A. Letter From Secretary General

Dear Delegates and most esteemed participants,

As the Co-Secretary Generals of the BJK Kabataş Foundation Schools Model United Nations Conference, it is our distinct honor to welcome you to our traditional conference, now in its second annual iteration this year.

We are delighted to collaborate with the diligent academic and organizational teams, whose dedication is truly commendable. We have worked extensively with our academic team to prepare engaging crisis and procedural committees where significant global issues will be discussed worldwide. Simultaneously, our organization team has tirelessly prepared to ensure the best conference experience for you, which will enchant these 3 days.

Delegates will have access to a wide variety of committee types and topics. Among these diverse options, delegates will have the opportunity to find a committee that aligns with their interests and select one that fits their preferred style of debate. With such broad spectrum, delegates can explore committees that resonate with their passions and engage in debates that suit their preferred style of discourse.

We aspire for this conference to act as a driving force, broadening your horizons, sparking fresh concepts, and propelling you toward greater strides in your pursuit of global leadership.

Sincerely,

Berra Gümüşler & Dila Bengisu

B. Welcome Letter from the Under-Secretary-General

Dear Delegates,

It is my utmost pleasure to welcome you to the Disarmament and International Security Committee at BKVMUN'25. My name is Neris, and I am a junior at Kabataş Erkek High School. I am looking forward to working with all of you as we navigate important discussions on global security challenges.

DISEC plays a crucial role in addressing international threats, fostering cooperation among nations, and ensuring stability in an ever-changing world. As delegates, you will be expected to engage in meaningful debates, collaborate with your fellow delegates, and propose innovative yet practical solutions to complex issues. Your ability to think critically and negotiate effectively will be key in shaping productive discussions and resolutions.

This conference is not just an opportunity to sharpen your diplomatic and public speaking skills but also a chance to gain new perspectives, build friendships, and develop a deeper understanding of global affairs. I strongly encourage you to come prepared, stay open to different viewpoints, and actively contribute to the discussions.

If you have any questions or need guidance, please feel free to reach out.

Best regards,

Z. Neris Bahrioğlu

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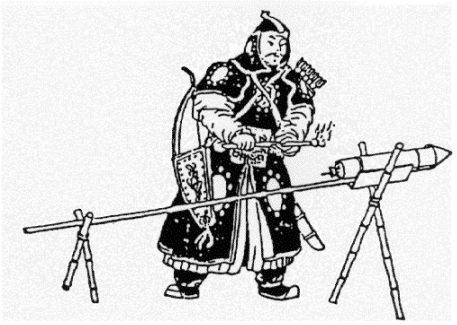
C. Introduction to the Committee

The Disarmament and Security Council (DISEC) is the First Committee of the United Nations General Assembly, established as such with the creation of the United Nations in 1945. DISEC mainly deals with the broad issues of nuclear weapons and other weapons of mass destruction, outer space, conventional weapons, regional disarmament and security, other disarmament measures, and international security. DISEC has had a few landmark resolutions, including the first General Assembly resolution (Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy) in 1946.

D. Introduction to the Agenda Item

Generally referred to as goods and technology that can satisfy multiple goals other than initially intended, dual-use technologies play a crucial role in developing military technologies. Dual-use technologies, ranging from artificial intelligence to biotechnology, offer great benefits in civilian applications while posing a great threat if misused or trafficked illegally. The modern dilemma about dual-use technologies emerged in concert with fears about the proliferation of nuclear weapons-related technologies in the early days of the Cold War. However, the dual nature of technological advances predates twentieth-century developments; the chemical advancements underlying the use of fireworks in imperial China were adapted by the tenth century AD to produce “fire arrows” to use in battles. What has changed is not the balance between civilian and military use of dual-use technologies but their scale of destruction. This instance



can be captured by the words of J. Robert Oppenheimer: “I am become Death, the destroyer of worlds.” when describing the Trinity nuclear reactions, the beginning of the weapons of mass destruction.

E. Key Terms

- Dual-Use Technologies (DUT): Dual-use technologies are the advancements made that could both be used in civil and military applications.
- Weapons of Mass Destruction (WMD): It refers to large-scale weaponry of warfare-related technologies that can harm a great number of people; and damage numerous natural, and artificial structures.
- Proliferation: The spread of weapons, technology, or knowledge, particularly about WMDs and dual-use technologies.
- Export Controls: Legal measures that regulate the export of dual-use goods to prevent unauthorized military applications.
- Trafficking: The illegal trade, smuggling, or unauthorized distribution of restricted goods, including dual-use technologies.
- Cyber Warfare: The use of digital attacks by nations or groups to damage infrastructure, steal information, or disrupt operations.
- Artificial Intelligence (AI): A field of computer science that enables machines to learn and make decisions; AI has significant dual-use applications.
- Autonomous Weapons Systems (AWS): Military technologies, including drones, that can select and engage targets with minimal human intervention.
- Quantum Computing: A developing field of technology that could revolutionize encryption and cybersecurity, with significant military and intelligence applications.

F. General Overview

Particularly concerning dual-use technologies, the rapid growth of technology has created new challenges in the fields of international security and disarmament. Even though these technologies have greatly advanced global development, there are major risks associated with their potential misuse, including the proliferation of weapons, cyber warfare, and mass surveillance. By making sure that international legislation keeps up with technological changes while striking a balance between security concerns and advancements in science and the economy, the DISEC committee plays a crucial role in tackling these issues. The inherent ambiguity of dual-use technologies is one of the main obstacles to their regulation. Although many of these technologies are created with good intentions, they can also be used for malicious purposes, such as espionage, bioterrorism, and autonomous warfare.

The illegal trafficking of dual-use technologies and knowledge, which gives unauthorized actors—whether rogue nations, terrorist groups, or private entities—access to sensitive technologies, has become a significant concern in recent years. The entire world has long worked to stop this kind of trafficking by exchanging intelligence, negotiating diplomatic agreements, and implementing export control measures. However, because of conflicting national interests, economic objectives, and the challenge of identifying covert transfers, enforcement is still inconsistent. These initiatives are made more difficult by the emergence of black markets, cybercrime, and decentralized trade networks, which facilitate the illicit acquisition of banned technologies. Furthermore, geopolitical competition has been more intense due to the global arms race in developing technologies. Nations invest heavily in cutting-edge defense capabilities, including hypersonic missiles, cyber warfare tools, and

advanced drone systems, fearing that failure to do so could leave them vulnerable. As a result, some governments hesitate to implement stringent controls on dual-use exports, as they fear that competitors may gain an advantage in military or economic domains. This has led to a fragmented approach to regulation, with different countries adopting policies that reflect their strategic priorities rather than a unified global standard.

Despite these challenges, international efforts to regulate dual-use technologies have made notable progress. Treaties such as UN Security Council Resolution 1540 have laid the groundwork for preventing the proliferation of weapons of mass destruction by restricting access to key technologies. Additionally, organizations such as the International Atomic Energy Agency (IAEA) and the Wassenaar Arrangement work to monitor and guide the responsible development and trade of dual-use items. However, the effectiveness of these frameworks depends on international cooperation, which remains fragile due to political tensions and differing national interests.

The ethical dimensions of dual-use technologies also raise pressing concerns. As artificial intelligence, gene editing, and autonomous weapons continue to evolve, questions arise about how to define acceptable uses, establish accountability, and implement oversight mechanisms. The lack of global consensus on these issues makes it difficult to formulate binding agreements, leading to regulatory gaps that could be exploited by malicious actors.

G. Timeline of Key Events

December 1938	*The discovery of nuclear fission reactions* was a great breakthrough in science as well as a great threat to humanity since it can be used as a weapon of mass destruction.
January 1, 1939	*Import, Export, and Customs Powers Defense Act* made it a criminal offense to export military and dual-use goods to enemy countries.
1958	The U.S. Department of Defense established the Defense Advanced Research Projects Agency (DARPA). DARPA's initiatives have led to numerous dual-use technologies, such as: the development of the internet, radar, unmanned aerial vehicles, and GPS.
1979	Indisputable evidence emerged that the Soviets had used the relaxed U.S. trade controls to legally and illegally obtain Western dual-use technology to modernize its military. As a result, *President Carter, acting under provisions of the EAA, denied all U.S. technology exports to the Soviet Union*.
May 20, 2021	*Regulation (EU) 2021/821* of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit, and transfer of dual-use items.
December 1, 2024	China has announced new restrictions to strengthen the export control of dual-use items, aiming to enhance transparency and prevent the misuse of technologies with both civilian and military applications.

H. Major Parties Involved

United States of America

The United States is a leading global power in both the development and regulation of dual-use technologies, balancing national security concerns with technological innovation. As a technological epicenter, the U.S. has pioneered advancements in artificial intelligence, cybersecurity, biotechnology, and quantum computing. However, it maintains strict export controls to prevent these technologies from being used for military purposes by their "enemy" states. The U.S. Department of Commerce enforces the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR), which restrict the sale of sensitive technology to foreign entities. The Bureau of Industry and Security (BIS) ensures that companies comply with these regulations, particularly regarding AI chips, semiconductors, and military-grade software. The U.S. is also a founding member of the Wassenaar Arrangement, which establishes international guidelines for the export of conventional arms and dual-use goods. The U.S. has imposed significant sanctions on China and Russia, particularly in the semiconductor and AI industries, fearing their use in military applications. Recent initiatives such as the CHIPS and Science Act (2022) aim to strengthen domestic semiconductor production to reduce reliance on foreign manufacturers. However, the U.S. faces challenges in maintaining a balance between national security, economic growth, and technological leadership, as well as addressing ethical concerns surrounding AI-driven military applications.

China

China has emerged as one of the most aggressive developers and adopters of dual-use technologies, leveraging artificial intelligence, quantum computing, and biotechnology for both civilian and military applications. Through its "Made in China 2025" strategy, China

aims to reduce its dependence on Western technology and achieve self-sufficiency in key industries such as semiconductors, robotics, and aerospace. The Chinese government heavily invests in AI-powered surveillance systems, exemplified by the controversial Social Credit System, and integrates these technologies into its broader national security strategy. Additionally, the country's Military-Civil Fusion policy encourages private technology firms to collaborate with the People's Liberation Army (PLA), leading to concerns about the militarization of civilian innovations. China has faced significant international scrutiny over allegations of cyber espionage and intellectual property theft, particularly from the U.S. and European Union. In response to increasing export restrictions imposed by Western nations, China announced new restrictions on the export of critical dual-use technologies in 2024, specifically targeting semiconductors and rare earth minerals to counterbalance U.S. sanctions. The country's policies on dual-use technology remain unclear, fueling fears about the potential use of AI and quantum computing for warfare and state control.

United Kingdom

The United Kingdom (UK) maintains a comprehensive export control regime to regulate the transfer of dual-use technologies. The UK's approach aims to prevent the proliferation of weapons and safeguard national security while supporting legitimate trade and knowledge acquisition.

Post-Brexit, the UK developed an independent export control framework, distinct from the European Union's system. This framework governs the movement of dual-use items from Great Britain (England, Wales, and Scotland), while EU law on the export of dual-use items remains applicable in Northern Ireland due to the Protocol on Ireland/Northern Ireland of the EU–UK Withdrawal Agreement.

The UK's export controls are detailed in the UK Strategic Export Control List, which specifies controlled dual-use goods, software, and technology. Exporters must obtain appropriate licenses before exporting these items to ensure compliance with national and international regulations.

In recent years, the UK has expanded its export controls to include emerging technologies, such as semiconductors and quantum technologies. Effective from April 1, 2024, an export license is required to export these newly controlled items to any destination. This expansion aligns with global trends of using export controls to protect critical technologies for economic and national security purposes.

The UK government emphasizes the importance of balancing security concerns with the facilitation of legitimate trade. Export controls for technology aim to prevent transfers that could lead to the development or production of weapons or goods that might be used against the UK and its allies, while not inhibiting legitimate trade and knowledge acquisition.

Canada

Canada implements a stringent export control regime to manage the export of dual-use technologies, ensuring that such exports align with national security interests and international commitments. The Export Control List (ECL) identifies specific goods and technologies subject to export controls, including dual-use items, munitions, nuclear-related goods, and more. To facilitate the export of dual-use items, Canada issues General Export Permits (GEPs). For instance, GEP No. 41 authorizes the export of certain dual-use goods and technologies to specified eligible destinations, provided exporters comply with the terms and conditions outlined in the permit. Canada's export controls are influenced by its participation in multilateral export control regimes, such as the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies. These

international commitments necessitate periodic amendments to the ECL to include additional items agreed upon by member countries. In response to geopolitical developments, Canada has taken measures to restrict exports to certain countries. For example, as of February 24, 2022, Global Affairs Canada ceased issuing new permits for the export and brokering of controlled goods and technologies to Russia and Belarus, reflecting Canada's stance on international security concerns. Overall, Canada's export control policies strive to balance the promotion of international trade with the imperative to prevent the proliferation of sensitive technologies that could compromise global peace and security.

Russia

Russia has historically relied on Western dual-use technologies to modernize its military, but it has faced increasing restrictions following its actions in Ukraine and Crimea. As a result, Russia has turned to alternative sources, including China, Iran, and North Korea, to circumvent Western export bans. The country has also strengthened its domestic technology sector to mitigate the impact of sanctions. Russian state-sponsored cyber warfare programs, such as those responsible for the 2017 NotPetya ransomware attack, highlight the nation’s use of dual-use technologies for cyber espionage and hybrid warfare. AI-driven disinformation campaigns have also become a significant concern, as Russian intelligence agencies leverage machine learning and automated bot networks to influence political discourse in foreign nations. The EU and the U.S. have imposed severe sanctions on Russia, restricting its access to microchips, semiconductors, and advanced computing components, leading to increased efforts by Russia to acquire these technologies through black-market channels. Russia’s growing dependence on Chinese technology for military applications raises additional concerns about the shifting balance of power in global technological geopolitics.

European Union

The EU maintains a cautious and highly regulated approach to dual-use technologies, emphasizing ethical considerations and human rights protections. The EU's Dual-Use Regulation (2021/821) established stricter controls on the export of sensitive technologies, particularly in artificial intelligence, surveillance, and cybersecurity. Unlike the United States, which focuses on strategic restrictions for national security, the EU places significant emphasis on human rights-based export controls, particularly regarding AI and surveillance technologies that could be used for repression. The EU AI Act (2024) introduced comprehensive guidelines for the ethical use of artificial intelligence, including military applications. The European Parliament has also imposed targeted restrictions on arms exports and dual-use technology transfers to countries involved in human rights violations or military conflicts. Following Russia's invasion of Ukraine, the EU imposed strict export controls on sensitive technologies that could support Russia's military-industrial complex, preventing the transfer of advanced semiconductors, AI software, and drone components. However, internal disagreements among EU member states regarding the extent of these restrictions present challenges, particularly as European companies seek to maintain global competitiveness. The EU also faces the challenge of navigating the U.S.-China technology rivalry while protecting its own technological and economic interests.

Technology Corporations

In addition to nation-states, major technology corporations play a crucial role in the development and distribution of dual-use technologies, often finding themselves at the center of geopolitical disputes. Microsoft has faced scrutiny over its involvement with the U.S. military, particularly regarding its HoloLens 2 augmented reality system, which has been adapted for battlefield applications. Google's DeepMind division has worked on AI ethics

and safety measures, while simultaneously being pressured to contribute to national defense projects. Companies such as NVIDIA and Intel dominate the semiconductor industry, with their AI chips being critical for both commercial and military applications. The increasing restrictions on Chinese tech giants like Huawei and ZTE reflect broader concerns about national security risks associated with foreign-owned technology infrastructure. The challenge for private corporations lies in balancing regulatory compliance with economic growth, as well as addressing ethical considerations in the development of AI, autonomous weapons, and surveillance technologies. Many companies advocate for greater international cooperation on ethical AI guidelines, fearing the potential consequences of unchecked military applications of advanced technologies. However, with countries taking divergent approaches to regulation, the role of multinational corporations in shaping the future of dual-use technologies remains a contentious issue.

I. Previous Attempts to Resolve the Issue

- **The Wassenaar Arrangement (1996):** The Wassenaar Arrangement is the first multilateral body focused on export controls for conventional arms and dual-use goods and technologies, and it comprises 42 participating states spanning six continents. It is consensus-based with decisions taken on a politically binding basis. The arrangement aims to prevent the spread of dual-use technologies and ensure safe trade by creating a detailed list of dual-use goods.

- **Dual Use Research of Concern (DURC) Guidance Document (2010):** The World Health Organization developed a guidance document for what it called DURC in the life sciences, regarding research that is intended to benefit, but might easily be misapplied to do harm

- **The Arms Trade Treaty (2013):** Establishes international standards for the regulation of arms trade, including dual-use components.

- **Regulation (EU) 2021/821:** A legal framework created by the European Parliament and the Council for the control of exports, brokering, technical assistance, transit, and transfer of dual-use items.

- **Regulation (EU) 2022/328:** The EU has sharpened and extended export controls on dual-use goods to target sensitive sectors in Russia's military-industrial complex, and limit Russia's access to crucial advanced technology, such as drones and software for drones, and chemicals and chemical precursors that could be used for chemical weapons or other military applications. The objective was to take restrictive measures given Russia's actions destabilizing the situation in Ukraine.

- **United States Government Policy for Oversight of Dual Use Research of Concern and Pathogens with Enhanced Pandemic Potential:** The objective is to establish a unified federal oversight framework for conducting and managing certain types of federally funded life sciences research on biological agents and toxins that may pose risks to public health, agriculture, food security, economic security, or national security.

J. Relevant UN Treaties, Resolutions, and Events

UN Security Council Resolution 1540 (2004): This UN resolution indirectly identifies DUT as beneficial in civil use yet might have detrimental effects if used militarily; thus, the resolution encourages a balanced approach.

K. Questions to be Answered

- How can existing international treaties be strengthened or updated to reflect modern technological advancements?
- What mechanisms can be introduced to ensure adherence to export control regulations while maintaining fair trade and technological innovation?
- How can companies be encouraged to self-regulate and share data with international monitoring bodies without compromising intellectual property rights?
- How can legal definitions of dual-use technologies be updated to account for rapidly evolving fields?

L. Further Readings

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