CANMUN 2025

BACKGROUND GUIDE

DISEC

Disarmament and International Security Committee

Letter from the Executive Board

Dear delegates,

It is an honour to serve as the executive board for the Disarmament and International Security Committee at CANMUN 2025. The committee you'll be a part of will discuss the current topic of Deliberation on mitigating the Threat of Biological Weapons in the Context of International Security and Disarmament. You'll be gathering for a formal meeting over two days, representing different countries and hopefully coming to a consensus.

The Executive Board looks forward to seeing well-researched delegates having great debates and discussions, which lead to amicable solutions in the committee. We're not looking for delegates to simply dump research and provide significant knowledge on the topic, but rather wish to have delegates understand the biggest obstacles in meeting the goals set out by the committee.

Just a note to the committee that we'll be following the UNA-USA rules of procedure with slight deviations. To help you with your research, we've prepared this background guide so you're familiar with the agenda. Please note this guide, as the name suggests, is merely to provide you with a basic idea regarding the agenda, so it's a must that you go beyond this guide to research. You are welcome and encouraged to discuss specific cases and laws that need improvement. The scope of your agenda is essential, and we wish to see fresh points with every speech and want the committee to form a productive direction.

We look forward to having you on our committee and hope you find this study guide helpful for your extensive research. We're looking forward to an exciting two days at CANMUN 2025.

Regards,

Chairperson: David Anup Raj

Vice Chairperson: Aditi Anand

Moderator: Haziqah K.

INTRODUCTION TO THE COMMITTEE

Disarmament and International Security Committee (DISEC) stands as a pivotal platform within the United Nations General Assembly, dedicated to addressing global security challenges and actively working towards disarmament.

The significance of DISEC lies in its ability to tackle and find solutions to some of the most pressing security concerns facing our world today. From the proliferation of nuclear weapons to the illicit arms trade, DISEC catalyses international cooperation, fostering dialogue and promoting effective policies that seek to enhance peace and security.

DISEC's importance is rooted in its mandate. The committee is responsible for formulating and recommending strategies to prevent armed conflicts, reduce military expenditures, and promote disarmament on a global scale. By addressing these critical issues, DISEC plays a crucial role in shaping the international security agenda and influencing global policies that impact the lives of millions.

Moreover, DISEC's international role is paramount. In an increasingly interconnected world, security challenges transcend borders and require collective action. DISEC provides a platform for nations to engage in meaningful dialogue, share best practices, and forge alliances to address common security threats. Through its deliberations, the committee encourages cooperation, builds trust among nations, and fosters an environment of mutual respect.

The mandate of DISEC encompasses a wide range of issues, including but not limited to nuclear disarmament, conventional arms regulation, cybersecurity, and the prevention of terrorism. By addressing these multifaceted concerns, DISEC strives to bolster international security, reduce conflict risks, and create conditions for sustainable peace.

The Disarmament and International Security Committee occupies a central and invaluable position within the United Nations system. Its significance, importance, and international role are instrumental in addressing global security challenges, pursuing disarmament, and fostering a safer world for all. As delegates, your role in this committee is vital, as you have the power to shape policies, promote dialogue, and create meaningful impact.

INTRODUCTION TO THE AGENDA

Biological weapons represent one of the most serious dangers to international security and disarmament. They create huge casualties, upend economies, and jeopardise international stability by making use of living things and poisons. The intentional use of disease as a weapon has been forbidden for decades, but scientific advancements, dual-use biotechnology, and the growth of non-state actors have reignited international concern.

The international community first addressed this threat through the 1925 Geneva Protocol, which banned the use of chemical and biological weapons in war. But this did not prohibit the development or stockpiling of biological weapons, leaving significant gaps. These loopholes were only addressed with the 1972 Biological Weapons Convention (BWC), the first multilateral treaty to outlaw the development, production and possession of biological agents for hostile purposes. There are still challenges, such as the lack of a verification mechanism and difficulties in monitoring, that persist.

Member nations are required to discuss how biological weapons threaten collective security, if current international frameworks are sufficient, and how to improve disarmament while striking a balance between scientific advancement and international safety as part of the DISEC agenda.

HISTORY

The efforts of the international community to regulate biological weapons can be traced back to the time between the two World Wars. In the wake of World War I and the extensive deployment of chemical weapons, countries convened in Geneva to enhance arms control initiatives. This resulted in the 1925 Geneva Protocol, which forbade the use of chemical and biological weapons in conflict. However, the Protocol had notable shortcomings: it prohibited only the use, while allowing development, production, or stockpiling of such weapons. Additionally, many nations imposed reservations that undermined its global applicability, committing to comply only if others did so first.

In the 1930s, efforts under the League of Nations aimed to expand these prohibitions. Proposals included outright bans on biological warfare, but these negotiations fell apart without establishing a legally binding agreement, primarily due to rising political tensions leading up to World War II. Consequently, states continued to maintain capabilities for biological warfare.

After World War II, the topic of weapons of mass destruction became a priority on the United Nations' disarmament agenda. Various proposals for "total and complete disarmament" featured clauses against biological weapons. A significant development occurred in 1961 with the McCloy-Zorin Declaration, which was a consensus between the United States and the Soviet Union calling for the eradication of nuclear, chemical, and biological weapons. Nonetheless, the rivalries of the Cold War hindered the creation of a comprehensive treaty.

Acknowledging these challenges, the UN shifted its focus to partial measures. In 1966, the General Assembly reaffirmed the tenets of the Geneva Protocol, but the attempt to regulate chemical and biological weapons together proved to be politically contentious. It wasn't until the early 1970s that a consensus was reached to pursue an independent treaty specifically aimed at biological and toxin weapons.

This advancement led to the negotiation of the Biological Weapons Convention (BWC) during the 1971 session of the Conference of the Committee on Disarmament. Draft proposals were collaboratively submitted by the United States and the Soviet Union, and the General Assembly endorsed them later that year. The Convention opened for signature in 1972 and became effective in 1975. In contrast to the Geneva Protocol, the BWC fully prohibited the development, production, stockpiling, and acquisition of biological and toxin weapons, making it the first multilateral treaty to entirely ban a specific category of weapons of mass destruction.

CURRENT THREAT LANDSCAPE

The arising gap - biological threats :

Biological threats today arise from legacy risks, accelerating technology, and governance gaps. Dual-use technologies like synthetic biology and AI reduce the time, cost, and expertise needed to manipulate biological systems. The commercial bio-economy is expanding, with cross-border start-ups, contract research, and gene synthesis services. Weak attribution and the ambiguity between state and non-state actors complicate monitoring and enforcement; therefore, the delegates may pay attention to how technology and private-sector growth are changing the threat landscape, which is crucial for shaping effective mitigation strategies.

The legality loophole :

The Biological Weapons Convention (BWC) prohibits the development, production, and stockpiling of biological weapons but lacks a verification mechanism, leaving compliance largely dependent on national implementation. The UN Secretary-General's Mechanism (UNSGM) allows investigation of alleged use but is reactive and relies on political will, nominated labs, and timely access. Informal export control regimes like the Australia Group help limit sensitive material transfers but are voluntary and fragmented, especially for intangible transfers such as DNA sequences or AI models. Delegates must therefore pay attention to these gaps in verification, inspection, and cross-border regulation when considering policy responses.

Gaps the International Community Cannot Ignore:

There is no formal verification protocol under the BWC, which limits confidence and trust. Commercial and digital blind spots leave intangible transfers and AI-assisted bio-design largely unregulated. Fragmented national enforcement creates inconsistencies in legal definitions, penalties, and laboratory oversight. Delays in attribution hinder timely response to incidents, and rapid technology diffusion continues to outpace governance. Addressing these gaps through transparency, harmonised rules, and international cooperation is essential to reduce the strategic risk of biological weapons.

Geopolitical and Strategic Dimensions:

Geopolitical tensions and strategic competition are increasingly shaping how states perceive and respond to biological threats. In 2025, NATO made a landmark move by investing in biotechnology through its Innovation Fund, co-leading a $35 million funding round for the UK-based Portal Biotech, which develops portable sensors capable of detecting engineered pathogens in real time. This illustrates the growing strategic importance of rapid detection, surveillance, and response capabilities in global biosecurity. Delegates should pay attention to how the integration of advanced technologies into national defence frameworks influences threat mitigation and international collaboration.

At the same time, the Biological Weapons Convention (BWC), now over 50 years old, faces challenges in addressing modern threats. Its lack of a formal verification mechanism and differing interpretations of Article X obligations limit compliance and enforcement. While recent BWC Working Group discussions have tackled assistance, response, and preparedness, member state disagreements have slowed progress. Delegates must consider ways to strengthen the BWC framework to address dual-use technologies and emerging biotechnologies without stifling legitimate scientific research. The rise of dual-use technologies, including synthetic biology and AI-assisted pathogen design, adds complexity, creating potential risks if misused. The absence of binding global standards for biosafety and oversight highlights a critical gap in governance. Delegates should focus on creating international norms and regulatory mechanisms that ensure technological advancements enhance global security rather than exacerbate vulnerabilities. In sum, the intersection of geopolitical strategy, emerging technologies, and treaty obligations requires a balanced approach emphasising cooperation, innovation, and robust governance.

Existing International Framework:

Biological Weapons Convention (BWC) – 1975

Full Name: Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.

Scope:

Prohibits the development, production, acquisition, stockpiling, and use of biological and toxin weapons.

Obliges states to destroy existing stockpiles and facilities.

Encourages international cooperation for peaceful uses of biology.

UN Security Council (UNSC) Resolutions Related to WMDs

Examples:

UNSC Resolution 1540 (2004): Obligates all UN member states to prevent the proliferation of WMDs, including biological weapons, to non-state actors.

Geneva Protocol – 1925

Full Name: Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare.

(World Health Organisation (WHO) Frameworks

International Health Regulations (IHR, 2005):

Requires states to report outbreaks of infectious diseases and strengthen health security systems.

Helps detect and mitigate the misuse of pathogens before they can become bioweapons.

UN Office for Disarmament Affairs (UNODA)

Facilitates capacity building, training, and technical support for BWC implementation.

UN Office for the Prevention of Genocide / International Security Programs

Assists with risk assessment of dual-use research and potential bioweapons threats

Regional and Cooperative Mechanisms

- Australia Group (AG):

A coalition of countries controlling the export of pathogens and dual-use technology to prevent BW proliferation.

- Proliferation Security Initiative (PSI):

Facilitates interdiction of WMD materials, including biological agents, in international transport.

- EU Biosecurity and Biosafety Guidelines:

EU member states implement measures to secure high-risk pathogens and research labs.

CASE STUDY

ICJ Case Study: Legality of the Threat or Use of Nuclear Weapons (1996)

While this ICJ case is about nuclear weapons, its principles are highly relevant to biological weapons because both are WMDs and fall under international humanitarian law.

Background:

The ICJ Advisory Opinion (1996) addressed whether the threat or use of nuclear weapons is permitted under international law.

Although the ICJ did not directly address biological weapons, it clarified key legal principles: WMDs that cause indiscriminate or unnecessary suffering violate International Humanitarian Law (IHL). The principle of state responsibility applies when the use or threat of WMDs breaches international law. The ICJ emphasised compliance with treaties (like the BWC for biological weapons) and customary international law obligations.

Legal Implications for Biological Weapons

Any use or threat of biological weapons is considered illegal under BWC and customary international law, especially if it targets civilians indiscriminately.

States may be held accountable under UN Charter Article 2(4) (prohibition of force) and ARSIWA (state responsibility for internationally wrongful acts). Issues for the DISEC. The ICJ reinforces that even the threat of biological weapons is legally problematic. Delegates can debate how to strengthen enforcement mechanisms and create accountability measures for states. Reference: ICJ Advisory Opinion, 1996

Generalised Case Study: Challenges of Dual-Use Biotechnology in Civilian Research

Background:

Across the world, countries conduct biomedical and biotech research to advance medicine, vaccines, agriculture, and biodefense. Dual-use research: The same technology could be repurposed to develop biological weapons if misused. This is the most common challenge for almost all countries: balancing innovation and international security.

Key Issues

1.Verification Gap:

The BWC lacks a formal inspection regime, making it difficult to ensure compliance.

Most countries conduct legitimate research, but the possibility of misuse remains.

2.Dual-Use Dilemma:

Research on pathogens (like influenza, anthrax, or coronaviruses) is necessary for public health but could theoretically be weaponised.

International law cannot easily differentiate between peaceful and offensive intent.

3.Global Security Concerns:

Any accidental release or malicious use could affect multiple countries, making this a transnational issue.

The risk exists regardless of geography or political alignment.

4.Non-State Actor Threat:

Knowledge or biological materials could be accessed by terrorist groups, a challenge common to all nations.

Issues to deliberate on:

The case highlights the universal challenges countries face under the BWC.

- Should international monitoring be strengthened to cover dual-use research?
- How can countries ensure transparency without hindering scientific progress?
- What mechanisms can mitigate the threat from non-state actors?

QARMA (QUESTIONS A RESOLUTION MUST ANSWER)

1. Regarding BWC Verification and Compliance:

- What specific, politically feasible modifications or mechanisms can be proposed to strengthen the existing system of Confidence-Building Measures (CBMs) to increase transparency and achieve greater participation, particularly from States Parties that are currently non-reporting or underreporting?
- What role, if any, should the BWC's Implementation Support Unit (ISU) play in a future verification and compliance mechanism, including potential modifications to its mandate or resources?
- How can existing international bodies, such as the World Health Organisation (WHO) and the World Organisation for Animal Health (OIE), be more effectively integrated with the BWC's framework to provide a form of soft verification and early warning?

2. Regarding the Dual-Use Dilemma:

- What criteria and risk assessment methodologies should be adopted internationally to identify and monitor research of particular dual-use concern (e.g., gain-of-function research), without inhibiting legitimate scientific innovation and cooperation?
- What specific educational mandates or ethical guidelines should be proposed for life science professionals and students to foster a "culture of responsibility" and increase awareness of the BWC's provisions and the dual-use dilemma?
- How can multilateral export control regimes, such as the Australia Group, be made more transparent and inclusive to both address dual-use risks and ensure fair access to biological materials and technology for all States Parties, consistent with BWC Article X?

3. Regarding Proliferation and Non-State Actors:

- What actionable steps can DISEC recommend to improve national-level enforcement of UN Security Council Resolution 1540, and what new metrics should be established to better assess States' compliance and identify gaps in their protective measures against non-state actors?
- How can intelligence-sharing protocols regarding biological threats be streamlined between States Parties and relevant international organisations (e.g., Interpol, Europol) while protecting sensitive information and respecting sovereignty?
- What legal frameworks are needed to prosecute individuals or groups responsible for developing, possessing, or using biological weapons, particularly in cases where they are not clearly affiliated with a state?

4. Regarding Attribution and Accountability:

- What concrete, technologically advanced methods (e.g., advanced forensic epidemiology, genomic sequencing) can be integrated into a multilateral framework to reliably and impartially investigate and attribute the source of a suspicious biological outbreak?
- What diplomatic and legal consequences should be established for a state found to have used biological weapons or for a state that fails to prevent non-state actors operating within its borders from acquiring or using them?
- How can a neutral, internationally mandated investigative mechanism for alleged biological weapons use, potentially under the auspices of the UN Secretary-General, be established without being subject to the veto of Security Council members?

5. Regarding Promoting Peaceful Use and Capacity Building:

- What structure and mandate should an International Cooperation and Assistance (ICA) mechanism under the BWC have to facilitate the transfer of technology and expertise for disease prevention, surveillance, and response, particularly for developing nations?
- What innovative funding models, including potential combinations of voluntary and assessed contributions, can be proposed to ensure the financial sustainability of a future BWC strengthening mechanism and related capacity-building initiatives?
- How can DISEC help integrate biosecurity capacity-building efforts into broader global health security frameworks, such as those coordinated by the WHO, to ensure maximum efficiency and prevent duplication of effort?