

YTUMUN24 IAEA STUDY GUIDE

CHAIRBOARD MEMBER Bilel Elarem CHAIRBOARD MEMBER Hassan Al-Emran ACADEMIC ASSISTANT *İrem Meryem Uslu*

#reachforthestars

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I. Letter from Secretary General

Esteemed Participants of YTUMUN'24,

As the Secretary-General of Yildiz Technical University Model United Nations 2024, it is my utmost pleasure to express my warmest welcome to every one of you.

YTUMUN'24 aims to provide a platform for students to engage in diplomatic simulations and discuss pressing global issues. Delegates from all over the world will gather to represent different countries and work towards finding innovative solutions to complex problems. Through lively debates, negotiations, and resolutions, YTUMUN'24 fosters critical thinking, diplomacy, and teamwork among participants.

Our conference has been very well prepared with the contributions of our brilliant and hard working academic team. I am beyond pleased to have worked with every one of them and to have been given the opportunity of coordinating these excellent individuals.

As YTUMUN'24 Academic Team we cannot wait to have you all witness the outcome of our endless effort making the second annual edition of YTUMUN. I hope this conference makes a difference in every related way one can think of. Our goal is to make sure every single participant leaves with so much more than they had come with and widens their vision and perspective on these complex issues which they will be discussing in the committee sessions throughout these 3 days.

I am eagerly looking forward to meet each one of you and wish everyone fruitful debates and success in the upcoming conference. Together, let us be the difference we all are looking for in ourselves and our world. Let us aim high and work cooperatively in order to make this conference memorable. Together, let us reach for the stars.

Best Regards,

Dilay Örüng Secretary-General of YTUMUN'24



II. Letter from the Chairboard:

Dear Delegates,

It is our pleasure to be serving as your chairboards in the IAEA committee in Yildiz Technical University Model United Nations 24.

We can not wait for the exciting debate you will have as this topic is quite heated and almost a century in the making in history and political conflicts. We wish you a fruitful debate and unforgettable experience.

If you have any questions about the committee or any concerns regarding the topic feel free to contact us on our emails: <u>hassankahtan94@yahoo.com</u>, <u>arembile118@gmail.com</u>

Kind Regards,

Bilel Elarem, Hasan Al-emran



III. Introduction to IAEA¹:

The International Atomic Energy Agency is the primary intergovernmental platform for scientific and technological collaboration in the nuclear



sector. It promotes the safe, secure, and peaceful use of nuclear science and technology, therefore contributing to world peace and security and the United Nations' Sustainable Development Goals.

The IAEA was established in 1957 in response to the widespread worries and expectations sparked by nuclear technology discoveries and applications. On December 8, 1953, US President Dwight D. Eisenhower delivered the "Atoms for Peace" speech to the United Nations General Assembly.

The IAEA is directly related with nuclear technology and its debatable applications, whether as a weapon or a practical and beneficial tool. The concepts advocated by President Eisenhower in his 1953 address helped develop the IAEA Statute, which was unanimously ratified by 81 nations in October 1956.

¹ <u>https://www.iaea.org/about/overview/history</u>



IV. Key Terminology:

Nuclear: anything relating to the nucleus of the atom.

Atom: Small particles that contain electrons, protons and neutrons.

Nuclear fission: is the process when a neutron slams into another neutron causing it to split and produce a huge amount of energy, which may in turn cause a chain reaction.

Nuclear fusion: is the process where two small nuclei merge to form a single heavy nuclei, this process also produces high energy which can be seen in Einstein's mass to energy equation.

Nuclear weapons: Weapons of mass destruction (WMD) which some term as "atomic bombs" that take advantage of nuclear processes to produce an explosion of very high energy that can lead to mass destruction.

Radioactive: A material that releases energy in the form of ionizing radiation, which can be highly dangerous to living organisms if exposed to it.

Nuclear proliferation: The spread of nuclear weapons, nuclear weapons technology, or fissile material to countries that do not already possess them.

V. Introduction to the Agenda:

A. Nuclear Weapons:

A nuclear weapon is an explosive device that derives its destructive force from nuclear reactions, either fission or a combination of fission and fusion reactions, producing a nuclear explosion. Both bomb types release large quantities of energy from relatively small amounts of matter. A nuclear device no larger than a conventional bomb can devastate an entire city by blast, fire, and radiation. Since they are weapons of mass destruction, the proliferation of nuclear weapons is a focus of international relations



policy. Because they are weapons of mass destruction, the proliferation and possible use of nuclear weapons are important issues in international relations and diplomacy. In most countries, the use of nuclear force can only be authorized by the head of government or head of state. Despite controls and regulations governing nuclear weapons, there is an inherent danger of "accidents, mistakes, false alarms, blackmail, theft, and sabotage".

B. Impact of Nuclear weapons²:

It can be clearly observed by the aftereffects of dropping a nuclear bomb on the japanese cities that nuclear bombs pose a significant threat to the humankind but it also has enabled many states to gain power and use it to their advantage either ethically or unethically.

1. It strengthens the concept of nationalism from a border-based standpoint:

The truth of human existence is that individuals gravitate toward locations of the world with the most resources available. This pattern of behavior extends back to the Roman Empire and Ancient Egypt. When governments take action to defend their borders, they establish a system of organization that allows for the efficient delivery of necessary products to their population and the rest of the globe. Even if a borderless world appears to be a great notion, borders create an atmosphere in which cultural cooperation becomes essential for existence. It forces us to adopt a diplomatic approach rather than unleashing missiles anytime someone does something we dislike.

2. Nuclear weapons act as a deterrence to world conflict:

The presence of nuclear weapons is one of the key reasons that no world conflict has occurred since the 1940s. Only a few countries possess or share this technology, and the majority of those that do have access to it have less than 100 weapons. The military's deadly capabilities were on full display over Japan at the conclusion of WWII, and no one wants to go through it again. The danger of being overpowered or facing mutually assured destruction is sufficient to deter the world's superpowers from extending a conflict to the point where a military confrontation is required.

3. This technology provides a bargaining chip for governments who seek it:

North Korea has independently developed this capability since the end of the Korean War, allowing it a place at the negotiation table, to the point where President Donald Trump has met with the country's leadership on several occasions. The potential of disaster posed by this technology is so enormous that other nations are forced to listen to what each other has to say. Because there is a desire to prevent the outcomes of Hiroshima and Nagasaki, compromises are frequently given to people in positions of power.

² <u>https://futureofworking.com/6-advantages-and-disadvantages-of-nuclear-weapons/</u>



4. Nuclear weapons mitigate the threat to a country's military forces:

Today's nuclear bombs can travel over 1,000 kilometers and hit a target with pinpoint accuracy. Even governments with "subpar" capability in this area, such as North Korea, may launch missiles powerful enough to threaten the sovereignty of another nation. Russia's Skyfall project proposes fitting a missile with a small nuclear reactor to allow it to run practically endlessly. Because these weapons can be deployed remotely, there is a lower risk of deaths or loss if a launch order is sent. It's not like the 1940s, when bombers carried weaponry and a whole flying crew.

5. Nuclear weapons enabled us to develop new technology in other fields:

Over the years, the principles of fission and fusion have aided in the development of a wide range of technologies in a variety of industries. Nuclear reactors generate around 10% of the world's electricity each year. Nuclear medicine can help detect and cure diseases when traditional treatments are unavailable or ineffective. We use nuclear engines on naval vessels and are investigating this possibility for space travel as well.Many individuals throughout the world are currently reading this information utilizing nuclear technology. The concept of utilizing it as a weapon may be nonsensical, but it does allow us to do good for the human species.

6. One of the most important characteristics of nuclear weapons is their dependability:

Nuclear fission can function continuously for up to three years, making it a very valuable choice for power generation. This benefit is also evident when nuclear weapons are refined. You can deploy a missile on a delivery platform and have it ready to launch for years on standby with no maintenance. It is a technology that boosts a government's preparedness and protective capability while minimizing the threat of conflict through the concepts of mutually assured destruction.

C. Impact of Removal of Nuclear Weapons:

Nuclear disarmament is the act of reducing or eliminating nuclear weapons. Its end state can also be a nuclear-weapons-free world, in which nuclear weapons are completely eliminated. The term denuclearization is also used to describe the process leading to complete nuclear disarmament. Disarmament and non-proliferation treaties have been agreed upon because of the extreme danger intrinsic to nuclear war and the possession of nuclear weapons. Proponents of nuclear disarmament say that it would lessen the probability of nuclear war occurring, especially considering accidents or retaliatory strikes from false alarms. Critics of nuclear disarmament say that it would undermine deterrence and make conventional wars more common.

The usage of nuclear weapons is considered highly immoral and highly dangerous. When a nuclear experiment is conducted, its after effects can be seen decades after the



experiment itself. These consequences could be prevented by the elimination of nuclear weapons. Producing and maintaining a nuclear bomb is pretty expensive, and it takes a large share from the country's budget, money that could have been put to better use. Hostile countries are more likely to have a war in which they may use nuclear bombs against each other, and the result could prove disastrous for the entire planet. The removal of nuclear weapons could prevent these excessive shares from the countries' budget.

Nuclear weapons' security can also be breached by unethical hackers, which may lead to blackmail of governments and extortion. Thus, having a nuclear arsenal also puts governments under attack from many threats whether it is an individual, an organization or even other governments that want to rise to power. It's still of course not easy to breach a government's security but the possibility still exists. But even if nuclear weapons were to be removed, there might be other defensive measures that could threaten world peace.

VI. Historical Overview³:

A. Discovery:

Otto Hahn and Fritz Strassmann of Germany found that hitting uranium with neutrons produced a radioactive barium isotope. The low-speed neutrons caused the uranium nucleus to fission, or split into two smaller pieces; the total atomic numbers of the two pieces—for example, barium and krypton—were equal to those of the uranium nucleus. To confirm this shocking outcome, Hahn forwarded his data to his colleague Lise Meitner, an Austrian Jew who had fled to Sweden. Meitner and her nephew Otto Frisch agreed on the results and recognized the immense energy potential.

In early January 1939, Frisch flew to Copenhagen to brief Danish physicist Niels Bohr of his discoveries. Bohr was ready to embark on a trip to the United States, where he broke the news to colleagues. The discovery sparked studies in several laboratories, and approximately 100 publications about the fascinating phenomena were published before the end of the year. It was discovered that neutrons are created during the fission process; on average, each fissioning atom produces more than two neutrons. If the right quantity of material is formed, these free neutrons may initiate a chain reaction. Under some conditions, an extremely quick chain reaction may result in a massive release of energy—in short, a weapon of incredible power may be possible.

B. The Manhattan Project:

³ <u>https://www.britannica.com/technology/nuclear-weapon</u>



The likelihood that Nazi Germany would be the first to build an atomic weapon frightened many scientists, and Albert Einstein, who was residing in the United States at the time, brought it to the attention of US President Franklin D. Roosevelt. The United States' entry into World War II in December 1941 was critical in supplying finances for a huge research and production effort to produce fissionable materials, and in May 1942, the historic decision was taken to continue concurrently with all promising manufacturing techniques. In mid-June, the task was assigned to the United States Army Corps of Engineers, with Col. James C. Marshall serving as project manager. Soon, an office in New York City was built, and in August, the project was formally named Manhattan Engineer District (Manhattan Project).

Over the summer, Bush and others believed that development was not moving fast enough, and the army was under pressure to find another general who would take more decisive action. Marshall's replacement was Col. Leslie R. Groves. Groves and scientist J. Robert Oppenheimer visited the Los Alamos Ranch School on November 16, about 100 kilometers (60 miles) north of Albuquerque, New Mexico, and Groves accepted it as the location for the primary scientific laboratory, known as Project Y. Groves had chosen the previous month to appoint Oppenheimer as the scientific head of the facility where the weapon would be designed, developed, and finally manufactured.

By 1944, the Manhattan Project was spending more than \$1 billion annually. Trinity was the designation given to the plutonium weapon test, which took place on July 16, 1945, at 5:29:45 a.m. The theorists predicted that the device's energy output, or yield, would be between less than 1,000 tons of TNT and 45,000 tons. The test yielded a yield of around 21,000 tons.

C. Little Boy and Fat Man:

Enola Gay, a lone B-29 bomber, flew over Hiroshima, Japan, on Monday, August 6, 1945, at 8:15 a.m. The experimental uranium-235 gun-assembly bomb, codenamed Little Boy, was airburst 580 meters (1,900 feet) over the city to maximize devastation; it was eventually believed to have produced 15 kilotons. Two-thirds of the city area has been devastated. The population at the time was believed to be 350,000, of which 140,000 perished by the end of the year.

The second weapon, a replica of the plutonium-239 implosion assembly tested in Trinity and called Fat Man, was to be dropped on Kokura on August 11, while a third was being developed in the United States for probable deployment 7 to 10 days later. To prevent severe weather, Fat Man's plans were moved forward two days to August 9. A B-29 called Bockscar flew above Kokura for 45 minutes without sighting its target. The air crew then continued to the secondary target of Nagasaki, where at 11:02 AM, the warhead was airburst at 500 meters (1,650 feet). It was eventually calculated that the explosion



produced 21 kilotons. About half of Nagasaki was destroyed, and approximately 70,000 of the 270,000 people present at the moment of the detonation perished by the end of the year.



D. The Race:

Soviet leader Joseph Stalin had previously approved a nuclear program in 1943, and a year and a half after the Japanese bombs, the Soviet Union completed its first nuclear chain reaction. In 1949, the USSR tested "First Lightening," its first nuclear bomb. Ironically, US policymakers felt that developing a large nuclear arsenal would serve as a deterrence, preventing a third global war by demonstrating that the US could defeat the USSR if it invaded Western Europe. However, as the United States began investing in thermonuclear weapons with hundreds of times the strength of the bombs used to end WWII, the Soviet Union followed suit. In 1961, the Soviet Union tested the "Tsar Bomba," a massive weapon capable of generating a mushroom cloud as tall as Mount Everest and delivering the equivalent of 50 megatons of TNT.

As more nations achieved nuclear capability and the Cold War reached a fever pitch in the late 1950s and early 1960s, an anti-nuclear movement emerged in reaction to a number of nuclear mishaps and weapons tests that resulted in environmental and human casualties. Scientists and the general public began to advocate first for a moratorium on nuclear testing, then for disarmament. Einstein, whose early warning to Roosevelt was intended to avoid rather than initiate nuclear war, was among them. In a 1955 statement, the scientist and a group of intellectuals urged the world to forgo its nuclear weapons. The important matter remained unaddressed. Then, in 1962, allegations of a Soviet armaments buildup



in Cuba sparked the Cuban Missile Crisis, a tense standoff between the United States and the Soviet Union that many thought would result in nuclear catastrophe. In response to activists' worries, the United States and the Soviet Union (later Russia) negotiated a partial test prohibition pact in 1963, followed by a nuclear nonproliferation treaty in 1968, and a series of other accords aimed at limiting the quantity of nuclear weapons.

E. Nuclear Legacy⁴:

Nonetheless, the Federation of American Scientists estimates that the world has 13,410 nuclear weapons in early 2020, down from a high of roughly 70,300 in 1986. The FAS says that Russia and the United States hold 91 percent of all nuclear weapons. The other nuclear powers include France, China, the United Kingdom, Israel, Pakistan, India, and North Korea. Iran is accused of aiming to develop its own nuclear weapons. Despite the hazards of nuclear proliferation, only two nuclear weapons—those dropped on Hiroshima and Nagasaki—have been used in a conflict. Nonetheless, the United Nations Office for Disarmament Affairs states, "The dangers of such weapons arise from their very existence." Seventy-five years after the Trinity test, mankind has so far endured the nuclear age. However, in a world with hundreds of nuclear weapons, ever-changing political alliances, and ongoing geopolitical warfare, the worries expressed by the scientists who created the technology that enables nuclear war remain.

VII. Current Situation:

At present there are 9 countries in the world that possess nuclear weapons. These are: Russia, United States, China, France, United Kingdom, Pakistan, India, Israel and North Korea

⁴ <u>https://www.nationalgeographic.com/history/article/how-advent-nuclear-weapons-changed-history</u>





Together, these 9 states have 12,700 nuclear warheads, of which 9,400 are in active military stockpiles. While this is a significant decline from the approximately 70,000 warheads owned by the nuclear-armed states during the Cold War, nuclear arsenals are expected to grow over the coming decade and today's forces are vastly more capable.

All the nuclear weapons owning countries have not joined the Treaty on the Prohibition of Nuclear Weapons (TPNW) yet and all of them have been voting against an annual UN General Assembly resolution since 2018, except North Korea who has been voting against it since 2020.

Here is an insight on the 9 countries possessing nuclear weapons⁵:

• United States of America:

The only nation to have employed nuclear bombs in combat is the United States. It dropped two atomic bombs over the Japanese cities of Hiroshima and Nagasaki during the closing stages of World War II, instantly or within a few



⁵ <u>https://www.icanw.org/nuclear_arsenals</u>



months of the bombings, killing over 200,000 people.

Many thousands of additional individuals lost their lives to illnesses brought on by radiation exposure from the bombs in the years that followed the bombing. Civilians made up the majority of the victims.

There are about 5,244 nuclear weapons in the United States that can be fired from aircraft, submarines, and missiles. Its missiles, which are intercontinental ballistic, are housed in silos in North Dakota, Wyoming, and Montana.

The US spent an estimated \$43.7 billion in 2022 building and maintaining its nuclear weapons.

Between 1945 and 1992, the United States carried out 1,030 nuclear tests, the majority of which were over the Atlantic Ocean, Alaska, Colorado, Mississippi, New Mexico, the Marshall Islands, and Nevada.

In October 2020 – with the TPNW's entry into force imminent – the United States called on states that had already ratified the treaty to withdraw their support.

In December 2021, the US secretary of state, Antony Blinken, said: "We do not support the Treaty on the Prohibition of Nuclear Weapons. Seeking to ban nuclear weapons through a treaty that does not include any of the countries that actually possess nuclear weapons is not likely to produce any results."

• Russian Federation:

Russia has about 5,889 nuclear warheads that it can fire from aircraft, submarines, and missiles. Russia invested an estimated \$9.6 billion on the development and upkeep of its nuclear weapons in 2022.

Between 1949 and 1990, the former Soviet Union conducted 715 nuclear weapons tests at the Semipalatinsk Test Site in Kazakhstan as well as in present-day Russia and Ukraine.



The minister for foreign affairs of Russia, Sergey Lavrov, said in 2019 that the goal of eliminating nuclear weapons cannot be achieved "by the unilateral and rather arrogant methods on which this document [the TPNW] is based".



• France:

About 290 nuclear warheads are in France's arsenal, which it may fire from submarines or missiles dropped from aircraft. Its submarines are stationed in the French area of Brittany, on the Île Longue peninsula, south of Brest.

the Île Longue peninsula, south of Brest. France invested an estimated US\$5.6 billion in the development and upkeep of its nuclear weapons in 2022.



France carried out 210 nuclear experiments in French Polynesia and Algeria between 1960 and 1996.

In 2022, the French president, Emmanuel Macron, issued a joint statement with his US counterpart, Joe Biden, in which they reaffirmed their opposition to the TPNW, arguing that it does not "reflect the increasingly challenging international security environment and is at odds with the existing non-proliferation and disarmament architecture".

France has actively discouraged other states from joining the TPNW, including Australia and African states that were once under its colonial rule.

• China:

China can fire approximately 410 nuclear warheads from aircraft, submarines, and missiles. It carried out forty-five nuclear tests on its soil between 1964 and 1996.





An estimated \$11.7 billion has been invested in the development and upkeep of its nuclear weapons in 2022.

China declared that it "has always been advocating complete prohibition and thorough destruction of nuclear weapons, which is fundamentally in line with purposes of TPNW" in 2020, following the achievement of the 50 ratifications required for the TPNW to enter into force.

China also stated in 2022 that "the principles of maintaining global strategic stability, undiminished security for all, and gradual nuclear disarmament are countered by the nuclear disarmament process advocated in this resolution [on the TPNW]".

However, China "understands the aspirations and demands of non-nuclear-weapon states to advance nuclear disarmament and endorses the purpose of the TPNW."

• United Kingdom:

About 225 nuclear warheads are in the possession of the United Kingdom, and they are launched from nuclear-capable submarines stationed at Her Majesty's Naval Base off the coast of Scotland. Typically, just one submarine is patrolling at any given time.



For the first time in many years, the United Kingdom said in 2021 that it will raise the cap on the size of its nuclear arsenal. The United Kingdom plans were to raise its nuclear stockpile by 40% to 260 warheads by the mid-2020s, instead of reducing it to 180 weapons as previously envisaged.

The UK spent an estimated US\$6.8 billion in 2022 developing and maintaining its nuclear weapons.

Between 1952 and 1991, the United Kingdom conducted 45 nuclear weapons tests. It carried out up to 600 alleged "minor trials" and 12 nuclear test explosions in Australia



between 1952 and 1963. It conducted 33 nuclear weapons tests at the Kiribati islands of Malden and Kiritimati between 1957 and 1962 (in collaboration with the United States).

• India:

About 164 nuclear weapons are in India's arsenal, which it can deliver by missiles and possibly aircrafts. It might be possible to fire them from submarines as well. Between 1974 and 1998, India has performed three nuclear tests in total.

India invested an estimated US\$2.7 billion in the development and upkeep of its nuclear weapons in 2022.



India stated in 2022 that it will not become a party to the TPNW and will not be obligated by any of the responsibilities that may arise from it, adding that it considers the TPNW "in no way constitutes or contributes to the development of any customary international law."

• Pakistan:

Pakistan possesses approximately 170 nuclear weapons, which it can launch from missiles and aircraft. It is also developing its capability to launch them from submarines. Pakistan conducted two nuclear tests in 1998.

In 2022, Pakistan spent an estimated US\$1 billion to build and maintain its nuclear weapons.



Pakistan made a complaint against the TPNW in 2022, stating that the treaty "neither forms a part of nor contributes to the development of customary international law in any manner," and that it "does not consider itself bound by any of the obligations arising from this treaty." Pakistan also claimed that the TPNW "fails to take on board our legitimate security concerns."

• North Korea:



North Korea possesses approximately 30 nuclear weapons, which it may be able to launch from missiles. It conducted six nuclear tests between 2006 and 2017, and is the only state to have conducted such tests in the 21st century.

In 2022, North Korea spent an estimated US\$589 million to build and maintain its nuclear forces.



In 2016, North Korea voted in the first committee of the UN General Assembly in favor of a draft resolution that established the formal mandate for states to commence negotiations on "a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination".

However, it did not participate in the vote on the same resolution when it was adopted at a plenary meeting of the UN General Assembly later that year.

• Israël:

There are about ninety nuclear weapons in Israel. Little is known about its arsenal because it will not admit or deny possessing such weapons, although it is thought to be able to fire nuclear warheads from aircraft, submarines, and missiles.

Israel invested an estimated US\$1.2 billion in the development and upkeep of its nuclear weapons in 2022.

It's believed that Israel and South Africa tested nuclear weapons in 1979 over the ocean separating Antarctica and southern Africa.

Israel claimed in 2022 that the treaty's negotiations "failed to give due regard to the security and stability context" and expressed "deep reservations" about it "based on substantive as well as procedural considerations."





Apart from the 9 countries possessing nuclear weapons, there are 6 other countries hosting nuclear weapons. The United States holds nuclear weapons in Belgium, Germany, Italy, the Netherlands, and Turkey. Although the US maintains operational authority over these weapons, the US's nuclear war planning is strengthened by their placement in these nations. Belarus's president, Alexander Lukashenko, declared in 2023 that his nation had begun receiving tactical nuclear weapons from Russia.



1 nuclear weapon detonated over NYC would cause 583160 estimated fatalities



By permitting the possible use of nuclear weapons on their behalf as members of defence alliances like the Collective Security Treaty Organisation (CSTO) and the North Atlantic Treaty Organisation (NATO), twenty-eight countries (plus the six hosts) also "endorse" the possession and use of nuclear weapons.

The thirty-four nations that support the use of nuclear weapons are:

Serbia, Bulgaria, Greece, Hungary, Iceland, Italy, Japan, Latvia, Lithuania, Luxembourg, Monténégro, The Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Korea, Spain, Sweden, and Turkiye.

It's important to keep in mind that there are significant movements against nuclear weapons possession from countries such as Ireland, Austria, Brazil, Indonesia, Mexico, Nigeria, South Africa and Thailand, which are the leading countries of the ICAN coalition.

VIII. Past Actions⁶:

In 1946 in its very first resolution, and after the dramatic Hiroshima and Nagasaki bombs, the General Assembly identified nuclear disarmament as a leading goal of the United Nations. Ever since, some notable events followed in:

1963: The Partial Test Ban Treaty, also referred to as the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space, and Underwater, became available for signature after the 1962 Cuban Missile Crisis had put a new focus on long-running talks between the Soviet Union, the United Kingdom, and the United States.

1967 (**Treaty of Tlatelolco**⁷): Latin American Governments became aware of the importance of negotiating the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco), which established the first nuclear weapons-free zone in a highly populated area.

1970: Entry-into-force of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

The Treaty on the Non-Proliferation of Nuclear Weapons, commonly known as the Non-Proliferation Treaty or NPT, is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy, and to further the goal of achieving nuclear disarmament and general and complete disarmament.

As of 2022, there are 191 states parties to the NPT, making it one of the most widely adhered-to arms control agreements.

⁷ <u>https://www.un.org/nwfz/fr/content/treaty-tlatelolco</u>



⁶ UN official website. <u>https://www.un.org/en/observances/nuclear-weapons-elimination-day</u>

1985 (Treaty of Rarotonga⁸): The South Pacific Nuclear Free Zone Treaty, also known as the Treaty of Rarotonga, was made available for signature on August 6, 1985, and it came into effect on December 11, 1986.

The Treaty was only the second nuclear weapons-free zone to take effect in a populated area after the Treaty of Tlatelolco in Latin America. It was the result of the South Pacific's first-hand experience with nuclear weapons testing.

1995 (Bangkok Treaty⁹): The Treaty on the Southeast Asia Nuclear Weapon-Free Zone, also known as the SEANWFZ Treaty or Bangkok Treaty, was signed on 15 December 1995 by ten Southeast Asian States.

1996 (Pelindaba Treaty¹⁰): The African Nuclear-Weapon-Free Zone Treaty, also known as the "Pelindaba Treaty", established the nuclear-weapon-free zone on the African continent.

2006 (**Treaty on a Nuclear-Weapon-Free Zone in Central Asia**¹¹): The Central Asian Nuclear-Weapon-Free Zone (CANWFZ) treaty is a legally binding commitment by Central Asian States (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) not to manufacture, acquire, test, or possess nuclear weapons. The treaty was signed on 8 September 2006 at the former Semipalatinsk nuclear test site in Kazakhstan, hence the Treaty's unofficial name as 'Semipalatinsk Treaty'.

2013: The first-ever high-level meeting on nuclear disarmament was held by the General Assembly. In its resolution 68/32, the General Assembly established September 26 as the International Day for the Total Elimination of Nuclear Weapons.

2021:

22 January: Entry-into-force of the Treaty on the Prohibition of Nuclear Weapons.

The Treaty on the Prohibition of Nuclear Weapons (TPNW)¹² includes a comprehensive set of prohibitions on participating in any nuclear weapon activities. These include undertakings not to develop, test, produce, acquire, possess, stockpile, use or threaten to use nuclear weapons.

3 February: The Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms, also known as "new START"¹³, between the United States

¹³ NTI. Education. Treaties and Regimes. New START. <u>https://shorturl.at/cflE3</u>



⁸ <u>https://www.un.org/nwfz/fr/content/treaty-rarotonga</u>

⁹ <u>https://www.un.org/nwfz/fr/content/treaty-bangkok</u>

¹⁰ <u>https://www.un.org/nwfz/fr/content/treaty-pelindaba</u>

¹¹ <u>https://www.un.org/nwfz/fr/content/treaty-nuclear-weapon-free-zone-central-asia</u>

¹² UN Office of Disarmament Affairs. <u>https://shorturl.at/gzAIU</u>

of America and the Russian Federation has been extended by the Parties until February 4, 2026.

2023: Citing "hostile Western actions against our country," Russian President Vladimir Putin declared on February 21 that Russia would be "suspending" its participation in New START. In an attempt to provide further light on the rationale behind this break, the Ministry of Foreign Affairs claimed that the United States was "seriously violating the fundamental provisions of the treaty on the quantitative restrictions of the parties relevant armaments." The Ministry further asserted that the preamble of the Treaty has been violated by the U.S. actions in Ukraine, which have created an unstable security environment. Nevertheless, the Ministry of Defence declared that Russia would keep up its "strict compliance" with the Treaty's restrictions.

These actions taken has resulted in a Nuclear-Weapon-Free Zone map that looks as follows:



In addition to these notable events, there were of course a lot of other measures taken to achieve global nuclear disarmament or at least ensure the global situation remains stable and moves towards the ultimate goal of a nuclear weapons free world. For instance, some of these measures are:

- the International Campaign to Abolish Nuclear Weapons (ICAN)¹⁴, a coalition of nongovernmental organizations promoting adherence to and implementation of the United Nations nuclear weapon ban treaty.
- The Joint Comprehensive Plan of Action (JCPOA)¹⁵, an agreement that ensures that Iran's nuclear programme will be exclusively peaceful. It lays down the timeline and arrangements for the lifting of nuclear-related sanctions against Iran.
- The Comprehensive Nuclear-Test-Ban Treaty (CTBT)¹⁶, a multilateral treaty opened for signature in 1996 by which states agree to ban all nuclear explosions in all environments, for military or civilian purposes.

IX. Questions to be Answered:

- What are the main obstacles to achieving nuclear disarmament globally?
- How can nuclear weapons be beneficial?
- How can nuclear weapons be harmful?
- Why were nuclear weapons developed hastily?
- How are nuclear non-proliferation and disarmament interconnected?
- What policies can be changed in order to facilitate achieving global nuclear disarmament?
- What agreements can be improved or implemented to achieve nuclear disarmament?
- What verification and monitoring mechanisms are needed for disarmament?
- How can transparency and confidence-building measures facilitate disarmament negotiations?
- What is the role of civil society in promoting nuclear disarmament?
- What concrete steps can be taken to advance nuclear disarmament globally?

¹⁶ CTBT official website. <u>https://www.ctbto.org/our-mission/the-treaty</u>



¹⁴ICAN official website. <u>https://shorturl.at/jpBOR</u>

¹⁵ European Council. Policies. <u>https://shorturl.at/brx19</u>