



UNSC

Study Guide

Committee United Nations Security Council (UNSC)
The use of Artificial Intelligence (AI) in Space Warfare

Letter from the Executive Board

Honorable Delegates,

It is our distinct pleasure to welcome you to the United Nations Security Council Committee at BDMUN 2022. Prepare yourselves for two days of heated yet fruitful debate, brain-numbing crises and a dynamic committee experience. You will have the opportunity to interact with students of diverse backgrounds and grow as a delegate through this challenging journey inside and outside the committee.

The United Nations Security Council is responsible for maintaining global peace and security. The presence of a global threat or aggressor causes the Security Council to pass legislations and vote on resolutions. The Security Council has the power to take military action and create peacekeeping organizations as well. The committee is made up of five permanent members which are the United States of America, the United Kingdom, China, Russia and France. These members are the only states with the power to veto any resolutions that are passed by the committee.

Space warfare refers to a situation in which two or more nations make use of AI based space weapon systems to sabotage or attack satellites of other nations. There are various forms of this warfare - space to space warfare refers to the use of satellites and other devices situated above the Earth's atmosphere in war and ground to space warfare refers to the use of technological advancements that are used to compromise devices that are above ground. As the human race is becoming increasingly reliant on the use of satellite based communications systems, space organizations from around the world are constantly innovating newer technologies to exploit these benefits that they can gain. During our committee session, the United Nations Security Council will work to pass a resolution that will help limit the use of such technologies while delegates will come face-to-face with crises that they must resolve.

BDMUN strives to provide the most well-rounded educational and enjoyable experience to delegates. These two days will be packed with challenges such as innovative crises, and resounding moral implications on the delegates. In this committee, we look forward to discussing the control of AI and technology in space warfare. We will do our best to help you understand parliamentary procedures and to ensure that the views of all delegates are respected and heard. Nevertheless, we expect each delegate to come to the conference with an understanding of their country's interests. Never hesitate to ask us any doubts you may have in the course of the conference. To sum it up, in the words of Stalin, "A sincere diplomat is like dry water or wooden iron." Thus, in a world where the honest man doesn't exist, it is up to you crafty delegates to change the course of global politics in the context of biowarfare, in accordance with the vested interests of your allotted countries.

Regards,
Shanay Tolat, Anaya Shah and Ishanvi Pandya
Chairs of UNSC
BDMUN 2022

About the committee:

The upkeep of global peace and security is primarily the duty of the Security Council. Each of its fifteen members has one vote. According to the United Nations Charter, all Members are required to abide with Council decisions.

When evaluating whether there is an aggression or threat to the peace, the Security Council is in charge. It suggests ways of adjusting the terms of settlement and encourages parties to a conflict to settle it peacefully. The Security Council occasionally has the option of using sanctions or even approving the use of force in order to preserve or restore global peace and security.

Five permanent members—the Republic of China [Taiwan], France, the Soviet Union, the United Kingdom, and the United States—and six nonpermanent members—elected by the UN General Assembly for two-year terms—made up the Security Council's inaugural membership. 15 people now make up the UN Security Council, including the original five permanent members and 10 nonpermanent ones, thanks to a 1965 modification to the UN Charter. Among the permanent members, the Russian Federation succeeded the Soviet Union in 1991 and the People's Republic of China took over for the Republic of China in 1971. In order to provide equitable geographical representation, the non permanent members are typically chosen with five members coming from Africa or Asia, one from Eastern Europe, two from Latin America, and two from Western Europe or other regions.

Introduction to agenda:

During our committee session, we will be discussing the implications that the use of Artificial Intelligence in Space Warfare may have for the members of the UNSC and we will work toward creating a resolution by the end of our session. The main topic to be addressed is the use of AI in space warfare and its consequences. There are also underlying topics of discussion such as the ethical considerations on the research aspects and space warfare in action, the tensions it causes and how secure it is. The idea is to come up with a resolution to regulate developments of AI technology and form rules about the potential future use of space warfare. Delegates will be expected to discuss the challenges, opportunities and general effects of AI and spacewarfare and asked to take a stance on the topic. The committee is also expected to delve into other related topics depending on where the discussion goes. AI is a large theme but the focus is on the use of AI in space warfare, military and other fields where it has a deep, controversial effect. Questions about how much we will rely on AI in space warfare should be addressed along with how pragmatic it is. Delegates will take on the roles of different countries, thus being able to discuss various perspectives, due to the economic state and value of the country, allowing to shape a more globally accepted view on this topic.

History of the problem:

As ground-to-space technologies were seen to be too slow and isolated by Earth's atmosphere and gravity to be successful at the time, early efforts to conduct space warfare were focused on space-to-space conflict. The Soviet Union started the Almaz project in the 1960s to develop the capability to check satellites while in orbit and, if necessary, destroy them. Since then, active space warfare technology has advanced significantly. The Blue Gemini project, which comprised modified Gemini capsules with the ability to deploy weapons and conduct surveillance, was an example of similar preparation being done in the United States.

The so-called Starfish Prime test, which involved the US detonating a nuclear weapon launched from the ground in space to examine the effects of an electromagnetic pulse, was one of the earliest examples of electronic space warfare. Many American and Soviet satellites that were in orbit at the time were deactivated as a result. The Outer Space Treaty of 1967 forbade the employment of nuclear weapons in space due to the harmful and diffuse consequences of the EMP test.

In order to destroy satellites, both the Soviet Union and the United States developed anti-satellite weapons. The United States succeeded in developing ground-to-space laser anti-satellite weapons in the 1980s, despite early efforts that mirrored previous space-to-space combat concepts. None of these systems are in use right now, but adaptive optics, an astronomical technique, frequently uses a less powerful ground-to-space laser system.

On January 11, 2007, the People's Republic of China successfully tested a ballistic missile-launched anti-satellite weapon (see 2007 Chinese anti-satellite missile test). The United States of America, Britain, and Japan all expressed strong condemnation as a result.

The United States created the SM-3 interceptor missile, and it was tested by launching ballistic test targets into space. The USA shot down the spy satellite USA-193 on February 21, 2008, while it was 247 kilometers (133 nautical miles) over the Pacific Ocean with an SM-3 missile.

India in March of 2019 used an ASAT mission to shoot down an orbiting satellite, therefore, adding the nation to the list of space warfare nations as well as creating the Defense Space Agency in April.

France announced a space weapons program in July of 2019 which reallocated the resources from their space surveillance strategy to the protection of their satellites. This program comprised patrolling nano-satellite swarms and ground-based laser systems to render spying satellites useless.

As of 2022 no actual warfare has occurred in space.

Current situation:

The rise of artificial intelligence has caused rapid development of commercial opportunities in space as well as military capabilities. Hence space is becoming contested therefore for the first time causing the United States to view it as a battleground. The primary concern of the utilization of artificial intelligence are the space deterrence scenarios as it causes the performance and accuracy of the program to come into question. The potential for adversarial attacks, due to space deterrence scenarios, creates concern about the vulnerability of these programs.

However artificial intelligence has seen rampant growth as well with the implementation of technology such as deep learning as well as neural networks which will only be further optimized in the future with better technology.

In terms of space warfare, China has multiple missiles to destroy satellites and cause EMPs. Russia has developed similar technology as well including counter space weapon capabilities which render other nations' ability to use space-based imagery and communication useless. Therefore causing nations to rapidly develop similar technology as a means for defense.

An important aspect of the use of AI in our current world resides with the ethics of implementing artificial intelligence in warfare. For example the use of machine learning to further military capabilities might threaten privacy due to the advanced surveillance and patrolling. The increasing reliance on technology leads to a loss of empathy and emotional intelligence which is vital in reducing collateral damage in warfare. It also brings up the prime criticism for utilitarianism as this branch of ethics would allow the justification of any number of bad actions hence this removed sense of accountability due to reliance on technology would be able to justify all sorts of cruel acts.

Questions committee should answer:

- How do the developments in artificial intelligence create a threat to global security?
 - What recent events have taken place in space that have impacted global affairs and international warfare?
 - Which countries are most affected by this warfare and how are they affected?
 - What actions should the UNSC take to prevent further damages?
 - How can space weapon plans cause tensions between countries?
 - What are the dangers of nuclear usage in space?
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Research guidance:

- Search about AI and warfare, especially space warfare.
 - Delegates should focus their research on existing AI technologies or ones that are being worked upon for space warfare.
 - Avoid including technologies that have not been made.
 - Analyze the tensions between countries in relation to space warfare.
 - Look at past consequences of rapid technological advancements to make predictions on what could happen now.
 - The World Wars provide examples of these consequences.
 - Learn the roles of countries looking towards space warfare and those who are against it.
 - Understand previous discussions of the UNSEC which cover some parts of AI and warfare.
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HMUN procedure:

This study guide and all material in it is only for reference purposes for delegates and affiliates of BDMUN 2022

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