# **First General Assembly**

Reinforcing treaties on nuclear weaponry in order to limit the threat of nuclear warfare

Forum: First General Assembly

**Issue:** Reinforcing treaties on nuclear weaponry in order

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## Introduction

It took the human race longer, going from bronze weapons to iron weapons than it took us to go from iron to nuclear weapons. The human race is plagued with an urge to keep finding more efficient ways of killing each other, this statement has been realised by the dropping of atomic bombs on Hiroshima and Nagasaki in 1945. As of our knowledge this is the most efficient, the most perilous and the most unforgiving weapon ever created. However, due to this research on nuclear reactions, we have also pioneered new sustainable energy sources and better overall knowledge of the world around us.

Atomic weapons are also one of the many ways of asserting power on other nations. The nine countries that possess atomic weapons are also often seen as the nine most powerful countries in the world. Of the nine previously mentioned countries two of them are head and shoulders above the rest; the Russian Federation and the United States of America. This is mostly because of the Cold war, during this time period we saw the global nuclear arsenal grow immensely, predominantly in the USA and the Russian Federation. With the USA fearful of a Russian nuclear bomb, and Russia vice versa it led to the creation of more bombs than ever before imagined. To put the size of the two nuclear arsenals into perspective, the country with the third most nuclear warheads, China, does not even have one tenth of the USA's arsenal.

Due to the growth in atomic weapons and because we had seen the effects of such a bomb before our own eyes, it is crucial for us to regulate and minimise the creation of these weapons.

Ultimately leading to nuclear disarmament.

## **Key Terms**

#### **Nuclear reactions**

An atomic reaction is a reaction where the nuclei of atoms either split or are combined with a different atom, creating a new atom. This type of reaction only happens with radioactive atoms. The radioactive part of a nuclear reaction is one of the reasons that nuclear reactions are so dangerous. The radiation emitted by such an atom can cause the bodily cells to increase the speed of their division, thus leading to cancer. Another adverse effect of radiation is radiation sickness, this is when the radiation damages your bodily tissues, leading to predominantly internal infections and internal bleedings. Nuclear reactions are a more efficient way of creating energy. With a chemical reaction, such as burning gasoline, molecules are altered, while with a nuclear reaction atoms itself are altered, the division of these atoms creates a lot more energy than the division of the molecules into new ones.

#### **Axis Power**

The Axis Power was the party fighting against the allied powers. It consisted of: Germany, Italy and Japan. They were called The Axis Power because, at the time of creation, it only consisted of Germany and Italy. With Italy being under Germany Mussolini declared there was a Berlin-Rome axis about which the world would revolve. Japan joined the alliance later as they saw an opportunity for them to expand their power in East Asia by invading western colonies. The colonies would barely be protected by their colonisers as they were in a war of their own.

#### Nazi

A Nazi is a member of the far right National Socialist German party led by Adolf Hitler. A soldier in German territory was also considered a Nazi as they were forced to pledge an oath to Hitler.

## **Allied powers**

The Allied Powers were the Nations fighting against the Axis Powers. The Allied Powers consisted of many nations, with the main five being: the United Kingdom, Soviet Union, China, Canada and the United States.

## **General Overview**

## The origin of the first nuclear weapons

Near the end of the nineteenth century the first major discoveries on radioactivity were made. It all started with Wilhelm Röntgen, he discovered unknown rays penetrating the screen, which was meant to block light. He decided to name these rays 'X-rays' and the name has stuck with us to this day. This kickstarted the research into radiation. After that the first radioactive element was found in 1896. Henri Bequerel was the first scientist to discover the radiation rays emitted by uranium salts. The last and final major discovery that led to the inevitable creation of the nuclear bomb was the discovery of nuclear fission by Otto Hahn and Fritz Strassman, this discovery was later theorised and made the creation of a bomb possible. The world feared that Nazi Germany might have caught on to this discovery earlier, as a lot of scientists were either German or part of the Nazi German territory. This added a layer of urgency for the United States to start committing towards the development of a nuclear bomb; they, together with the United Kingdom, performed extensive research, until finally the Manhattan Project was founded. Due to the urgency of the matter the Manhattan project was finished in three years, this is still the fastest a nuclear weapon production program has been finished. The end goal of the Manhattan project was to build a bomb before Nazi Germany did, there was never a clear plan on where to drop the bomb. When the bomb was finally finalised the Germans had already forfeited, the only Axis Power left was Japan. The USA decided hurriedly that it was best to drop the bombs instead of dragging the war out for longer. If the bomb was not dropped it would mean months of further war and many more regular bombings on Japan.

## The aftermath of the bombing

It is safe to say that the bombing of Hiroshima and Nagasaki changed the course of history. In the initial explosion alone a combined tally of about 110.000 people died, this is without noting the people that suffered from long term illness and the following generations that had an increased chance of being born with a mutation. Only one day after the bombs were dropped on Japan, the government decided to accept the terms that were proposed in the Potsdam declaration. It meant that Japan had to unconditionally surrender to the allied powers, this led to the installation of the Supreme Commander for the Allied Powers; an American named Douglas MacArthur. This installation and occupation had long lasting effects on every

aspect of Japanese society. On a global scale it caused the Cold War to start, which in turn led to an exponential growth in global nuclear warheads. The Cold War is one of the main reasons for the geopolitical divide that we live in now. During the Cold War there were two main global powers, the Soviet Union and the United States of America. Both parties were scared that the other would become economically, politically and militarily superior (with the creation of more nuclear warheads as a result). This forced the two parties to 'draft' countries to their side, creating alliances that are still visible to this day. This is one of the main reasons that global politics is, in rough lines, composed with countries either siding towards the American, 'western', side or the Russian, anti western, side.

## The United Nations' involvement and its post Cold War treaties

After the Cold War there are three main treaties that form the current nuclear legislations. Firstly, the Comprehensive Nuclear-Test-Ban Treaty (CTBT) was proposed in 1954. This was seen as the first major step towards international disarmament, as of July 5<sup>th</sup> 2024 it has however not been entered into force. This is because even though nations such as the UK, USA and Soviet Union all expressed interest in adopting the treaty, their talks were stalled repeatedly. All three nations wanted to keep their own arsenal while still aspiring to limit those of others. This treaty is still seen as a major goal in global disarmament. The second major treaty was jolted into action by the Cuban Missile crisis. This crisis added a layer of urgency for the member states to make limitations on nuclear testing, thus the Partial Test Ban Treaty (PTBT) was signed by American, Soviet and British leaders in 1963. This treaty prohibited testing underwater, in the atmosphere and in outer space. This paved the way for the third and final major treaty created in 1968, the Treaty on Non-Proliferation of Nuclear Weapons (NPT). This treaty was created because nuclear warheads were in the military interests of Cold War nations that possess nuclear weapons, it was however not in the global interests of the other nations and civilians. In this treaty Nuclear weapon states must not give nuclear weapons to Non Nuclear Weapon States (NNWS), they must also adhere to the precautions made by the International Atomic Energy Agency (IAEA). Furthermore, nations must end all nuclear arms races and pursue nuclear disarmament. This treaty has entered into force. More recently one final crucial treaty was created, the Treaty on the Prohibition of Nuclear Weapons (TPNW). This treaty prohibits Member States from developing, manufacturing, testing, producing, acquiring, possessing or

stockpiling any nuclear weapons. This treaty has, however, not been signed by any Member States that possess nuclear weapons but has entered into force.

# **Major Parties Involved**

#### **United States of America**

The United States is the country with the second largest amount of nuclear warheads. They have over 5000, with an estimated number of 3708 warheads that are not retired or awaiting dismantlement. The United States is the only nation to have ever used a nuclear weapon, and they have stated that the only reason for them to keep their weapons is to deter nuclear attacks from other Member States. This statement was predominantly directed towards the Russian Federation and the DPRK. The USA has already had an arms race with the Russian Federation and this is one of the clear reasons for the political divide in our global society. They are also fearful of the DPRK because, even though they do not possess the weapons currently, they still have a very active nuclear plan. The USA is worried that the Korean weapons will soon be able to reach the United States.

#### **Russian Federation**

The Russian Federation has the most (active) nuclear warheads in the world. Moreover the Russian Federation is not scared to make statements threatening the use of nuclear weapons. During the invasion of Ukraine several senior Russian generals and Vladimir Putin himself have threatened the use of nuclear weapons. Even though the Russian Federation has suffered heavy losses during their invasion of Ukraine, the threat of a nuclear bomb dropping is not imminent as the process to drop a nuke is similar for both the US and Russia, so if one country would drop a nuke the other would swiftly follow. This means that Russia would inevitably risk their own safety, which is highly unlikely.

## **Security Council committee 1540**

The Security Council committee 1540 was established following resolution 1540 in 2004. Its main goal is monitoring countries in their adherence to the clauses made in resolution 1540. The resolution obliges States to refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their means of delivery.

## The International Atomic Energy Agency (IAEA)

The IAEA was founded in 1957, following the fears generated by the discoveries of nuclear technology. The IAEA is an autonomous international organisation within the United Nations. The organisation covers a vast amount of topics such as, nuclear safety, peaceful application of nuclear energy and technical cooperation and development. The IAEA has: one of the biggest databases, training materials, technical documents and publications on nuclear technology and safety precautions. The IAEA also plays a vital role in helping Member States transition to nuclear energy. Even though nuclear energy does come with nuclear waste, it is still seen as a clean energy source and transitioning to nuclear energy adheres to the Sustainable Development Goals proposed by the United Nations.

# **Timeline of Key Events**

**1895** Wilhelm Röntgen discovers ionising radiation in

the form of X-rays.

**1896** Henri Bequerel announces the discovery of

radioactivity to the Academy of Sciences in Paris.

**1938** German physicists Otto Hahn and Fritz Strassman

discover nuclear fission, making an atomic bomb

possible.

August 2<sup>nd</sup>, 1939 President Franklin Delano Roosevelt receives the

"Einstein Letter" warning of Nazi Germany's

efforts to create an atomic weapon

September 1<sup>st</sup>, 1939 World War II starts.

**December 7<sup>th</sup>, 1941** Japan attacks Pearl Harbor.

**December 8<sup>th</sup>, 1941** The US declares war on Japan.

November 25<sup>th</sup>, 1942 Los Alamos, a secret military base where

scientists live during the process of building the

bomb, is approved

**June 6<sup>th</sup>, 1944** D Day.

May 7<sup>th</sup>, 1945 Nazi Germany surrenders, Japan is the only Axis

Power left.

**July 26<sup>th</sup>, 1945** Truman issues the Potsdam Declaration.

**August 6<sup>th</sup>, 1945** The first bomb, designed in Los Alamos,

detonates above Hiroshima.

August 9<sup>th</sup>, 1945 With Japan failing to agree with the Potsdam

Declaration, the second atomic bomb is dropped

above Nagasaki

September 2<sup>nd</sup>, 1945 Japan formally surrenders, ending the Second

World War.

1947 Start of the Cold War.

July 29 <sup>th</sup> , 1954	The Marshall Islands submits a proposal for the CTBT.
July 29 <sup>th</sup> , 1957	The International Atomic Energy Agency is formed.
October 30 <sup>th</sup> , 1961	The biggest nuclear bomb ever dropped was tested. The Tsar Bomba made by the Soviet Union was dropped above the Arctic Ocean. It is still the most powerful man-made explosion ever.
October 10 <sup>th</sup> , 1963	The PTBT is entered into force.
March 5 <sup>th</sup> , 1970	The NPT is entered into force.
January 22 <sup>nd</sup> , 2021	The TPNW is entered into force.

# **UN Involvement and Other Treaties**

- Comprehensive Nuclear-Test-Ban Treaty, 1954.
- Partial Test Ban Treaty, 1963.
- The Non-Proliferation of Nuclear Weapons Treaty, 1970.
- Security Council Resolution 1540, 2004.
- Treaty on the Prohibition of Nuclear Weapons, 2021.

## **Possible Solutions**

## **Creating a shared nuclear database**

Nuclear reactions are something relatively new to us, if a new discovery is made it definitely benefits the nine nations that possess nuclear bombs, as, if they were to have an active nuclear program, this scientific breakthrough might alter these plans. It could also be beneficial to all Member States as even though NNWS don't have weapons, they could be working on a nuclear energy program or something completely different which works with nuclear reactions. For that reason it might be a good idea for the delegates to create a committee of scientists to share their discoveries on nuclear reactions. Most nations do not share all their information with the world, but seeing as these discoveries, if not published, could lead to detrimental consequences for the world, we issue the delegates to make a committee and global database sharing these discoveries.

## **Promoting atomic energy**

As said before an atomic reaction creates a lot more energy than a chemical reaction. Therefore it might be smart for More Developed Countries (MDC) to fund nuclear energy programs in Lesser Economically Developed Countries (LEDC) or in their own countries. As of now we are a long way from reaching the SDG's, and having nuclear energy plants could mean that there is not only more room for farmland or housing, as factories produce less energy and thus need more space to produce the same amount of energy as a nuclear plant, but also a clean energy source. Building such a plant does, however, cost a lot of money, therefore it is crucial that delegates find suitable locations to place these plants making sure that we are powering as much as possible for as little as possible money while still ensuring the highest safety standards.

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# **Appendix**

- Security Council committee 1540 homepage
- Resolutions made by committee 1540
- Resolution 1540
- Information on treaties and their status
- <u>Information on individual countries</u>
- List of disarmament treaties and why they were created