

Committee: Disarmament & International Security (GA1)

Agenda Item: Utilising multilateral deterrence to develop a credible framework for nuclear stability; with an emphasis on MAD and deterrence theory principles.

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Introduction

Mutual assured destruction (MAD) was considered to be an effective approach for stopping nuclear weapon proliferation during the Cold War. Based on the deterrence theory, MAD depends on the idea that if one country launches a nuclear attack, the other would react with an equal or greater force, thus completely annihilating both nations. This balance of terror was intended to prevent either side from initiating a nuclear conflict.

However, the nuclear forces around the world have dramatically changed since the Cold War. The increasing number of nuclear-armed states now poses new security challenges. Instead of a simple war between two powerful states, today's environment includes multiple actors with different goals, territorial disputes, and technological and military capabilities. The current nuclear crisis has resulted in the declaration that MAD is no longer acceptable, as a result of rising tensions in the Middle East, North Korea, South Asia, and other regions. The ongoing war between India and Pakistan, for example, shows that a nuclear weapons crisis can only occur under the shadow of a ban. Similarly, North Korea's and Iran's nuclear programs demonstrate the power of conflict across the political spectrum. While the presence of nuclear weapons may deter major wars, it may encourage governments to engage in smaller wars considering they believe their nuclear forces will protect their people from retaliation. As nuclear weapons begin to include smart missiles, hypersonic delivery systems, and cyber capabilities, traditional deterrence mechanisms will eventually change.

Unlike the Cold War, when cooperation was maintained through negotiations and treaty agreements, most of today's nuclear powers are unable to work together to resolve conflicts.

Definition of Key Terms

Deterrence: instilling doubt or fear of the consequences with threats in order to discourage a behavior or event.

Deterrence Theory: Theory claiming that criminal penalties do not just punish violators, but also discourage other people from committing similar offenses.

Mutual Assured Destruction (MAD): Principle of deterrence that states if one superpower (a nation) launches a nuclear attack, another superpower would respond with an equally powerful nuclear attack, destroying both sides.

Nuclear Stability: a situation where nuclear weapons are not likely to be used. It happens when countries with nuclear weapons feel secure enough not to attack each other.

Bipolarity: when two powerful countries, like the U.S. and Soviet Union during the Cold War, dominate world politics.

Multipolarity: when many powerful countries, like today, have nuclear weapons and therefore influence.

Nuclear Proliferation: the spread of nuclear weapons to more countries. It increases the risk of conflict and makes controlling nuclear weapons harder.

Nuclear Standoff: when two or more countries with nuclear weapons face each other in a tense situation, but no one attacks because of the fear of mutual destruction.

START: The Strategic Arms Reduction Treaty (START) is an agreement between the U.S. and Russia to reduce the number of nuclear weapons they have. It helps lower the risk of a nuclear war.

NPT: The NPT (Non-Proliferation Treaty) is an international agreement in order to cease the spread of nuclear weapons, promote peaceful nuclear energy, and work towards disarmament.

NFU: No First Use (NFU) is a promise by some countries with nuclear weapons that they will not use them unless they are attacked first.

Stability - Instability Paradox: the paradox states that while nuclear weapons may stop big wars, they can make smaller conflicts more likely because countries feel safer starting them without risking themselves with a nuclear response.

Manhattan Project: The Manhattan Project was a secret U.S. program during World War II that developed the first nuclear bombs. These bombs were later used in Hiroshima and Nagasaki.

Nuclear Triad: The nuclear triad is the three ways a country can deliver nuclear weapons: Land-based missiles, Submarines, Airplanes

SALT: SALT (Strategic Arms Limitation Talks) were meetings between the U.S. and the Soviet Union to limit the number of nuclear weapons during the Cold War.

CTBT: The CTBT (Comprehensive Nuclear-Test-Ban Treaty) is an agreement to stop all nuclear explosions for testing. It aims to stop countries from improving or developing nuclear weapons.

Major Actors Involved

United States of America

The United States is one of the major contributors in the system of global nuclear deterrence as it possesses one of the largest and the most up-to-date nuclear stockpiles in the world. Due to the membership in NATO, the U.S. provides nuclear guarantee to the countries of the region, which are referred to as the extended deterrence, covering countries like Japan, South Korea and the members of NATO. The U.S. strives to enhance the stability of the strategic nuclear relationship with Russia through updating its nuclear arsenal and seeking for more agreements on arms control, for instance, the New START treaty. The policies of the U. S. have often been centered on both mutual assured destruction and disarmament and this is evident in its role in the NPT (Non-Proliferation Treaty). Nevertheless, it has interactions with other nuclear weapon states including China and Russia which shape its strategic thinking.

Russian Federation

Russia, as successor to the Soviet Union, keeps the largest number of nuclear weapons in the world. Its government views nuclear weapons as key to its protection and as a way to challenge NATO's power. Russia's strategy allows for the possibility of nuclear weapons use in response to conventional threats that, in the view of Russia, pose a threat to its very existence. Russia's position in multilateral deterrence is taken in the context of opposition with NATO and strategic alliance with China. It is a party to the major bilateral arms limitation treaty titled New START, however, its current foreign policy does not contribute to the restoration of the global nuclear disarmament discourse.

People's Republic of China

China has a relatively smaller number of nuclear weapons but follows a policy of minimum nuclear counterforce deterrence, that is, enough retaliatory capabilities in the event of an attack. It has announced the No First Use (NFU) policy, thus proving its willingness to not use nuclear weapons first. China's rise in Asia and its rivalry with the US positions it in the middle of the most crucial nuclear powers of the world. It is also working on improving the delivery systems like hypersonic missiles which makes the existing deterrence mechanisms even more complex. Despite not being a signatory to the bilateral arms reduction treaties, China has participated in the discussions regarding the overall nuclear disarmament.

India and Pakistan

Two nations that are very crucial to nuclear policies in South Asia are India and Pakistan, since they have been at war for quite some time and have conflicting borders. India has adopted the No First Use (NFU) policy and its strategic objective is to ensure that its nuclear deterrent is effective against Pakistan and China. On the other hand, Pakistan has taken a more aggressive approach by developing and focusing on the use of tactical nuclear weapons to counter conventional threats from India. Both nations are outside the NPT, thus posing challenges to the global non-proliferation policies. This nuclear rivalry is a critical element of the stability-instability paradox as their nuclear standoff fuels limited conflicts.

Democratic People's Republic of Korea

North Korea can be considered as a unique actor as it has defied the world's non-proliferation regulations and has depended on nuclear weapons for the survival of its regime and for coercive diplomacy. Even though North Korea has a small number of nuclear warheads, its constant missile tests and the threats towards neighboring countries such as South Korea and Japan are a threat to nuclear non-proliferation. It has no formal alliances but it has had limited support from China and Russia in the past. Its nuclear program threatens the process of disarmament and therefore needs the involvement of many countries for its normalization.

European Union

The EU, even though it is not a nuclear power, is still influential in arms control and non-proliferation policies. France and the United Kingdom are EU member states that are aligned with nuclear powers and they provide nuclear guarantees to NATO. The EU supports diplomatic measures, including the Joint Comprehensive Plan of Action (JCPOA) on Iran and provides funding for projects that prevent the spread of nuclear materials. Its connection with other international organizations such as the United Nations enhances its role as a broker in nuclear negotiations.

North Atlantic Treaty Organization

NATO is a defensive alliance which means that nuclear deterrence is a collective liability. In the current structure of NATO, the USA, UK, and France offer nuclear assurance to the allied countries. NATO's nuclear policy is based on the fact that the alliance has the capability to station nuclear weapons in Europe with the aim of discouraging potential aggressors such as Russia. This relationship shows the integration of member countries and their dependence on the pack.

General Overview of the Issue

History

The concept and practice of nuclear deterrence originated right after World War II. The atomic bombings of Hiroshima and Nagasaki had demonstrated the unparalleled destructive force of nuclear weapons (also known as the Manhattan Project). Deterrence, particularly nuclear deterrence, became the centerpiece of global security after World War II. With the United States and the Soviet Union in a deadly standoff that led to the two sides building up arsenals of thousands of nuclear weapons, it was absolutely essential for both sides to have a clear understanding of the principle of deterrence. After all, if they did not understand nuclear deterrence, they might accidentally trigger a nuclear war. So much for what happened after 1945.

The history of nuclear deterrence changed when the Cuban Missile Crisis occurred in 1962. It was the briefing between the U.S. and the U.S.S.R. that really brought home to both superpowers the necessity of better communication and, above all, the need for some type of arms control. Otherwise, no one would know what kind of crisis would come next. The instabilities inherent in the both sides' policies, as well as the existence of the hydrogen bomb, were obviously leading toward some sort of catastrophe.

After the crisis, the Partial Nuclear Test Ban Treaty of 1963 and the Hotline Agreement (for direct communication) were among the first arms control measures to enhance stability and make misunderstandings less likely.

The proliferation of nuclear warheads and the technology needed to make them was, of course, a direct threat to that stability. The NPT was an attempt to shore up that all-important bipolar balance, by making it harder for states (and also for certain groups of individuals) to acquire nuclear capabilities and by promoting disarmament alongside the peaceful use of nuclear energy. But since both sides could count on their nuclear deterrents to prevent direct military conflict, the NPT's inspections aimed at ensuring "undisturbed nuclear disarmament" didn't solve the problem of dangerous confrontations at the regional level, for example, the Indo-Pakistani crisis and the Middle East, or the serious accidents that could involve nuclear weapons.

Structure

Nuclear deterrence during the Cold War was based on the idea of bipolarity with the US and Soviet Union as the main players in the nuclear strategy. This structure was characterized by the so called 'nuclear triad' of weapons delivery systems which was meant to provide the second strike capability and, thus, reinforce the MAD concept.

The nuclear triad included three major delivery systems:

- Land-based Intercontinental Ballistic Missiles (ICBMs): These missiles were the fastest and could strike targets across continents within a short time.
- Submarine-Launched Ballistic Missiles (SLBMs): These submarines were capable of operating underwater which increased the likelihood of the missiles reaching their targets even in a surprise attack.
- Strategic Bombers: These are aircrafts that are fitted with nuclear bombs and cruise missiles which provide an element of maneuverability and a clear message of warning to the potential adversary.

These weapons systems and many others were in turn backed up by both superpowers in the form of extensive command and control networks to guarantee the accuracy and non-tactical use of the weapons.

The structure of deterrence also hinged on arms control measures to reduce escalating. The SALT chances (Strategic of Arms the Limitation Crisis Talks) and START (Strategic Arms Reduction Treaty) Treaties were meant to reduce the number of nuclear weapons that could be deployed while at the same time preserving the opus weightless balance essential for the deterrence to hold.

However, all these measures have been sustained by the assumption of rationality and effective communication between the opposing sides. This bilateral framework was inadequate to address the issues of the multipolar nuclear world.

Post-Cold War Developments

The post Cold War period saw a major change in the nuclear strategy. With the collapse of the Soviet Union in 1991 the bipolar structure of the Cold War deterrence was eliminated and the international system became multipolar. Some of the countries that became independent include Ukraine, Belarus and Kazakhstan, which had nuclear weapons but decided to give up in the presence of international treaties.

Though the chances of direct superpower confrontation reduced, new problems appeared. Some of them include India, Pakistan and North Korea which acquired nuclear weapons due to either regional rivalry or strategic fears. Such interdependence of the nuclear states created the complex patterns of mutual deterrence and made the relations between them more unstable.

Technological innovations have also helped to shape the dynamics of deterrence. Advancements in the hypersonic missiles, targeting systems, and cyber weapons have raised certain doubts. For instance, cyber warfare can compromise nuclear command and control systems and thus undermine deterrence through spreading false warnings or neutralizing the ability to respond.

The Stability-Instability Paradox has also been on the rise in this period as well. Nuclear weapons ensure that conventional warfare will not occur but they make nations more likely to initiate limited warfare since they presume that the opposing nation will not respond in kind owing to the risk of nuclear response. This paradox has been seen in India-Pakistan border clashes and North Korea's aggression on the Korean peninsula.

Financing

Nuclear deterrence has always been a costly proposition, this includes the sustenance creation, of enhancement nuclear and arsenal. The two opposing powers during the cold war, the US and Soviet Union spent a lot of money in the development and enhancement of their arsenals at the expense of other domestic developments.

In the post Cold War period, nuclear weapon states have come under increasing pressure and to enhance and justify nuclear forces. For instance, the United States has spent more than \$1 trillion for the modernization of its nuclear forces over the next thirty years, this includes the modernization of ICBMs, submarines and bombers.

Such programs like the Cooperative Threat Reduction (CTR) have got financial support from the international community for the dismantling of the surplus nuclear weapons. However, the measures that have been put in place to prevent nuclear proliferation and such secure materials have been expensive and have proven to be challenging for the developing nations of Pakistan and North Korea.

Arms control agreements are beneficial for the international community but they come with a verification cost and since enforcement mechanisms are for costly the International Atomic Energy Agency (IAEA) carries out inspections of nuclear programs across the globe, this being through financial support from the member countries.

Goals

The main reason for the adoption of the multilateral deterrence is to prevent the use of nuclear weapons and to maintain the balance in the international system. Thus, in the contemporary international system where several states possess nuclear weapons, this goal requires the reform of the Cold War era concepts of bilateral deterrence and deterrence theory.

Key objectives include:

- **Ensuring Credible Deterrence:** Sustaining healthy and efficient nuclear arsenal with the capability of deterring any aggression from any country or any other political entity.
- **Promoting Arms Control and Disarmament:** The enhancement of the existing treaties for example the NPT, CTBT and the START to decrease the possibility of nuclear risks.
- **Preventing Proliferation:** Improving measures on the prevention of horizontal spread of nuclear weapons to other countries or even terrorist attacks.
- **Addressing Emerging Technologies:** Developing new strategies that will be able to counter hypersonic weapons, cyber threats and artificial intelligence.
- **Building Crisis Management Mechanisms:** The development of communication channels, hotlines and the confidence and security building measures to avoid accidental or intentional use of the weapons.

Ultimately, the goal is to guarantee that no state believes it may benefit from a nuclear strike, hence nuclear war is not likely to start. Engagement of the nuclear weapon states, the regional powers, and the international institutions will help to address the problems of a multipolar nuclear world.

Timeline of Important Events

Date:	Event:
18 June 1942	The US government started the Manhattan Project to develop the first nuclear weapons against Nazi's during WW2.
16 July 1945	First nuclear-weapon ,a plutonium implosion device, the Trinity was tested in Los Alamos.
6 August 1945	The US bombed Hiroshima which was the first time the use of nuclear weapons in warfare.
9 August 1945	The US bombed Nagazski with a nuclear weapon bringing an end to WW2.
29 August 1949	After the US, the Soviet Union tested their first nuclear weapon becoming the second state that held nuclear power.
1 November 1952	The US detonates the first hydrogen bomb in the Marshall Islands which was 500 times more powerful than the Nagasaki bomb.
May 1955	The United Nations Disarmament Commission started negotiations on ending nuclear weapons testing that led to the Test Ban Treaty.
5 August 1963	The Limited Nuclear Test Ban

	treaty was signed in Moscow by The US, USSR and UK.
1968	Treaty on the Non-Proliferation of Nuclear Weapons was signed.
1991 and 2010	START I and START II treaties were signed between the US and USSR/Russian Federation.
	The Treaty on the Prohibition of Nuclear Weapons was signed but none of the states holding nuclear weapons signed it.

Related Documents

- Legality of the Threat or Use of Nuclear Weapons
(Advisory opinion of International Court of Justice by the request of the General Assembly) <https://www.icj-cij.org/case/95>
- Legality of the Use by a State of Nuclear Weapons in Armed Conflict
(Advisory opinion of International Court of Justice by the request of the World Health Organization) <https://www.icj-cij.org/case/93>
- Test Ban Treaty (1963)
<https://treaties.un.org/doc/Publication/UNTS/Volume%20480/volume-480-I-6964-English.pdf>
- Treaty on the Non-Proliferation of Nuclear Weapons (NPT) (1968)
<https://treaties.unoda.org/t/npt>
- Strategic Arms Reduction Treaty (START I) (1991)
https://media.nti.org/documents/start_1_treaty.pdf
- New Start Treaty (2010)

https://media.nti.org/documents/new_start_treaty.pdf

- Resolution 1540 (2004)

<https://documents.un.org/doc/undoc/gen/n04/328/43/pdf/n0432843.pdf>

- Resolution 1718 (2006)

<https://documents.un.org/doc/undoc/gen/n06/572/07/pdf/n0657207.pdf>

- Treaty on the Prohibition of Nuclear Weapons (TPNW) (2017)

<https://d3n8a8pro7vhm.cloudfront.net/tectodevms/pages/2417/attachments/original/1571248124/TPNW-English1.pdf?1571248124>

Past Solution Attempts

Since the first Nuclear Weapon was used in warfare its limitation was always a question. After the bombing of Hiroshima and Nagazski in 1945, powerful Allied nations(Soviet Union, UK and France) started to develop their nuclear weapons. The US and Soviet led this arms race but in the 1960s with Cuba and Turkey Missile Crisis both nations realized that this was getting out of control. In 1963 Soviets and the US signed a treaty which limited testing and decreased the radioactive material spreaded to the atmosphere but this didn't stop both countries and other nations from continuing the development of nuclear weapons. In 1968 the US, UK and Soviet (Nuclear Powers) signed the NPT to prevent additional states from acquiring nuclear weapons but this didn't last as well since after the treaty nations like India, South Africa, France, DPR Korea obtained their own nuclear arsenals as well.

Possible Solutions

While thinking about a solution delegates should bear in mind that this is a long going global threat for international peace. The damage from nuclear weapons costs are far greater than any weapons developed by humankind. Delegates can suggest formation of an international body to monitor the trade and mining of materials used in the development of these weapons such as; Uranium-235, Plutonium etc. They can suggest organizing new international conferences or treaties on this agenda but they should bear in mind that the only nation to voluntarily de-activate its own nuclear weapons in history was South Africa, so it's likely that nations obtaining nuclear weapons are not likely to demilitarize themselves.

Useful Links

You can watch this short video to have a better understanding of the deterrence theory:

- <https://study.com/academy/lesson/deterrence-theory-of-punishment-definition-effect-on-law-obedience.html>
- <https://thediplomat.com/2024/10/nuclear-stability-in-the-21st-century/>
- <https://www.ceris.be/wp-content/uploads/2024/03/Nuclear-Stability-and-Conventionnal-Conflict-Robert-Trager.pdf>
- To better comprehend the Manhattan Project and its effects:
<https://www.osti.gov/opennet/manhattan-project-history/Events/1945/hiroshima.htm>
<https://education.cfr.org/learn/reading/what-deterrence>

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