

STUDY GUIDE NATO
TOPIC: NUCLEAR DETERRENCE, ARMS CONTROL, AND
STRATEGIC STABILITY IN THE 21ST CENTURY

LAMUN **XI**

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Introduction to the Committee:

The North Atlantic Treaty Organization (NATO) is a political and military alliance established on 4 April 1949 through the North Atlantic Treaty (Washington Treaty). Founded by 12 countries in the aftermath of the Second World War, NATO was created to safeguard the freedom, security, and territorial integrity of its member states through political consultation and collective defence. Today, the Alliance comprises 32 member states from Europe and North America and remains one of the world's most influential security organizations. NATO's primary purpose is to preserve peace and deter aggression. Its founding principle, Article 5 of the North Atlantic Treaty, states that an armed attack against one Ally is considered an attack against all Allies, forming the basis of NATO's collective defence system. Alongside military cooperation, NATO promotes democratic values, encourages dialogue among its members, and works to prevent conflicts through political consultation and diplomacy. Under its 2022 Strategic Concept, NATO carries out three core tasks: a) Deterrence and Defence, b) Crisis Prevention and Management, and c) Cooperative Security. The Alliance addresses both traditional and emerging security challenges, including terrorism, cyberattacks, hybrid warfare, and regional instability, while working closely with partner countries and international organizations. All NATO decisions are made by consensus, ensuring that every member state has an equal voice in shaping the Alliance's policies and actions.

Committee Mandate:

NATO's primary mandate is to protect the freedom and security of its member states through political cooperation and collective military defence, while promoting stability and preventing conflict. NATO also promotes democratic values, individual liberty, human rights, and the rule of law among its members.

The core of NATO's mandate is collective defence under Article 5 of the North Atlantic Treaty. This principle states that an armed attack against one NATO member is considered an attack against all members. The most notable example was after the 11 September 2001 terrorist attacks on the United States, when Article 5 was invoked for the first time and NATO allies provided collective support.

In addition to collective defence, NATO is responsible for crisis prevention and management. It works to address security challenges through diplomatic consultation, peace-support operations, training missions, and cooperation with international organizations. NATO's Kosovo Force (KFOR) mission and training assistance provided to Iraq to strengthen national security institutions are a few examples of such operations.

Another essential component of NATO's mission is cooperative security. To advance stability and avert conflict, the group collaborates closely with non-member nations and global institutions

like the European Union and the United Nations. Through collaboration, partnership, and diplomacy, NATO helps to lessen global threats by supporting programs about arms control, disarmament, and non-proliferation. Instances of such actions include Partnership for Peace (PfP) and the Istanbul Cooperation Initiative.

Introduction to the topic:

Nuclear Deterrence, Arms Control, and Strategic Stability in the 21st Century is centered on how the international community can prevent nuclear conflict while managing the risks created by nuclear weapons and changing security conditions. Nuclear deterrence is intended to discourage aggression, while arms control and non-proliferation seek to reduce risks through international agreements, transparency, verification, and cooperation. The NPT remains the central international framework for preventing the spread of nuclear weapons and advancing nuclear disarmament. In the 21st century, maintaining strategic stability has become more complicated because of geopolitical tensions, technological developments, and weakened arms-control frameworks. Emerging capabilities and reduced dialogue can increase uncertainty and the possibility of miscalculation or escalation. Therefore, the agenda focuses on finding a balance between deterrence, arms control, risk reduction, and international cooperation to strengthen global security and preserve long-term strategic stability. The importance of this agenda has grown significantly due to recent global developments, including Russia/Ukraine war and its nuclear rhetoric, China's rapid expansion and modernization of its nuclear arsenal, North Korea's continued missile and nuclear tests, and the erosion of major arms control agreements. These challenges have increased concerns over miscalculation, accidental escalation, and the possibility of a renewed global arms race.

KEY TERMS:

Nuclear Deterrence

A security strategy in which the possession of nuclear weapons discourages adversaries from launching an attack due to the threat of devastating retaliation.

Arms control

International agreements, measures, and negotiations that regulate, limit, or reduce weapons to enhance security, transparency, and stability while lowering the risk of conflict.

Strategic Stability

A condition in which states have no incentive to launch a first strike because the risk of retaliation and escalation outweighs any potential military advantage.

Collective Defence

Refers to the principle that an attack against one NATO member is considered an attack against all members, requiring the other Allies to assist to the member under attack. This strengthens deterrence by making potential aggression less likely and contributes to strategic stability

Nuclear Non-Proliferation Treaty (NPT)

The cornerstone international treaty aimed at preventing the spread of nuclear weapons, promoting peaceful uses of nuclear energy, and advancing nuclear disarmament.

Disarmament

The reduction or complete elimination of weapons, particularly weapons of mass destruction, through negotiated international agreements.

Non-Proliferation

Efforts to prevent additional states or non-state actors from acquiring nuclear weapons and related technologies.

Strategic Nuclear Forces

Long-range nuclear weapons and delivery systems designed to deter major attacks against a state or alliance. Within NATO, the United States, United Kingdom, and France provide these capabilities.

Verification Mechanisms

Inspection, monitoring, and information-sharing systems used to ensure compliance with arms control and non-proliferation agreements

Nuclear Planning Group (NPG)

NATO's senior body responsible for consultation and decision-making on nuclear policy, planning, posture, and deterrence issues.

Weapons of Mass Destruction (WMDs)

Weapons capable of causing widespread destruction, including nuclear, chemical, biological, and radiological weapons.

Strategic Risk Reduction

Measures such as dialogue, transparency, verification, confidence-building, and crisis communication that reduce the likelihood of nuclear escalation or miscalculation.

Credible Deterrence

Maintaining sufficient military capabilities and political resolve so that potential adversaries believe any aggression would face an effective response.

Second-Strike Capability

The assured ability of a state to respond with nuclear force after surviving an initial nuclear attack, making deterrence more credible.

Confidence-Building Measures (CBMs)

Cooperative actions such as information sharing, military notifications, inspections, and transparency mechanisms that reduce mistrust and the risk of accidental conflict.

History and background

Context

“Nuclear Deterrence, Arms Control, and Strategic Stability in the 21st Century” is shaped by the need to maintain international security while reducing the risks associated with nuclear weapons. Today’s strategic environment is more complex due to geopolitical competition, technological developments, changing military capabilities, and uncertainty surrounding existing arms-control frameworks. These factors can increase mistrust and the possibility of miscalculation between states. As a result, maintaining strategic stability requires a careful balance between credible deterrence, risk reduction, transparency, dialogue, and international cooperation.

History

The origins of nuclear deterrence and arms control can be traced to the early years of the Cold War, when the United States and the Soviet Union rapidly expanded their nuclear arsenals following the use of atomic bombs in 1945. As tensions grew, both superpowers adopted the doctrine of nuclear deterrence, the idea that the threat of overwhelming retaliation would prevent either side from launching a nuclear attack. Established in 1949, NATO integrated nuclear deterrence into its collective defence strategy to protect its members from potential aggression. By the 1950s, U.S. nuclear weapons had been deployed in Europe, and nuclear deterrence became a cornerstone of the Alliance's security policy.

Recognizing the catastrophic consequences of a nuclear war, the international community gradually shifted towards arms control and non-proliferation. Landmark agreements such as

- 1. Treaty on the Non-Proliferation of Nuclear Weapons (NPT) (1968),**
- 2. The Strategic Arms Limitation Talks (SALT),**
- 3. The Intermediate-Range Nuclear Forces (INF) Treaty (1987),**

4. The New START Treaty (2010)

sought to limit nuclear arsenals, improve transparency, and reduce the risk of conflict. Following the end of the Cold War, NATO significantly reduced its nuclear stockpile in Europe by more than 90% while continuing to support effective and verifiable arms control, disarmament, and non-proliferation initiatives.

Current

As of now, there is an immense need to balance nuclear deterrence, arms control, and strategic stability in an increasingly uncertain security environment. In 2026, the expiration of New START has removed binding limits on the strategic nuclear arsenals of the United States and Russia, creating greater uncertainty and increasing the need for new arms-control and risk-reduction measures. At the same time, nuclear-armed states are modernizing their capabilities, while emerging technologies and changing military strategies are making traditional deterrence more complex. These developments highlight the importance of maintaining credible deterrence while strengthening transparency, verification, dialogue, non-proliferation, and measures that can prevent miscalculation or unintended escalation.

ROLE OF INTERNATIONAL CONVENTIONS:

International conventions form the legal foundation of global efforts to prevent nuclear conflict, limit the spread of nuclear weapons, and maintain strategic stability. NATO considers effective and verifiable arms control, disarmament, and non-proliferation to be essential complements to its policy of credible deterrence, emphasizing that international treaties strengthen global security while supporting the Alliance's collective defence objectives.

KEY INTERNATIONAL CONVENTIONS AND TREATIES:

1. Treaty on the Non-Proliferation of Nuclear Weapons (NPT):

The Nuclear Non-Proliferation Treaty (NPT) is the cornerstone of the global nuclear non-proliferation regime. It is based on three pillars: non-proliferation, peaceful use of nuclear energy, and nuclear disarmament. The treaty seeks to prevent the spread of nuclear weapons, promote the peaceful use of nuclear technology, and encourage negotiations toward eventual nuclear disarmament.

2. Comprehensive Nuclear-Test-Ban Treaty (CTBT):

The CTBT prohibits all nuclear test explosions, limiting the development of new nuclear weapons and strengthening the global non-proliferation regime. Although it has not yet entered into force, NATO supports its objectives and recognizes its role in enhancing strategic stability.

3. New Strategic Arms Reduction Treaty (New START):

The New START Treaty was a bilateral agreement between the United States and Russia that placed verifiable limits on deployed strategic nuclear warheads and delivery systems. It promoted transparency through inspections and data exchanges, making it a key pillar of strategic stability until it expired in 2026.

4. Intermediate-Range Nuclear Forces (INF) Treaty:

The INF Treaty eliminated all U.S. and Soviet/Russian ground-launched ballistic and cruise missiles with ranges between 500 and 5,500 kilometers. It was considered a landmark Cold War arms control agreement before it ended in 2019, increasing concerns about a renewed missile arms race in Europe.

5. Treaty on the Prohibition of Nuclear Weapons (TPNW):

The TPNW is the first international treaty to comprehensively prohibit nuclear weapons. However, NATO does not support the treaty, arguing that it is inconsistent with the Alliance's nuclear deterrence policy and lacks an effective verification mechanism. NATO instead continues to support the NPT as the primary framework for nuclear disarmament and non-proliferation.

6. Open Skies Treaty:

The Open Skies Treaty allowed participating states to conduct unarmed observation flights over one another's territories to increase military transparency and build confidence. It helped reduce the risk of misunderstanding and contributed to strategic stability in Europe.

7. Treaty on Conventional Armed Forces in Europe (CFE Treaty):

The CFE Treaty established limits on conventional military equipment in Europe and introduced verification measures to reduce the risk of large-scale conflict. Although focused on conventional rather than nuclear weapons, it has long been regarded as an important component of European strategic stability and confidence-building.

(Read more about these treaties on NATO's official website)

PROBLEMS AND CHALLENGES:

a) Modernization and Expansion of Nuclear Arsenals: Major nuclear powers, including Russia and China, are modernizing and expanding their nuclear capabilities by developing advanced warheads, hypersonic missiles, and new delivery systems. These developments increase strategic competition, fuel a renewed arms race, and complicate efforts to maintain global strategic stability

b) Weakening of Arms Control Agreements: The erosion and expiration of major arms control treaties have reduced transparency, verification, and mutual trust among nuclear-armed states. The decline of agreements such as the INF Treaty and the expiry of New START has made it more difficult to limit nuclear arsenals and prevent strategic miscalculations.

c) Rising Geopolitical Tensions: The Russia / Ukraine war, growing strategic competition with China, and increasing regional conflicts have significantly heightened nuclear risks. NATO has identified these developments as major threats to Euro-Atlantic security, requiring a stronger deterrence posture while avoiding unintended escalation.

d) Emerging Technologies and Cyber Threats: Advances in artificial intelligence, cyber capabilities, hypersonic weapons, missile defence, and space technologies are changing the nature of nuclear deterrence. These technologies can shorten decision-making time, disrupt command-and-control systems, and increase the possibility of accidental escalation during a crisis.

e) Nuclear Proliferation and Declining Strategic Dialogue: The continued spread of nuclear and missile technologies, combined with weakening diplomatic dialogue and confidence-building measures, poses a significant challenge to global security.

f) Balancing Deterrence with Disarmament: This is a central challenge because states may consider nuclear deterrence necessary for their immediate security while simultaneously supporting long-term nuclear disarmament. If reductions are pursued without sufficient confidence in alternative security arrangements, states may fear becoming more vulnerable. Conversely, excessive reliance on nuclear deterrence can make progress toward disarmament more difficult.

g) Unequal Security Concerns: This is a problem because states may have different levels and types of nuclear capabilities, leading some countries to believe that existing security arrangements do not adequately protect their interests. Such perceptions can make states reluctant to accept arms-control limitations or reductions, complicating efforts to establish balanced agreements.

CAUSES:

1. Intensifying Geopolitical Competition: Increasing strategic rivalry between major powers, particularly the United States, Russia, and China, has driven states to prioritize military strength and nuclear deterrence. This competition has reduced trust, intensified security concerns, and encouraged countries to modernize their nuclear forces, making arms control negotiations more difficult.

2. Decline of Arms Control and Verification Mechanisms: The suspension, collapse, or expiration of several key arms control agreements has weakened transparency, verification, and confidence-building measures between nuclear powers. Without effective verification and

dialogue, states are more likely to question one another's intentions and invest in expanding or modernizing their arsenals.

3. Rapid Advances in Military Technology: The development of hypersonic missiles, cyber capabilities, artificial intelligence, missile defence systems, and space technologies has transformed the strategic environment. Many existing arms control treaties were negotiated before these technologies emerged, creating regulatory gaps and increasing uncertainty over future deterrence strategies.

4. Regional Conflicts and Security Crises: Ongoing conflicts and regional instability have reinforced the perceived need for strong nuclear deterrence. Events such as the Russia/ Ukraine war and persistent tensions in other regions have heightened security concerns, leading states to strengthen their defence capabilities rather than pursue further disarmament.

5. Growing Nuclear Proliferation Risks: The continued pursuit of nuclear weapons and ballistic missile capabilities by some states, along with concerns about the spread of nuclear technologies, has increased pressure on the global non-proliferation regime. These developments have made it more difficult to preserve strategic stability and have reinforced NATO's emphasis on credible deterrence alongside effective non-proliferation efforts.

MAJOR STAKEHOLDERS:

1. NATO:

NATO is the primary stakeholder in this agenda, responsible for ensuring the collective defence of its 32 member states. It maintains a credible nuclear deterrence while promoting arms control, disarmament, and non-proliferation to preserve strategic stability and international security.

2. United States:

The United States is NATO's leading nuclear power and provides the majority of the Alliance's strategic nuclear deterrence. It also plays a central role in arms control negotiations and in shaping NATO's nuclear policies and security strategy.

3. Russia:

As one of the world's largest nuclear powers, Russia significantly influences NATO's deterrence posture. Its nuclear modernization, strategic policies, and military actions have made it a key stakeholder in discussions on arms control and strategic stability.

4. China:

China is an increasingly important stakeholder due to its expanding nuclear arsenal and growing global influence. NATO recognizes China's military modernization as a factor affecting international security and strategic stability.

5. United Nations (UN) and International Atomic Energy Agency (IAEA):

The United Nations promotes global disarmament and international peace through treaties and diplomatic initiatives, while the International Atomic Energy Agency (IAEA) monitors compliance with nuclear safeguards and verifies the peaceful use of nuclear technology under the NPT. Together, they play a crucial role in supporting the global non-proliferation regime.

QARMA (Questions a resolution must answer)

1. What measures can strengthen international arms control, disarmament, and non-proliferation frameworks?
2. How can international cooperation be enhanced to prevent nuclear proliferation and reduce strategic risks?
3. What confidence-building, transparency, and verification mechanisms can be implemented to reduce mistrust and prevent miscalculation among nuclear-armed states?
4. What steps can be taken to adapt existing arms control frameworks to address emerging security threats and future technological developments?
5. How can nuclear deterrence be maintained while reducing the risk of nuclear escalation and preserving strategic stability?

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SOURCES:

<https://www.nato.int/en/what-we-do/deterrence-and-defence/natos-nuclear-deterrence-policy-and-forces>

<https://www.un.org/en/peace-and-security/what-nuclear-disarmament>

<https://www.nato.int/en/what-we-do/wider-activities/arms-control-disarmament-and-non-proliferation>

<https://www.nato.int/content/dam/nato/webready/documents/publications-and-reports/strategic-concepts/2022/290622-strategic-concept.pdf>

<https://www.nato.int/content/dam/nato/webready/documents/publications-and-reports/strategic-concepts/2022/290622-strategic-concept.pdf>

<https://www.nato.int/en/about-us/official-texts-and-resources/official-texts/2026/04/20/north-atlantic-council-statement-on-the-occasion-of-the-11th-review-conference-of-the-treaty-on-the-non-proliferation-of-nuclear-weapons>

<https://www.nato.int/en/what-we-do/wider-activities/arms-control-disarmament-and-non-proliferation>

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<https://www.unoda.org/en/our-work/weapons-mass-destruction/nuclear-weapons/treaty-non-proliferation-nuclear-weapons>

<https://www.nato.int/en/what-we-do/wider-activities/conventional-arms-control>

<https://www.nato.int/en/what-we-do/deterrence-and-defence/natos-nuclear-deterrence-policy-and-forces>

<https://www.nato.int/en/what-we-do/introduction-to-nato/collective-defence-and-article-5>



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