

# STUDY GUIDE

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## UNOOSA

High School Committee

# ZuMUN 2024

April 12 - 14





# United Nations Office for Outer Space Affairs

Study Guide for Zurich Model United Nations 2024

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## Table of Contents

Table of Contents	3
Letter from the Chairs	5
United Nations Office for Outer Space Affairs	6
Introduction to the Committee	6
Topic A	7
Democratization of Space: Holding Corporations Accountable by Reframing the Outer Space Treaty (1967)	7
Introduction to the Topic	7
Current Situation	7
1. Involvement of Various Actors:	7
2. Importance of Corporate Inclusion for Democracy:	7
3. Challenges and Risks:	8
Actions taken in the Past	8
1. UN Resolutions and Initiatives:	8
2. Outer Space Treaty (1967):	9
3. Challenges and Limitations:	9
4. Ongoing Efforts and Future Prospects:	10
Conclusion	10
Questions your Resolution should Answer	10
Practical Advice for your Research	11
Country Picks	11
Topic B	13
Managing Space Debris: A new Framework for the Peaceful Use of Outer Space	13
Introduction to the Topic	13



Current Situation	13
Space Debris	13
Long-term Sustainability of Outer Space Activities	14
Actions taken in the Past	15
Conclusion	16
Questions a Resolution Should Address	16
Practical Advice for your Research	17
References	17
Topic A	17
Topic B	18



## Letter from the Chairs



Julia. Hi there! My name is Julia, I'm in my last year of Gymi at Freies Gymnasium Zürich and i'm very excited to be chairing for the first time at ZuMUN this year. ZuMUN was my first conference and I'm very honored to be chairing now 2 years later:)) When I'm not organizing our FGZMUN club I love listening to music, singing, baking and going to the gym. I'm really looking forward to meeting you all!!



Theodor. Hello, my name is Theodor. I study Mathematics in my third year at ETH Zurich. When I'm not crunching numbers or solving differential equations, I love reading about political issues as well as playing video games. Additionally, to all of that, I am one of the ETHMUN content directors and have had previous experience chairing in some ETHMUN weekly sessions since Autumn Semester of 2022. I am looking forward to being your chair and hope that you will be able to pass a creative resolution.



## United Nations Office for Outer Space Affairs

### Introduction to the Committee

Outer space affairs are regulated by the United Nations Office for Outer Space Affairs (UNOOSA), which was established in 1958, a month after the launch of Sputnik. Although it started out as an ad-hoc committee, it was later formally established by UN Resolution 1472. UNOOSA is the only United Nations Office entirely dedicated to outer space affairs. The office manages and implements the programme on the peaceful uses of outer space, advancing international cooperation in space and the use of space science and technology for sustainable development, particularly for the benefit of developing countries. The committee meets annually in Vienna, Austria, to discuss questions relating to current and future activities in space. The United Nations Office for Outer Space Affairs (UNOOSA) serves as the central platform within the United Nations system for promoting international cooperation in the peaceful use and exploration of outer space.

At the heart of UNOOSA's mandate lies the promotion of equitable access to space and the sustainable development of space-related technologies and applications for the benefit of all humankind. The democratization of space, a key focus area for UNOOSA, entails ensuring that the benefits of space exploration and utilization are shared equitably among all nations, while upholding principles of transparency, accountability, and inclusivity.

The committee convenes delegations from member states, international organizations, and civil society to address critical issues facing the global space community. Through collaborative efforts, delegates work towards formulating resolutions, recommendations, and guidelines aimed at advancing international cooperation, promoting responsible behavior in space, and addressing emerging challenges.



## Topic A

# Democratization of Space: Holding Corporations Accountable by Reframing the Outer Space Treaty (1967)

## Introduction to the Topic

The democratization of space entails ensuring equitable access, shared benefits, and sustainable development in outer space activities. As space exploration expands, the inclusion of corporations in space governance becomes crucial. This study guide aims to explore how reframing the Outer Space Treaty (1967) can hold corporations accountable and foster democratic practices in space.

## Current Situation

### 1. Involvement of Various Actors:

**Governmental Space Agencies:** Traditional space powers like NASA (USA), Roscosmos (Russia), CNSA (China), and ISRO (India) have been pioneers in space exploration. They operate under government mandates and are subject to national and international regulations.

**Private Space Corporations:** Companies like SpaceX, Blue Origin, and Virgin Galactic are increasingly becoming prominent players in space exploration and commercialization. They operate independently or in partnership with governmental agencies, often with more flexibility but less oversight.

**International Organizations:** Bodies like the United Nations Office for Outer Space Affairs (UNOOSA) play a crucial role in coordinating international cooperation, setting guidelines, and facilitating dialogue among stakeholders.

### 2. Importance of Corporate Inclusion for Democracy:

**Transparency and Accountability:** Corporations, driven by profit motives, may prioritize their interests over broader societal benefits. Inclusion in space governance ensures transparency in their activities and holds them accountable for their impact on space environment and resources.



**Equitable Participation:** Democratization of space requires equal opportunities for all stakeholders, including corporations, to access and benefit from space activities. Without proper regulations, there's a risk of monopolization, hindering fair competition and innovation.

**Sustainable Development:** Incorporating corporations into space treaties enables the establishment of frameworks for sustainable development in space exploration and utilization. This includes mitigating space debris, preserving celestial environments, and ensuring the responsible extraction of space resources.

### **3. Challenges and Risks:**

**Regulatory Gaps:** The current legal framework, primarily the Outer Space Treaty (1967), lacks specific provisions addressing corporate activities in space. This leads to ambiguity and loopholes, allowing for potential exploitation and unethical practices.

**Ethical Concerns:** Corporate involvement in space raises ethical questions regarding the equitable distribution of space benefits, environmental impact, and the potential militarization of space. Without proper regulations, there's a risk of exacerbating existing inequalities and geopolitical tensions.

**Technological Advancements:** Rapid advancements in space technology, including reusable rockets, satellite constellations, and asteroid mining, outpace regulatory efforts, posing challenges in ensuring the safe and responsible use of space resources.

Addressing the current situation requires proactive measures to integrate corporations into space governance frameworks while mitigating associated risks and ensuring democratic principles are upheld in space activities. Collaboration between governments, corporations, and international organizations is essential to achieve this goal.

## **Actions taken in the Past**

### **1. UN Resolutions and Initiatives:**

**Resolution A/RES/75/36 (2020):** The United Nations General Assembly adopted this resolution, emphasizing the importance of international cooperation in space activities and the need to





promote responsible behavior in space. While not specifically addressing corporate accountability, it underscores the broader efforts to ensure the peaceful and sustainable use of outer space.

**UNOOSA Collaborations:** UNOOSA has been actively engaged in initiatives promoting responsible space exploration and utilization. Partnerships with countries like Luxembourg, as seen in the signing of agreements for projects like SpaceResources.lu, aim to develop frameworks for sustainable space resource management involving both governmental and private entities.

## **2. Outer Space Treaty (1967):**

**Foundational Principles:** The Outer Space Treaty, ratified by 110 countries, establishes fundamental principles governing space exploration and use. It prohibits the national appropriation of celestial bodies, promotes international cooperation, and stipulates that space activities should be carried out for the benefit of all countries.

**Limitations:** While the treaty serves as a cornerstone for space governance, it primarily focuses on governmental activities, leaving gaps in regulating private corporations' actions in space. As a result, there's a need to update and expand its provisions to address the evolving landscape of space exploration.

## **3. Challenges and Limitations:**

**Lack of Enforcement Mechanisms:** The effectiveness of existing space treaties, including the Outer Space Treaty, is limited by the absence of robust enforcement mechanisms. Violations or non-compliance by states or corporations often go unpunished due to the lack of an international regulatory body with sufficient authority.

**Divergent National Interests:** Negotiating amendments to existing treaties or drafting new agreements to include provisions for corporate accountability is complicated by divergent national interests. States with strong commercial space sectors may resist measures that impose constraints on corporate activities, citing concerns over competitiveness and economic growth.

**Complex Legal Framework:** The legal framework governing space activities is complex, involving a combination of international treaties, national laws, and industry standards. Harmonizing these disparate elements to effectively regulate corporate behavior in space presents significant challenges.



#### 4. Ongoing Efforts and Future Prospects:

**International Dialogue:** Continued dialogue among stakeholders, including governments, corporations, and civil society organizations, is crucial for advancing efforts to hold corporations accountable in space. Forums such as the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) provide a platform for discussing key issues and formulating cooperative solutions.

**Capacity Building:** Building institutional capacity, particularly in developing countries, is essential for ensuring effective participation in international space governance processes. Technical assistance programs and knowledge-sharing initiatives can empower states to engage meaningfully in discussions on corporate accountability in space.

**Exploration of New Legal Mechanisms:** Exploring innovative legal mechanisms, such as multilateral agreements or codes of conduct specific to corporate activities in space, could complement existing treaties and address gaps in regulation. These mechanisms should balance the interests of states, corporations, and other stakeholders while upholding principles of equity and sustainability.

While past actions have laid the groundwork for addressing corporate accountability in space, significant challenges remain. Further efforts are needed to enhance international cooperation, strengthen regulatory frameworks, and foster inclusive dialogue to ensure the peaceful, equitable, and sustainable use of outer space for the benefit of all humankind.

## Conclusion

To achieve true democratization of space, it's imperative to include corporations in space governance frameworks. Reframing the Outer Space Treaty to explicitly address corporate activities can ensure responsible and sustainable practices in space exploration and utilization.

## Questions your Resolution should Answer

1. How can the Outer Space Treaty be amended to include provisions for corporate accountability?
2. What mechanisms can be established to enforce regulations on corporations operating in space?



3. How can international cooperation be enhanced to ensure the democratic governance of space activities?

### Practical Advice for your Research

- Explore existing space laws and treaties, focusing on their provisions related to corporate involvement.
- Analyze case studies of past space missions involving corporations and their impact on space governance.
- Investigate the perspectives of various stakeholders, including governments, corporations, and civil society organizations, on the democratization of space.

### Country Picks

(this list follows no particular order and is not conclusive)

- Russian Federation: Significant player in space exploration with a vested interest in space governance.
- United States of America: Leader in space technology and home to several influential space corporations.
- China: Emerging space power with increasing involvement of corporations in space activities.
- Luxembourg: Known for its initiatives in space resource utilization and collaboration with private companies.
- India: Developing space program with growing participation of private entities.
- Russian Federation
- France
- United Kingdom of Great Britain and Northern Ireland
- Japan



- Canada
- Argentina
- Spain
- Germany
- Italy
- Republic of Korea
- South Africa



## Topic B

# Managing Space Debris: A new Framework for the Peaceful Use of Outer Space

### Introduction to the Topic

Space, the final frontier. It has always been a topic of fascination for humans. It is therefore not surprising that we would eventually start to explore it. In the late 1950s, we were finally able to launch the first satellites into space and use the information they provided for things we now take for granted such as GPS, (more accurate) weather forecasts etc. Such inventions have in the present day made it possible to monitor hurricanes and prepare for them accordingly or use infrared pictures to increase crop growth, just to name a few examples. The launch of the first satellite was by the Soviet Union in 1957 and by 2019, we had collectively launched a further 2'500 satellites into space. However, as much as we have been busy launching new satellites, we have also neglected to take care of the debris left behind after each launch or after a satellite eventually becomes inactive.

As various countries have been exploring space, many have quickly come to the realization that some guidelines are direly needed. Without any guidelines, different values and points of view can obviously clash with each other as there can be very different motivations behind exploring space. Some see it as an opportunity to make scientific advances and improve everyday life, others see it as an opportunity to advance militarily. Apart from establishing guidelines, it is of course also important to seek a way to enforce and implement them.

### Current Situation

#### Space Debris

Space junk or space debris is any piece of machinery or debris left by humans in space. It can refer to big objects such as dead satellites, in other words, satellites that have failed or been left in orbit



at the end of their mission, but it can also refer to smaller things, such as bits of debris or paint flecks that may have fallen off a rocket.

Some human-made junk has been left on the moon too. While there are about 2,000 active satellites orbiting Earth at the moment, there are also already 3,000 dead ones currently littering space. What's more, there are around 34,000 pieces of space junk larger than 10cm in size and millions of smaller pieces that could nonetheless also prove disastrous if they hit something else.<sup>1</sup> All space junk is the result of us launching objects from Earth, and it remains in orbit until it reenters the atmosphere. Debris or satellites left at higher altitudes than 36,000 km above sea level, where communications and weather satellites are often placed in geostationary orbits, can continue to circle the earth for hundreds or even thousands of years, perhaps even long after humanity will have died out.

### Long-term Sustainability of Outer Space Activities

The Guidelines for the Long-term Sustainability [LTS] of Outer Space Activities are a set of 21 voluntary best practices negotiated and adopted by consensus at the UN Committee on the Peaceful Uses of Outer Space (UN COPUOS). The guidelines touch on a range of activities aimed at enhancing the sustainability of the space environment, the safety of space operations, international cooperation, capacity-building, and scientific and technical research. Although voluntary, the guidelines do become legally binding, as states adopt the recommended measures through national legislation and regulations. The guidelines are considered a “living document” that will be updated periodically.

These guidelines are grouped into four categories:

- policy and regulatory framework for space activities
- safety of space operations
- international cooperation, capacity-building, and awareness



- scientific and technical research and development

## Actions taken in the Past

At the dawn of the creation of the committee, there was a general concern for an arms race in outer space, since the technology was progressing at an incredibly fast pace. Thus, just one month after Russia's first Sputnik launch, the UNGA passed its first resolution on the topic of outer space in November 1957. In Resolution 1148, the GA urged "the joint study of an inspection system designed to ensure that the sending of objects through outer space shall be exclusively for peaceful and scientific purposes."

In 1959, in Resolution 1472, the GA established the Committee on the Peaceful Uses of Outer Space (CPUOS). The committee, which meets annually, now has 77 UN Member States. The GA charged CPUOS with studying measures to promote the peaceful use of outer space.

In 1967, the GA adopted the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer space which agreed to the following provisions:

- the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind;
- outer space shall be free for exploration and use by all States;
- outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means;
- States shall not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies or station them in outer space in any other manner;
- the Moon and other celestial bodies shall be used exclusively for peaceful purposes;
- astronauts shall be regarded as the envoys of mankind;



- States shall be responsible for national space activities whether carried out by governmental or non-governmental entities;
- States shall be liable for damage caused by their space objects, and
- States shall avoid harmful contamination of space and celestial bodies.

“Preventing an Arms Race in Outer Space” is a regular item on the GA’s agenda, and typically at least one resolution per year has been passed on the topic in recent years.

## Conclusion

As our focus will be exclusively on the strategic use of outer space, it is imperative that you focus on your countries’ interests and balance your approach to the discussion by taking into account stances regarding the sustainable development of space programmes, funding of space programmes in developing countries, addressing the problem of space debris and how the problem could be tackled in the future or more specifically, how we could implement and enforce the existing guidelines.

## Questions a Resolution Should Address

1. How do we help developing countries build their capacity to develop and make the most out of the space sector?
2. What measures can be taken to encourage multilateral cooperation, especially among nations with considerable space exploration capabilities?
3. How can we ensure sustainable outer space activities in order to preserve space for future generations?
4. What can be done to prevent the creation of space debris in the future?





## Practical Advice for your Research

When researching your country's position, think about the following questions:

- Does your country have any space programs? If so, what is their end goal?
- Is your country part of the UNOOSA? (use this link to find that out: <https://www.unoosa.org/oosa/en/ourwork/copuos/members/evolution.html>)
- Are there any past statements made by prominent politicians on this topic?
- Has your country come up with any innovative solutions regarding sustainability in outer space or enacted any legislation regarding the topic?

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