proponents argue for the humanitarian approach, which emphasizes the existence of humanity itself.

In addition, opponents oppose and reject the TPNW, but proponents do not oppose and reject the NPT and other existing treaties. The argument by opponents is exclusive, but the argument by proponents is inclusive. The two approaches are not necessarily confrontational, and the two approaches should be pursued in parallel in the interest of progress in nuclear disarmament.

However, the traditional approach has not produced either a new bilateral treaty in almost 10 years or a new multilateral treaty in almost 25 years.

From this practical point of view, the conclusion of TPNW should be highly appreciated. Although it entered into force, the work is not complete; its supporters need to keep trying to increase the number of treaty parties and sway public opinion to change government attitudes.

(3) Other Multilateral Treaties

Only two multilateral treaties exist. The TPNW entered into force, but the CTBT will not in the near future, although almost 25 years have passed since it was adopted and signed. This situation is deeply regrettable from the viewpoint of the implementation of Article 6 of the NPT during the last 50 years.

The 1995 NPT Review and Extension Conference cites the following three measures as important for the full realization and effective implementation of Article 6:

- (a) The completion of the negotiations on the CTBT no later than 1996.
 - (b) The immediate commencement and early conclusion of negotiations on a Fissile Material Cutoff Treaty (FMCT).
 - (c) The determined pursuit of efforts to reduce nuclear weapons globally.
- The CTBT was concluded, and efforts to reduce nuclear weapons have been

pursued, but the negotiations on a FMCT have made no progress. The main reason for this is that Pakistan has strongly opposed the start of the negotiations at the CD, where all issues, including the procedural ones concerning matters such as whether to start negotiations, are to be decided by consensus. This means that each state has veto power. The problem here is not only the voting system at the CD but also the fact that there have not been many efforts to look for other options to start negotiations.

For example, in the case of the CTBT negotiations at the CD, as India opposed the draft treaty, the CD could not adopt it because of the consensus rule. However, Australia submitted the same draft treaty to the United Nations for the negotiations, although it was irregular. The UN General Assembly discussed the draft treaty and adopted it by a majority vote, according to the rules of the UN General Assembly. This means that the alternative method was pursued, and the treaty was formally adopted.

The lesson here is that although in the case of nuclear-disarmament-related treaties, it is preferable to decide by consensus, we should look for other methods by which to adopt a treaty. Methods without a consensus rule have a higher possibility of resulting in a successful adoption of a FMCT. The TPNW was adopted by a majority rule at the UN Conference despite strong opposition from the nuclear-weapon states and other states under the nuclear umbrella who refused to participate in the negotiations.

III NPT Review Conferences

Article 8, paragraph 3 of the NPT provides that a conference of parties shall be held in order to review the operation of this treaty with a view to assuring that the purposes of the preamble and the provisions are being realized. At the 1995 review conference, this review process was strengthened. The review conference should be held every five years for four weeks. The preparatory committee should hold for two weeks in each of the three years prior to the review conference, and the review conference should look forward as well as back.

The fact that such a long time is allotted for the review process reflects the fact that its process is extremely important for international peace and security, and every issue should be discussed here. The conference consists of three main committees: the first committee for nuclear disarmament, the second committee for non-proliferation, and the third committee for peaceful uses of nuclear energy.

Nine review conferences have been held so far, and the three conferences can be said to have succeeded in agreeing on final documents in 1995, 2000, and 2010.

1 1975–1990 Review Conferences

At the review conferences during the first 20 years when the ABM Treaty and the SALT I Interim Agreement were ratified, the SALT II Treaty was signed, and the INF Treaty was ratified, the US and the Soviet Union stated that they were making efforts toward nuclear disarmament, and they argued that they were implementing their obligations under Article 6 in good faith.

However, the non-nuclear-weapon states, particularly the NAM states, argued very strongly for beginning CTBT negotiations early. The nuclear-weapon states refused to start it. CTBT has been the most critical issue at these conferences. The attitude of both sides was very confrontational. This is the main reason why the first four review conferences did not yield any positive results.

2 1995 Review Conference

In the first half of the 1990s, the START Treaty entered into force, the START II Treaty was signed, and the CTBT negotiations started, following the end of the Cold War. The 1995 conference was not only a review conference but also an extension conference to decide how to extend the NPT.

The conference decided to extend the treaty indefinitely as a package with the adoption of the two documents. One is “Strengthening the Review Process for the Treaty,” and the other is “Principles and Objectives for Nuclear Non-Proliferation and Disarmament.” In addition, the conference adopted a resolution on the Middle East.⁸⁾

The document on principles and objectives for nuclear non-proliferation and disarmament includes seven topics: universality, non-proliferation, nuclear disarmament, nuclear-weapon-free zones, security assurances, safeguards, and peaceful uses of nuclear energy.

On nuclear disarmament, it provides that the achievement of the following measures is important for the full realization and effective implementation of Article 6:

- (a) The completion of the negotiations on a universal, internationally, and effectively verifiable CTBT no later than 1996
- (b) Immediate commencement and early conclusion on the negotiations on a non-discriminatory and universally applicable convention on a FMCT

8) NPT/CONF.1995/32 (Part 1), 1995, 1995 NPT Review and Extension Conference, Final Document Part 1. <https://documents-dds-ny.un.org/UNDOC/GEN/N95/176/PDF/N9517816.pdf?OpenElement>

- (c) The determined pursuit by the nuclear-weapon states of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons.

The conference succeeded in strengthening the legal basis of non-proliferation by extending the treaty indefinitely. On the other hand, the disarmament aspect was settled by the political agreement to make efforts for it, although non-nuclear-weapon states had argued for the strong connection between the decision of the extension and the strict obligations on nuclear disarmament.

3 2000 Review Conference

The CTBT was adopted in 1996, but negotiations on a FMCT did not start, and no progress was made in the reduction of nuclear weapons. There was no progress in the START process, and the US Senate rejected the ratification of the CTBT.

At the conference, the New Agenda Coalition (NAC), consisting of Ireland, Sweden, New Zealand, Egypt, Brazil, Mexico, and South Africa, played a central role in nuclear disarmament in place of the NAM. The NAC's proposal was more realistic than the NAM's. It argued that the nuclear-weapon states should make an unequivocal undertaking to accomplish the total elimination of nuclear weapons and take measures that lead to nuclear disarmament.

The conference agreed to the following practical measures:

1. Signatures and ratification of the CTBT
2. A moratorium on nuclear-weapon-test explosion
3. Negotiations of a FMCT
4. Establishment of a subsidiary body for nuclear disarmament
5. Application of the principle of irreversibility to nuclear disarmament
6. An unequivocal undertaking to accomplish the total elimination of nuclear weapons
7. The early entry into force of START II
8. The completion of the Trilateral Initiative
9. Steps leading to nuclear disarmament: (i) unilateral reduction of nuclear arsenals, (ii) increased transparency, (iii) further reduction of non-strategic nuclear weapons, (iv) reduction of operational status, (v) a diminishing role of nuclear weapons, (vi) engagement of all nuclear-weapon states in the disarmament process.
10. Disposition of fissile material that is no longer necessary
11. General and complete disarmament

12 Regular report on the implementation of nuclear disarmament

13 The further development of verification capabilities

The 2000 review conference should be highly valued, as it succeeded in adopting the final document by consensus, which included a review of the previous five years on the progress of nuclear disarmament and the measures that needed to be implemented in the coming five years.

4 2005 Review Conference

The US under the Bush administration fervently supported unilateralism instead of multilateralism and ignored international cooperation, international law, and international organizations. In the field of nuclear disarmament, the US strongly opposed the CTBT and unilaterally withdrew from the ABM Treaty.

The conference could not agree on the agenda for two-and-a-half weeks, mainly because the US refused to refer to the undertakings at the previous review conferences, in particular the undertakings agreed at the 2000 review conference, including an unequivocal undertaking to accomplish the total elimination of nuclear weapons.

As a result of this US attitude, the conference could not agree on anything, and it was generally regarded as a complete failure. The president of the conference, Sergio Duarte, stated, “I am very worried about the future and credibility of the NPT, considering the general trend away from multilateralism. If commitments undertaken by states parties under the NPT, regarding both nonproliferation and nuclear disarmament, continue to be perceived as ignored or disregarded, and if there is no common, overriding interest in upholding the treaty, or if states parties come to believe that their security interests are no longer served by the NPT, then the prospects for the treaty look dire indeed.”⁹⁾

5 2010 Review Conference

President Obama stated in April 2009 that he would pursue a world without nuclear weapons, and in April 2010 the New START Treaty was signed. The 2010 review conference was held in this promising atmosphere and succeeded in agreeing on a final document.

The part of the conclusion and the recommendations for follow-on actions dealing with nuclear disarmament includes 22 actions in the following six

9) John du Preez and Sergio Duarte, “Keeping the NPT Together: A Thankless Job in a Climate of Mistrust,” *Nonproliferation Review* 13, no. 1 (March 2006): 13.

categories: (a) principles and objectives, (b) disarmament of nuclear weapons, (c) security assurances, (d) nuclear testing, (e) fissile materials, and (f) other measures in support of nuclear disarmament.

The concrete measures recommended there are reductions in nuclear weapons, early entry into force and full implementation of the New START Treaty, concrete progress on the concrete measures contained in the 2000 final document, ratification of the CTBT, the immediate start of a FMCT, and others.

Alison Kelly states that the outcome is a forward-looking 22-point action plan on nuclear disarmament. She says that its important recommendation to previous undertakings on nuclear disarmament and concrete steps are welcome and that the action plan represents a significant step forward for the NPT regime.¹⁰⁾

However, Shannon Kile is skeptical that substantive success was achieved, stating, “The NAM states parties were particularly critical of what they saw as the failure of the NWS to make sufficient progress towards fulfilling their commitment, codified in Article 6 of the Treaty, to work towards nuclear disarmament.”¹¹⁾

The conference is considered to have been a success, as it was able to adopt a part of the future action plan by consensus. However, it cannot be denied that the contents of the action plans were weakened to reach consensus, and many of the actions mentioned were a repetition of the 2000 final document.

6 2015 Review Conference

The circumstances surrounding the conference were unfavorable: there were no nuclear disarmament negotiations because of the general deterioration of US-Russia relations, nuclear-weapon states were modernizing their arsenals, and Russia was increasing the role of nuclear weapons in its security policy.

One of the central issues in the arguments at the conference was the introduction of a humanitarian approach towards nuclear disarmament. The joint statement prepared by Austria with 159 states argued that (1) awareness of the catastrophic consequences of nuclear weapons must underpin all approaches and efforts towards nuclear disarmament, (2) it is in the interest of the very survival of humanity that nuclear weapons are never used again under any circumstances, and (3) the only way to guarantee that nuclear weapons will never be used again is

10) Allison Kelly, “NPT: Back on Track,” *Arms Control Today* 40, no. 6 (July/August 2010): 23.

11) Shannon N. Kile, “Nuclear Arms Control and Non-Proliferation,” *SIPRI Yearbook 2011: Armaments, Disarmament and International Security* (2011), 381.

through their total elimination.¹²⁾

The other joint statement, prepared by Australia with 26 states, argued that (1) the signatories stress the significance of spreading awareness of the humanitarian impact of nuclear weapons across borders and generations, (2) eliminating nuclear weapons is possible only through substantive and constructive engagement with those states that possess nuclear weapons, and (3) to create the conditions for nuclear disarmament requires the global community to cooperate to address the important security and humanitarian dimensions of nuclear weapons.¹³⁾

The paragraph 1 of the final draft document states the following:

The Conference emphasizes that deep concerns pertaining to the catastrophic humanitarian consequences of any use of nuclear weapons are a key factor that should continue to underpin efforts in the field of nuclear disarmament, and that awareness of these consequences should lend urgency to efforts by all states leading to a world without nuclear weapons. The Conference affirms that, pending the realization of this objective, it is in the interest of humanity and the security of all people that nuclear weapons never be used again¹⁴⁾.

The content of the final draft document on nuclear disarmament mostly repeats the 2010 final document without great progress. The content of the first four drafts included new nuclear disarmament measures, but they were watered down in order to adopt the opinions of the nuclear-weapon states to achieve consensus. Despite these processes, there seemed to be general agreement concerning the part about nuclear disarmament in the final draft document.

However, on the last day of the conference, the final draft document as a whole could not be accepted by consensus; the US, the UK, and Canada expressed opposition to it on the grounds that they could not agree to a zone in the Middle East free of weapons of mass destruction.

Jayanta Dhanapala and Sergio Duarte state, “The long-standing efforts of the international community to forge a realistic, sensible path to achieve nuclear disarmament seem to have hit a dead end. Unless the gap between promises and

12) 2015 NPT Review Conference, General Debate, Statement by Austria, Joint Statement on the Humanitarian Consequences of Nuclear Weapons, 28 April 2015. https://www.un.org/conf/npt/2015/statement/pdf/humanitarian_en.pdf

13) 2015 NPT Review Conference, General Debate, Statement by Australia, Joint Statement on the Humanitarian Consequences of Nuclear Weapons, 30 April 2015. https://www.un.org/en/conf/npt/2015/statement/pdf/HCG_en.pdf

14) 2015NPT Review Conference, Draft Final Document, Volume I, NPT/CONF.2015/R.3

effective measures is filled, the legitimacy, authority, and appeal of the NPT will inexorably wane.”¹⁵⁾

IV Conclusion

This paper attempts to evaluate, 50 years after the NPT entered into force, to what extent the obligations under Article 6 of the NPT have actually been implemented in international relations. For the last 50 years, negotiations on nuclear disarmament have been conducted intermittently, and as a result, 10 treaties were signed.

It is remarkable that so many treaties have been signed. However, three of the 10 treaties have never been ratified and have not entered into force. In addition, two can no longer take effect, as the implementation date has passed. The CTBT has no prospect of entering into force, although 25 years have passed since it was signed.

It is deeply regrettable that the US has unilaterally withdrawn from the two ratified bilateral treaties. One is President Bush’s withdrawal from the ABM Treaty in 2002, and the other is President Trump’s withdrawal from the INF Treaty in 2018. Bush’s slogan was “Unilateralism,” and Trump’s slogan was “America First.” The two presidents have both pursued a strictly defined national interest that is short-sighted and strongly opposed international interest, international law, international organizations, and international cooperation.

Six of the 10 treaties deal with strategic offensive arms between the US and the Soviet Union or Russia. Although two of them did not enter into force, these six treaties should be treated as one continuous long-term process. Under the SALT negotiations, the SALT I Interim Agreement and the SALT II Treaty provided for the limitation or freeze of the offensive arms. Under the START negotiations, the number of warheads has been reduced from 12,000 to 6,000, 3,000–3,500, 1,700–2,200, and finally, 1,550. These processes should be highly appreciated for their continuous reduction of strategic nuclear offensive warheads. The SORT Treaty should not be understood as being included in the START process. Rather, the basic agreement of the START III Treaty should be considered.

The START process has succeeded in reducing the number of nuclear warheads for nearly 30 years. However, under the Trump administration, the process risks encountering discontinuity, as the New START will expire on

15) Jayantha Dhanapala and Sergio Duarte, “Is There a Future for the NPT?” *Arms Control Today* 45, no. 6 (July/August 2015): 10.

February 5, 2021, unless the two parties agree to extend it.

New US President Joseph Biden have argued for the extension of the treaty during the Presidential campaign, and it is expected that the treaty will be extended for five years and new negotiations on the further reduction of strategic arms between the US and Russia will soon start.

It is the good news that recently the TPNW entered into force, but the division and confrontation between the supporters and the opponents will continue. The supporters must work hard to increase the contracting states of the treaty and make it more universal.

Article 6 stipulates the effective measures relating to cessation of arms race “at an early date,” but arms race have not terminated even now. Recently the arms race between the US and Russia as well as between the US and China is getting harsh. They are all modernizing their offensive and defensive arms. As a qualitative measure for the cessation of arms race, the CTBT was concluded but has not entered into force, and as a quantitative measure, a FMCT has not seriously negotiated yet.

This is the final analysis of the current progress in nuclear disarmament during the last 50 years. In summary, the situation remains highly unsatisfactory.

