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Topic Research Report

Topic: Disarming all nuclear weapons across all nuclear powers



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Introduction:

This research report will explore denuclearization. It will explore the development of nuclear technology as well as the spread of the Anti-Nuclear movement. This report will also outline the main organizations involved and their preferred outcome, as well relevant UN resolutions and previous attempts to solve the issue. Finally, it will conclude with possible outcomes to the issue at hand and which organization would support which outcome.

Nuclear technology has developed exponentially since the discovery of nuclear fission in 1938. Ever since the United States began their nuclear program, it spread further and further to other countries, causing them to develop nuclear programs as well as stockpiling nuclear weapons. The “Treaty on the Non-proliferation of Nuclear Weapons”, (NPT) in 1968, was a treaty created to prevent a nuclear war among the global powers, and an attempt to prevent the spread of nuclear weapons. However, powers have continued to stockpile nuclear weapons and countries have continued to develop their own nuclear programmes in an attempt to align themselves with the global powers. Even with the NPT the threat of nuclear war has still lingered among the people. The atomic bombings of Hiroshima and Nagasaki have demonstrated the amount of damage a singular nuclear bomb can do, and this image of immense human suffering combined with the wide growth of nuclear weapons and technology has created a sense of dread over future conflicts

While there has been previous UN action on the topic of nuclear disarmament, with even the first ever passed UN resolution calling for nuclear disarmament, the effect of these actions has been limited. Some actions have been vastly more successful than others, with some nuclear-free zones being established in certain regions and partially successful treaties such as the NPT being agreed upon in UN-sponsored conferences, other proposals such as the Comprehensive Nuclear-Test Ban Treaty have failed to pick up steam with the nuclear powers.

There are many different views on how states and actors should approach nuclear disarmament. More traditional approaches to disarmament emphasize multilateralism and international cooperation, while some more unorthodox approaches to nuclear weapons completely oppose nuclear disarmament, and in fact advocate for the proliferation of nuclear weapons as a means of ensuring peace.

Definition of Key Terms:

Denuclearization - The process of disarming and reducing nuclear weapons

Antinuclear - A social movement during the rise of nuclear technology which critiques nuclear technology usually due to the danger and unpredictability of the technology.

Nuclear weapon - A device which utilizes a nuclear reaction to create an explosion¹

Radiation exposure - exposure to radiation, as a reference, humans are currently exposed to around 2-3 mSv per year².

Mass hysteria - A phenomenon which affects large groups of people, it is typically characterized by extreme excitement or anxiety as well as irrational behaviors or beliefs.

NPT - Treaty on the Non-proliferation of Nuclear Weapons

WMD - Weapons of mass destruction

GA/UNGA - United Nations General Assembly

Background Information:

Timeline of nuclear invention

December 1938 - Nuclear fission is discovered in Berlin by Otto Hahn, Lise Meitner and Fritz Strassman³.

December 28, 1942 - President Roosevelt authorized the Manhattan Project which would bring scientists and military together to research nuclear power and create nuclear weapons.

July 16, 1945 - The first atomic bomb is successfully detonated and named the Trinity test⁴.

August 6, 1945 - The United States drops their first atomic bomb after Japan refuses to surrender during World War II. The bomb was dropped over Hiroshima and killed 80,000 people instantly and later around 50,000 people died from the radiation exposure.

August 9, 1945 - When the Japanese did not immediately surrender after Hiroshima, the United States dropped a second atomic bomb on the city of Nagasaki. The bomb killed around 40,000 people on impact and many more thousands from the radiation poisoning⁵.

August 15, 1945 - Japan surrenders and thereby ends World War II

August 29, 1949 - The Soviets test their first nuclear Bomb²

March 12, 1947 - December 26, 1991 - Cold war, a political rivalry between the United States and the Soviet Union, as well as their allies that resulted after World War II.

Over the next years many countries began to develop nuclear weapons and stockpile as many as possible. The USSR and the US were close to a nuclear war in October of 1962, which is now called the Cuban Missile Crisis⁶.

¹ CDC 2019.

² Reuters Staff 2011.

³ Chodos 2007.

⁴ History.com Editors 2022.

⁵ Britannica 2022b.

⁶ Britannica 2022a.

The bombing of Hiroshima and Nagasaki as well as the Cuban Missile Crisis, caused the antinuclear movement to grow tremendously, considering these nuclear developments were occurring during the Cold War it also created a lot of tension between the two sides. This tension created lots of mass hysteria and paranoia due to the possibility of a nuclear war, especially after seeing the grave amounts of deaths in Hiroshima and Nagasaki. This mass hysteria caused people to build bomb shelters in their backyards and stockpile non-perishables in preparation for a nuclear disaster. The “Ban the Bomb” movement began in Britain and after significant protests and growing controversy over the nuclear weapons, the United States, Soviet Union and the United Kingdom signed the “Treaty on the Non-proliferation of Nuclear Weapons”, in 1968. This aimed at limiting the spread of nuclear weapons and will be discussed more in depth later in the report. The antinuclear movement reemerged in the energy crisis in the 1970s, during this time nuclear technology continued to develop around the globe and with the expansion of nuclear technology came more controversy and further critique about its safety. The antinuclear movement was brought to attention in 1979 when the Three-mile Island accident happened⁷. This event was a nuclear meltdown at a power plant in Pennsylvania, although there were no deaths it was estimated that around 2 million people were exposed to small amounts of radiation. Nothing deadly or extremely harmful but enough to cause mass panic especially with the concern of an explosion in a nuclear environment⁸. The Chernobyl explosion in 1986 also significantly boosted the antinuclear movement, and in fact it became a global symbol for the antinuclear movement.⁵

Three years after Chernobyl, in 1989 South Africa began to disarm and destroy all of their nuclear weapons, and by 1993 had officially dismantled all of their weapons of mass destruction programs, including chemical, biological, missile and of course nuclear weapons. South Africa was the first country to fully dismantle and destroy all of their nuclear weapons. South Africa had originally begun these nuclear programs in order to gain more political power and make them seem like a much more powerful country. South Africa was originally very nuclear oriented and when they refused to sign the NPT (“Treaty on the Non-proliferation of Nuclear Weapons”) it isolated South Africa from the other countries, particularly the UN countries, especially because they also currently had their apartheid policy. South Africa also focused on nuclear weapons due to the political instability of their neighbors and the security threats they posed. In September 1989, President F.W de Klerk assumed power in South Africa, he posed the idea of disarmament and considering his opposition to apartheid, the apartheid government was scared of putting nuclear weapons to someone against them and agreed to his proposition⁹.

⁷ Rothwell 2014.

⁸ History.com Editors 2018.

⁹ Council on Foreign Relations n.d.

Major Countries and Organizations Involved:

United States of America - Has signed the NPT (Treaty on the Non-Proliferation of Nuclear Weapons), and actively is trying to prevent the spread of nuclear weapons, they have around 250 nuclear weapons. However, they are not willing to concede their own nuclear weapons or technology. The United States of America is currently for denuclearization in other countries, however not their own.

Russia - Has signed the NPT, but has active amounts of nuclear weapons, around 4,497, and has been extremely against denuclearization. Russia is currently against denuclearization.

China - Has signed the NPT, but has around 350 nuclear warheads. China is for preventing the spread of nuclear weapons but is not willing to concede their own nuclear weapons. China is against denuclearization currently.

France - Has also signed the NPT, has around 290 nuclear warheads. France has taken steps towards denuclearization and adheres to a policy of “strict sufficiency” whereby it keeps its nuclear arsenal at the lowest possible level in accordance with the strategic context¹⁰. France is currently for denuclearization.

United Kingdom - Has also signed the NPT, has around 225 nuclear warheads. The United Kingdom is trying to take steps towards denuclearization, and has a similar policy to France of keeping nuclear weapons as a form of defense strategy¹¹. The United Kingdom is currently for denuclearization.

North Korea - Did sign the NPT, however they withdrew from it in 2003. They have around 40-50 warheads however there is a high degree of uncertainty. North Korea is currently against the disarmament of nuclear weapons.

India - Has also not signed the NPT and is estimated to have around 156 nuclear warheads. India is currently against the disarmament of nuclear weapons.

Pakistan - Has not also not signed the NPT and has approximately 165 nuclear warheads. Pakistan is currently against the disarmament of nuclear weapons.

Israel - Israel has also not signed the NPT and will not acknowledge nor deny the existence of a nuclear arsenal, although they are believed to have one. They are currently against the disarmament of nuclear weapons¹².

¹⁰ Arms Control Association 2019a.

¹¹ Arms Control Association 2019b.

¹² Center for Arms Control and Nuclear Proliferation n.d.

Japan - Japan does not possess any WMD (Weapons of Mass Destruction) and would currently like to see further disarmament of nuclear weapons considering their history with them, Hiroshimi and Nagasaki.

South Africa - Was the first country to shut down their nuclear programs, and all of their WMD and would currently prefer to see further disarmament of nuclear weapons¹³.

Relevant UN Resolutions:

The first UN resolution ever passed in the GA was A/RES/1(I), a resolution establishing “a commission on dealing with the problems raised by the discovery of atomic energy and other related manners”, with the purpose of making proposals “for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction.” The resolution was passed on January 24th 1946, showing that the United Nations has ever since its founding been an active actor within nuclear disarmament discussions¹⁴.

On the issue of testing nuclear explosive devices, the UNGA passed resolution A/RES/50/245 on September 10th 1996, thus adopting the Comprehensive Nuclear-Test Ban Treaty (A/50/1027). Once in force, the CTBT bars all party states from conducting any nuclear explosions, whether they be for civilian or military purposes. The treaty has however not come into effect yet, as not all states listed by the treaty text have ratified the treaty¹⁵.

The UNGA adopted resolution A/RES/18/1884 on the 17th of October 1963, in light of the Outer Space Treaty entering into force. The Outer Space Treaty, amongst other things, prohibits the deployment of nuclear weapons in space. The GA-passed resolution welcomes the intentions of the US and the Soviet Union not to place nuclear weapons into space, and reiterates that states should refrain from placing nuclear weapons into space¹⁶.

Previous attempts at solving the issue

The Treaty on the Non-Proliferation of Nuclear Weapons, also known as the NPT, is the cornerstone of global nuclear disarmament efforts. The treaty is the result of negotiations at a UN-backed disarmament conference held in Geneva, and entered into force in 1970. The NPT prohibits states which possess nuclear weapons from sharing nuclear weapons and their technology with other states, bars non-nuclear states from developing or possessing said technology, and is the only binding multilateral treaty to contain commitments by nuclear

¹³ Council on Foreign Relations n.d.

¹⁴ United Nations 1946.

¹⁵ United Nations Office for Disarmament Affairs n.d.

¹⁶ United Nations 1963.

weapon states to disarm¹⁷. While the NPT forms the foundation of modern nuclear disarmament and non-proliferation efforts, it has still failed in preventing states from developing nuclear weapons, as seen most recently with North Korea developing nuclear weapons. The NPT has however created an international norm of non-proliferation, which has prevented some states from further pursuing nuclear weapons, as seen with the dismantling of Sweden's and Switzerland's respective nuclear weapon programs¹⁸.

In an effort to reduce tensions surrounding the development of more powerful nuclear devices, and the environmental dangers posed by nuclear weapons, the Partial Nuclear Test Ban Treaty was signed and entered into force on the 10th of October 1963. The treaty prohibits parties from conducting nuclear tests in space, in the atmosphere, under water, and other environments where radioactive fallout may travel outside state boundaries. It has been successful in reducing radioactive pollution emitted from nuclear tests, and in decreasing the yield of tested nuclear weapons. The treaty however did not universally prohibit nuclear tests, which led to increased testing of nuclear weapons underground¹⁹.

Nuclear-weapon-free zones are defined by A/RES/3472(XXX) B as zones recognized by the GA and a group of states, where said states have agreed to not place any nuclear arms. These zones have been implemented in all of Africa, all of Latin America, all of the Caribbean, in the South Pacific, Antarctica, all of Southeast Asia, and in all of Central Asia with the exception of Afghanistan. These zones have prevented further nuclear proliferation in these regions, but they have not had an effect in disarming any of the nuclear powers²⁰.

The Treaty on the Prohibition of Nuclear Weapons, also known as the TPNW, was adopted on the 7th of July 2017. The treaty was the result of a GA-called conference (A/RES/71/258) on the creation of a legally binding treaty regarding the prohibition of nuclear weapons. The TPNW is the first global treaty prohibiting the possession of nuclear weapons by all state parties²¹.

Possible Solutions:

The generally held solution for nuclear disarmament is multilateral disarmament. Multilateral disarmament requires multiple states to cooperate on nuclear disarmament, with the end goal of reducing or even eliminating said states' arsenals. Examples of multilateral disarmament include the Strategic Arms Reduction Treaties (START), which were signed between Russia and the US. The START treaties were successful in reducing US and Russian nuclear arsenals, as the treaties included concrete provisions for the verification of compliance. However, there have been no multilateral treaties regarding multilateral disarmament where the

¹⁷ United Nations Office for Disarmament Affairs n.d.

¹⁸ Fitzpatrick 2009.

¹⁹ Békés 2018.

²⁰ United Nations Office for Disarmament Affairs n.d.

²¹ United Nations Office for Disarmament Affairs n.d.

states reducing their nuclear arsenals are other than the US or Russia. For successful multilateral disarmament beyond the scope of the START treaties, cooperation between all nuclear parties is required for any new disarmament efforts to succeed, as an agreement which does not impose equal restrictions on the signatories may cause the signatories to view themselves as disproportionately losing security by signing an agreement²².

Unilateral nuclear disarmament is the act of unilaterally giving up or reducing nuclear weapons. This has been done by states such as South Africa and Ukraine. The main reason behind unilateral nuclear disarmament is for states to gain soft power, which is the capability of states to attract other states to its ideas and beliefs²³. However, unilateral disarmament rarely occurs as a state unilaterally disarming is akin to it giving away its blanket of security, making the state vulnerable to potential security threats²⁴.

One contentious possible solution to reducing the threat of conflict is to proliferate nuclear arms across the world. This solution relies upon two different concepts, the concepts of Mutually Assured Destructions, also known as MAD, and nuclear deterrence. MAD is a concept which states that nuclear powers will not engage in nuclear warfare, as the states involved would destroy each other, thus making nuclear war unwinnable. The concept of MAD was employed throughout the Cold War, and was key in preventing a full-blown nuclear war between the two sides²⁵. Nuclear deterrence refers to nuclear weapons deterring outright conflict between nuclear armed states, as a direct confrontation would likely lead to nuclear warfare. The theory of nuclear deterrence its legitimacy has recently been demonstrated through the Russian invasion of Ukraine, with Russia's nuclear arsenal deterring direct involvement in the war from the West²⁶.

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²² Erästö 2019.

²³ Ogunnubi 2022.

²⁴ Koch 2019.

²⁵ Wallander 2013, 1–3.

²⁶ Traub 2022.

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