COMMITTEE : Space Governance and Security

ISSUE : Security and the Militarization of Outer Space - How can the international community regulate the militarization of outer space in order to prevent the emergence of space conflicts while protecting civilian infrastructure from military targeting?

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PRESIDENCY

Hello delegates! My name is Inès Kadiri and I am a 17 year old student at the Belgian School of Casablanca. Born and raised in Morocco, I've always been fascinated by languages such as French, English, Arabic and Spanish thanks to my family and my natural drive to learn. Travelling for my birthday has become a yearly tradition for me, as I love discovering new cities and experiencing different cultures. During my free time I read, listen to music, follow Formula 1 with passion, and have a huge interest in fashion.

Hello dear delegates, my name is Daphne Selini and I am a 17 year old student at the Lycée International of Ferney-Voltaire. I am Greek but I grew up in different European countries. I lived in Serbia, Cyprus, Greece, Belgium and for two years now, I've been living in France. In that vein, I love travelling and meeting new people. I also enjoy watching movies and reading books in my free time.

This year our committee will debate on the current day issue that is space governance and security, a matter that has become more significant as humanity's reliance on outer space continues to grow. Today, satellites and other space-based technologies play a vital role in everyday life, supporting communication, navigation, weather forecasting, scientific research, and global security. However, as more states develop military space capabilities, a regulation is needed on outer space's militarization. I'm looking forward to meeting all of you and I hope this research report will serve as a good basis for your research.

KEY WORDS

Militarization of outer space: The use of space to enhance military capabilities and national security (usually by developing defensive and offensive dual-use technologies).

Weaponization of outer space: The deployment of weapons in outer space.

Space conflicts: Disputes that arise from activities in space.

Civilian infrastructure: Physical systems, facilities, and services that support the daily functioning of a society and are intended primarily for civilian (non-military) use.

Dual-use satellites: Satellites that can have military and security, as well as civilian and commercial functions.

Outer space: The term is still under debate. There are two basic perceptions in defining the term, the one is spatial (distance from earth) and the other is functional (function of the object no matter the altitude).

OVERVIEW

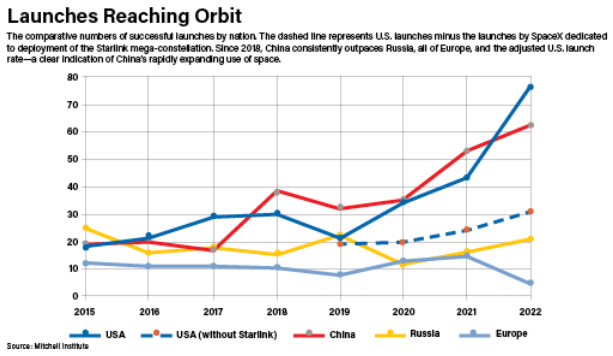
1. The Militarization of Outer Space

a) Brief history (Cold War).

The Soviet Union launched Sputnik in 1957, marking the beginning of the space race. As part of the Cold War, the US and the USSR competed to see who could accomplish the most in space to demonstrate to the world that they were more powerful.
For a while, the Soviet Union was ahead. They achieved many fundamentals, such as sending the first animal (a dog named Laika) and the first human (Yuri Gagarin) into space. They also sent the first woman, Valentina Tereshkova, and performed the first spacewalk.
The U.S. however eventually symbolically won this race in 1969 when Neil Armstrong became the first person to walk on the moon during the Apollo 11 mission, which is considered the culminating point of the space race.

b) Technological advances

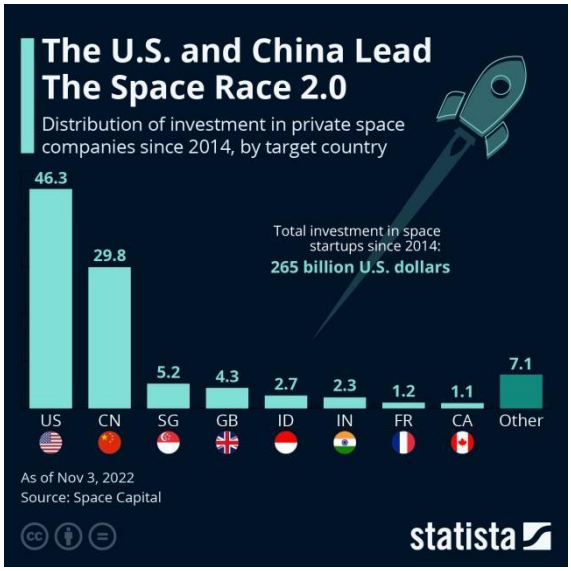
Since then, space has become and is becoming more and more crucial for both military and civilian operations: weather monitoring, the environment, agriculture, transportation, science, communications, and banking are just a few of the industries that profit from space capabilities.



At the same time, however, satellites are susceptible to interference and space is becoming much more competitive and crowded. Nations are increasingly battling to control space, recognizing that disrupting GPS and communication satellites can cripple ground-based military operations. A variety of counter-space technologies have been developed and tested by nations, such as China with the intentional break-up of the Fengyun-1C spacecraft on 11 January 2007 via hypervelocitycollision with a

ballistic object[1] and Russia's 'reckless' and 'irresponsible' as deemed by the North Atlantic Council (NATO's Council), anti-satellite missile test on 15 November 2021[2].

2. Risks to Civilian Infrastructure



With the rise of dual-use satellites, the militarization of space poses severe risks to civilian infrastructure because the distinction between "civilian" and "military" space assets is rapidly disappearing. The commercialization of space has further blurred this distinction, as states increasingly rely on private companies for military operations. The United States and China are in the lead on the distribution of investment in private space companies as seen on the provided graphic. They have both demonstrated a willingness to integrate commercial space capabilities into their national security strategies, contributing to an emerging strategic rivalry often described as a new space race. For example, in 2022, SpaceX activated its Starlink satellite internet service in Ukraine to replace communication networks that had been degraded or destroyed during the Russian invasion. Although the service was initially provided free of charge, the U.S. Department of Defense awarded SpaceX a contract in 2023 to continue providing Starlink services to Ukraine[3] . At the same time, access to Starlink was not made available to Russian forces.

This case illustrates how military forces are increasingly reliant on commercial mega-constellations. Commercial satellite systems can become integral to military operations, making them increasingly difficult to distinguish from traditional military targets. Consequently, dual-use satellites and their associated ground infrastructure may be considered as lawful military targets during armed conflict, despite the essential civilian services they provide.

[1] https://ntrs.nasa.gov/api/citations/20070007324/downloads/20070007324.pdf

[2] https://www.nato.int/en/about-us/official-texts-and-resources/official-texts/2021/11/19/statement-by-the-north-atlantic-council-on-the-recent-anti-satellite-missile-test-conducted-by-the-russian-federation

[3] https://www.space.com/pentagon-buying-spacex-starlink-services-ukraine

3. Geopolitical and Security Challenges

On an operational level, NATO recognizes space as a distinct operational domain alongside land, air, sea, and cyberspace since 2019. As a result, attacks to, from, or within space may invoke Article 5 collective defence obligations when they meet the threshold of an armed attack, provided that such a decision has been taken by the North Atlantic Council. This shift reflects the growing strategic importance of space-based assets for communication, navigation, intelligence, surveillance, and military operations.

The 2025 Space Threat Assessment published by the Center for Strategic and International Studies (CSIS) Aerospace Security Project highlights increasingly sophisticated counterspace capabilities, noting that Russian and Chinese satellites have demonstrated advanced manoeuvring techniques and on-orbit behaviours that raise concerns about their potential military applications. These developments have heightened international concerns over the security and stability of the space environment.

According to Vice Admiral Dr. Thomas Daum, Inspector of the Cyber and Information Domain Service of the German Armed Forces, speaking to Euronews, space has effectively become a battlefield in its own right. However, the primary threat is no longer limited to the physical destruction of satellites. Instead, non-kinetic forms of interference have emerged as a major concern. These include reversible actions such as electronic jamming of communication signals, GPS interference, and the dazzling or blinding of optical sensors with lasers, all of which can temporarily disable or degrade a satellite's capabilities without permanently destroying it.

Countries' tension hardened as NATO's approach on space notified that 'Some countries, including Russia and China, have developed and tested a wide range of counter-space technologies that could restrict Allies' access and freedom to operate in space.'

4. Challenges for International Governance

Article III of the annex of the Outer Space Treaty provides that the exploration and use of outer space must be conducted in the interest of maintaining international peace and security. However, the interpretation of the above mentioned article has been contested following the Chinese narrative. More specifically, it is said that the United States and several other states have argued that it should be understood as meaning non-aggressive rather than non-military. Under this interpretation, military activities in outer space are considered lawful provided they comply with Article 2(4) of the United Nations Charter, which prohibits the threat or use of force against the territorial integrity or political independence of other states. Consequently, activities such as the use of reconnaissance satellites for intelligence gathering, the deployment

of military support systems, peacetime military exercises, weapons testing, and the operation of military space facilities have been regarded by these states as permissible "peaceful military activities."[4]

As such, the regulation of military activities in outer space remains a complex and evolving issue. The existing legal framework provides only a limited foundation, and many of its key concepts lack precise definitions. States continue to disagree on the interpretation of fundamental principles, resulting in inconsistent applications of international law. Moreover, the current body of rules is insufficient to address the rapid expansion of space activities, particularly as technological developments continue to outpace legal and policy frameworks. The technological innovation and the lack of international regulation makes it difficult to establish clear, effective, and universally accepted governance of outer space.

[4] https://www.scirp.net/journal/paperinformation?paperid=123761

RELEVANT UN TREATIES AND EVENTS

27/01/1967

The Outer Space Treaty or Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, was opened for signature in January 1967, and it entered into force in October 1967. The Treaty was largely based on the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, which had been adopted in 1963, but added a few new provisions. The Outer Space Treaty provides the basic framework on international space law, including the following principles: outer space cannot be claimed or owned by any state; outer space must be used exclusively for peaceful purposes; the placement of nuclear weapons in outer space is prohibited.

1981

Paros initiative that is currently discussed in the Conference on Disarmament (CD), "in order to prevent an arms race in outer space" that are "held in accordance with the spirit of the [Outer Space Treaty]."

19/11/1996

Comprehensive Test Ban Treaty (CTBT) was opened for signature in 1996 to stop the development of new nuclear weapons and prevent upgrades to existing ones, supporting global efforts in non-proliferation and disarmament. The treaty bans all nuclear test explosions, whether for military or civilian purposes.

POSSIBLE SOLUTIONS

➵ Develop an international code of conduct that reflects modern technological developments. Common rules on responsible behaviour in space would reduce legal uncertainty and help prevent conflicts between space actors.

➵ Strengthen safeguards against military escalation. Greater transparency and confidence-building measures would reduce the risk of misunderstandings and prevent accidental conflicts in outer space.

➵ Improve global governance of outer space would help ensure that all states follow common rules. More inclusive international cooperation and stronger institutions would enhance security, sustainability, and trust among space-faring nations.

➵ Establish clearer regulations regarding private companies' responsibilities during armed conflicts and the use of commercial satellites for military purposes.

GUIDED QUESTIONS :

1) Is your country a space-faring nation or does it rely on foreign satellite services?

2) How dependent is your country on satellites for communication, navigation, banking, and national security?

3) Does your country support the peaceful use of outer space or the development of military space capabilities?

4) Does your country support greater transparency and confidence-building measures between space-faring nations?

5) Would your country support stricter international regulations governing military activities in outer space?

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1 : https://www.britannica.com/story/timeline-of-the-space-race
2 : https://www.statista.com/chart/28667/countries-are-leading-the-space-race-20/?srsltid=AfmBOorw2IzYV9vQiups382FhC4l-JBEMFfZItwRgt7_037sviH-rZaL