

General Assembly 1

The Right to Retain Nuclear Weaponry



Forum General Assembly 1

Issue: The Right to Retain Nuclear Weaponry

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Introduction

Nuclear weapons are widely considered to be the most dangerous weapons on the planet. These man made bombs/missiles - also commonly referred to using the umbrella term of “weapons of mass destruction” (which also includes biological, chemical, radiological and similar types of weapons) - are in actual fact recently developed technologies due to the exploration of nuclear power. In general, nuclear weapons utilize the processes of nuclear fissionⁱ and/or fusionⁱⁱ within radioisotopes to generate enormous explosions, immense heat and light, an extremely large fireball, its smoke cloud - known as a “mushroom cloud” due to its distinctive shape - is the result of the rising and expanding hot air. The color of the cloud is from incinerated ground particles that are buoyant due to their heat. The byproduct of fallout renders the surrounding area unsuitable for human occupation for decades. An important difference must be distinguished however, as there are two primary types of nuclear weapons; atomic bombs, which work by fissioning the nuclei of two atoms, most commonly the radioisotopes Uranium-235 or Plutonium-239; thermonuclear bombs (also known as Hydrogen bombs), use the process of fusion to ignite fusion, utilising either Uranium-235 or Plutonium-239, like atomic bombs, in addition to Deuterium and Tritium (two isotopes of Hydrogen).

Despite significant development of nuclear weapon programmes beginning at the end of the Second World War - a mere 77 years ago - many countries started to reduce their nuclear arsenals by the end of the Cold Warⁱⁱⁱ in the presence of increased fear of the weapons. The threat of a nuclear war outbreak - whether intentionally or accidentally - in addition to the unequivocal power that the warheads possess, led to be a strong deterrent for many, mitigating the proliferation of these weapons of mass destruction and thereby limiting the number of nuclear states to 9, as of 2022. This has also come in part due to the United Nations’ advocating for the non proliferation of nuclear warheads, and more specifically the intervention of the United Nations Office for Disarmament



Affairs (UNODA), as well as the multiple treaties/agreements that have been implemented through this branch since the 1970s.

Definition of Key Terms

Weapons of mass destruction

Weapons of mass destruction is a general umbrella term for a variety of different types of weapons. More specifically, this includes nuclear, biological, radiological or chemical weapons with the purpose of causing mass destruction/devastation and subsequently loss of life.

Nuclear weapon

An atomic or thermonuclear weapon that uses nuclear energy (fission and fusion) to create an explosion (and consequently large amounts of heat and light, as well as the byproduct of fallout).

Fallout

Radioactive particles released by a nuclear bomb (into the atmosphere). These are highly dangerous, being a serious negative impact to the atmosphere, environment, and humans.

Nuclear state

Any country that is known to possess nuclear weapons, either officially recognised (e.g as per the Nuclear Non Proliferation Treaty) or not.



Mutually assured destruction

A concept that two parties with nuclear weapons (typically nuclear “superpowers” like the United States and Russia) acknowledge that initiating a (nuclear) attack on the opposite party would almost ensure complete destruction of oneself, due to the capabilities of both parties. This is typical within national security policy and is often considered as a deterrent for advances with nuclear weapons, due to the potential response.

Nuclear non proliferation treaty

The Nuclear Non Proliferation Treaty (NPT) was the first significant treaty that aimed to reduce and ultimately eradicate nuclear weapons, striving for world peace and multilateral cooperation. This particularly applies to the United States and Russia, due to their significantly larger nuclear inventories (and hence were obliged to reduce their stockpile more).

Nuclear weapons states

Nuclear Weapon States (NWS), as defined by the Nuclear Non Proliferation Treaty, are the 5 officially recognised nations to possess and own the right to a nuclear weapons arsenal; The United States, Soviet Union (now Russian Federation), United Kingdom, France, People’s Republic of China. These members are considered NWS as they had manufactured and detonated a nuclear explosive device prior to 1 January 1967.

Non nuclear weapons states

These are countries not recognised as Nuclear Weapons States by the NPT, instead being Non Nuclear Weapon States (NNWS). That said, some nations that fall under this category still maintain nuclear weapons programmes and inventories.



No first use

Abbreviated to NFU, this is a nuclear policy adopted by nations, stating that they will not use or threaten to use nuclear weapons in combat unless attacked first (by an adversary using nuclear weapons).

Security assurance

A guarantee provided with regard to access control, security privileges, and enforcement over time as users interact with an application.

Nuclear weapon free zone

A Nuclear Weapon Free Zone (NWFZ) looks to consolidate non proliferation or utilization of these weapons of mass destruction via a regional approach. As defined by General Assembly resolution 3472 (XXX) B, an NWFZ is:

“...any zone recognized as such by the General Assembly of the United Nations, which any group of States, in the free exercises of their sovereignty, has established by virtue of a treaty or convention whereby:

- (a) The statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined;
- (b) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute.”

Sole authority

Functioning automatically or with independent power.

Cuban missile crisis

The Cuban Missile Crisis is considered to be the climax of the Cold War, and by extension the nearest the world has come to nuclear war. It was a 13-day period between October 16th 1962 - October 29th 1962, that saw the (then) Soviet Union set up ballistic missiles in communist Cuba, whilst the U.S made similar preparations in Italy and Turkey. This then led to president John F. Kennedy



ordering a naval blockade around Cuba. This period of time saw political tensions between the two states at its highest, however eventually Kennedy and Soviet premier Nikita Khrushchev came to an agreement^{IV} for the diffusion of the situation.

General Overview

Nuclear weapon ownership

Only 10 different nations have had stockpiles of nuclear weapons in history, and that number has now reduced to 9. South Africa briefly had their own arsenal in the 1980s, however this only ever peaked at 6 warheads and their programme was voluntarily dismantled in 1989. Currently, there are now 9 nations who are known to possess nuclear weapons, with the total number of weapons amounting to an estimated 12,700 - 13,400 warheads. Exact figures vary between sources, due to the nature of the information and surreptitiousness surrounding military stockpiles; the United Nations Office for Disarmament Affairs (UNODA) quotes a higher figure of 13,400, whereas the Arms Control Association states an estimate of 13,080 (January 2021-22), differing again from sites suggesting that the number of nuclear weapons worldwide add up to only 12,700 (2022). Individually however, the distribution of these bombs between nuclear states are extremely skewed, with the (now) Russian Federation (formerly the Soviet Union) as well as the United States of America estimated to be owning approximately 6,300 and 5,600 nuclear warheads respectively - making up around 90% of the global inventory (however it should be noted that many of these weapons are retired and awaiting dismantlement). The People's Republic of China (China), France, and the United Kingdom (U.K) make up the top 5 nations with the most nuclear weapons worldwide, followed by Pakistan, India, Israel (noting that they neither officially confirm nor deny this), and the Democratic People's Republic of Korea (DPRK, or North Korea) respectively.



Nuclear weapons through history

The United States took the primary initiative with the development of their nuclear weapons programme, commencing the Manhattan Project^v in the Autumn of 1942 - however this was only in response to suppositions of Nazi Germany attempting the same a little under a decade prior (it should be noted that the first nuclear weapon programmes, like the Manhattan

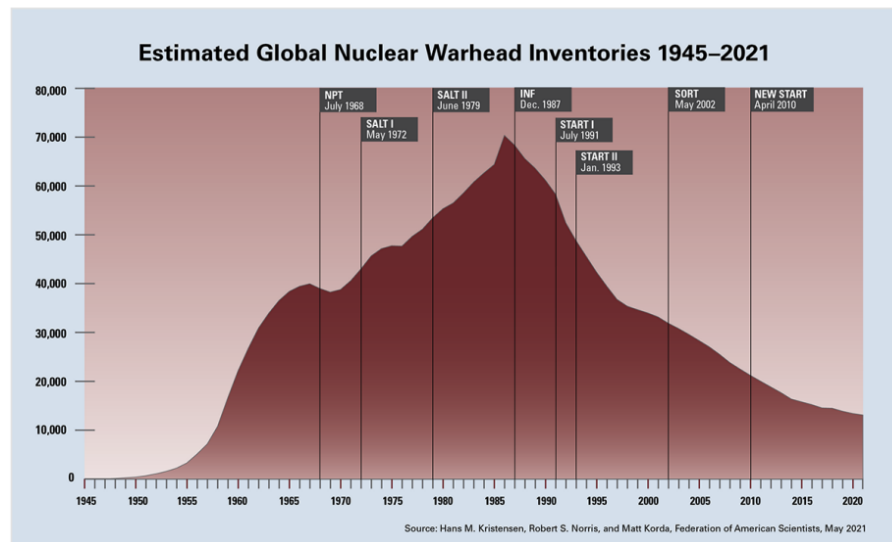
Project, were creating atomic (fission)

bombs as this was the recently discovered science; thermonuclear bombs would not come until the 1950s). There were approximately 2,056 nuclear bomb tests between 1945 and 2017, however only two have ever been used in warfare - the infamous World War II bombings of Nagasaki and Hiroshima. With that being said, throughout history nuclear weapon arsenals and programmes have for the most part been developed as pre-emptive/precautionary measures, often in response to potential external threats and in order to further test and explore the technology. The former point is referred to as “mutually assured destruction”, and was most prevalent during the Cold War during which tensions between the United States (U.S) and then Soviet Union (U.S.S.R) were at a peak - like the global nuclear weapon stockpile. The Cuban Missile Crisis^{vi} is considered to be the peak of this conflict, being the closest the world has come to complete nuclear war with political tensions at an all time high between the U.S and U.S.S.R, however, this eventually dissipated with no attacks being launched.

Stability between nuclear states

Recently nuclear weapons have not appeared to be a major threat to society, however most countries (in possession of these weapons) still continue to maintain or grow their nuclear arsenals. The last confirmed test of a nuclear weapon was on September 3rd 2017, conducted by North Korea. Despite this, recent conflicts, most notably the Russian invasion of Ukraine (Russo-Ukrainian crisis) have once again sparked concern regarding the utilization of nuclear weaponry, and subsequently political tension between NATO and the Russian Federation. Elsewhere, India and Pakistan both flex similarly sized nuclear arsenals, and although currently

Fig. 1: The proliferation of nuclear weapons has drastically risen and fallen in 77 years



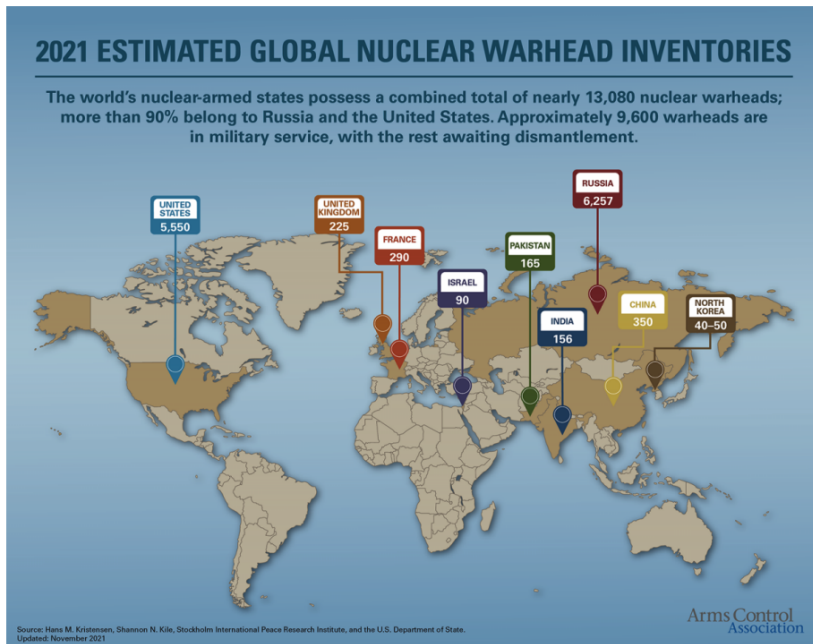


Figure 2

The United States, France, the United Kingdom, Israel, and to extents India, generally have positive relations, with the U.S, France, and U.K all being (founding) members of NATO; on the other hand, Pakistan, China, in many circumstances Russia, and by association the DPRK tend to consider one another allies; these relations are of significance due to all aforementioned parties being nuclear states, and therefore political stability between these nations being considered crucial due to the military power they possess; see **Fig 2**.

The right to retain nuclear weaponry

For over half a decade the world has been aiming for the reduction of nuclear weapons, and to many extents this has been successful. That said, some nuclear states still maintain their weapons programmes, thus increasing stockpiles. Due to the complexity and cost of the proliferation of nuclear weapons (as well as necessities for the development and continued maintenance of such supplies) a large portion of the world do not have the means to produce nuclear warheads - whether it be financial, intellectual, infrastructural, technological and/or resource limitations. Additionally, all countries - with the exception of Israel, Pakistan, North Korea, South Sudan and India - are signatories of the 1968 Nuclear Non-Proliferation Treaty (NPT), which came into act in 1970 (noting that North Korea were a signatory, but left the treaty agreement in 2003). Through this agreement there are 5 officially recognised nuclear-weapons states (NWS); the United States, United Kingdom, China, France, and the Soviet Union (now the Russian Federation, who assumed all rights and obligations after the dissolution of the U.S.S.R). All other members are considered non-nuclear-weapons states

maintain a ceasefire, the longstanding volatile conflict in the Kashmir region could have the potential to seriously escalate to extreme levels. The aforementioned nations are examples of intense and unstable relationships between certain nuclear states.



(NNWS). The aforementioned NWS reserve the right to retain their nuclear weaponry, due to the fact that they crafted and tested their weapons before the NPT came into effect. In comparison, the treaty prohibits NNWS from acquiring or producing their own nuclear weapons, in addition to forbidding NWS from transferring any warheads, or encouraging/assisting in the creation of these weapons within NNWS (however the exchange of materials, expertise and/or technology is permitted for civilian development programmes). The International Atomic Energy Agency (IAEA) monitors compliance within both sets of signatory states in regards to the treaty, and holds the right of additional legal authority to manage and assess situations/developments regarding the agreement. Organizations such as this, as well as other treaties like the NPT, and the United Nations (UN) as a whole all ultimately have the goal of global nuclear disarmament, however relies on those with the most power to lead the way.

Major Parties Involved

United States of America (U.S)

The U.S was the first nation to harness the power of nuclear fission, developing the first atomic bombs and being the only country to have used nuclear warheads in warfare. They have an estimated military stockpile of just over 3,700, with a total inventory of roughly 5,500; they are also an NPT signatory. The U.S and Russia have embodied the general world nuclear threat, being two enormous powerhouses and continuing to have unsteady relations - this was of course the basis of the Cold War and by extension the Cuban Missile Crisis.

Russian Federation (Russia)

Russia is a significant party in the matter considering it is the owner of the largest nuclear weapon stockpile in the world (at around 4,500 in their military arsenal and a total estimated inventory of roughly 6,000). Being an NWS it is of course a signatory of the NPT, and despite the overall strength and depth of Russia's supply being significantly deteriorated compared to that of the Soviet Union's during the peak of the Cold War, it still inherited these weapons of mass destruction, alongside the power (and responsibilities) that come with them.

People's Republic of China (China)

China, being another NWS, operates under a "no first use" nuclear security assurance policy. The country has an estimated stockpile of 600-650 nuclear weapons, and appears to be expanding



this. However, China has clearly stated its intentions to not use nuclear weapons against NNWS or nuclear weapon free zones, abiding by its nuclear policy and in many senses remaining neutral. That said, it has close nuclear relations with Pakistan, having exported necessary materials to the nation in the past - something that is permitted under the NPT - yet still prioritizes its status as the greatest nuclear state in Asia; hence has expressed discomfort with the militarized nuclear advancements made by the DPRK, similarly to the U.S.

France

France began developing its nuclear weapons program in the 1950s, carrying out its first test in the 1960s and thus establishing itself as a Nuclear Weapon State - however this was mostly for national security (deterrence) and international prestige. Currently with an arsenal of 290 nuclear weapons of mass destruction, it maintains its right as an NWS, however remains apprehensive at times with the disarmament of its warheads, and continues to update/maintain its nuclear military capabilities in the name of deterrence for national sovereignty.

United Kingdom (U.K)

The U.K established its nuclear programme notbaly sooner, in 1940, and sent British scientists to contribute to the Manhattan Project, linking the U.K to the early development of nuclear weapons. As an NWS, the United Kingdom has an arsenal of 225, with it making up the 5 Nuclear Weapon States. The nation continues to modernize its arsenal, however is not expanding its inventory and has a nuclear policy of primarily contributing to the collective defense of NATO.

United Nations Office for Disarmament Affairs (UNODA)

Initially established in 1982, this branch of the UN underwent numerous name changes, including the Center for Disarmament Affairs, under the Department of Political Affairs (1992), followed by Department for Disarmament Affairs (1997), and finally the United Nations Office for Disarmament Affairs (2007). The primary goal of the department is to achieve complete global disarmament through enhanced international regulation, and often derives the basis of its operations from resolutions passed in the General Assembly. It has a particular focus on nuclear weapons due to their extreme destructive power, as well as their growing presence in some regions.

International Atomic Energy Agency (IAEA)

The IAEA was established in 1957 specifically due to concern over the governance and rapid expansion of nuclear technology. This regards all varying applications of the technology, whether it be for military or peaceful use, however primarily focuses on the promotion of sustainable and healthy



nuclear use, structuring frameworks for safe and secure global nuclear society.

Timeline of Key Events

Compared to the rest of human civilisation, nuclear energy and by extension the use of nuclear weaponry, is very recent, leading it to be considered as a modern technology, with even more modern implications and events, including:

Date Description of event

1939 Process of fission was discovered.

August 13th, 1942 The Manhattan Project begins.

February, 1943 The Soviet Union begins its own atomic programme.

August, 1943 Franklin D. Roosevelt and Winston Churchill sign the Quebec Agreement^{vii}.

July 16th, 1945 The Trinity test occurs, being the first ever test of an atomic bomb.

August 6th, 1945 Atomic bomb “Little Boy” was dropped on Hiroshima by the U.S, the first nuclear weapon to be used in warfare.

August 9th, 1945 Atomic bomb “Fat Man” was released onto Nagasaki by the U.S, the second atomic bomb to ever be used in warfare; this forced Japanese surrender.

January 24th, 1946 United Nations Atomic Energy Commission was established.

November 1st, 1952 The first thermonuclear (Hydrogen) bomb was created.

October 16th, 1962 The Cuban Missile Crisis begins, a 13-day period of intense political tension.

March 5th, 1970 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) came into force.

December 8th, 1987 Intermediate-Range Nuclear Forces Treaty (INF) is signed.

June 1st, 1988 The INF comes into force.

July 31st, 1991 The U.S and Soviet Union sign the Strategic Arms Reduction Treaty (START) I^{viii}. January

3rd, 1993 START II^{ix} is signed.

May 11th, 1995 The NPT is renewed indefinitely.

May 24th, 2002 The Strategic Offensive Reductions Treaty (SORT)^x is signed.

14th June, 2002 Russia declares START II null and void.

June 1st, 2003 SORT comes into effect.

January 10th, 2003 North Korea withdraws from the NPT, having signed it in 1985.



February 5th, 2011 The Measures for the Further Reduction and Limitation of Strategic Offensive Arms Treaty (the New START treaty) comes into effect.

July 14th, 2015 Iran^{xI} agrees to limit its nuclear activity in return for the lifting of international economic sanctions.

February, 2018 The U.S rejects the idea of the Treaty on the Prohibition of Nuclear Weapons.

May 8th, 2018 President Trump withdraws the United States from the Joint Comprehensive Plan of Action (JCPOA, also known as the Iran nuclear deal).

February 1st, 2019 The U.S withdraws itself from the INF, on the basis of claims that Russia had been violating it.

June 21st, 2022 UN Secretary-General António Guterres reiterates the position and disarmament goal of the UN of eradicating nuclear weapons, referring to them as “[...]false promises of security and deterrence...[.]”.

UN involvement, Relevant Resolutions, Treaties and Events

This issue is a matter that is rich with external influence and involvement, including multiple treaties and a variety of UN resolutions as well. The most prominent of which is the previously mentioned Treaty on the Non-Proliferation of Nuclear Weapons (NPT); this has been, and continues to be, the primary treaty in global nuclear disarmament, representing the only binding multilateral commitment in regards to this goal, having been ratified by more countries than any other arms agreement, including being signed by 191 of 196 countries, and having an indefinite expiry date, it allows for continuous control and progress on the matter.

The new strategic arms reduction treaty (New START)

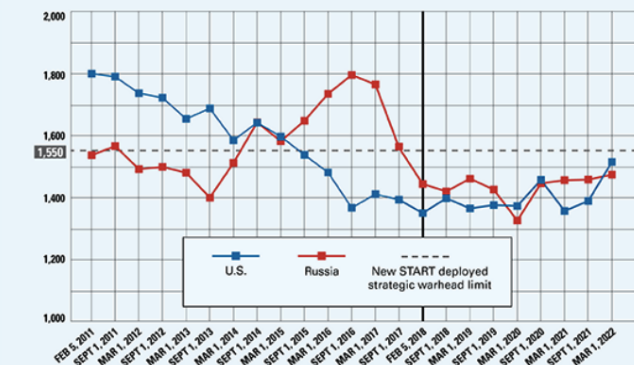
In addition to the NPT, a more recent attempt includes the aforementioned New START treaty between the United States and Russian Federation. This document - substituting for the original 1991 Strategic Arms Reduction Treaty (START I), as well as superseding the Strategic Offensive reduction Treaty (SORT) - focuses on the U.S and Russia reducing their arms (**Fig. 3**), doing so by setting limitations on the number of nuclear warheads both states may possess; in the case of New START, this caps at 1,550 warheads/bombs, a 30% decrease from the SORT agreement and a 74% decrease from START I. Noting that the initial deadline to meet the requirements of the treaty was on February 5th, 2018 (requirements that both states adequately met), the two parties agreed to a five-year extension (as enabled by the treaty) on February 3rd, 2021 (extending the treaty expiry date to February 5th, 2026).



Deployed U.S. and Russian Nuclear Warheads: The Path to Meeting New START Limits

The 2010 New Strategic Arms Reduction Treaty started a countdown to deployment limits that took effect February 5, 2018. The uneven path toward the limits reflects the nuclear weapons modernization programs implemented by both nuclear powers.

The treaty permits each side to have no more than 1,550 warheads on deployed intercontinental ballistic missiles (ICBMs), deployed submarine-launched ballistic missiles (SLBMs), and deployed heavy bombers assigned to nuclear missions (each heavy bomber is counted as one warhead).



Source: U.S. Department of State
Updated April 6, 2022

Arms Control
Association

Figure 3

Treaty on the prohibition of nuclear weapons

The Treaty on the Prohibition of Nuclear Weapons (TPNW) is of extremely notable significance, as it is considered to be a far more direct and progressive attempt towards achieving the collective goal of nuclear arms disarmament. Adopted in 2017, this treaty seeks to manifest a legally binding instrument by which all nations must comply, working towards the abolishment of developing, testing, producing, acquiring, possessing, stockpiling, using or threatening to use nuclear weapons, and thus eliminating such weaponry completely. This is in close connection with resolution “Taking forward multilateral nuclear disarmament negotiations”, 11 December 2017 (A/RES/72/31). Similar and/or additional resolutions by the United Nations General Assembly regarding this matter include^{xii}:

- “Taking forward multilateral nuclear disarmament negotiations”, 11 January 2017 (A/RES/71/258)
- “Treaty on the Prohibition of Nuclear Weapons”, 12 December 2019 (A/RES/74/41)
- “Comprehensive Nuclear-Test-Ban Treaty”, 6 December 2021 (A/RES/76/66)
- “Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices”, 6 December 2021 (A/RES/76/51)
- “Nuclear disarmament”, 6 December 2021 (A/RES/76/46)



Previous Attempts to Solve the Issue

Recent attempts have tended to show more success on global disarmament, including the TPNW and New START. The latter in particular is considered positively progressive due to the sizable cuts that the U.S and Russia have had to make to their stockpiles, reducing between 16%-32% in regards to certain types of weaponry. Additionally, the NPT took the first major step to nuclear arms' reduction, confining nuclear weapon retention rights to only 5 nations, halting further proliferation, and acting as a landmark treaty for over 50 years. Moreover, the aforementioned resolutions (see previous section) are evidence of the world remaining seized on the matter, highlighting continued interest. On the contrary, not all previous efforts have been successful, or at the very least, have been flawed. For example, according to experts, pacts like the NPT or INF could likely fail to produce continued success in the future due to deteriorating stability of bilateral relations between nuclear states. This is enhanced by Iran's development of its nuclear programme, the United States' withdrawal from JCPOA, and the tendency of countries to skirt or outright ignore certain (aspects of) agreements, considering that only the TPNW is legally binding (and due to the enormous difference between inventories, most treaties primarily focus on Russia and the U.S).

Possible Solutions

In the modern day, despite reductions made by nations through history, the threat of nuclear warfare is still ever present. The primary role of nuclear weapons is currently as a deterrent, however most NWS have relatively loose or flawed nuclear policies, creating the potential for conflict to begin, and subsequently escalate, extremely quickly, even if the prior issue did not regard nuclear weapons. However, there are several ways to improve such policies, making the world safer and less exposed to rash decisions, compromised systems or unstable governance, whilst still allowing nations to maintain - but slowly reduce - their nuclear arsenals.

No first use

Implementing a no first use policy, like that of which China has clearly done, would likely reduce rapid escalation - and likely the commencing of - nuclear conflict. The idea that a nation would only authorize the use of these weapons of mass destruction in response to another doing the same, creates a better sense of neutrality and tranquility in regards to the possession of warheads, rather



than uneasy aggression or instability. If all nuclear states were to consider and act upon this policy, it would theoretically create a (positive) situation where the parties involved would not have the need to use their military stockpiles at all, as nobody would take the initiative to start nuclear warfare - this is of course assuming that all members abide by this policy. That said, enforcing these policies, incentivising the idea, as well as maintaining the ideals under which a no first use policy would work, would likely prove quite challenging.

Sole authority

Sole Authority is particularly prevalent under autocratic/authoritarian regimes, however is common amongst governments in regards to nuclear weaponry. The U.S is a notable example, where the President assumes the sole right of authority to the launch of a nuclear weapon, not necessarily having to consult a team. If leaders were required to process major decisions like this, it could possibly improve global safety by mitigating or even eradicating irrationality - however this may be at the cost of a nations' self-governing rights and therefore prove difficult to get widely accepted.

De-incentivising development and funding

The nuclear arms race of the 20th century came mostly through competition, with nations wanting to outdo one another with their nuclear inventories, in addition to wanting the pre given deterrence and/or protection. Therefore, delegates could potentially consider suggesting the implementation of soft reduction methods, such as calling for reductions in the funding of nuclear weapons programmes, alongside any harder measures such as prohibitions. The U.S alone has a financial structure in place to spend a further USD \$1.7 trillion in the next 30 years on maintaining and updating its inventory; if intentions like this were persuaded to focus funds, time, and energy elsewhere (like civilian nuclear infrastructure), it would likely be considered much more beneficial for the global society.

Whilst Nuclear Weapon States, as defined by the Nuclear Non Proliferation Treaty have the right to retain their nuclear weapons, as nations with such power they also have obligations to correctly manage this stock. Whilst there are benefits to nuclear weaponry, there are many positives to the global disarmament of such weapons and ultimately, the UN continues to strive for a nuclear weapon free world. The technology can indeed be put to extremely good use, most notably within



the energy industry, however where possible the focus should be drawn away from the aggression of war and weapons, and instead, to the future.

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