Forum: Disarmament and International Security Committee (GA1)

Issue: Re-evaluating the effectiveness of nuclear free weapon zones

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#### INTRODUCTION

Nuclear-Weapon-Free Zones (NWFZ) are a crucial regional strategy for bolstering international nuclear non-proliferation and disarmament principles as well as fortifying efforts to promote world peace and security. The Treaties creating NWFZs forbid the purchase, possession, placement, testing, and use of such weapons within the respective jurisdictions of the zones. Thus, States Parties to the Treaties creating NWFZs are working to formalize agreements that would forbid nuclear-armed States from threatening to use or utilizing their nuclear weapons against any nations that are a part of the zones. Nuclear-Weapon-Free Zones are "landmark instruments" that serve as a prime illustration of the cooperation between local, national, and international efforts to achieve a world free of nuclear weapons, according to the Secretary-General's Disarmament Agenda<sup>1</sup>. Nuclear-Weapon-Free Zones shouldn't be viewed as an end in and of itself, but each of these regional accords significantly benefits global efforts to create a more secure and peaceful world.

The establishment of a nuclear weapons-free zone's ultimate objective is to ensure the abolition of nuclear weapons within a certain geographic area; in addition, it is crucial to promote the eradication of the threat of nuclear conflict. States that are a part of a NWFZ commit to neither producing their own nuclear weapons nor hosting any nuclear weapons of others, which helps to improve security in the region. Furthermore, getting security guarantees from nuclear-weapon states enables the region to be protected against nuclear attacks.

In terms of preventing the spread of nuclear weapons, NWFZs can be seen as genuinely reliable measures because they are based on international treaties. In conclusion, as they improve regional – and ultimately global – security, detent, reliance, and they encourage the complete abolition of nuclear weapons, NWFZs play a significant role in nuclear disarmament.

One issue that cannot be ignored is the spread of nuclear weapons. The public benefit and general security are at stake. In this regard, the establishment of new NWFZs is a successful strategy for ensuring regional security, which can then be stitched together into a worldwide

<sup>1</sup> "United Nations Platform for Nuclear-Weapon-Free Zones |." Welcome to the United Nations, www.un.org/nwfz/.

"quilt" of nuclear-weapon-free areas. Focusing on the regional level enables us to ground our thoughts and activities whereas beginning with a global perspective is challenging.

### **DEFINITION OF KEY-TERMS**

#### **Cold War**

Competition between the Soviet Union (USSR) and the United States of America (USA) escalated as World War II changed both countries, transforming them into strong global powers. After the Axis powers were defeated, a political and ideological conflict between the US and the USSR gave place to the beginning of the Cold War.<sup>2</sup>

### **Nuclear Weapon States (NWS)**

Nuclear Weapon States are states that had produced and exploded a nuclear weapon before January 1, 1967.<sup>3</sup>

### Weapons of Mass Destruction (WMDs)

A weapon of mass destruction is a nuclear, radiological, chemical, biological, or other device that is intended to harm a large number of people.<sup>4</sup>

#### **Nuclear Order**

The term "nuclear order" is frequently used to describe the current status of nuclear affairs, in which only a small number of countries are permitted to possess nuclear weapons and which have made long-term commitments to disarm their nuclear arsenals but have not yet done so.<sup>5</sup>

# **Negative security assurances**

A negative security assurance is a guarantee by a nuclear weapon state that it will not use or threaten to use nuclear weapons against non-nuclear weapon states<sup>6</sup>.

<sup>&</sup>lt;sup>2</sup> "Cold Conflict." *The National WWII Museum | New Orleans, 31 July 2020,* www.nationalww2museum.org/war/articles/cold-conflict.

<sup>&</sup>lt;sup>3</sup> "Just a Moment..." *Just a Moment...*, <u>www.nti.org/education-center/treaties-and-regimes/treaty-on-the-non-proliferation-of-nuclear-weapons/.</u>

<sup>&</sup>lt;sup>4</sup> "Weapons of Mass Destruction." *Homeland Security, 1 November 2022,* <u>www.dhs.gov/topics/weapons-mass-destruction.</u>

<sup>&</sup>lt;sup>5</sup> "Historicizing the Hegemonic Nuclear Order." *Wilson Center*, <u>www.wilsoncenter.org/blog-post/historicizing-hegemonic-nuclear-order.</u>

<sup>&</sup>lt;sup>6</sup> "Critical Issues." *Reaching Critical Will*, <u>www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5442-negative-security-assurances</u>.

### **External nuclear Interventions (ENI's)**

ENIs occur when a foreign NWS uses, tests or stations nuclear weapons in another region without that region's consent. For example, when the USSR stationed nuclear weapons in Latin America during the Cuban missile crisis, when France tested nuclear weapons in Africa, or when several NWSs tested nuclear weapons in the South Pacific.<sup>7</sup>

#### **BACKGROUND INFORMATION**

### **Concept of Nuclear free weapon zones**

Nuclear-weapon-free zones are agreements that are designed to offer a legally binding framework to forbid the use, possession, or deployment of nuclear weapons in a region that is specifically identified. With the ultimate goal of establishing a world free of nuclear weapons, the international community has long viewed the creation of such zones as a crucial disarmament tool and called for their encouragement. Over the years, the NWFZ have assisted in preventing additional states from acquiring nuclear weapons, provided the confidence required to facilitate cooperation on the peaceful uses of nuclear energy, and fostered a security environment that has allowed for dramatic reductions in nuclear stockpiles and that is crucial for future advancement on nuclear disarmament.

It is worth noting that in the Nuclear Non-Proliferation Treaty, according to Article VII, "affects any group of States' right to conclude regional treaties to ensure the complete absence of nuclear weapons in their respective territories". In contrary, many so-called threshold States and others with a sufficient level of nuclear energy industry, which are not Treaty Parties, research peaceful uses of nuclear energy in order to enable the production of nuclear weapons. This poses as another vulnerability of the NWFZs. This is true with nations such as South Africa, Argentina, Brazil, India, Israel, and Pakistan. The number of these threshold nations is anticipated to rise, as the need for nuclear energy and its use for peaceful purposes increases. Unless the threshold countries can be convinced to join the NPT or other measures are found in order to put effective restraints on the emergence of new threshold countries and the improvement of the explosive capacities of the existing ones, there is a growing risk for proliferation of nuclear weapons or equivalent nuclear explosive capacity.

<sup>&</sup>lt;sup>7</sup>Mpofu-Walsh, Sizwe. "Obedient Rebellion: Nuclear Weapon-Free Zones and Global Nuclear Order, 1967-2017", *University of Oxford, 2020,* <a href="https://ora.ox.ac.uk/objects/uuid:1989894d-1e20-419e-8b39-84a02b53cf05/files/dw9505048f/">https://ora.ox.ac.uk/objects/uuid:1989894d-1e20-419e-8b39-84a02b53cf05/files/dw9505048f/</a>.

<sup>8&</sup>quot;Just a Moment..." *Just a Moment...*www.armscontrol.org/factsheets/nwfz? cf chl tk=T.x9Zb8tjhzJVliL3WxnDZA6XZ2zoBGv9CXdftv8hbQ1686216606-0-gaNycGzNDNA.

The five nuclear weapon states recognized by the NPT (the "P5") provide legally binding guarantees, by signing and ratifying the pertinent protocols to NWFZs treaties, to the States Parties of these treaties that they will not use or threaten to use nuclear weapons against them. Negative security assurances are what they are called. However, the five nuclear-armed nations have occasionally accepted and signed a NWFZ protocol and made declarations reserving the ability to deploy nuclear weapons against participants in a nuclear-weapon-free zone under specific circumstances. For instance, the United States agreed to join the African Nuclear-Weapon-Free Zone Protocol in April 1996 and stated that it would reserve the right to use all available means of retaliation, including the use of nuclear weapons, in the event that a member of the zone used chemical or biological weapons against it.

Due to concerns that it would interfere with their ships' and aircraft's freedom of movement in international waters and airspace and issues with the definitions of territory, which include exclusive economic zones and continental shelves, none of the nuclear-weapon states have signed the relevant protocol for the treaty creating a zone in Southeast Asia. Nuclear-weapon states typically do not declare whether nuclear weapons are aboard their boats, and the other three zones do not expressly prohibit the transit of nuclear weapons by nuclear-weapon states via the zones.



Figure 1: Nuclear Weapon free zones<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> "United Nations Platform for Nuclear-Weapon-Free Zones |." *United Nations*, <u>www.un.org/nwfz/</u>.

### **History of Nuclear-Weapon-Free Zones**

Several attempts to establish such a zone in Central and Eastern Europe signaled the beginning of the endeavor to create a region free of nuclear weapons in the late 1950s. In 1958, Poland made the initial suggestion, known as the Rapacki Plan after its foreign minister. The intended goal of the Rapacki Plan was to prevent the deployment of nuclear weapons in Poland, Czechoslovakia, West Germany, and East Germany, while reserving the right for other European nations to do the same. Similar ideas were also put forth by the Soviet Union, Sweden, Finland, Romania, and Bulgaria.

All of these early attempts, however, failed in the midst of the battle between the United States and the Soviet Union. Be that as it may, the Rapacki Plan would later serve as a template for the establishment of nuclear-weapon-free zones in other parts of the world<sup>10</sup>. The first NWFZ accord to denuclearize a significant population center was the accord of Tlatelolco, signed in 1969. As far north as Mexico and the Bahamas, the pact outlawed nuclear weapons in Latin America and the Caribbean. The agreement was negotiated in reaction to the Cuban Missile Crisis, which saw the Soviet Union nuclearizing Cuba and putting the United States and Soviet Union at risk of war. Australia, New Zealand, and other small island republics in Oceania are only a few of the members of the NWFZ that was established in the South Pacific by the Treaty of Rarotonga.

The charter extends over a significant geographic area, from the west coast of Australia to the 115th meridian west, which also marks the western limit of the Treaty of Tlatelolco, and from the equator to the 60th parallel south, which marks the northern limit of the Antarctic Treaty. This agreement, which was signed in 1986, was considered a response to nuclear weapon states testing their bombs nearby. The Association of Southeast Asian Nations (ASEAN) is credited with establishing the Treaty of Bangkok.

The Declaration of the Zone of Peace, Freedom and Neutrality, which attempted to establish a NWFZ, was signed in 1971 by the five founding members of the organization: Indonesia, Malaysia, Philippines, Singapore, and Thailand. Due to Cold War tensions, the project was postponed until the 10 ASEAN countries at the time signed the Bangkok Treaty in 1995, which went into effect two years later.

Similar to this, the establishment of the Central Asian NWFZ coincided with the end of Cold War hostilities. The Almaty Declaration, which was released in 1997 and supported the concept, was signed by the presidents of the five central Asian countries of Kyrgyzstan, Uzbekistan, Turkmenistan, Tajikistan, and Kazakhstan. This proclamation served as the starting

<sup>&</sup>quot;Just a Moment..." *Just a Moment...*" *Just a Moment...*www.armscontrol.org/factsheets/nwfz? cf chl tk=T.x9Zb8tjhzJVIiL3WxnDZA6XZ2zoBGv9CXdftv8hbQ
1686216606-0-gaNycGzNDNA.

point for a series of negotiations that led to the Semipalatinsk Treaty, which established the Central Asian NWFZ in 2002.

The African NWFZ was finally established by the Treaty of Pelindaba. The Organization of African Unity, the forerunner of the African Union, led a global campaign for the disarmament of the continent in 1964, before the signing of the treaty. Similar to earlier attempts, the agreement was delayed by Cold War tensions as well as the competition between Israel and the Arab world. Therefore, the treaty was open for signatures in 1996. The accord eventually entered into force in 2009 after being ratified by African nations in response to numerous resolutions adopted by the UN General Assembly<sup>11</sup>.

#### Obedient rebellion

Because of an attitude of submissive resistance against the nuclear order, NWFZs exist and continue to do so. This mentality exists both between and within the states that make up zones and the NWSs. States display obedient rebellion on a global scale, whereas local obedient rebellion is expressed by strategic elites within nations. The term "obedient rebellion" refers to an ambivalent attitude toward the nuclear system that involves recognition seeking both inside and outside of the nuclear order, as well as legitimacy acceptance and rejection. In the 'existence' and 'persistence' phases of NWFZs, obedient rebellion takes diverse forms. The 'existence' phase of a NWFZ is when ENIs first occur. ENIs happen when a foreign NWS deploys, tests, or uses nuclear weapons in a territory beyond its own without receiving widespread regional approval. ENIs, for instance, happened when the USSR stationed nuclear weapons in Latin America during the Cuban missile crisis, when France conducted nuclear weapons tests in Africa, or when many nuclear countries conducted nuclear weapons tests in the South Pacific. When an ENI occurs, both obedient and rebellious actors respond by creating a NWFZ, which ultimately mediates their reactions. A new phase of "persistence" is initiated by the act of creating the zone itself. In this phase, the upkeep of NWFZs serves to accommodate the divergent views of nuclear order held by obedient and rebellious actors.

### The importance of Nuclear-Weapon-Free Zones

The single most effective component of the international non-proliferation system is arguably NWFZs. While NWFZs have expanded their geographical scope through nuclear umbrella agreements, the disarmament pledge made in Article VI of the NPT has yet to be fulfilled. As an illustration, the majority of governments choose membership in NWFZs in addition to NPT membership. They are, therefore, the most prevalent and durable aspect of international nuclear governance, aside from the NPT. The reach and appeal of NWFZs are not their only intriguing characteristics. The reach and appeal of NWFZs are not their only intriguing

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<sup>&</sup>lt;sup>11</sup> Sonde, Farah. "Fact Sheet: Nuclear-Weapon-Free Zones." *Center for Arms Control and Non-Proliferation, 11 April 2023,* armscontrolcenter.org/nuclear-weapon-free-zones/.

characteristics. At a time when nuclear order is going through its most serious existential crisis in a generation, this Southern perspective is desperately needed. According to the Southern viewpoint, NWFZs play a crucial role in international nuclear law by establishing legally binding negative security guarantees.

#### The Latin American NWFZ

There are two major factors from within the region that show the Treaty of Tlatelolco was a remarkable success. During this time, the continent experienced a move toward authoritarian governments, and as a result, a large portion of Latin America's territory was subject to authoritarian, military governments that were pro-West and anticommunist. Mistrust, territorial conflicts, and guerrilla warfare plagued the region, making it difficult to imagine that a Treaty concerning national security, which would necessitate trust among the parties, could ever be reached. Against these difficulties, Latin American countries decided to ensure their security that did not include resolving their disputes or joining with the East or West: the establishment of a nuclear-weapons-free zone.

Following the 1962 "Missile Crisis" in Cuba, which created an atmosphere of great tension and fear, the Presidents of Bolivia, Brazil, Chile, Ecuador, and Mexico issued a Joint Statement on April 29, 1963, announcing their willingness to sign a multilateral agreement that would make Latin America a nuclear-weapon-free zone<sup>12</sup>. The next year, on November 27, the United Nations General Assembly passed Resolution 1911 (XVIII), endorsing the aforementioned declaration<sup>13</sup>. The program had clearly been laid out, and other Latin American governments agreed to join it. The following year, 1912, from November 23 to 27, the "Preliminary Meeting on the Denuclearization of Latin America" (REUPRAL) convened and decided to form the "Preparatory Committee for the Denuclearization of Latin America" (COPREDAL).

Thus, from 1965 to 1967, rigorous discussions took place until the wording of the "Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean," or Treaty of Tlatelolco, was unanimously ratified by COPREDAL on February 12, 1967<sup>14</sup>. The Treaty of Tlatelolco was opened for signature two days later, on February 14th. After 47 years, all 33 Latin American and Caribbean countries have signed up to the Treaty.

#### The African NWFZ

It took more than four decades for Africa's goal of a NWFZ to become a reality. As decolonization expanded and a new era of nuclear rivalry awaited, Africa's new powers assembled to consider the threat of nuclear war in the 1960s<sup>14</sup>. The announcement of French

<sup>&</sup>lt;sup>12</sup> "Cuban Missile Crisis." *JFK Library*, <u>www.jfklibrary.org/learn/about-jfk/jfk-in-history/cuban-missile-crisis</u>.

<sup>&</sup>lt;sup>13</sup> "Denuclearization of Latin America." *United Nations Digital Library System*, digitallibrary.un.org/record/203964.

<sup>&</sup>lt;sup>14</sup> "Treaty of Tlatelolco | United Nations Platform for Nuclear-Weapon-Free Zones." *United Nations*, www.un.org/nwfz/content/treaty-tlatelolco.

nuclear tests in the Sahara Desert in 1959 shook the continent and infuriated several newly decolonized African states: Nigeria broke diplomatic relations, Ghana froze French assets, and eight African countries successfully petitioned the General Assembly to sanction France at the 15th Session in 1960<sup>15</sup>. In that session, the resolution<sup>16</sup>, titled 'Consideration of Africa as a Nuclear Weapons Free Zone,' focused on barring the testing, storage, and transport of nuclear weapons on the continent, establishing the groundwork for the African NWFZ.

The formation of the Organization for African Unity (OAU) in 1963 gave the first continental platform to coordinate denuclearization. The OAU Secretariat developed a Convention on the Denuclearization of Africa in 1964. Later that year, the heads of state adopted the Declaration on the Denuclearization of Africa. However, the objective of a nuclear-free Africa was hampered by two major challenges: the NPT was vying for public attention, and NATO states were opposed to NWFZs during the Cold War. The last and most significant obstacle to the African NWFZ was colonial South Africa's secret nuclear weapons program, which developed faster, whereas African states outside the region pushed non-proliferation.

In 1991, Algeria, Cameroon, Egypt, Ethiopia, Mauritius, Namibia, Nigeria, Senegal, Sudan, Togo, Congo, and Zimbabwe assembled an Inter-Governmental Group of Experts in Abuja. The Group prepared a report on which the OAU Council of Ministers and later a joint meeting of the Intergovernmental Group and the UN-OAU Group developed the first draft of a treaty for comment at the Council's fifty-eighth meeting in June 1993<sup>17</sup>. At the 1992 General Assembly, the UN recommended that the Secretary General "take steps to implement the NWFZ in Africa by convening a meeting of OAU and UN experts in 1993." Despite advances toward the abolition of apartheid, South Africa was not yet a member of the OAU Program for the Promotion of Non-Proliferation.

South Africa's willingness to participate in the African NWFZ was expressed at the General Assembly of 1992. The breakthrough occurred in 1994 at Addis Abeba following a number of additional meetings. On June 23, 1995, African chiefs of state adopted the final draft that had been prepared in Pelindaba. On November 6, 1995, the pact was then ratified by the UNGA during its regular session. On April 11, 1996, 47 of Africa's then-53 governments formally ratified the pact in Cairo.

<sup>&</sup>lt;sup>15</sup> "Nuclear Powers: France's Atomic Bomb Tests in the Algerian Sahara." *Architectural Review*, 6 2022, www.architectural-review.com/essays/nuclear-powers-frances-atomic-bomb-tests-in-the-algerian-sahara.

<sup>&</sup>lt;sup>16</sup> "African Nuclear Weapon-Free-Zone Treaty (Pelindaba Treaty)." *International Atomic Energy Agency | Atoms for Peace and Development, 23 June 2022,* www.iaea.org/publications/documents/treaties/african-nuclear-weapon-free-zone-treaty-pelindaba-treaty.

<sup>&</sup>lt;sup>17</sup> "Cooperation Between the United Nations and the Organization of African Unity: « *United Nations Digital Library System*, digitallibrary.un.org/record/197410.

UNIDIR | The United Nations Institute for Disarmament Research, 2011, unidir.org/sites/default/files/publication/pdfs//nuclear-weapon-free-zones-en-314.pdf.

### The South Pacific NWFZ

Pacific island states took action as a result of the region's widespread nuclear testing. The US conducted sixty-six nuclear tests in the Marshall Islands between 1946 and 1958, accounting for one third of all US nuclear tests in history, shortly after the tragic explosions at Hiroshima and Nagasaki<sup>19</sup>. France and the United Kingdom also conducted destructive tests in the area. France began conducting atmospheric tests in French Polynesia in 1962, following atmospheric tests at Reganne in Algeria<sup>20</sup>. It launched an air test from its first location, the coral atoll of Mururoa, in July 1966. Fangataufa, the second location, was located 25 miles southeast of Mururoa.

On August 24, 1968, it was the site of France's first thermonuclear test, which made the island uninhabitable for six years. France carried out considerable testing in Polynesian atolls even after the PTBT of 1963, until it signed the CTBT in 1996 under intense international pressure.

The legislative executive of the Australian Labor Party (ALP) proposed a Pacific NWFZ in 1962, which was later expanded to include the entire Southern Hemisphere. Conservative victory and US pressure stymied these first proposals. Through organizations like Against Testing on Mururoa (ATOM) and Nuclear Free Independent Pacific (NFIP), island states outside of Australia organized against the presence of nuclear weapons in the South Pacific.

Despite resistance from the NWSs and Australian ambiguity, resolution 3477<sup>21</sup> was approved by New Zealand, Papua New Guinea, and Fiji in the UNGA in December 1975. Members of the South Pacific Forum – SPF and the NWSs – held extensive discussions about the specifics of an SPNWFZ as a result of this. The South Pacific Forum (SPF) publicly committed to denuclearizing the South Pacific that year, but due to Australian reluctance, the plan wouldn't be implemented for another ten years.

The SPNWFZ Treaty was signed by eight states on August 6, 1985, Hiroshima Day. After the eighth ratification, it came into effect in 1986. The pact recognizes 'conversation partners' in the US, Canada, China, the EU, Japan, South Korea, and the UK. France was suspended in 1995 after it resumed testing, although it was later reinstated after it changed its mind in 1996. The pact is now a firmly entrenched aspect of political life in the South Pacific, despite a few early objections. Ten years after it came into effect, on March 25, 1996, the US, France, and the UK

<sup>&</sup>lt;sup>19</sup> "Marshall Islands." *Nuclear Museum*, ahf.nuclearmuseum.org/ahf/location/marshall-islands/.

Elsaidi, Samira. "'The Day the Desert Wind Cried': French Nuclear Tests Cast Long Shadow in Libyan Sahara." *Middle East Eye, 29 January 2023,* <a href="https://www.middleeasteye.net/news/france-libya-algeria-nuclear-tests-still-haunt-desert-cried">www.middleeasteye.net/news/france-libya-algeria-nuclear-tests-still-haunt-desert-cried</a>.

<sup>&</sup>lt;sup>21</sup> "Establishment of a Nuclear-weapon-free Zone in the South Pacific: « *United Nations Digital Library System,* digitallibrary.un.org/record/650095.

signed Protocol I, which covers areas of the zone that are governed by foreign governments. The pact was ratified by France and Britain in the same year.

### MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

#### **United States of America (USA)**

The United States carried out the first nuclear test in July 1945, and a month later, it became the first and only nation to employ nuclear weapons in combat. With three different delivery methods, the United States today has one of the largest nuclear arsenals in the world. The main objective of U.S. foreign policy has historically been to stop the proliferation of Weapons of Mass Destruction (WMDs).

The Treaty of the Non-Proliferation of Nuclear Weapons (NPT) will be upheld and strengthened, and American leadership in weapons control and nonproliferation will be reestablished, according to the United States. Effective weapons control lowers the likelihood of expensive and dangerous arms races while enhancing stability, openness, and predictability. As reported by the most recent public disclosure of U.S. stockpile data, the United States has significantly decreased its nuclear arsenal since the NPT was established during the height of the Cold War<sup>22</sup>. Since their peak in 1986, global stocks have decreased by more than 80%, according<sup>22</sup> to the Federation of American Scientists, which keeps track of international security matters.

The US has contributed more than \$395 million to IAEA projects supporting non-military nuclear usage since 2015. It committed an extra \$50 million over the following five years in November 2020 for the IAEA's Peaceful Uses Initiative<sup>23</sup>.

However, there are a number of persistent and changing nuclear proliferation dangers that the US and other countries must deal with that might destabilize this framework and endanger global security and stability. These dangers include terrorists potentially obtaining nuclear weapons, locations with improperly secured nuclear materials that can be used as weapons, and nations with nuclear weapons programs like North Korea.

#### India

In India, nuclear energy for civil purposes is well-established and has been a top priority since 1947, the year of independence. The Atomic Energy Act and Atomic Energy Commission

<sup>&</sup>lt;sup>22</sup> "Status of World Nuclear Forces." *Federation of American Scientists, 10 May 2023,* fas.org/initiative/status-world-nuclear-forces/.

<sup>&</sup>lt;sup>23</sup> "Nuclear Nonproliferation." *U.S. Government Accountability Office (U.S. GAO)*, <u>www.gao.gov/nuclear-nonproliferation</u>.

were both passed in 1948<sup>24</sup>. In 1954, the year the nation's initial 3-stage plan for establishing nuclear power was initially laid out, the Department of Atomic Energy was established under it. The initial step in this strategy is to use natural uranium-fueled pressurized heavy-water reactors (PHWR) to create power and plutonium as a byproduct. This will be developed in Stage 3 along with producing an excess of fissile material.

Due to its exclusion from the 1970 Nuclear Non-Proliferation Treaty (NPT) for gaining nuclear weapons capability after 1970, India's civil nuclear policy has been focused on achieving total independence in the nuclear fuel cycle. Only 94 states had signed the NPT at the time of India's first nuclear explosion in May 1974, and just 79 had ratified it. In contrast, there are currently 190 ratifying states. After 1974, the West refused to give India nuclear technology not much after a nuclear device was detonated, with a yield of 12-13 kiloton of TNT, on May 18, 1974<sup>25</sup>. India has been regarded as a nuclear weapons-capable state from the year 1974, despite the fact that its military nuclear program developed slowly over the years and didn't completely emerge until 1998, when India performed six nuclear explosion tests<sup>26</sup>.

However, due to mistrust of its neighbors, China and Pakistan in particular expressed their political support within India for its nuclear weapons program has been strong across the political spectrum. This prevented any move to sign the NPT as a Non-Nuclear Weapons State, the only option available from an NPT perspective. This isolation has led to an increase in self-sufficiency that includes uranium mining, fuel manufacturing, heavy water generation, reactor design and construction, used fuel processing, and waste management. It currently has a little fast breeder reactor and is starting up a much bigger one. It is also working on technology to use the thorium that is abundant there as nuclear fuel.

# **Democratic People's Republic of Korea (DPRK)**

North Korea said on January 10, 2003 that it 'could no longer remain bound to the NPT'<sup>27</sup>.DPR Korea was the very first, and still only, NPT state party to declare this<sup>28</sup>. The fact that the DPRK withdrew from the treaty raises immediate concerns about the country's standing within the NPT and the suitability of the NPT's treaty withdrawal provisions. Additionally, it

<sup>&</sup>lt;sup>24</sup> "India, China and the Non-Proliferation Treaty (NPT) - World Nuclear Association." *World Nuclear Association* - *World Nuclear Association*, www.world-nuclear.org/information-library/safety-and-security/non-proliferation/india,-china-npt.aspx.

<sup>&</sup>lt;sup>25</sup> "Operation Smiling Buddha: The Story of India's First Nuclear Test at Pokhran in 1974." *The Indian Express,* 19 May 2023, indianexpress.com/article/explained/explained-history/operation-smiling-buddha-nuclear-first-test-pokhran-history-8616714/.

<sup>&</sup>lt;sup>26</sup> "25th Anniversary of Pokhran-II: India's Journey to Become a Nuclear Power." *The Indian Express, 11 May 2023,* indianexpress.com/article/explained/explained-history/25th-anniversary-pokhran-ii-8604356/.

<sup>&</sup>lt;sup>27</sup> International Peace Institute, www.ipinst.org/wp-content/uploads/2010/04/pdfs\_koreachapt2.pdf.

Bai, Su. "North Korea's Withdrawal from the NPT: Neorealism and Selectorate Theory." *E-International Relations,* 28 January 2022, <a href="https://www.e-ir.info/2022/01/27/north-koreas-withdraw-from-the-npt-neorealism-and-selectorate-theory/">www.e-ir.info/2022/01/27/north-koreas-withdraw-from-the-npt-neorealism-and-selectorate-theory/</a>.

reinforced longer-term questions about the capacity of current international organizations to supervise the fulfillment of treaty obligations relating to nuclear nonproliferation and disarmament. In the 1950s, the DPRK began taking preliminary measures toward the creation of a civilian nuclear program.

North Korean government started pushing the advancement of scientific and engineering knowledge after the Korean War, notably in the field of nuclear physics. In order to collaborate with the Soviet Union on training, they signed various agreements. The Soviet Union promised in 1959 to provide the DPRK with a research reactor and to help with the establishment of a nuclear research facility. The DPRK possessed the research reactor by the start of the 1960s, and work on the Yongbyon Nuclear Research Complex was well under way. It is thought that the research reactor started operating in 1967. Beginning on May 1992, the International Atomic Energy Agency's (IAEA) inspection operations in the DPRK initially went very smoothly. However, the agency subsequently discovered large differences between the DPRK's original study of the data gathered during inspections and the declaration. In order to clarify the differences, the agency asked to go to two garbage sites and collect samples. However, the DPRK forbade them from doing so.

Early in 1993, the IAEA exploited a provision of the safeguards agreement that had gone unused to conduct "special inspections," when crucial for confirming a nation's claimed nuclear arsenal<sup>28</sup>. The DPRK continued to refuse to give access, and as the dispute persisted, the North Koreans said in March 1993 that they intended to leave the NPT in three months, as permitted by the agreement. Ultimately, the DPRK agreed to "suspend the effectuation" of its departure from the treaty after talks between North Korea and the US.

### **South Africa**

The Treaty on the Prohibition of Nuclear Weapons (TPNW) has been ratified and signed by South Africa. It was one of the original 50 signatories to the pact when it became effective on January 22, 2021. The TPNW was opened for signature on September 20, 2017, and on that date, Jacob Zuma, the then-president of South Africa, signed it at a prestigious ceremony in New York. He stated: "We are making a clarion call to all member states of the UN to sign and ratify the ban treaty in order to rid the world and humanity of these lethal weapons of mass destruction." <sup>29</sup> in a speech to the UN that same day.

In November 2018, South Africa's national assembly voted to ratify the TPNW. On February 25, 2019, South Africa's instrument of ratification was submitted to the UN Secretary-General by Jerry Matthews Matjila, the country's permanent representative. The TPNW was ratified or acceded to by South Africa as the 22nd state. South Africa praised the implementation of the "milestone" TPNW as "one of the most important developments towards nuclear

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<sup>&</sup>lt;sup>29</sup> "South Africa." *ICAN*, www.icanw.org/south\_africa.

disarmament"<sup>30</sup> since the establishment of the organization in a statement to the UN in October 2021. South Africa submitted a declaration to the UN Secretary-General on February 18, 2021, in accordance with Article 2 of the TPNW, stating that although it had nuclear weapons in the past, it had not produced, deployed, or tested nuclear weapons since "voluntarily abandoning" its nuclear-weapons program in 1989.

South Africa praised the TPNW as "a bold and positive step towards the total elimination of nuclear weapons" in a statement to the UN in September 2019 and urged those states that have not yet done so to ratify it. To entice African states to join the TPNW, South Africa co-hosted a regional meeting in August 2018 in Pretoria. Participants included delegations from 20 states, who "pledged to work with policymakers in capitals to effect the policy processes necessary to ensure signature and ratification of the [TPNW]" Formerly, South Africa had six nuclear weapons in its arsenal. Prior to joining the Non-Proliferation Treaty in 1991, it demolished them because it understood that the only way to ensure its security was through disarmament. The IAEA verified that South Africa had destroyed six fully operational nuclear weapons as well as one that had only been halfway built in 1994.

# **United Nations Office of Disarmament Affairs (UNODA)**

Through the activities of the General Assembly and its First Committee, the Disarmament Commission, the Conference on Disarmament, and other bodies, such as the Office for Disarmament Affairs, offers Member States substantive and organizational support in the area of disarmament. It supports regional disarmament initiatives and promotes preventive disarmament practices like communication, openness, and confidence-building in military matters. Additionally, it offers details on UN efforts to disarm. After a conflict, the ODA supports the creation and execution of actual disarmament measures, such as demobilizing and disarming former fighters and assisting with their reintegration into civil society.

The ODA supports the objectives of nuclear nonproliferation and disarmament as well as the improvement of other WMD disarmament regimes. Additionally, it supports attempts to eliminate conventional weapons, particularly landmines and small arms, which are the weapons of choice in modern conflicts. The security environment of today has not been taken into account by their current nuclear policies. The current situation cannot continue, and the results of doing nothing are intolerable. To build the global ability to lessen reliance on nuclear weapons, stop their spread, and finally eliminate them as a threat to the world, ODA collaborates with leaders, governments, and partner organizations.

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<sup>&</sup>lt;sup>30</sup> "Just a Moment..." *Just a Moment...*, www.nti.org/countries/south-africa/.

### **Association of Southeastern Asian Nations (ASEAN)**

An organization for regional politics and commerce is the Association of Southeast Asian Nations. It was formed on August 8th, 1967 by Thailand, Indonesia, Malaysia, the Philippines, and Singapore. Viet Nam joined in 1984, Laos and Myanmar in 1997, Cambodia joined in 1999, and Brunei Darussalam joined in 1984. Within its Member States, ASEAN seeks to hasten economic growth, social advancement, and cultural advancement while advancing regional security and advancement.

As a pledge to keep the Southeast Asian region free of nuclear and other weapons of mass destruction, ASEAN Member States signed the Treaty of Southeast Asia Nuclear Weapon-Free Zone (SEANWFZ Treaty) on December 15, 1995. It is also referred to as the Bangkok Treaty. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is reaffirmed by ASEAN through this agreement as being crucial to maintaining world peace and security and preventing the spread of nuclear weapons. Additionally, it heralds the establishment of Southeast Asia's Nuclear Weapon-Free Zone (NWFZ), one of only five such zones worldwide. The other four NWFZs are located in Central Asia, Africa, Latin America and the Caribbean, and the South Pacific.

### **TIMELINE OF EVENTS**

DATE	DESCRIPTION OF EVENT					
16 October 1962	The Cuban missile crisis takes place					
29 April 1963	Latin American countries express their willingness to form a NWFZ					
12 February 1967	The Treaty of Tlatelolco is ratified					
14 February 1967	The Treaty of Tlatelolco is open for signature					
1 July 1968	The NPT agreement is signed by several of the major nuclear and non-nuclear powers					
24 August 1968	France's first thermonuclear test occurs					
27 October 1971	Zone of Peace, Freedom and Neutrality Declaration is founded by the ASEAN member states					
18 May 1974	The west does not grant India nuclear technology					

6 August 1985	The South Pacific NWFZ is established on Hiroshima day			
23 June 1995	The final draft of the Treaty of Pelindaba is formed			
6 November 1995	the UNGA ratifies the Pelindaba Treaty			
25 March 1996	the South Pacific NWFZ comes into effect			
11 April 1996	Africa formally ratifies the African NWFZ Pact in Cairo, Egypt			
12 April 1996	The African NWFZ is initiated			
10 January 2003	DPRK withdraws from the NPT			
10 September 2017	the TPNW is open for signature			
25 February 2019	South Africa ratifies the TPNW			
18 February 2021	South Africa denies any nuclear Activity			

# **RELEVANT UN RESOLUTIONS, TREATIES AND EVENTS**

# Treaty of Tlatelolco<sup>31</sup>

The Tlatelolco Treaty entered into effect in the whole region on October 23, 2002, when Cuba, the only state that had not ratified the agreement, deposited its instrument of ratification. Currently, the pact has been signed and ratified by all 33 countries in the region of Latin America and the Caribbean. All upcoming accords establishing nuclear-weapon-free zones (NWFZs) have been modeled after the Tlatelolco Treaty. Large portions of the Pacific and Atlantic Oceans as well as the whole region of Latin America and the Caribbean are covered by the pact.

The testing, use, production, manufacture, or acquisition of any nuclear weapons by the Parties directly or indirectly, on behalf of anyone else, or in any other manner is prohibited by the Treaty, as is the receipt, storage, installation, deployment, and any other form of possession of any nuclear weapons by the Parties directly or indirectly, on behalf of anyone else, or in any other manner. The Parties further agree to refrain from participating in any way in the testing,

<sup>&</sup>lt;sup>31</sup> "Treaty of Tlatelolco | United Nations Platform for Nuclear-Weapon-Free Zones." *United Nations*, www.un.org/nwfz/content/treaty-tlatelolco.

use, manufacturing, production, possession, or control of any nuclear weapons, whether directly or indirectly.

The Tlatelolco regime faces a number of unforeseen challenges, but its significance goes beyond its clear advantages for the Latin American area. It complements and is integrated into the global non-proliferation regime, which is centered on International Atomic Energy Agency (IAEA) safeguards. The success of Tlatelolco will have a positive effect on the non-proliferation regime's political vigor. On the other hand, Tlatelolco's failure could not help but reduce foreign support for the international rule.



Figure 2: Treaty of Tlatelolco signed<sup>32</sup>

# **Treaty of Rarotonga<sup>33</sup>**

In addition to being concerned about nuclear testing in their territory and its surroundings, the South Pacific States were also concerned about nuclear waste being dumped at sea for fear of radioactive contamination of the marine environment. In response to a proposal from New Zealand advocating for the establishment of a nuclear-weapon-free zone (NWFZ) in the area, the South Pacific Forum (SPF) took up the topic in 1975. That same year, the UN General Assembly approved of this plan. In 1979, in response to information about nuclear waste disposal in the area, the SPF vehemently denounced the practice of disposing of nuclear waste in the Pacific. Japan opposed the dumping of nuclear waste in the Pacific.

Australia brought up the idea of an SPNFZ in 1983 at an SPF meeting held in Canberra. The Forum agreed with a set of guidelines put forth by Australia as a foundation for creating a

<sup>&</sup>lt;sup>32</sup> "Treaty of Tlatelolco." *OPANAL*, <u>www.opanal.org/en/treaty-of-tlatelolco/</u>.

<sup>&</sup>lt;sup>33</sup> "Just a Moment..." *Just a Moment...*, www.nti.org/education-center/treaties-and-regimes/south-pacific-nuclear-free-zone-spnfz-treaty-rarotonga/.

zone the following year during its conference in Tuvalu and established a working group to prepare a treaty text. These guiding principles intended to safeguard the wellbeing and way of life of the South Pacific people, as well as avoiding the region from turning becoming a battleground for superpower competition.

The Tlatelolco Treaty, the Antarctic Treaty, the Seabed Treaty, the PTBT, and the Non-Proliferation Treaty (NPT) served as the Working Group's working documents. The Treaty of Rarotonga was signed on August 6, 1985, in Rarotonga, Cook Islands, and it came into effect on December 11, 1986, with the submission of the eighth ratification instrument. Australia, Cook Islands, Fiji, Kiribati, Nauru, New Zealand, Niue, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Western Samoa are the other 12 parties to the treaty. The SPNFZ helps to bolster the NPT framework and nuclear nonproliferation while reducing the threat posed by nuclear weapons.

The principal source of international law for the South Pacific NWFZ is the multinational treaty establishing it. This Treaty's responsibilities could conflict with those of its parties' other international legal obligations. This Comment's goal is to assess the likelihood of those disputes and provide remedies for those that already exist. In terms of avoiding the dumping of radioactive waste and outlawing nuclear explosions even for peaceful reasons, the Treaty of Rarotonga is thought to be an improvement over the Tlatelolco treaty, as it contains stricter regulations concerning nuclear waste exports. Rarotonga, which essentially confirms the status quo, although rich in symbols is not necessarily a precursor to a spread of free-zones.

### Treaty of Bangkok<sup>34</sup>

The Southeast Asia Nuclear Weapon-Free Zone Treaty, often known as the SEANWFZ Treaty or Bangkok Treaty, was signed by ten Southeast Asian States on December 15, 1995 (Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam). The Treaty was registered with the UN on June 27, 1997, and it came into effect on March 27, 1997. Following the signing of the Treaties of Tlatelolco, which established the Nuclear Weapon-Free Zone (NWFZ) for the Latin American and Caribbean region in 1967, and of the Treaty of Rarotonga, which established the NWFZ for the South Pacific region in 1985, the Treaty established the third Nuclear Weapon-Free Zone in the world.

The Treaty forbids the development, production, acquisition, possession, or control of nuclear weapons, their stationing or transportation, as well as their testing or actual use. Additionally, nations Parties agree not to release radioactive waste or materials into the atmosphere, at sea, or on land within the Zone, and not to let other nations to do the same. The Treaty also requires each State Party to only use nuclear resources and facilities for peaceful

<sup>&</sup>lt;sup>34</sup> "Treaty of Bangkok | NATIONS UNIES." *United Nations*, <u>www.un.org/nwfz/fr/content/treaty-bangkok</u>.

purposes and to rigorously evaluate the safety of any proposed peaceful nuclear energy program in accordance with recommendations made by the International Atomic Energy Agency (IAEA).

In conclusion, the Treaty encourages the expansion of global agreements on the non-proliferation and disarmament of weapons of mass destruction (WMD) and binds States Parties to fully support and implement the three main tenets of the NPT, namely nuclear non-proliferation, nuclear disarmament, and peaceful uses of nuclear energy.

It's important though to mention that even a single nuclear detonation over a significant South Asian city would cause significant destruction. A massive nuclear conflict would have worldwide physical, environmental, and biological implications, whereas a "small" nuclear conflict would be an unprecedented calamity for the area.

Future obstacles must be overcome, and India's nuclear policy may even need to be reviewed. Although the decision to undertake these experiments was initially met with popular approval, this has given way to a more serious analysis of the new risks and expenses they brought about.

# **Treaty of Pelindaba**<sup>35</sup>

The UN General Assembly (UNGA) initially issued a resolution in 1961 urging its members to recognize and respect Africa as a non-nuclear zone. The UNGA later approved the Declaration on the Denuclearization of Africa, which was first released by the Organization of African Unity (OAU) in 1964.

A Joint Group of Experts, constituted by the OAU and the UN, originally convened in Addis Abeba in April 1991 to prepare a treaty establishing an African NWFZ. The experts were able to adopt the first comprehensive draft text of an African NWFZ Treaty at its meetings in Windhoek in March 1994 and Addis Abeba in May 1994. The final draft of the Treaty was finished at a joint expert meeting in Johannesburg and Pelindaba in May and June 1995, and it was approved by African Heads of State on June 23 of that same year. On November 6, 1995, the UNGA regular session adopted the Treaty.<sup>36</sup>

The Parties agree not to conduct any research, develop any nuclear explosive devices, manufacture any nuclear explosive devices, stockpile any nuclear explosive devices, or otherwise obtain, possess, or have control over any nuclear explosive devices by any means anywhere; to not seek or receive any assistance in the research, development, manufacture, stockpiling, or acquisition of any nuclear explosive devices; or to take any action to encourage or help with any of the foregoing. The Parties agree to forbid the stationing of any nuclear explosive device on their respective territories. However, they are free to choose whether to permit foreign ships

<sup>&</sup>lt;sup>35</sup> "Treaty of Pelindaba | United Nations Platform for Nuclear-Weapon-Free Zones." *United Nations*, www.un.org/nwfz/content/treaty-pelindaba.

<sup>&</sup>lt;sup>36</sup> "Final Text of the African Nuclear-Weapon-Free Zone Treaty (the Pelindaba Treaty): « *United Nations Digital Library System*, digitallibrary.un.org/record/200628?ln=en.

and aircraft to enter their ports and airports, fly through their airspace, or navigate through their territorial seas or archipelago waters. The Treaty also forbids the Parties from testing nuclear explosive devices, permitting testing on their soil, aiding or supporting testing, and disposing of radioactive waste. Africa's active involvement in the treaty's development is a testament to the continent's ongoing efforts to advance regional and global security. Africa's dedication to regional and global peace and security was further strengthened with the establishment of the African Union in July 2002. African leaders understood that security is a requirement for human welfare and sustainable economic growth.

Despite several embargoes and sanctions imposed against the apartheid regime, it was able to create a wide range of nuclear weapon manufacturing capabilities through its nuclear weapon manufacture organization. It has been challenging to create a global disarmament system and guarantee absolute non-proliferation because the major nuclear-weapons states (NWS) utilize analogous arguments of "deterrence" and "security" and have been particularly sluggish to heed global pleas for disarmament.

# Treaty on a Nuclear-Weapon-Free Zone in Central Asia<sup>37</sup>

Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan have signed the Central Asian Nuclear-Weapon-Free Zone (CANWFZ) Treaty, which binds them to refrain from developing, acquiring, testing, or possessing nuclear weapons. The agreement, which has the unofficial name "Semipalatinsk Treaty," was signed on September 8, 2006, at the former Semipalatinsk nuclear test site in Kazakhstan.

Following ratification by all five Central Asian nations, the agreement became effective on March 21, 2009. The five Central Asian states worked together to establish the zone as a result of their shared efforts to solve environmental issues, ensure security, stability, and peace in the region, as well as to establish the circumstances essential for regional development and stability.

The State Parties to the CANWFZ have willingly and unambiguously agreed to forbid the production, acquisition, and use of nuclear weapons, their parts, or other nuclear explosive devices on their respective sovereign territories. Since CANWFZ States Parties are required to enter into both a comprehensive safeguards agreement and an extra protocol with the IAEA, all verification in accordance with the treaty is carried out by the latter. In line with the Comprehensive Nuclear Test-Ban Treaty (CTBT), States Parties are also obligated to "maintain effective standards of physical protection of nuclear material, facilities, and equipment." 38

<sup>&</sup>lt;sup>37</sup> "Treaty on a Nuclear-Weapon-Free Zone in Central Asia | United Nations Platform for Nuclear-Weapon-Free Zones." *United Nations*, <a href="www.un.org/nwfz/content/treaty-nuclear-weapon-free-zone-central-asia">www.un.org/nwfz/content/treaty-nuclear-weapon-free-zone-central-asia</a>.

<sup>&</sup>lt;sup>38</sup> "An Assessment of Obligations Under the Comprehensive Nuclear Test-Ban-Treaty (CTBT)." *Building Better Security for Wider Europe | European Leadership Network*, www.europeanleadershipnetwork.org/commentary/an-assessment-of-obligations-under-the-comprehensive-nuclear-test-ban-treaty-ctbt/.

There are several unique aspects of the Treaty. The zone is the only one now in existence that is wholly in the northern hemisphere and is located in a landlocked area that shares a border with two nuclear-armed States. The only area where nuclear weapons have previously been both tested and operationally deployed is the CANWFZ.

The international conference "Central Asia - a Zone Free of Nuclear Weapons" held in Tashkent, Uzbekistan, in September 1997 is when the concept for the zone was first proposed. In Semipalatinsk, Kazakhstan, where one of the largest nuclear test sites in the world was shut down in 1991, the Treaty on the Zone signing ceremony was conducted in 2006. Since that time, the Kyrgyz Republic has been recognized as the Treaty's official repository.

The security conundrum in the South Asian subcontinent involves a number of regional and extra-regional entities with competing interests. It is crucial to keep in mind that for countries like India and China, even while the nonproliferation objectives are crucial, the perception of national interests influences the eventual course of action more.

Governments that fully abide by their duties under the Treaty on a Nuclear-Weapon-Free Zone in Central Asia and other international nonproliferation requirements, will gain security benefits and promote crucial nonproliferation objectives. The Treaty promotes the maintenance of effective standards for the physical protection of nuclear material and facilities, as well as efforts to strengthen the IAEA safeguards regime and universality of the Additional Protocol to the NPT and to prevent acts of nuclear terrorism, as explained above. Additionally, the treaty and its protocol seek to improve regional stability, security, and cooperation while acting as a vehicle for the expansion of legally binding negative security assurances that are consistent with the reinforced negative security assurance.

			Countries ratifying security assurance protocols				
Year in force	Treaty name	Zone	United States	Russia	China	United Kingdom	France
1968	Tlatelolco Treaty	Latin America NWFZ	Х	Х	Х	Х	Х
1986	Rarotonga Treaty	South Pacific NWFZ		Х	Х	Х	Х
1997	Bangkok Treaty	Southeast Asia NWFZ					
2009	Pelindaba Treaty	African NWFZ		Х	Х	Х	Х
2009	Semipalatinsk Treaty	Central Asia NWFZ		Х	Х	Х	Х

Figure 3: P5's stance towards each treaty<sup>39</sup>

<sup>&</sup>lt;sup>39</sup> "Nuclear-Weapon-Free Zones and Contemporary Arms Control." *Semantic Scholar | Al-Powered Research Tool,* www.semanticscholar.org/paper/Nuclear-Weapon-Free-Zones-and-Contemporary-Arms-Mendenhall/0246e1e0bd5a5ae16e03f46365a0320233223d66.

### PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

# Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

The NPT is a historic international agreement whose main goals are to promote cooperation in the peaceful uses of nuclear energy, prevent the spread of nuclear weapons and weapons technology, and advance the cause of general and complete disarmament. The Treaty is the only multilateral agreement that makes a legally binding commitment to the nuclear-weapon states' disarmament as a goal. The Treaty was made available for signing in 1968, and it became operative in 1970. The Treaty was renewed indefinitely on May 11, 1995. The five nuclear-armed States are included in the overall number of States that have ratified the Treaty. The NPT has been ratified by more nations than any other arms control and disarmament agreement, which indicates the Treaty's importance.

Therefore, the NPT has provided the confidence necessary to facilitate cooperation on the peaceful uses of nuclear energy over the years, helped prevent additional states from acquiring nuclear weapons, and fostered a security environment that has allowed for dramatic reductions in nuclear stockpiles and is necessary for the future.

The Treaty established a safeguards mechanism under the control of the International Atomic Energy Agency (IAEA) to further the objective of non-proliferation and as a confidence-building measure between States parties. The IAEA conducts inspections to see whether the Treaty is being complied with using safeguards. Due to the monitoring of State Parties as well as the vast number of signatory parties, the NPT is deemed one, if not the most effective arms control and disarmament agreement.

#### Comprehensive Nuclear Test Ban Treaty (CTBT)

The Protocol to the Comprehensive Nuclear Test Ban Treaty (CTBT) is divided into three parts: Part I describes the International Monitoring System (IMS); Part II covers on-site inspections; and Part III describes confidence-building measures. The Protocol also includes two Annexes: Annex 1, which refers to the locations of various Treaty monitoring resources connected to the IMS, and Annex 2, which describes the specifications for screening events. A CTBT Organization (CTBTO) is created by the Treaty and is based in Vienna to oversee the execution of all of its provisions, including those pertaining to global verification procedures.

The Treaty includes provisions for fines and dispute resolution as well as measures to ensure compliance and correct Treaty violations. The Conference or Executive Council may bring an issue to the United Nations if it decides that a situation is of a particularly serious nature.

The International Monitoring System (IMS), which consists of seismological, radionuclide, hydroacoustic, and infrasound monitoring, as well as consultation and clarification, on-site

inspections and confidence-building measures, is part of the Treaty's verification regime. Along with the current 16 radionuclide laboratories, the IMS will have 321 monitoring stations when it is completely operational. It is specifically allowed for the employment of national technology methods, which is essential for the Treaty's verification mechanism. A minimum of 30 of the 51 members of the Treaty's Executive Council must vote in favor of requests for on-site inspections. After getting a request for an inspection, the Executive Council has 96 hours to take action.

In conclusion, the CTBT is already making the globe safer, even if it has not yet come into effect. It is a strong collective confidence- and security-building measure that has already been ratified by 176 states and signed by 186 more. It serves as a powerful brake on nuclear proliferation, stopping the development of more lethal nuclear weapons and halting a hazardous spiral of international nuclear competitiveness.

The CTBT, a significant accomplishment, put an end to a period of unrestricted nuclear testing that fueled the Cold War nuclear arms race. Between the initial nuclear explosion over the desert sands in New Mexico in 1945 and the establishment of the CTBT in 1996, more than 2,000 nuclear tests were carried out.

### **2010 NPT Review Conference**

The Conference provides an opportunity to enhance and stabilize the nuclear non-proliferation regime. The Review Conference is tasked with assessing how effectively the NPT's terms have been put into practice and with outlining a future course for resolving outstanding issues.

Going into the summit, there were a lot of high expectations, but many of the approximately 190 participating countries had quite different viewpoints. States managed to defuse contentious issues like North Korea's withdrawal and nuclear testing, Iran's non-compliance, the possibility of a Middle East WMD Free Zone, and further progress on disarmament, which individually could have derailed the negotiations.

States were willing and able to reach an unanimity of opinion on a difficult agenda of problems despite the circumstances preceding up to the Review Conference. They overcame what appeared to be endemic and expected dysfunction, particularly on topics as divisive as nonproliferation and disarmament, in a moment where multilateral approaches have suffered major failures such as the Copenhagen climate accords. An incremental success is the final paper that was unanimously approved on May 28.

Finally, it is the responsibility of all nations to make sure that the consensus, which has been hard won, is not rendered useless by a lack of execution. All states must assume certain

commitments and acts as of right away because those are the standards by which they will be judged and held responsible.

### Partial Test Ban Treaty (PTBT)

The first suggestion to prohibit nuclear weapons tests was made by India in 1954. In an effort to come to an agreement on a test ban that would be effectively regulated, the United States, the Soviet Union, and the United Kingdom started the Conference on the Discontinuance of Nuclear Tests in Geneva in 1958. Due to the parties' inability to agree on verification processes, the Conference was unable to proceed. The United States, the Soviet Union, and the United Kingdom signed the Partial Test Ban Treaty (PTBT), sometimes known as the Limited Test Ban Treaty (LTBT), on August 5, 1963, in Moscow. The Treaty obliges Parties to forbid, prevent, and refrain from conducting nuclear weapon tests or any other nuclear explosions in the air, space, under the sea, or in any other environment if such explosions result in the presence of radioactive debris outside the territorial limits of the State that conducts an explosion; to refrain from causing, encouraging, or in any other way taking part in the conduct of any nuclear weapon test explosion, or any other nuclear explosion. Even if the treaty posed limited conditions and did not manage to halt proliferation, it contributed to the creation of guidelines for future arms control and disarmament frameworks.

### Rapacki Plan

Polish Foreign Minister Adam Rapacki first suggested denuclearizing Central Europe, more specifically East and West Germany, Poland, and Czechoslovakia, on October 2, 1957. This collection includes documents from 1958 and 1959, the heyday of debates over the Rapacki Plan, taken from volumes of the Polish Institute of International Affairs' "Polskie Dokumenty Dyplomatyczne" series. The collection provides details on Poland's most significant diplomatic effort of the late 1950s, one that Warsaw hoped would fundamentally alter the dynamics of European security and secure Poland a bigger place on the global stage. See Ryan Musto's article, "Polish Perspectives on the Rapacki Plan for the Denuclearization of Central Europe," from Sources & Methods for a summary of the collection.

### **POSSIBLE SOLUTIONS**

#### Steps towards nuclear zero policy

The nine nuclear-armed nations of the world — China, France, India, Israel, North Korea, Pakistan, Russia, the UK, and the US — must come to a legally-binding agreement with the contribution of the UN GA6 Committee, to gradually eliminate all nuclear weapons under stringent international supervision and verification. Although efforts to unite non-nuclear countries behind a legislative ban on these weapons have made progress, eradication cannot be

realized without engaging nuclear-armed governments in direct negotiations. In order to adopt such a policy and so increase the effectiveness of NWFZ, these states must be confronted head-on and brought to the table for a discussion on disarmament that can finally result in discussions and a formal deal.

#### **Detection**

Through the early detection of the misuse of nuclear material or technology, UN bodies and officials could prevent the proliferation of nuclear weapons with the assistance of the IAEA. This offers believable reassurances that States are upholding their legal commitments to only use nuclear material for peaceful purposes. This measure could aid in preventing additional states from getting nuclear weapons, fostering a security climate that has allowed for drastically reduced nuclear stockpiles, and promoting the necessary confidence to permit collaboration on the peaceful applications of nuclear energy.

### **Disclose non-compliance**

Many of the protocols that the NWFZ parties ask Nuclear Weapon nations (NWS) to ratify them. However, many have not done so and as a result, avoid total compliance and make NWFZs less effective. One such protocol often requires NWS to abide with the restrictions outlined in the treaty. Commonly, a second guards against the NWS's use or threat of nuclear weapons against parties and their territory. The third, in general, requests that NWSs refrain from conducting any nuclear weapons tests inside the treaty zone. This situation could be tackled by resolving any disagreements on interpretation between member states and thus urge them to to ratify the protocols of the aforementioned treaties. Any later cases of non-compliances should be thoroughly evaluated and brought to justice and as result make NWFZ beneficial to global security.

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