

**Committee:** Disarmament and International Security Committee (GA1)

**Issue:** The Question of Nuclear Proliferation on a Global Scale

**Student Officer:** Giorgos Konstantinidis

**Position:** Co-Chair

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## PERSONAL INTRODUCTION

Dear delegates,

My name is Giorgos Konstantinidis, I am 15 years old and I am attending the 10th grade of the Anavryta Model High School in Athens. This will be my first time chairing as well as my first DSTMUN conference, but 8th overall.

In this committee, we will be drafting resolutions and debating upon very important topics that pose major threats to the whole world and delay global development, namely: Addressing the Security Risks and Benefits of Biometric Mass Surveillance Practices in Europe and the Question of Nuclear Proliferation on a Global Scale. This study guide aims to help you understand the topic better, as well as provide you with useful background information, a timeline and possible solutions you can propose to help solve the problem. However, I strongly suggest that you do your own research as well to delve deeper into your country's policy upon the matter and draft your resolutions.

If you have any questions concerning a part of this study guide, the procedure or anything that has to do with the topic, do not hesitate to contact me. My email is: [giokon007@gmail.com](mailto:giokon007@gmail.com).

I am looking forward to this conference and meeting with you all. Hope we have a wonderful debate!

Best regards,

Giorgos Konstantinidis

## TOPIC INTRODUCTION

Ever since the discovery and the first use of nuclear weapons at the end of WWII, more and more countries are seeking to acquire or develop their own, for self-defense purposes or territorial expansion. It is important thus to acknowledge the fact that owning a nuclear device completely changes a country's global status and that's one of the main reasons why they are so desired. A nuclear power is greatly respected/feared by foreign leaders due to the destructive power it possesses and the threat of it in case of a conflict. However, after the end of the Cold War, during which nuclear proliferation thrived, the world's superpowers are trying to stop the spread of these lethal weapons to new countries through agreements and peace acts like the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the only binding commitment in a multilateral treaty with the goal of disarmament by the nuclear-weapon States signed by 191 nations. The treaty aims at the complete and global nuclear disarmament, as well as the peaceful cooperation for the safe use of nuclear energy for non military actions. The problem that the world's great powers have and support nuclear non-proliferation is firstly, the risk of every country having the power to completely eliminate another country at the press of a button. What if a smaller nation's government is overthrown by rebels or terrorists and they gain control of the nuclear arsenal of that country. Moreover, they fear that by giving away nuclear devices that their allies would no longer need any help to guarantee their protection, thus, bigger powers would lose their influence around the world and their arms sales would shrink. Additionally, former weak countries could cooperate and develop to become a powerful first-world country. Overall, for stronger nations, nuclear proliferation would risk the lives of millions of people as well as weaken the current military powers.

Until today, the number of nuclear powers around the world seems to remain relatively stable but none of the 9 countries currently possessing nukes –the United States, Russia, France, China, the United Kingdom, Pakistan, India, Israel, and North Korea– seems completely willing to abandon them and the advantage of having them. The threat is imminent, especially when no one is stopping any of the 9 mentioned arsenals from launching a devastating nuclear attack to a target anywhere on the globe. The sole existence of armed nuclear devices has its dangers (e.g. a potential accident, a malfunction or the use of these weapons by non authorized personnel in case of a rebellion or a terrorist attack). Apart from these risks, no one really knows what governments really plan, having nuclear weapons if only to be used defensively and at these quantities seems worthless. It is important to understand that Nuclear proliferation cannot be halted without nuclear disarmament. A peaceful solution must be found between all nuclear powers, the rest of the countries and the United Nations (UN).

## DEFINITION OF KEY TERMS

### **Nuclear proliferation**

Nuclear proliferation is the spread of nuclear weapons, nuclear weapons technology, or fissile material to countries that do not already possess them. The term is also used to refer to the possible acquisition of nuclear weapons by terrorist organizations or other armed groups.

### **Nuclear Weapon**

A nuclear weapon is a device designed to release energy in an explosive manner as a result of nuclear fission, nuclear fusion, or a combination of the two processes. Fission weapons are commonly referred to as atomic bombs. Fusion weapons are also referred to as thermonuclear bombs or, more commonly, hydrogen bombs; they are usually defined as nuclear weapons in which at least a portion of the energy is released by nuclear fusion.

### **Nuclear-weapon States**

Nuclear-weapon states are the 5 countries recognized by the NPT, USA, Russia, Great Britain, France and China and they officially possess nuclear warheads. The USA and Russia combined have 90% of all nuclear bombs currently functional.

### **Nuclear arms race**

An arms race occurs when two or more countries increase the size and quality of military resources to gain military and political superiority over one another. The most notable example is the nuclear arms race which was an arms race competition for supremacy in nuclear warfare between the United States, the Soviet Union, and their respective allies during the Cold War.

### **Superpower**

A superpower is a state that possesses military or economic might, or both, and general influence vastly superior to that of other states. Generally, even though there are no exact criteria, a country must vastly influence global politics, the global economy and have the military power to support its position, like the United States of America (USA) and the Union of Soviet Socialist Republics (USSR) during the Cold War.

### **The Manhattan project**

The Manhattan Project was the codename for the American-led effort to develop a functional atomic weapon during World War II. Following multiple tests, the first offensive bombing targeted the Japanese cities of Hiroshima and Nagasaki which led to hundreds of thousands of civilian casualties and made Japan surrender, which ended the war. The consequences of the research project were, are and will be criticized.

## BACKGROUND INFORMATION

### Important Historical Events

#### The Manhattan Project

It all began during WWII, the date was August 13, 1942, Americans had joined the war and fought against the Japanese army in the Pacific while Germany was starting to show some weaknesses. A couple years earlier, among other scientists, Albert Einstein signed a letter to the American president President Franklin D. Roosevelt and it warned him about the development of "extremely powerful bombs of a new type". It urged the United States to acquire stockpiles of uranium ore and accelerate the research of Enrico Fermi and others into nuclear chain reactions. The British government created their own research program but in 1940 they offered access to the Americans. Finally, in 1941, after a meeting with the vice president, Roosevelt approved an atomic program in coordination with the British scientists, code-named as "The Manhattan project" aiming to develop the first nuclear weapon before the Germans and gain a significant military advantage to win the war.

After years of research and an intense death race against the Germans on this matter, in July 16, 1945, the first ever nuclear bomb exploded at a test site in New Mexico, a test conducted by the United States of America (USA). In Europe, the devastated Germany, following the invasion of Normandy and the counteroffensive by the Soviet Union, surrendered, leaving Japan as the only major Axis power still in conflict. The allies sent an ultimatum to the Japanese government, demanding their surrender but they refused. As a result, instead of proceeding with a contemporary invasion of the main island of Japan, with the consent of the United Kingdom, the USA set off two nuclear bombs at the Japanese cities of Hiroshima and Nagasaki on 6 and 9 August 1945, respectively. The two bombings killed between 129,000 and 226,000 people, most of whom were civilians, and remain the only use of nuclear weapons in armed conflict. This was a fatal hit in the already devastated Japanese people and resulted to their surrender six days after the bombing of Nagasaki. This was an event that to this day remains unforgettable as it changed the world forever.

In brief, someone might say that the Manhattan project and its consequences were a necessary evil to end the horrors of WWII, another might contrast that it was just a pretext for the US to secure their global control era. None of the two will probably ever be proved wrong or right and everyone can say whatever they think but the event happened and its consequences haunt us to this day. Undoubtedly, the importance of the project cannot be overlooked, it was the final act of a power balance change that started with WWII, for the first time in history the tides had changed and Europe was not the leading actor anymore. The ex-English colonies in North America, two centuries after gaining their independence had managed to become the number one world superpower with the USSR shortly after. It

marked the beginning of a new era where the USA will be expanding its sphere of influence in unimaginable size and would become the protagonist in global politics, the economy, military and much more. But let's don't forget that while the bombing sped up the surrender of Japan and relieved the world from one more deadly invasion, it opened up new "possibilities" for new kinds of conflict, a much more devastating one where the first striker has a big advantage. It is indeed one huge problem, while in times of tension and great instability a nation can prepare to defend itself from an invasion and counter it, a nuclear strike would probably be sudden and there is currently no way of stopping a nuclear missile once it is launched.

### **The Cold War**

After the end of WWII, with Germany and Japan defeated and the UK and France devastated by the war, there were only two superpowers left on the field, the USA and the Union of Soviet Socialist Republics (USSR). The two countries were totally and symmetrically opposite on almost everything, politics, ideology, regime, culture, climate and more. They may have been allies against the Nazis during the war, but now there was nothing to agree upon. They were two superpowers in a world where everyone else tried to recover and thus, the fight for control was fierce. But, although the two nations upfront opposed each other, there were no battles with soldiers to be fought, it was a new type of warfare which included political games, espionage and trying to come out ahead of your opponent in every scientific or athletic field to make your country seem better and more powerful. This was later named by experts "Cold War".

### **Nuclear Terrorism**

Nuclear terrorism can take at least four forms: detonation of an intact nuclear weapon, an improvised nuclear device, a radiation-dispersal device or "dirty bomb"; or the release of radioactivity. The first one is difficult in well organized and developed countries where trespassing into a relevant military facility to acquire an operational nuclear weapon is extremely difficult. Stealing components to construct a functioning nuclear weapon is also improbable as that requires professional expertise and equipment that is well monitored. Therefore, and because civilian facilities and their staff present easier targets, the other three categories are more feasible forms of nuclear terrorism. The second option requires terrorists to steal materials found in nuclear power plants to handle, store, or transport nuclear fuel. A "dirty-bomb" is a device whose primary purpose is to spread dangerous levels of radiation. Combining conventional explosives with radioactive material, dirty bombs are relatively unsophisticated when compared to those used for targeted nuclear explosions. Consequently, they do not require the same level of expertise and rare materials as a conventional nuclear bomb. The fourth form of nuclear terrorism aims to disperse radioactivity even more indiscriminately – with no explosive devices required. Instead of opting for detonation, perpetrators could attack a facility handling nuclear or radiological

materials in order to disrupt, sabotage, or manipulate its operations, resulting in the release of radioactivity.

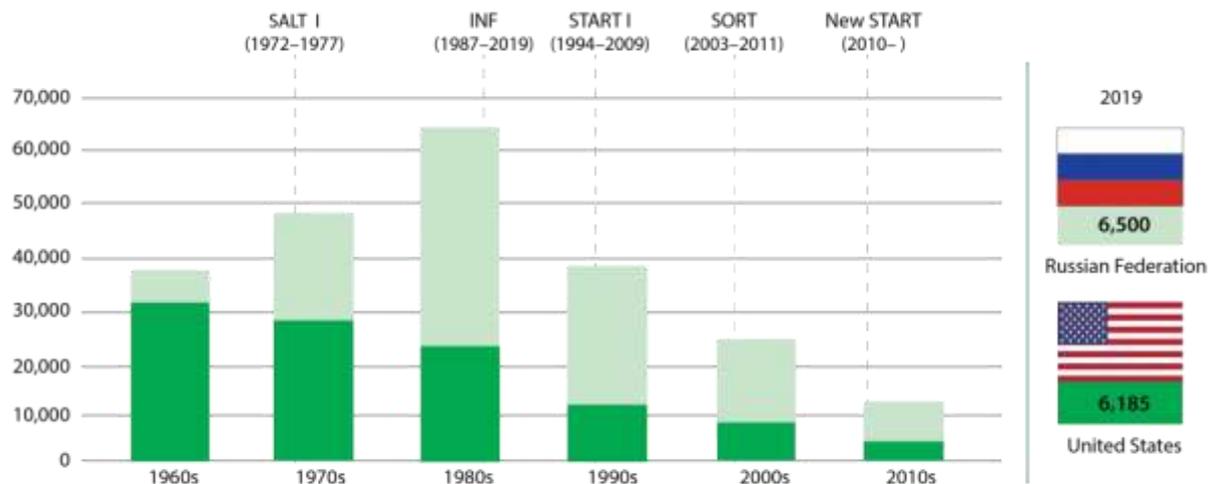


Figure 1: Nuclear Possession of the Russian Federation and the US

### The Cuban Missile crisis

The superiority of the USA who possess nuclear weapons did not last for long. Just four years after the Hiroshima and Nagasaki bombings in 1945 the USSR tested their own atomic bombs changing the balance of power in the world. From then, as part of the Cold War and a cause of it, the two nuclear powers started an arms race of trying to develop more and more powerful nuclear weapons than the other. Additionally, they started helping and arming their major allies with nuclear weapons for “protection”. Moreover, as none superpower had the ability to launch missiles from their territory and reach the other in case of an emergency, the US armed Italy with nuclear bombs capable of direct striking Russian territory. In response, the USSR tried to supply the island of Cuba with such weapons to balance out the American striking power. But this action seemed unacceptable by the USA and they formed a blockade around the island for russian ships carrying nuclear materials. Tension between the two sides rose quickly and humanity experienced the closest it has ever been to a nuclear conflict. Finally, they came to an agreement of both removing their missiles from Cuba and Italy respectively and it was this time that they realized how dangerous it is to have these excessive amounts of nuclear weapons and started together signing agreements which limited their arsenals.

### Nuclear Disarmament

If the history of the nuclear age teaches one clear lesson, it is that nations seek nuclear weapons chiefly because others have them. Deterrence theory teaches that safety

from nuclear arms resides in possessing some yourself. So long as any state has nuclear weapons, others will want them. So long as any such weapons remain, it defies credibility that they will not one day be used, by accident, miscalculation or design. And any such use would be catastrophic. It is thus important to find a solution to the problem collectively, all nuclear powers must agree and comply with a solution. The world's largest nuclear arsenal possessor must lead by example, taking actions to reduce their nuclear power as well as withdrawing all nuclear devices placed outside their territory if they have done so. These are some steps that need to be taken if a nuclear-free world is what we aim for.

## MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

### United States of America (USA)

The US owns less than 5,500 nuclear weapons as of May 2022 in their arsenal, a little less than what Russia has. It is no secret that they have many enemies in the middle-east, especially terroristic organizations or other Muslim countries and if a nation of them acquired nuclear weapons, it would be a huge threat to their safety. Moreover, they have a clear advantage with Russia in terms of military power over the rest of the world, something that they would certainly want to keep with the influence they have on global politics.

### Russian Federation

Russia has one of the two largest nuclear arsenals along with the US and, like them, has great influence over their allies and greatly controls what is happening in the globe. Currently, because of the ongoing invasion of Ukraine, their nuclear power is really useful for them for their protection. They are certainly seen as a threat to neighboring countries and the NATO alliance, and their relationships with other allies may have been shaken up, but possessing nukes makes them an invulnerable target to a military conflict and grants them huge influence power. This is why, especially now, nuclear weapons are essential to Russia and their "survival".

### United Kingdom (UK)

The United Kingdom was the third country to test a nuclear weapon and it is recognized as one of the five nuclear weapon states under the Nuclear Non-proliferation Treaty. It currently possesses four ballistic missile submarines, and has maintained a continuous deployment of nuclear weapons at sea since 1969. It received extensive research material from the USA during the Cold War to accelerate the development proceeded to test their first successful bomb on the 3rd of October, 1952. The UK has stated that they have no intentions of using their nuclear weapons offensively, their sole purpose is for extreme situations for self-defense and controlled solely by the prime minister.

## **France**

France is also recognized as one of the five nuclear weapons states that built the Nuclear Nonproliferation Treaty. It developed their nuclear weapons like the UK during the Cold War with help from the US, in order to establish their nuclear superiority in Europe. Since the end of the Cold War, France has reduced its stockpile of nuclear weapons from an approximate high of 540 to its current arsenal of around 290. It is also important to note that France tries to always keep its nuclear arsenal at the lowest possible level in accordance with the strategic context.

## **People's Republic of China**

China is currently estimated to have 350 nuclear weapons and it is the 3rd biggest nuclear power in the world in terms of the quantity of their missiles. In 1951, China signed a secret agreement with Moscow through which China provided uranium ores in exchange for Soviet assistance in nuclear technology. China began developing nuclear weapons in the late 1950s with substantial Soviet assistance. China has pledged unconditionally not to use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones in a public statement. However, China, like other nuclear weapons states, continues to advance their nuclear arsenal despite their commitment under the NPT to pursue nuclear disarmament.

## **India**

India's loss to China in a brief Himalayan border war in October 1962, provided the New Delhi government impetus for developing nuclear weapons as a means of deterring potential Chinese aggression. They finished development and tested their first bomb in 1974, in an operation codenamed "Smiling Buddha", but only officially announcing it in 1998. That day, India became the world's sixth nuclear power outside the five permanent members of the United Nations to successfully test a nuclear bomb. India did not participate in the negotiation of the TPNW at the United Nations in New York in 2017 and thus did not vote on its adoption. In 2016, India abstained from voting on the UN General Assembly 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". In addition, India has yet to sign the NPT, claiming that their nuclear tests were for peaceful reasons.

## **Israel**

Israel is believed to have developed their first functional nuclear bomb in 1966 in cooperation with France and with British and Norwegian aid in form of restricted materials and now it is able to deliver it in several methods, including by aircraft and submarines. Israel maintains a policy of deliberate ambiguity, never officially denying or admitting to having nuclear weapons, instead repeating over the years that "Israel will not be the first

country to introduce nuclear weapons to the Middle East”. As a result, they are not a party to the Nuclear Non-Proliferation Treaty (NPT) and have not accepted International Atomic Energy Agency (IAEA) safeguards on some of its principal nuclear activities.

### Pakistan

Pakistan, pressured by the existence of the developed Indian nuclear weapons, they developed and tested their first nuclear bomb back in 1998 while claiming that it is a necessary measure to maintain its territorial integrity, but like their neighbors, has not signed the NPT. Ever since, every American president lives with the fear of these weapons falling into the wrong hands. But now, prompted by the recent success that Taliban had in Afghanistan, Pakistani jihadis might try to seize power in their home state. As former President Barack Obama translated this challenge into carefully chosen words: “The single biggest threat to U.S. security, both short term, medium term and long term,” he asserted, “would be the possibility of a terrorist organization obtaining a nuclear weapon.”. This possibility has now grown from a fear into a strategic challenge that no American president can afford to ignore.

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

North Korea, although under a dictatorial regime, has received help in the form of equipment and expertise from many different countries in North Africa and Asia, mainly Russia and the U.S.S.R, China, and Iran for their nuclear programs as a response to the deployment of U.S. missiles in South Korea. Accordingly, North Korea withdrew from the NPT in 2003 before testing their first nuclear bomb in 2006. Despite extreme international pressure and sanctions, North Korea has defiantly pursued a nuclear weapons program for decades in a self-described attempt to protect the regime from the security threats posed by adversarial countries.



Figure 2: Global Nuclear Weapons Stockpile

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

The United Nations Office for Disarmament Affairs, or UNODA for short, was established in January 1998 and it provides substantive and organizational support for norm-setting in the area of disarmament through the work of the General Assembly and its First Committee, the Disarmament Commission, the Conference on Disarmament and other bodies. It fosters disarmament measures through dialogue, transparency and confidence-building on military matters, and encourages regional disarmament efforts; these include the United Nations Register of Conventional Arms and regional forums. It also aims at global nuclear disarmament.

### **International Atomic Energy Agency (IAEA)**

The IAEA contributes to the proliferation of nuclear weapons. It applies nuclear safeguards – consisting of monitoring, inspection, information analysis, and other activities – to verify that nuclear activities remain peaceful and detect and deter their diversion, including to weapons-related purposes. In particular, the IAEA implements comprehensive safeguards agreements mandated by the NPT, which serve as a first line of defense against nuclear weapons proliferation.

## **BLOCS EXPECTED**

### **Bloc 1 (Countries supporting nuclear non-proliferation)**

In this bloc countries who support the stop of the spread of nuclear weapons and seek a global nuclear disarmament should gather (e.g. USA, the Russian Federation, Most European Nations) and together in coordination with all nuclear states they must try to find solutions in which everyone agrees to pursue disarmament. Greater powers like the USA and Russia should guarantee the security of smaller nations in order to eliminate their need for nuclear weapons. Additionally, solutions should also be found about the safe removal of existing nuclear weapons and the environmentally-friendly disposal of radioactive material.

### **Bloc 2 (Countries against nuclear non-proliferation)**

In this bloc countries like Iran must gather who “need” nuclear weapons for their self defense and for that they support nuclear proliferation, (e.g. South Korea, India, Pakistan, Arabian countries). They should try to find measures with which it is ensured that countries can only use their nuclear weapons defensively and avoid a nuclear conflict. They should also focus on equally spreading nuclear power at small quantities and try to maintain a sustainable balance between countries. Moreover, it is important for everyone to securely keep nuclear weapons and away from terrorist groups based on some standards or monitored by an international organization.

**TIMELINE OF EVENTS**

Date	Description of event
July 16, 1945	The first nuclear bomb in the world was set off by the USA in Mexico
August 6, 1945 – August 9, 1945	The nuclear bombing of Hiroshima and Nagasaki happened and ended WWII
August 29, 1949	USSR tested their first nuclear weapon
October 3, 1952	UK tested their first nuclear weapon
November 1st, 1952	The first thermonuclear weapon (hydrogen bomb) was discovered and tested by the Americans
February 13, 1960	France tested their first nuclear weapon
October 16, 1964	China tested their first nuclear weapon
July 1st, 1968	The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) was signed with an indefinite duration
May 18, 1974	India tested their first nuclear weapon
November 16, 1988 – December 26, 1991	The USSR collapsed and the Cold War ended
May 28, 1998	Pakistan tested their first nuclear weapon
January 10, 2003	North Korea withdrew from the NPT
Oct. 9, 2006	North Korea tested their first nuclear weapon

## RELEVANT RESOLUTIONS, TREATIES AND EVENTS

### **Resolution A/RES/1(I)**

The Resolution A/RES/1(I) was the first ever resolution adopted by the security council on January 24, 1946, established a commission of the UN Security Council to ensure 'the elimination from national armaments of atomic weapons and all other major weapons adaptable to mass destruction.' UNGA Res 1 (1) placed a primary responsibility on the Security Council in order to facilitate the elimination from national armaments of atomic weapons and all other major weapons adaptable to mass destruction. The Security Council has, so far, failed to implement this obligation.

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

The Comprehensive Test Ban Treaty (CTBT) prohibits "any nuclear weapon test explosion or any other nuclear explosion" anywhere in the world. The treaty was opened for signature in September 1996, and has been signed by 185 nations and ratified by 172. The treaty cannot formally enter into force until it is ratified by 44 specific nations, eight of which have yet to do so: China, India, Pakistan, North Korea, Israel, Iran, Egypt, and the United States.

### **Partial Test Ban Treaty (PTBT)**

The Partial Test ban Treaty, PTBT for short, requires parties to abstain from carrying out nuclear explosions in any environment where such explosions cause radioactive debris outside the limits of the State that conducts an explosion. The treaty is signed by almost every nation and has an unlimited duration.

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

The Treaty on the Non-Proliferation of Nuclear Weapons, NPT for short, is the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States. Opened for signature in 1968, the Treaty entered into force in 1970. On 11 May 1995, the Treaty was extended indefinitely. A total of 191 States have joined the Treaty, including the five nuclear-weapon States.

### **Treaty on the Prohibition of Nuclear Weapons (TPNW)**

The Treaty on the Prohibition of Nuclear Weapons, or TPNW for short, 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. The Treaty also prohibits the deployment of nuclear weapons on national territory and the provision of assistance to any State in the conduct of prohibited activities. States parties will be obliged to prevent and suppress any activity

prohibited under the TPNW undertaken by persons or on territory under its jurisdiction or control.

## PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

### **Nuclear-Weapon-Free Zones (NWFZ)**

The Nuclear-Weapon-Free Zones, NWFZ for short, is a regional approach to strengthen global nuclear non-proliferation and disarmament norms and consolidate international efforts towards peace and security. It basically prohibits the existence and use of nuclear weapons in certain areas which must be recognized by all member states and have no nuclear weapons. The treaty today includes places which are not hostile to any other country and must be preserved due to their significance (e.g. Antarctica, parts of Africa).

### **UNFOLD ZERO**

UNFOLD ZERO is a platform designed for UN focused initiatives and actions towards the achievement of a nuclear weapons free world that calls on the members of the UN Security Council to take action to support the goal of a nuclear-weapon-free world.

## POSSIBLE SOLUTIONS

### **Promotion of global peace and elimination of the need for nuclear devices**

The protection of a country is considered to be one of the top reasons why a nation may want to acquire nukes. For strong anti-nuclear proliferation countries, ensuring to your smaller allies the security they need is the key to counteracting their desire for nuclear weapons. This solution promotes the change from nuclear warfare to contemporary warfare and strengthens even more the influence big countries have over their respective allies.

### **Creation of an observation body under the UN to supervise and ensure that all nuclear weapons are safely kept**

The destructive power of even the tiniest of nuclear bombs is immense and if one exploded due to an accident or mistreatment it would have irreversible consequences to the environment around and the people. It is obvious then, that such devices should be handled with extreme caution and by experts to avoid a situation like the one described. This is what the newly formed body will be assigned to do, monitor whether the conditions in which the nuclear bombs are safe. In addition, it will help if a new nuclear facility is being

built to ensure that everything is done by the book, if the committee agrees that nations may acquire and keep their own nuclear weapons freely.

### **Applying stricter legislation to materials used in the creation of nuclear devices**

Although already the international community has restricted the circulation of certain materials that are known to be used in the development of nuclear weapons, these restrictions should be reconsidered and modernized. Additionally, the list of these materials should be regularly enriched with new materials as technology and development methods evolve. Lastly, all the above limitations should be strictly applied in every situation (e.g. by limiting the possible producers and buyers of these materials).

### **Monitoring of all cases of nuclear energy being used for civil reasons**

The civil use of nuclear energy, unfortunately, can easily be reversed engineered into nuclear weapons by any government or group of scientists. This is why it is important to keep all of this kind of tech well protected and managed to avoid it falling into the wrong hands of terrorists in case of a rebellion or a heist. In addition, if anything suspicious is detected (e.g. the extensive use of materials used in nuclear development by a non authorized individual group) should be immediately seized by the authorities.

### **Stop the nuclear arms race and try to reduce or extinct all nuclear arsenals**

During the Cold War, the USA and the USSR constantly tried their best to come out ahead in every possible confrontation/showdown to establish their position as the greatest superpower, from chess tournaments to the space race and the size of each's nuclear arsenal. At the peak of their "race", the two nations combined had enough nuclear weapons to destroy the entire surface of the planet three times. After some serious series of events (e.g.the cuban missile crisis), the two started through a handful of agreements over time to dramatically reduce the quantity of nuclear missiles they possessed to less than the 1/5 of their original amount. Today, the effort of limiting nuclear weapons continues, by international organizations like the UNODA which aims at the complete nuclear disarmament of all nuclear weapons states world-wide.

### **Raising public awareness about the destructive power of nuclear bombs**

It is no secret that one of the most important and effective ways to influence a military operation, such as the development of nuclear weapons or the invasion of another country is by well informing the citizens of the nation about it and making them either support or not the government's action. In a truly democratic country, the people control the government and in other kinds of regimes, the people are capable of overthrowing their leader, if he is found not to follow the public's opinion. The same method could be applied to this question, international organizations or governments could influence the public

opinion towards a more nuclear-free world, or the opposite, which if successful would pressure governments to act and aim towards that.

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