#### Forum: General Assembly 1

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# **TOPIC 2:** The question of nuclear states and nuclear umbrellas

## Please consult this topic LibGuide for guidance in your research

### I. Introduction to the Topic

On July 16, 1942, the first-ever nuclear warhead - "Gadget" was detonated as a test on US soil. It would however take another 3 years for the whole world to discover such weapons with the bombing of Hiroshima and Nagasaki in 1945, sparking a new era of nuclear states. (Britannica)

Nuclear warheads themselves are weapons of mass destruction made with principles of fission, their decimating power devastates not only humans but also lands and ecosystems with an immense initial explosion followed by radiation. Its effects are long-lasting, ranging from expensive reconstruction costs to the simple fact of the affected area being inhospitable for several years due to fallout radiation which causes cancer and genetic damage in humans in a very short time frame. Furthermore, less than 1 percent of currently existing nuclear warheads are able to severely undermine the climate of the entire planet, causing famines and millions if not billions of deaths. (ICAN)

For a country to have such a weapon means to hold a symbol of power, a fear factor that other nations have to consider at all times. The destructiveness of nuclear warheads is both a blessing and a curse, forcing nations in possession of them to stay out of direct conflict, creating peculiar situations like power struggles. A more known power struggle unfolded in the form of a cold war between the nations of the USSR and the US. Over the course of the 20th century, both nations have accumulated over 35,000 nuclear missiles each, enough to ravage the world several times, thus forcing these rivals to pursue proxy campaigns and indirect conflicts in order to secure their interests in various regions. (UN)

Yet, in the fear of being intimidated, threatened, or blackmailed by foreign powers no nation wished to stay out of the game in the international arena. In return, several choices arose, either attempt to become a nuclear state yourself, enter a nuclear umbrella, or stay out of everything. Picking the first option requires the contribution of vast resources into science, personal, and logistics on top of politically navigating through Non-profeliaton treaties like NPT, TPNW, and START I which might cause sanctions upon the nation attempting to reach a nuclear state status. Yet, it's evident that nations with nuclear arsenals are able to punch above their own weight in geopolitics, akin to what DPRK did in 2005 (EastWest.ngo). The second option for entering a "nuclear umbrella" is signing a treaty of nuclear protection from a state that already possesses nuclear warheads. An instance of such an umbrella can be seen in the NATO alliance where the United States of America is guaranteeing nuclear arsenal dealings. An alternative to a nuclear arsenal is simply using nuclear energy as the means of energy production, countries with such programs are referred to as being in a state of "nuclear latency " (Geopolitical Futures). All nations are forced to pick one of the options as such determines the stance, allegiance and actions on the international stage together with domestic policies.

Going down to the domestic level, possession of nuclear warheads induces economic strain in public institutions as funds have to be directed to the expensive upkeep of the military complex. (Learmaboutnukes). This on the other hand manifested a militarization sentiment within the population due to the immense power of the nuclear warheads. Furthermore, the Possession of nuclear warheads also creates a risk of environmental damage in accidents. On the contrary, not being in possession of nuclear warheads provides its own set of issues in the face of having less political leverage in negotiations and disputes, the perceived vulnerability of the state followed by potential nuclear blackmail.

## **II. Definition of Key Terms & Concepts**

### Nuclear umbrellas

A relationship between 2 or more nations in which one is guaranteed to be protected with the nuclear arsenal of the other in case of a conflict. Such agreements were common in the 20th century with the US vs USSR rivalry, nations would go into the agreement with one of the nations for protection. This concept has been carried into the 21th century with the US being the nuclear protector of 30 sovereign states across Europe, Asia and Oceania.

### **Mutually assured destruction**

A concept of a military doctrine in which both the attacker and the defender in the nuclear war would annihilate each other due to their second-strike capabilities. Such a concept has been a fear factor of the entire world for decades, causing widespread paranoia in the 20th century and is still a gruesome factor brought up when debating upon the ethics of any nation possessing an arsenal capable of destroying not just another nation but the whole world.

## Non proliferation of nuclear arms

A political concept of not spreading nuclear warheads to nations which do not possess them. Such policy was used in order to limit the number of nations with nuclear status hence stabilising the nuclear power in a small circle of nations which were able to get them early on together with assisting in decreasing the amount of conflicts and bringing them to diplomacy through threats of usage of such weapons.

### **Preemptive strike**

A military concept of action in order to prevent an imminent attack/threat. The usage of preemptive strikes especially with nuclear warheads is usually a controversial topic due to the proportionality of a threat to the damage made by a nuclear warhead.

## **III. Key Stakeholders**

### **Nuclear states**

These are states which publicly admit to possessing and maintaining a nuclear arsenal, such being the US, Russia, China, France, UK, India, Pakistan and North Korea. The significance of these states can be felt through all of their political bargains on a global scale. Decisions on upkeep or expanding the arsenal have far-reaching consequences in world security and diplomacy. The presence of nuclear states also complicated the disarmament efforts and raised ethical inquiries about the legitimacy of any nation possessing such destructive power. On the other hand, said states wish to keep the status quo in order to maintain national security, deterring potential threats, influencing global politics, and preserving their position as major powers.

## **Non-nuclear states**

These are states which publicly do not possess a nuclear arsenal, such being over 90% of nations on the globe which were not mentioned above with the exception of Israel (unknown). Such states have their interest in ensuring their own security without relying on foreign powers, preventing nuclear proliferation as well as preventing a nuclear war. The conflict however still arises as some non-nuclear states rely on nuclear umbrellas raising ethical questions of such agreements.

### **United Nations**

A peacekeeping organisation made up of all the recognized nations in the world with an aim of preventing conflicts and promoting diplomacy, in this case preventing an all out nuclear war. Actions of said organisation have been the establishment of Non-proliferation (NPT), Partial Test Ban (PTBT), Comprehensive Nuclear-Test-Ban (CTBT), Prohibition of Nuclear Weapons (TPNW) treaties under the International Atomic Energy Agency (IAEA).

## **Civil organisations**

Organisations advocating for prohibition of nuclear warheads, major players being: International Campaign to Abolish Nuclear Weapons (ICAN), Physicians for Social Responsibility (PSR), Global Zero whose aim is to reduce the total amount of nuclear warheads through promotion of humanitarian and security consequences of such weapons. One of the most recent major victories was playing a key role in passing the Treaty on the Prohibition of Nuclear Weapons in 2017, which has been ratified by 69 UN member states.

### **Military complex**

The military complex is composed of military contractors who play a significant role in development, production and maintenance of nuclear weapons. These entities have a keen interest in continuous military spending and may influence the governmental policies on maintaining and expanding the nuclear arsenal. Disarmament of nations would mean a halt of said contracts thus affecting these organisations and their employees, adding an economic factor into the nuclear debate. (Phil Archive)

## **III. Key Treaties & Policies**

## **No First Use Policy (NFU)**

A "No first use" policy is a concept within the nuclear deterrence theory, it refers to a type of pledge where a nation refrains from using nuclear weapons of mass destruction in conflict, unless done as a second strike as a response to a nuclear warhead being shot at the nation. As of 2024 countries following such a policy are: China and India.

## **No Proliferation Treaty (NPT)**

A treaty of "Non proliferation" aimed at 3 major elements: non-proliferation, disarmament and safe use of nuclear energy. Such treaty has created a concept of a "bargain" between nuclear nations, constituting them to pursue:

- Not acquiring more nuclear weapons
- Pursuing disarmament
- Allowing all states to access nuclear technology for peaceful uses, under safeguards

The treaty was signed by all UN nations with exceptions of: India, Pakistan, Israel and South Sudan (NTI)

## Strategic Arms Reductions Treaties (START) I, II and NEW

A sequence of treaties between the United States of America and Russia (previously USSR) on measures of reduction and limitation of strategic offensive arms. The treaty has set boundaries for both nations to abide by, for instance: US and Russia are restricted to only 1550 deployed strategic warheads each (by the treaty). (NTI)

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

A recent treaty on prohibition of nuclear weapons, signed in 2021, and ratified by 69 nations - none of which possesses any nuclear warheads. The treaty prohibits States Parties from developing, testing, producing, manufacturing, acquiring, possessing, or stockpiling nuclear weapons or other nuclear explosive devices.

## **IV. Key Issues including Background Information**

## **Modernisation of nuclear arsenals**

Nuclear arsenals built over the period of cold war are slowly decaying, resulting in nuclear states modernising them based on 21th century principles and technologies. This raises a complex debate in terms of ethics, geopolitics and finance. (Al jazeera)

## Safe disposal of expired nuclear arsenal

Another issue arising from decaying arsenals is their disposal. Upon the degradation of the plutonium core within the nuclear warhead it is no longer capable of military capabilities hence is dismantled (<u>New York Times</u>), the expiration date varies across countries. The issue of disposal of any kind of nuclear waste is that it cannot be recycled while also being extremely toxic to both the humans and the environment. As of now most nations keep the deadly cores within domains of underground bunkers, such solutions are not long lasting and are prone to possible leakages which needs to be addressed.

## **Proliferation and arms control**

Preventing the spread of nuclear warheads is a global challenge due to countless conflicting interests. The treaties like NPT and START offer a legal framework for disarmament yet their effectiveness is put into question with arrangements of nuclear umbrellas. The current world stage has experienced nations still being able to acquire nuclear arsenals despite the non-proliferation agreements, such being: India, Pakistan, DPRK and Israel (believed to) which have established themselves as nuclear nations (except Israel), significantly increasing total amount of weapons of mass destruction on the globe.

## **Cybersecurity of nuclear weapons**

With an increased reliance on modern technology the posing threat of cyber security grows with exceeding, especially in the area of nuclear warhead control. Correctly securing destructive weapons is vital in order to keep world peace and stability, especially in face of hackers and terrorists. In addition to prevention, it is imperative to develop robust incident response and recovery plans in the event of a cyber attack, quickly recovering control over the national arsenal of weapons.

## V. Timeline of Resolutions, Treaties, and Events

<u>Date</u>	<b>Description of event</b>
1945	• The United States drops atomic bombs on the cities of Hiroshima and Nagasaki, leading to Japan's surrender and marking the first wartime use of nuclear weapons.
1946-1952	<ul> <li>1949: The Soviet Union acquires its first atomic bomb, breaking the American monopoly on nuclear weapons.</li> <li>1952: The United Kingdom becomes the third nation to test a nuclear weapon,</li> </ul>
1950s-1960s	<ul> <li>1954: The U.S. and the Soviet Union engage in the development of hydrogen bombs, escalating the arms race.</li> <li>1960: France conducts its first successful nuclear test, becoming the fourth nuclear-armed nation.</li> </ul>

<ul> <li>Various Years: The United States extends nuclear umbrellas to NATO allies, Japan, South Korea, and other nations as part of security agreements.</li> </ul>
• July 1: The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) enters into force, aiming to prevent the spread of nuclear weapons and promote peaceful uses of nuclear energy.
<ul> <li>1974: India conducts its first nuclear test, becoming a nuclear nation</li> <li>1986: China conducts its first nuclear test, becoming a nuclear nation</li> </ul>
• December: The Soviet Union dissolves, ending the cold war and subsequently leading to a significant shift in global power dynamics and the reduction of nuclear arsenals.
• The Russian Federation and USA enter a Plutonium Management and Disposition Agreement. The aim of said agreement was for each nation to dispose of 34 metric tons of weapon-grade plutonium. Plutonium was converted into mixed oxide (MOX) fuel, which can be used in civilian nuclear reactors.
• USA invades Iraq, citing the presence of nuclear weapons of mass destruction, which were never found.
• North Korea conducts its first nuclear test, establishing itself as a nuclear state
<ul> <li>July 7: The United Nations adopts the TPNW, aiming to establish a legally binding instrument for the prohibition of nuclear weapons.</li> <li>North Korea conducts its 6th and most powerful underground nuclear test</li> </ul>
<ul> <li>Ongoing: Continued discussions on disarmament, arms control, and the role of nuclear weapons in global security.</li> <li>The Russian Federation announced on 21 February 2023 that it will suspend its participation in the Treaty on Measures for the Further</li> </ul>
Reduction and Limitation of Strategic Offensive Arms ("New START")
with the reasoning of the US not abiding by the treaty. (UN)
• The North Korean government has fired an ICBM (Inter-continental
ballistic missile) over Japan.

## **VI. Possible Challenges & Solutions**

### **Modernisation of nuclear arsenals**

Modernisation of weaponry is a constant complex topic as there is always a philosophical question of "Why?". In this case of nuclear weapons the critics argue that such modernization fuels an arms race, potentially escalating conflicts, and raises profound ethical concerns about the continued enhancement of weapons capable of mass destruction. They contend that the financial resources allocated to modernization could be better spent on pressing global issues. While proponents on the other hand believe that such modernisation acts as a better deterrence, adapting to evolving geopolitical challenges, and ensuring national security, US being one of the examples of nations modernising their arsenal (US defence department). One of the main challenges in this topic would be to reach a consensus as major nuclear powerhouses will have radically different opinions compared to their non-nuclear counter-parts.

### Safe disposal of expired nuclear arsenal

With the recent trends of environmental sustainability this factor has become very significant for the future of our planet as well as the existence of nuclear warheads. Toxic nuclear waste from warhead's cores cannot be recycled, the plutonium inside can only decay with time. Implications of nuclear waste would prove devastating to the environment, intoxicating thousands of acres of land and harming genetic material of animals living on that land. The ways governments like US (<u>New York times</u>) and other nuclear powers deal with these issues involve: storage of warhead's cores, conversion of toxic chemicals into safe ones and complete disposal of nuclear waste via secure burial into the ground where the material will slowly degrade.

### **Proliferation and arms control**

Despite numerous treaties there are still nuclear warheads on Earth which constantly fuels a degree of confusion, argument, hate, hypocrisy and many other aspects. Non-proliferation and control of nuclear arms has proven to be challenging due to nations being overshadowed by major powers, inciting them to actively attempt to create their own arsenal, an instance of this would be DPRK acquiring nuclear warheads in 2005. Despite this, nations like Austria completely discourage the existence of nuclear weapons, massively pushing for their disarmament, "a world without nuclear weapons, where everyone is safer" - Sebastian Kurz (previous minister of foreign affairs) 2017 (icanw). Expanding on that, some say nuclear umbrellas undermine the legitimacy of non-proliferation treaties as such arrangements create more nations dependent on nuclear protection hence acting as an incentive for non-nuclear nations to seek creation of their own arsenal (foreignpolicy). On the contrary, nations like Taiwan believe in the necessity of nuclear weapons and nuclear umbrellas for assured sovereignty of their nation. Yet, it is however important to mention major motion inside the nuclear-free world as countries such as the US and Russia have on several occasions engaged in partial disarmament of their arsenals yet not to a high extent.

## Cybersecurity of nuclear weapons

In the modern world there have been many instances when a group of hackers were able to acquire access to insider governmental portals, causing leaks of data and subsequent issues related to such leaks. An

issue which cannot under no circumstances be neglected is the possibility of such circumstances happening to systems in charge of weapons of mass destruction. For mitigation purposes countless cyber prevention measures are present like, encryption, air-gapped systems, multi factor authentication and others. It is vital for nations to continuously develop safety mechanisms due to the police always being a step behind in thief's innovation. (NTI)

### **VII. Recommendations for Resolution Writing including Research**

Delegates are encouraged to have or learn insightful information and perspectives regarding the topic as the question of nuclear states and nuclear umbrellas is not a relic of the previous century but a life factor which exists with us.

In the global nuclear order, regions like the Asia-Pacific region and EU have had misaligned views on the topic, some seeing nuclear warheads as a necessary deterrent to prevent wars, while others believe they're too dangerous and should be eliminated. Allies between these countries will need to balance between normative pressures to support nuclear disarmament and commitments that require passive support for nuclear deterrence practices. This is extended to Australia, Japan, and South Korea, who balance their own disarmament goals with their alliances with the United States. Russia has made a decision to provide a nuclear umbrella to Belarus, yet as seen by Ukrainian territories failing to deter counter-attacks by Ukraine and its supporters some question the effectiveness of the nuclear deterrence.

Delving more into this, a low income nation might see nuclear warheads situation as another factor of disproportional power dynamics in the world, fueling the current gap between wealthy nations in possession of threatening weapons whilst leaving the rest out, such nations might advocate for nuclear warhead disarmament. A resource rich country might view this issue intertwined with their economic situation, the competition of nuclear states might be viewed as an opportunity for deals and arrangements, their stance might revolve around keeping stability and peace to safeguard their resources. A P5 nation might see this issue as a potential lever of power, allowing them to maintain the global influence with the concept of nuclear deterrence, their stance might be related to keeping the status quo or slowly disarming themselves. Organisations like the EU might view this issue as a potential jeopardising factor in the future, hence aiming at empathising better diplomatic negotiation as well as establishing legal frameworks like NPT to foster peace and stability. Last but not least, a single party state might view this issue as one of the ways of making the regime survive and maintain local stability, such nations might view nuclear warheads as methods of fostering national pride and strength, their ultimate aim being to deter any potential advisories.

Although there are differing opinions which may arise in your personal circles the chairs urge all participants to follow the national policies of your respected nations. It would be ideal to dive deeper into your stance via learning what treaties, policies, statements your government has signed and committed to over the years and if the position has in any way shifted. Through your research you might realise the

current limitations of solutions, congrats, you have found core troubles which will be discussed within the council and it is your goal to find out how to bring compromise, with an aim of making the world at least a slightly better place.

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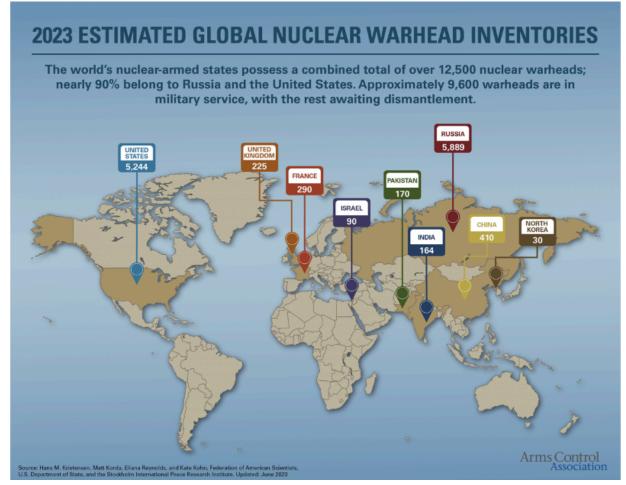
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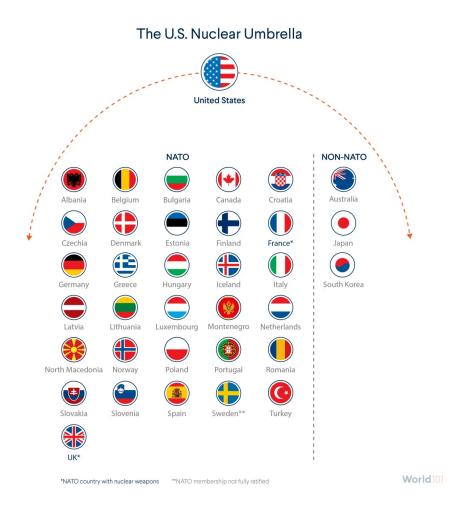
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## **IX: Additional Resources**



https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat



https://world101.cfr.org/global-era-issues/nuclear-proliferation/nuclear-world