UNOOSA BACKGROUND GUIDE

AGENDA 1: Ethical Concerns of Human Settlement on Other Planets

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Introduction

The dream of living beyond Earth is fast becoming a reality. With organizations like NASA, SpaceX, and the European Space Agency planning long-term missions to the Moon and Mars, humanity is entering a new age of exploration. However, as technology advances, ethical questions arise: How should humans treat other planets? Do we have the right to alter or claim them? What moral responsibilities accompany space settlement?

This topic invites delegates to explore not only the scientific and political challenges of interplanetary colonization but also the **ethical dilemmas** that come with expanding humanity's presence beyond Earth.

General Overview

Human settlement on other planets could provide solutions to overpopulation, resource shortages, and the survival of humankind. Yet, these benefits must be balanced against serious ethical and legal concerns.

One of the main issues is **planetary protection** — ensuring that no biological contamination harms potential alien ecosystems or disrupts scientific research. Another is **resource ownership**, as companies and nations look to mine extraterrestrial materials. Additionally, **human rights and governance** in space must be addressed: who makes the laws, and who enforces them?

The United Nations Office for Outer Space Affairs (UNOOSA) and its Committee on the Peaceful Uses of Outer Space (COPUOS) aim to ensure that outer space is explored and used **peacefully, responsibly, and for the benefit of all humankind.**

Definition of Key Terms

- **Ethics:** A system of moral principles guiding what is right or wrong in human behavior and decision-making.
- **Planetary Protection:** Policies and practices to prevent biological contamination between Earth and other celestial bodies.

- **Colonization:** Establishing permanent or semi-permanent human presence on a new territory, in this case, another planet.
- **Outer Space Treaty (1967):** The foundational international agreement that governs space activities, emphasizing peaceful use and non-ownership.
- **Astrobiology:** The study of life in the universe, including the potential for extraterrestrial life.
- **Terraforming:** Modifying the environment of a planet to make it habitable for humans.
- **Space Resource Utilization:** The extraction and use of materials from celestial bodies for economic or survival purposes.

Major Parties Involved

1. **United States (NASA & SpaceX):** Leading research on Mars colonization and lunar bases, often facing criticism for commercial influence in space.
2. **European Space Agency (ESA):** Advocates for international cooperation and sustainability in space exploration.
3. **People's Republic of China (CNSA):** Expanding its lunar and Mars exploration programs with long-term settlement ambitions.
4. **Russian Federation (Roscosmos):** One of the oldest space powers, supporting scientific collaboration but cautious about commercialization.
5. **Private Space Companies (SpaceX, Blue Origin, etc.):** Playing a growing role in exploration, yet raising questions about regulation and accountability.
6. **UNOOSA and COPUOS:** The main UN bodies responsible for promoting the peaceful and ethical use of outer space.
7. **Developing Nations:** Often underrepresented in space governance but deeply affected by how future space resources are shared.

Timeline of Key Events

1957 Launch of *Sputnik 1* — beginning of the Space Age.

1961 Yuri Gagarin becomes the first human in space.

1967 Adoption of the **Outer Space Treaty**, establishing international space law.

1969 Apollo 11 lands on the Moon, first human steps beyond Earth.

1979 **Moon Agreement** introduced to regulate ownership and resource use (limited ratification).

1998 Launch of the **International Space Station (ISS)** — symbol of global cooperation.

2015 U.S. passes the **Commercial Space Launch Competitiveness Act**, allowing private resource extraction.

2020 NASA's Artemis Program announced — aiming for lunar colonization.

2023 China's long-term Mars base plans and international discussions on lunar governance intensify.

Previous Attempts to Resolve the Issue

- **Outer Space Treaty (1967):** Established that no nation can claim sovereignty over outer space or celestial bodies. It also emphasizes peaceful use and prohibits weapons in orbit.
- **Moon Agreement (1979):** Proposed fair resource sharing and environmental protection, though most major spacefaring nations did not sign it.
- **COPUOS Discussions:** Regular UN meetings on the sustainability and ethics of space exploration.
- **Planetary Protection Policies (NASA & ESA):** Guidelines to prevent contamination during missions to Mars and other celestial bodies.
- **UNOOSA Capacity-Building Programs:** Encourage developing nations to participate in ethical and responsible space exploration.

Despite these measures, no **comprehensive international framework** currently exists for regulating human settlement or commercial activity on other planets.

Possible Solutions

1. **Global Ethical Framework:** Create an internationally agreed set of moral and environmental guidelines for extraterrestrial settlement.
2. **Space Governance Authority:** Establish a UN-led body to monitor colonization, resource use, and rights of space settlers.
3. **Update International Treaties:** Modernize the Outer Space Treaty to include private actors and new technologies.
4. **Planetary Protection Standards:** Strengthen scientific protocols to avoid contamination of extraterrestrial environments.
5. **Equitable Resource Sharing:** Ensure that benefits from space exploration are shared among all nations, not just wealthy ones.
6. **Sustainability in Space:** Encourage renewable technologies and waste management systems for future colonies.

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4. "Outer Space Treaty of 1967" — United Nations, Vienna.
5. "Moon Agreement of 1979" — United Nations Office for Outer Space Affairs.
6. K. Szocik, *Human Settlement on Mars: Ethical, Psychological, and Biological Issues*, Springer, 2021.
7. The Guardian (2023). *Ethics of Colonizing Mars: Should We Go?*

Absolutely — here's a **complete, well-structured MUN-style background guide** for the **UNOOSA council** on the topic **"Challenges in Space Law and Governance."**

It includes all the required sections: **introduction, general overview, definitions, major parties, timeline, previous attempts, possible solutions, and bibliography.**
Written in clear, formal, MUN-appropriate language — perfect for conference use.

AGENDA 2: Challenges in Space Law and Governance

Introduction

Outer space was once a domain limited to a few powerful nations, but today, it has become a shared frontier for governments, private companies, and even individuals. With rapid technological progress, activities such as satellite launches, asteroid mining, and plans for space tourism have grown exponentially. However, the laws governing these actions have not evolved at the same pace.

The question of **how to manage and regulate activities in outer space** is now one of the most pressing issues for the international community. As space becomes more crowded and commercialized, delegates in this council must explore how to strengthen global space governance, ensure peaceful use, and prevent conflicts or exploitation beyond Earth.

General Overview

Since the 1960s, international space law has been guided by the **Outer Space Treaty (OST)** and a few related agreements. These treaties were drafted during the Cold War, when only two nations — the United States and the Soviet Union — were active in space.

Today, the landscape has changed drastically. More than 80 countries have satellites in orbit, and private corporations such as SpaceX, Blue Origin, and OneWeb play central roles in space exploration and communication. Meanwhile, emerging concerns such as **space debris**, **militarization**, **commercial exploitation**, and **space traffic management** pose new governance challenges.

Despite UNOOSA's efforts to promote cooperation, there is still no **comprehensive legal framework** that effectively regulates modern space activities. The result is a legal "gray zone" that threatens safety, sustainability, and equality in the use of outer space.

Definition of Key Terms

- **Space Law:** The body of international and national laws that govern human activities in outer space.
- **Governance:** The systems, rules, and institutions that manage how decisions are made and enforced in space activities.
- **Outer Space Treaty (1967):** The foundational legal document establishing that space must be used peacefully and for the benefit of all humankind.
- **Militarization of Space:** The use of space for military operations, weaponization, or defense purposes.
- **Space Debris:** Non-functional satellites, rocket parts, and fragments orbiting Earth, posing collision risks.
- **Space Traffic Management (STM):** Coordination of satellite launches and orbital paths to avoid collisions and ensure safety.
- **Commercialization of Space:** Private sector involvement in exploration, mining, or transportation in outer space.
- **National Space Legislation:** Domestic laws that regulate space activities within individual countries.

Major Parties Involved

1. **United States (NASA, Space Force, FAA):** A leading space power with advanced technology and strong private sector involvement. Supports flexible space governance that encourages innovation.
2. **Russian Federation (Roscosmos):** Emphasizes maintaining space as a demilitarized and cooperative domain under UN oversight.
3. **People's Republic of China (CNSA):** Rapidly expanding its presence in orbit and beyond, calling for fair representation of developing countries in space governance.
4. **European Union (ESA & EUSPA):** Advocates for sustainable space management and stricter rules on debris and traffic management.
5. **Private Companies (SpaceX, Blue Origin, OneWeb, Virgin Galactic):** Increasingly influential, yet operating in unclear legal conditions.
6. **Developing Nations:** Seek fair access to orbit and oppose monopolization by wealthy states or corporations.

7. **UNOOSA and COPUOS:** Central UN bodies promoting international cooperation, transparency, and peaceful use of space.

Timeline of Key Events

Year	Event
1957	Launch of *Sputnik 1* by the USSR — start of the Space Age.
1967	**Outer Space Treaty** adopted — foundation of space law.
1972	**Liability Convention** established — rules on damage caused by space objects.
1975	**Registration Convention** — countries must report space objects launched into orbit.
1979	**Moon Agreement** — proposed fair sharing of lunar resources (few signatories).
1998	**International Space Station (ISS)** launched as a cooperative project among major powers.
2015	U.S. **Commercial Space Launch Competitiveness Act** — allows private companies to extract space resources.
2020	**Artemis Accords** introduced — U.S.-led framework for lunar exploration, sparking global debate.
2023	Record number of satellite launches; concerns about orbital congestion and debris rise sharply.

Previous Attempts to Resolve the Issue

1. **The Outer Space Treaty (1967):** Still the primary legal instrument, but outdated regarding private and commercial activities.
2. **The Liability Convention (1972):** Addresses responsibility for damage caused by space objects, but enforcement remains weak.
3. **The Moon Agreement (1979):** Aims to manage lunar resources collectively, but lacks support from major space powers.

4. **COPUOS and UNOOSA Initiatives:** Ongoing discussions on long-term sustainability, transparency, and space traffic management.
5. **National Legislation:** Some countries (U.S., Luxembourg, UAE) have introduced domestic laws allowing resource ownership or regulation of private missions — but this creates inconsistency at the global level.

Despite these measures, **no unified international system** exists to manage space traffic, prevent debris, or regulate private mining and tourism.

Possible Solutions

1. **Modernizing International Treaties:** Update or expand the Outer Space Treaty to address 21st-century challenges like commercialization and defense use.
2. **Establishing a Global Space Governance Body:** A UNOOSA-led organization to coordinate policy, data sharing, and conflict resolution.
3. **Creating a Space Traffic Management System:** Global registry and monitoring network to prevent satellite collisions and manage debris.
4. **Ethical and Environmental Guidelines:** International agreement on sustainable practices and environmental protection in outer space.
5. **Private Sector Regulation:** Develop global standards for licensing, liability, and resource extraction for private entities.
6. **Promoting Inclusivity:** Ensure that developing countries have equal access to space technology, orbit slots, and participation in governance decisions.

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