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Security Council (SC)

Research Report

Topic 3: Eradicating and preventing future development of nuclear weapons.

Deniz Devrim & Isabella Hilmar

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Introduction:

Nuclear weapons were first developed during World War II, climaxing with the atomic bombings of Hiroshima and Nagasaki in 1945. During the Cold War, nuclear arms proliferation accelerated as the United States (U.S.) and the Soviet Union built vast arsenals, leading to the concept of Mutually Assured Destruction (MAD). MAD is a military strategy used in wars or in combat which destroys both sides if either side makes an attack. As a result, a deadlock occurs which pushes countries to peace. Emerging threats and changing technologies are increasing the risks that more countries will seek nuclear weapons or the means to produce them in the near future. And in a world where there is so much renewed proliferation potential and where many of the tools and mechanisms traditionally relied upon to combat the spread of nuclear weapons are becoming less and less effective. These developments, and the related security risks they produce, warrant revisions to the anti-proliferation strategy. By resolution 71/258, the General Assembly decided to convene in 2017 a United Nations conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination. The Assembly encouraged all member states to participate in the Conference, as well as the participation and cooperation of international organizations. The Conference took place in March and June of 2017 in New York. The Treaty on the Prohibition of Nuclear Weapons (TPNW) was proposed during this Conference, and was adopted on 7th of July 2017, and opened for signature on 20th of September. The treaty includes prohibitions on participating in any activities involving nuclear weapons, these prohibitions include agreements not to develop, test, produce, acquire, possess, stockpile, use or threaten other member states with the usage of nuclear weapons.

Definition of Key Terms:

Disarmament: the fact of a country reducing the size of its armed forces or the number of weapons, especially nuclear weapons, that it has.[1]

Nuclear Winter: Nuclear winter is a hypothesised severe and prolonged anti-greenhouse climatic effect resulting from the injection of large quantities of soot into the stratosphere following extensive firestorms triggered by large-scale nuclear warfare. The concept emerged as a major area of scientific study during the 1980s and remains one of the most significant projected long-term global consequences of nuclear conflict.[2] By blocking a substantial proportion of incoming solar radiation, stratospheric soot layers are expected to cool the Earth's surface to levels that could severely disrupt agriculture, ecosystems and food supplies, potentially leading to widespread famine.

[1] www.oxfordlearnersdictionaries.com/definition/english/disarmament
[2] www.gktoday.in/nuclear-winter/

Proliferation: rapid and repeated production of new parts or of offspring.[3]

Confidence-Building Measures: CBMs are agreements between two or more parties regarding exchanges of information and verification, typically with respect to the use of military forces and armaments. Some measures attempt to make military capabilities more transparent and to clarify the intention of military and political activities. Others establish rules regarding the movement of military forces, as well as mechanisms for verifying compliance with such rules.[4]

Security Assurances: Measure of confidence that the security features, practices, procedures, and architecture of an information system accurately mediates and enforces the security policy.[5]

Background Information:

The issue of eradicating and preventing the future development of nuclear weapons is rooted in the profound humanitarian, environmental, and security consequences associated with nuclear warfare.[6] Nuclear weapons are the most destructive weapons ever created, capable of causing mass civilian casualties, long-term radiation effects, environmental devastation, and global economic disruption. The international concern over nuclear weapons first started after the atomic bombings of Hiroshima and Nagasaki in 1945, which demonstrated the catastrophic harms that nuclear weapıns can cause for the world. Following the Cold War, nuclear weapons became a global security strategy when both the Soviet Union and the United States started accumulating tens of thousands of weapons.[7] This period subsequently introduced the MAD. As nuclear weapons started becoming more popular, fears of proliferation increased. States sought after nuclear capabilities for deterrence, regional dominance, or national security, which raised the risk of nuclear conflict or accidental launch. In order to prevent any other mass conflicts occurring from nuclear weapons, the international community began pursuing legal frameworks and mechanisms to limit and eventually eliminate the risk factor. One of the most significant steps to this journey was the adoption of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1968.[8] This treaty aimed to limit the further spread of nuclear weapons, and promote the peaceful usage of nuclear energy, whilst encouraging disarmament. Despite arms

[3] www.merriam-webster.com/medical/proliferation.
[4] www.beyondintractability.org/essay/confidence_building_measures.
[5] csrc.nist.gov/glossary/term/security_assurance.
[6] https://www.icrc.org/en/war-and-law/weapons/nuclear-weapons
[7] https://www.cfr.org/timeline/us-russia-nuclear-arms-control
[8] https://www.britannica.com/event/Treaty-on-the-Non-Proliferation-of-Nuclear-Weapons

reduction agreements towards the end of the Cold War, nuclear weapıns still remain a central security concern.

Historical Background

On August 6th, 1945, an American pilot dropped the first ever deployed atomic bomb over Hiroshima, Japan, immediately killing 80,000 people. Three days later, another atomic bomb was released over the Japanese city of Nagasaki, killing another 40,000 people.[9] After this first deployment of atomic bombs, a race began between nations to develop the same cruel weaponry. The Soviet Union did not want to end up the same way as Japan in a case where they engaged with the United States.[10] They began working on hydrogen bombs that would have even greater effects compared to atomic bombs. The U.S. then started dedicating the same resources into developing their own hydrogen bomb, and soon after other states started joining in on the rally. This is where nuclear deterrence was developed, since both the U.S. and the Soviet Union had nuclear weapons, they dissuaded one another from using them with the threat of retaliation. Later the term Mutually Assured Destruction (MAD) was found by game theorist John von Neumann.[11] Based on his equilibrium strategy, nations realised that the best attack to avoid MAD was no attack at all.

Global Impact

The existence and potential usage of nuclear weapons have far worse global impacts beyond national borders. These nuclear weapons pose a serious threat to humanity as a whole. The utilisation of nuclear weapons could cause mass civilian casualties, which will overwhelm medical systems leaving long-term effects such as radiation-induced illnesses, genetic damage and psychological trauma, as highlighted by the International Committee of the Red Cross and the United Nations Office for Disarmament Affairs.[12] Nuclear detonations could also contaminate land and waters for decades. Scientific research also indicated that even a limited nuclear conflict could cause a “nuclear winter”, which is a hypothesised severe and prolonged anti-greenhouse climatic effect.[13] This scenario would disrupt global climate patterns and would severely threaten food security worldwide. The continued possession of nuclear weapons also increases the risk of accidental launch, miscalculations, and escalation during regional conflicts,

[9] https://www.icrc.org/en/document/nuclear-weapons
[10] https://academic.oup.com/sipri-yearbook/book/60812/chapter-abstract/534456075
[11] https://www.thedecisionlab.com/reference-guide/management/mutually-assured-destruction
[12]https://disarmament.unoda.org/en/our-work/weapons-mass-destruction/nuclear-weapons/treaty-non-proliferation-nuclear-weapons
[13] https://www.gktoday.in/nuclear-winter/

particularly in areas where there are ongoing tensions with nuclear-armed states, which is a concern frequently raised by the Arms Control Association and the United Nations Security Council.[14] Economically, the development, maintenance, and modernisation of nuclear arsenals require large financial resources that could be actively used for sustainable development, healthcare, and education.

Regional Nuclear Tensions

Regional nuclear tensions arise when neighbouring states with nuclear capabilities confront one another in ways that increase the risk of conflict escalation and destabilise international security. In South Asia, the long-standing rivalry between India and Pakistan, which are both nuclear-armed states, has periodically escalated into conflict. Most recently in 2025, cross-border clashes between the two raised global concerns regarding the possible utilisation of nuclear arms. Experts warn that even the limited hostilities between the states can carry the risk of nuclear exchange due to their large arsenals. In East Asia, North Korea's ongoing nuclear and missile developments, including progress to expand its nuclear arsenal in response to U.S. and South Korea military exercises, continue to heighten tensions in the Korean Peninsula and complicate diplomatic efforts towards denuclearisation.[15] Meanwhile, in the Middle East, concerns continue over Iran's nuclear program and regional conflicts.

Major Countries and Organisations Involved:

The International Committee of the Red Cross (ICRC)

The International Committee of the Red Cross (ICRC) plays a very vital humanitarian and legal advocacy role in the issue of nuclear arms. After witnessing the aftermath of the two bombings in 1945, the ICRC has consistently emphasised on the existential threat of nuclear weapons to humanity, and how they are incompatible with humanitarian law.[16] The ICRC stresses that the massive destruction power and long-term effect of nuclear weapons make adequate humanitarian response almost impossible, thereby framing nuclear disarmament as both an urgent benevolent matter and a legal obligation.[17] The committee actively promotes the Treaty on the Prohibition of Nuclear Weapons (TPNW) as a crucial step towards elimination and also

[14] https://www.armscontrol.org/act/2024-11/features/southern-asia-26-years-after-nuclear-tests-review
[15] https://academic.oup.com/sipri-yearbook/book/60812/chapter-abstract/534456075
[16] https://international-review.icrc.org/articles/the-icrcs-legal-and-policy-position-on-nuclear-weapons-919
[17] https://www.icrc.org/en/document/nuclear-weapons

urges all states to join and faithfully implement this treaty as well as other treaties concerning this matter.[18] Through their statements and efforts on papers at UN fora and support in humanitarian initiatives, the ICRC adds moral and legal weight to global calls for disarmament.

The United Nations Office for Disarmament Affairs (UNODA)

The United Nations Office for Disarmament Affairs (UNODA) is the central UN-body concerned with the matter of nuclear weapons, responsible for promoting their disarmament and non-proliferation under the authority of the Secretary General.[19] Their mandates include supporting multilateral efforts aimed at general and complete disarmament under effective international control. UNODA also tries to facilitate dialogue and confidence-building measures amongst member states and provides objective information alongside normative frameworks to states such as UN bodies (the General Assembly and Disarmament Commission), and civil society actors.[20] The office additionally organises and supports negotiations on key treaties, assists in the implementation of disarmament agreements, and fosters cooperation between governments and non-governmental partners to strengthen global norms against development, possession and utilisation of nuclear arms.

Relevant UN Resolutions:

S/RES/1887 (2009):A key landmark SC resolution unanimously adopted to strengthen non-proliferation and nuclear disarmament, reaffirming the goals of the NPT and calling for a world free of nuclear weapons.

S/RES/984 (1995): This resolution offered security assurances to non-nuclear-weapon states under the NPT framework, reinforcing the commitment to non-proliferation.

S/RES/1540 (2004): Although broader than just nuclear weapons, this Chapter VII resolution is crucial because it prohibits non-state actors (e.g., terrorists) from acquiring nuclear, chemical, or biological weapons.

[18]https://disarmament.unoda.org/en/our-work/weapons-mass-destruction/nuclear-weapons/treaty-prohibition-nuclear-weapons
[19]https://disarmament.unoda.org/en/our-work/weapons-mass-destruction/nuclear-weapons/treaty-non-proliferation-nuclear-weapons
[20] https://disarmament.unoda.org/en/our-work/emerging-challenges/civil-society-and-disarmament

Previous Attempts to Solve the Issue:

One of the first ever propositions to solve this matter was made by the United States in 1946 during the United Nations Atomic Energy Commission, which was shortly after the first attack and World War II.[21] This proposal sought after all nuclear arsenals and technology being under international control in order to eliminate nuclear arms globally. This would have required the U.S. to dismantle its nuclear arsenal in exchange for all other countries agreeing not to develop or possess new atomic weapons. This plan ultimately failed, after the Soviet Union rejected it with the growing mistrust after the Cold war, leading to an arms race instead of global disarmament.

Possible Solutions:

A possible solution in order to handle this matter could be the establishment and expansion of regional nuclear-weapon-free zones (NWFZS) and security assurances. These zones could help reduce the appeal of nuclear weapons for states under regional security pressures. If they are to be backed by legally binding treaties, they could demonstrate that security can be maintained without the possession of nuclear arms for all states. Additionally, security assurances offered by nuclear-armed states to non-nuclear-armed states can reduce incentives for proliferation.

[21] https://www.britannica.com/event/Baruch-Plan

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