

Forum: The First General Assembly

Issue: The question of measures to prevent the proliferation of weapons of mass destruction and warfare

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Introduction

The use of weapons of mass destruction (WMDs), have allowed humans to annihilate one another throughout history, most notably the nuclear bombings in 1945 on Hiroshima and Nagasaki, as well as the usage of chemical arms in the Iran-Iraq War and the Syrian Civil War. However, the time and effort required to kill has significantly decreased with the development of such weapons, allowing countries to kill people in a small fraction of the time. The fundamental technologies that chemical, biological, and nuclear weapons are from World Wars I and II, today's technology increases the grave impacts of them. Now, they have the potential to put these lethal weapons in the hands of far too many people due to the constant flow of goods and information across international borders.

Numerous nations actively engage in the development and production of WMDs, consisting of three primary categories: nuclear weapons (including atomic and radiological weapons), chemical weapons (such as poison gases), and biological weapons (comprising natural toxins and pathogens, like the anthrax bacterium). These states also pursue acquiring delivery systems essential for deploying WMD effectively. Typical delivery methods include ballistic missiles, cruise missiles, and unmanned aerial vehicles (UAVs), each capable of delivering such weapons across vast distances. These efforts reflect the continuous challenge of non-proliferation as states seek advanced means to strengthen their strategic capabilities or deterrence.

Not only states, but also terrorists may seek to possess weapons of mass destruction for committing or threatening attacks. For example, the well-known extremist and founder of Al Qa'ida, Osama Bin Laden, openly declared himself in favour of this idea and has proved the deterrence of WMD's.

Proliferation, or the spread of WMD, involves not only the development and delivery of these weapons but also the acquisition of knowledge and technology necessary for their creation. This procurement often occurs in industrialised nations, where advanced technology and expertise are readily available. This technology can be used for military and civilian purposes ('dual use'). To do their deadly work, agents' destruction have to be integrated into (e.g., an aerial bomb, a ballistic missile of mass weapons warhead, or even a suitcase) and delivered to their targets. Such weapons can be highly threatening without sophisticated delivery systems. A nuclear device planted by a terrorist or commando squad, or delivered by a disguised cargo ship, civil aircraft, or even a small pleasure boat, can kill just as many people as one delivered by intercontinental ballistic missile; a given quantity of certain lethal microorganisms would probably kill even more people if spread effectively by human agents than if by a missile.

Definition of Key Terms

Weapons of mass destruction (WMDs)

A weapon of mass destruction is a biological, chemical,, nuclear, or any other weapon that can kill or significantly harm a large number of people or cause great damage to artificial structures, natural structures, or the biosphere.

Biological weapons of mass destruction

Biological and toxin weapons are either microorganisms like virus, bacteria or fungi, or toxic substances produced by living organisms that are produced and released deliberately to cause disease and death in humans, animals or plants.

Chemical weapons of mass destruction

A Chemical Weapon is a chemical used to cause intentional death or harm through its toxic properties. Primary forms of chemical weapons include nerve agents, blister agents, choking agents, and blood agents. These agents are categorized based on how they affect the human body. For example, Chlorine, phosgene (a choking agent) and mustard gas (which inflicts painful burns on the skin) are chemicals injected into various of weapons

Nuclear weapons of mass destruction

A nuclear weapon is an explosive device that derives its destructive force from nuclear reactions, either fission (fission bomb) or a combination of fission and fusion reactions (thermonuclear bomb), producing a nuclear explosion. An example is the atomic bombs dropped on Hiroshima and Nagasaki, Japan, in 1945.

Deterrence

Deterrence theory holds that WMDs are intended to deter other states from attacking with their weapons, through the promise of retaliation and possibly mutually assured destruction.

Proliferation

the proliferation of weapons of mass destruction (WMD) as the transfer and export of nuclear, chemical or biological weapons, their means of delivery and related materials.

Disarmament

The act of reducing, limiting, or abolishing weapons. Disarmament generally refers to country's military or specific type of weaponry. Disarmament is often taken as the mean total elimination of weapons of mass destruction, such as nuclear arms.

Non-State Actors

an individual or organization that has significant political influence but is not allied to any particular country or state that seek to acquire WMD or related technologies outside state control.

Dual-use technology

dual-use items refer to goods, software and technology that can be used for both civilian and military applications. More generally speaking, dual-use can also refer to any goods or technology which can satisfy more than one goal at any given time.

Key Issues

Access by Non-State Actors and Terrorist Groups

The proliferation of Weapons of Mass Destruction (WMD) through terrorist groups and non-state actors is a growing threat to global security. These groups, which operate beyond the authority of international law, pose significant challenges for counter-proliferation efforts because traditional mechanisms like retaliation, economic sanctions, or diplomatic negotiations do not deter them. Unlike states, non-state actors often have ideological or extremist motives, making them more willing to use WMD in pursuit of mass destruction or political goals, with minimal concern for consequences. The decentralised nature of terrorist organisations makes them harder to monitor, increasing the complexity of counter-proliferation operations. This situation requires a different approach from state-focused frameworks like the Non-Proliferation Treaty (NPT) as new and evolving actors enter the situation.

the motivation of terrorist groups to obtain WMD lies in their ability to cause mass casualties, create widespread panic, disrupt economies, and destabilise governments. For example, groups like Al-Qaeda have explicitly sought to acquire nuclear or chemical materials. Its indicated that terrorist groups attempt to procure these weapons by exploiting vulnerabilities in security infrastructure—targeting poorly guarded WMD stockpiles, smuggling materials through illicit black markets, and seeking assistance from disenfranchised scientists or corrupt insiders.

Terrorists and non-state actors leverage dual-use technologies, exploiting materials intended for legitimate civilian purposes—such as industrial chemicals, biological research tools, or radiological equipment—for harmful means. Vulnerable regions with weak governance or conflict, where WMD stockpiles are poorly secured, offer additional opportunities for these actors to steal or smuggle sensitive materials. Moreover, terrorist groups increasingly use encrypted communication channels and the dark web to coordinate operations, recruit members, and acquire WMD components clandestinely. Addressing this evolving threat requires proactive measures involving security, intelligence, and counter-terrorism cooperation across borders

Non-state actors often rely on black markets and illicit networks to acquire WMD pieces, circumventing traditional export controls. These networks exploit weak regulatory frameworks

in regions with limited oversight, smuggling nuclear materials, chemical precursors, and biological agents. Additionally, the rise of cyber-enabled trade on the dark web has made it easier for terrorist groups to access dual-use technologies, posing a new challenge for global counter-proliferation efforts.

Attention was drawn to The A.Q. Khan Network, one of the most well-known examples of black-market proliferation, which facilitated the transfer of nuclear technology and components from Pakistan to North Korea, Iran, and Libya. The case exposed the limitations of international oversight and the importance of robust export control regimes to prevent sensitive technology from reaching hostile actors.

Dual-Use Technologies

Dual-use technologies are materials, equipment, or knowledge that have both civilian and military applications, making them a significant challenge in the effort to prevent the proliferation of WMD. These technologies are commonly used for legitimate purposes, like agriculture, medicine, and research, but can be repurposed to develop chemical, biological, or nuclear weapons. The accessibility of dual-use items creates regulatory gaps and complicates non-proliferation efforts, as defining peaceful and hostile purposes is often difficult.

The proliferation of dual-use technologies provides chances for non-state actors, rogue entities, and state actors to avoid controls. An example is biotechnology research, which is made for medical advancements, but can be misused to create biological weapons. The misuse of these technologies complicates enforcement because regulating every instance of dual-use application without disrupting legitimate activities is extremely challenging.

Weak Security of WMD Stockpiles and Facilities

Inadequate security of key sites and stockpiles is another problem in stopping the spread of WMD. Weakly protected WMD stockpiles provide a serious risk since they can be stolen or sabotaged. Weak facility security is especially problematic in politically unstable or conflict-ridden areas, where governments may lose control over critical infrastructure. This

vulnerability increases the risk that WMD materials will fall into the hands of non-state actors or terrorist groups.

Stockpile security issues can rise due to insufficient physical protection measures or poorly enforced access controls at storage sites. In some cases, corruption within security forces or facility staff further fuels the fire, Facilities may also lack comprehensive tracking systems to monitor the movement of sensitive materials, leaving authorities unaware of thefts until long after they occur. Weak or failing states with minimal governance oversight are particularly vulnerable, as local authorities may lack the resources or expertise to secure WMD materials effectively.

Major Parties Involved and Their Views

Iran

Iran conforms to the non-proliferation conventions concerning WMD. Still, there are worries that Iran is working on a nuclear weapons program. Without a doubt, the country is developing ballistic missiles capable of carrying nuclear, biological, or chemical weapons. Iran tested missiles for 1,500 kilometers in 1998 and 2000. Persian news reported the testing as "successful". The Joint Comprehensive Plan of Action (JCPOA), which was reached in 2015 in exchange for a decrease of sanctions, called for reducing Iran's nuclear activities. However, tensions reappeared after the US withdrew from the agreement in 2018, and Iran responded by moving closer to completing its nuclear program.

North Korea

North Korea exports goods and technology related to its vast ballistic missile program to other countries of concern. In addition, North Korea has often been charged with continuing to harbor nuclear weapons ambitions in spite of a 1994 deal with the United States on the matter. In 1998, North Korea conducted a medium-range missile test. North Korea publicly acknowledged pursuing nuclear weapons at the end of 2002, and the

nation declared its intention to leave the Nuclear Nonproliferation Treaty at the beginning of 2003. One of the nation's nuclear reactors, which was shut down in accordance with the 1994 deal, has now been reopened.

United States of America

To stop nations and terrorists from obtaining weapons of mass destruction and missiles, the United Nations attempts to make every effort. They want to strengthen the established tools—diplomacy, arms control, multilateral accords, assistance with threat reduction, and export controls—that aim to discourage or obstruct terrorist networks and proliferant states, as well as to delay and increase the cost of their access to sensitive information, materials, and expertise. They uphold adherence to pertinent international accords, such as the Biological Weapons Convention (BWC), the Chemical Weapons Convention (CWC), and the Nuclear Nonproliferation Treaty (NPT).

Russia

Russia is a key player in global non-proliferation efforts, given its status as a nuclear superpower and one of the five recognized nuclear-armed states under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Russia officially supports non-proliferation frameworks such as the NPT, Chemical Weapons Convention (CWC), and Biological Weapons Convention (BWC). It has dismantled large portions of its chemical arsenal, in compliance with the CWC, and works with the International Atomic Energy Agency (IAEA) to promote peaceful uses of nuclear energy. Russia also participates in export control regimes, such as the Missile Technology Control Regime (MTCR), to restrict the spread of WMD delivery systems. However, Russia views nuclear weapons as essential to its national security, modernizing its strategic arsenal and maintaining robust deterrence policies to counter NATO and U.S. influence.

Russia's non-proliferation policies are complicated by geopolitical tensions. It opposes U.S. sanctions on Iran and supports reviving the JCPOA, viewing Iran as a strategic ally. While it has backed UN resolutions targeting North Korea, Russia has also engaged in

diplomatic and economic exchanges with Pyongyang, complicating global efforts to isolate the regime.

Terrorist groups

Terrorist groups represent a significant and growing threat in the landscape of WMD proliferation. Their intent to acquire nuclear, chemical, or biological weapons heightens global security concerns, as their use of these weapons would cause indiscriminate harm, civilian casualties, and long-term destabilization. Unlike state actors, terrorist organizations do not adhere to international norms or treaties, making their involvement in WMD proliferation exceptionally dangerous. Their goal is often to leverage these weapons for mass terror, coercion, or political objectives without regard for human suffering or diplomatic consequences. Two groups that have warranted special attention because they combined the motivation to use WMD with substantial resources are the Japanese sect Aum Shinrikyo and Usama Bin Ladin's organization, Al-Quiada.

These groups may attempt to purchase, steal, or manufacture WMD components, often exploiting poorly secured stockpiles or weak regulatory frameworks in conflict zones. They also rely on illicit networks for trafficking materials, including intermediaries with expertise in nuclear or chemical technologies. Terrorist organizations might seek to use dual-use technologies—such as commercial chemicals or biological agents—for attacks, complicating efforts to track and prevent their activities. As non-state actors, they are difficult to monitor, and their decentralized networks make intelligence gathering and enforcement especially challenging. Addressing the threat posed by these groups requires a multilateral effort, combining counter-terrorism, intelligence sharing, stockpile security, and export controls to prevent WMD acquisition.

China

China plays a significant role in global non-proliferation efforts, balancing its strategic interests with international commitments to treaties such as the NPT, BWC, and CWC. As a nuclear-armed state and a permanent member of the UN Security Council, China

supports non-proliferation actions but emphasizes diplomatic engagement over punitive measures, particularly with North Korea and Iran. China enforces some UN sanctions on North Korea, but reports suggest it allows certain border trade to prevent destabilization. In Iran, China has backed the JCPOA and opposed U.S. withdrawal, maintaining economic ties with Tehran while supporting monitoring efforts through the IAEA.

Despite its commitments, inconsistent enforcement of export controls and dual-use technology transfers remain concerns. China has been criticized for gaps in oversight, as some entities have allegedly transferred missile components and sensitive materials to countries like North Korea and Iran.

India

India plays a unique role in global non-proliferation efforts, as it is not a signatory to the NPT but maintains its own nuclear arsenal. India justifies its decision by citing the need for nuclear deterrence in a region marked by strategic rivalries, particularly with Pakistan and China. While outside the NPT framework, India has committed to non-proliferation principles by adhering to export control regimes and maintaining responsible control over its nuclear program. India has also enacted domestic regulations to prevent the misuse of sensitive technologies and dual-use materials, demonstrating its commitment to non-proliferation norms.

Pakistan

Pakistan's role in non-proliferation is shaped by its nuclear weapons program, which operates outside the NPT framework. Pakistan justifies its nuclear arsenal as essential for deterrence against India and regional security. However, it faces criticism for its proliferation history, particularly due to the A.Q. Khan network, which was involved in the illicit transfer of nuclear technology to countries like North Korea, Iran, and Libya. While Pakistan has since reformed its export controls and tightened nuclear security,

concerns remain over the risk of WMD proliferation in a country facing political instability and the presence of terrorists.

Development of Issue/Timeline

Date	Event	Outcome
1945	Use of Nuclear Weapons on Hiroshima and Nagasaki	The U.S. dropped atomic bombs on Hiroshima (August 6) and Nagasaki (August 9), leading to over 200,000 deaths and devastating long-term effects due to radiation exposure. This raised global awareness of the catastrophic potential of nuclear weapons, catalyzing early disarmament discussions. It also influenced the establishment of the United Nations and early initiatives like the Baruch Plan (1946) to control nuclear technology, though Cold War tensions hindered immediate progress
1968	Treaty on the Non-Proliferation of Nuclear Weapons (NPT)	The NPT aimed to prevent nuclear proliferation, promote peaceful use of nuclear energy, and encourage disarmament. It became a cornerstone of nuclear non-proliferation with 191 signatories, including five recognized nuclear-weapon states. The treaty institutionalized IAEA safeguards but faced criticism for its inability to achieve universal enforcement. Non-signatories like India, Pakistan, and Israel maintain nuclear programs, raising concerns about regional security.
1975	Biological Weapons Convention (BWC) adopted	The BWC was the first treaty to completely ban an entire category of WMDs, prohibiting the development, production, and stockpiling of biological weapons. Despite its success in raising global awareness about biosecurity, the absence of a formal verification mechanism has limited its enforcement. Compliance concerns persist, especially with advancements in synthetic

		biology and dual-use technologies, which challenge the treaty's effectiveness.
1993	Chemical Weapons Convention (CWC) adopted	The CWC banned the production, use, and stockpiling of chemical weapons. Overseen by the OPCW, the treaty has achieved significant success, with 99% of declared chemical stockpiles destroyed as of 2022. The OPCW won the Nobel Peace Prize in 2013 for its efforts. However, alleged uses of chemical weapons in Syria and other conflict zones highlight enforcement challenges, and there are ongoing debates about accountability for violations by state and non-state actors.
2003	North Korea withdraws from the NPT	North Korea invoked Article X of the NPT to withdraw, citing U.S. hostility. This marked the first withdrawal from the treaty and heightened global concerns about nuclear proliferation. It prompted six-party talks involving China, the U.S., South Korea, Japan, and Russia to negotiate denuclearization. Despite intermittent agreements, North Korea continues to expand its nuclear and missile programs, leading to international sanctions and strained diplomatic relations.
2004	UN Security Council Resolution 1540 adopted	Resolution 1540 mandated that all states criminalize WMD proliferation, secure sensitive materials, and enhance export controls to prevent non-state actors from acquiring WMDs. It marked a significant step in addressing terrorist threats but faced challenges in uniform implementation. Some states lack resources or political will to comply fully, and the 1540 Committee continues to provide support and monitor progress. The resolution remains critical in strengthening international cooperation against WMD proliferation..

<p>2006</p>	<p>North Korea conducts its first nuclear test</p>	<p>On October 9, 2006, North Korea conducted its first nuclear test, confirming its status as a nuclear-armed state. This defiance of international norms triggered UN Security Council Resolution 1718, which imposed sanctions targeting North Korea’s nuclear and missile programs. The test exacerbated regional tensions and complicated efforts to achieve denuclearization, raising fears of a regional arms race..</p>
<p>2015</p>	<p>JCPOA Agreement with Iran</p>	<p>The JCPOA, negotiated between Iran and P5+1 countries, limited Iran’s nuclear activities and enhanced transparency through IAEA inspections in exchange for sanctions relief. Initially, the agreement reduced Iran’s enriched uranium stockpile and delayed its potential breakout time for developing nuclear weapons. However, the U.S. withdrawal in 2018 undermined the agreement, leading Iran to scale back its commitments. Diplomatic efforts continue to revive or renegotiate the deal amid ongoing regional tensions and concerns about Iran’s nuclear ambitions</p>

Previous Attempts to Solve the Issue

Treaty on the Non-Proliferation of Nuclear Weapons (NPT) – 1968

The NPT is an international agreement whose goals are to stop the proliferation of nuclear weapons and related technology, to encourage collaboration in the peaceful uses of nuclear energy, and to advance the pursuit of universal and comprehensive disarmament as well as nuclear disarmament. The Treaty established a safeguards system through the International Atomic Energy Agency (IAEA) to promote non-proliferation and foster confidence among States parties. The IAEA uses safeguards to undertake inspections to confirm obedience to the Treaty. Safeguards prevent the diversion of fissile material for use in weapons. The Treaty encourages collaboration in the field of peaceful nuclear technology and equal access to this technology for all States parties. Key elements include that Nuclear-weapon states should agree not to transfer nuclear weapons to non-nuclear-weapon states, non-nuclear-weapon states committed not to

develop or acquire nuclear weapons, and all parties pledged to pursue disarmament. The treaty has 191 signatories. However, key states like India, Pakistan, and Israel never signed the treaty, and North Korea withdrew in 2003.

Chemical Weapons Convention (CWC) – 1993

A multinational agreement called the Chemical Weapons Convention (CWC) forbids the use of chemical weapons and mandates their disposal after a predetermined amount of time. The Convention on Chemical Weapons forbids creating, manufacturing, obtaining, storing, or holding onto chemical weapons, the transportation of chemical weapons, either directly or indirectly, usage of chemical weapons or military readiness for deployment. helping, motivating, or coercing other states to take part in activities that are prohibited by the CWC. The CWC is open to all nations and currently has 193 states-parties. Israel has signed but has yet to ratify the convention. Three states have neither signed nor ratified the convention, those are Egypt, North Korea and South Sudan. As at January 2019, 96 per cent of chemical weapons stockpiles declared by possessor States Parties to the CWC had been verifiably destroyed

Biological Weapons Convention (BWC) – 1975

The Biological Weapons Convention (BWC), which entered into force on 26 March 1975, is an international treaty that prohibits the development, production, acquisition, stockpiling, and use of biological and toxin weapons. It was the first multilateral disarmament treaty to ban an entire class of weapons, reflecting global recognition of the catastrophic risks posed by biological agents. The BWC encourages peaceful cooperation in the life sciences, including medical and agricultural research, while requiring states to ensure that their activities are not misused for hostile purposes. Despite these efforts, a major limitation of the BWC is the absence of a formal verification mechanism to monitor compliance. This lack of inspections makes it difficult to detect violations, raising concerns that some states may secretly maintain offensive biological programs. The BWC also faces new challenges from emerging technologies such as synthetic biology and genetic engineering, which make it easier to manipulate pathogens or create biological agents. The treaty's weaknesses increase the risks posed by both state actors and terrorist groups that could misuse dual-use technologies to develop biological weapons. Efforts

to strengthen the BWC through verification protocols have faced resistance over concerns about national sovereignty and commercial research.

UN Security Council Resolution 1540 (2004)

UN Security Council Resolution 1540, adopted on April 28, 2004, is a measure aimed at preventing non-state actors, including terrorist groups, from acquiring nuclear, chemical, or biological weapons and their means of delivery. Unlike traditional non-proliferation treaties that focus on state actors, Resolution 1540 directly addresses the risk of WMD falling into the hands of non-state actors. It mandates that all UN member states adopt and enforce domestic laws to prevent the trafficking, manufacturing, and acquisition of WMD-related materials. The resolution also requires states to establish national controls to secure stockpiles, regulate sensitive materials, and ensure that dual-use technologies are not misused for hostile purposes.

Possible Solutions

Strengthen Export Controls

Nations could potentially adopt and enforce stronger export control regulations to prevent the sale and transfer of dual-use technologies that could be used in WMD development. This includes establishing tracking systems for sensitive materials and improving the enforcement of international export control regimes.

Strengthen international legal frameworks

The current international legal framework for WMD regulation requires a more nuanced and enforceable system to address geopolitical complexities and emerging threats. For instance, gaps in the enforcement mechanisms of the Non-Proliferation Treaty (NPT) have allowed non-compliance to persist with limited consequences. A critical improvement would involve amending treaties like the NPT and Chemical Weapons Convention (CWC) to include automatic, binding sanctions for violations, circumventing potential deadlocks in the UN Security Council due to veto power. Additionally, establishing a universally mandated body, such as a "Global Arms Compliance Tribunal" under the International Court of Justice, could provide impartial adjudication of treaty breaches. This tribunal would be empowered to impose punitive measures, such as economic penalties or restrictions on technology access. Furthermore, creating

region-specific agreements—tailored to local political realities—could address unique challenges, such as non-state actors acquiring WMDs in unstable regions like the Sahel.

Enhance technological oversight and commission

The unchecked advancement of dual-use technologies like artificial intelligence and synthetic biology poses significant risks to global security. To counter these threats, nations should collectively establish a "Global Technology Safeguard Framework" under the auspices of the UN. This framework would require all nations to register their high-risk technology projects, with regular audits conducted by an international task force. For instance, CRISPR gene-editing research with potential weaponization implications could be strictly monitored through a combination of AI-driven anomaly detection and blockchain-based tracking systems for sensitive research materials. Furthermore, incentivizing compliance through subsidies for research institutions and penalties for non-cooperation can ensure broader participation. The framework should also include a "Technology Neutralization Fund" to support the safe de-escalation of weaponized projects, funded by contributions from nations and private tech giants.

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Appendix

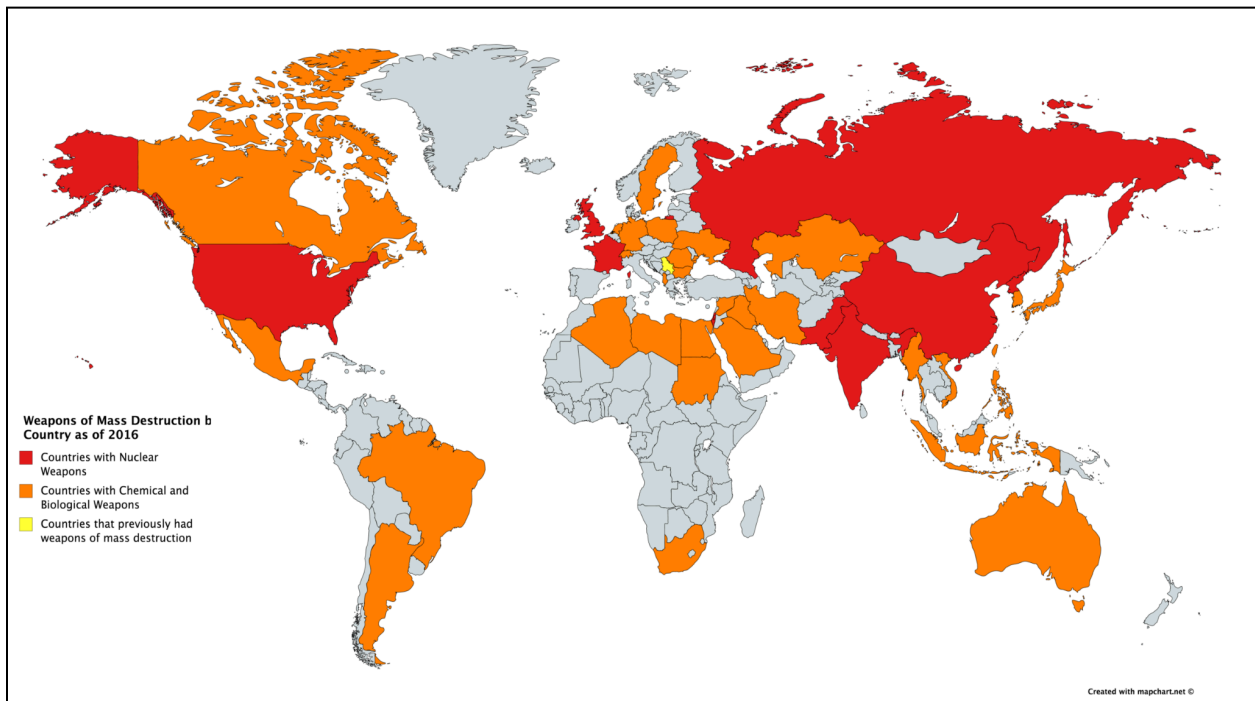


Figure 1: Visual representation of the provision of WMD's across states, regions, and nations based on the access to Nuclear weapons, Biological and Chemical weapons, or previously held owners of WMD's