COPUOS

Oakridge MUN 2026

Committee On the Peaceful Uses of Outer Space (COPUOS)

Agenda: Deliberation on Debris Mitigation in Outer Space with an emphasis on new space junk

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Letter from Executive Board

Dear Delegates,

Welcome to the COPUOS committee at Oak MUN 2026. We are honoured to serve as your Executive Board and are genuinely excited for the debates that lie ahead this conference.

This Background Guide is meant to give you a starting point, not a finish line. It covers the essentials of the Committee's mandate, the treaties that shape international space law, and the growing problem of space debris, but it is far from exhaustive. Please treat it as a foundation for your own research rather than a substitute for it. Note also that nothing in this guide may be cited as evidence or proof during committee proceedings.

We know that MUN can feel intimidating, especially for delegates attending their first conference. What matters to us isn't polish or public speaking experience. It's how well you can listen to positions different from your own, find common ground without losing sight of your country's interests, and work toward real, workable solutions. Trust us, you all will do a great job :).

Space law has always depended on cooperation. The treaties that govern outer space were built in an era when only a handful of countries could even reach orbit, yet they were written with the understanding that space belongs to everyone. That spirit matters more today than ever.

If you have questions at any stage of your preparation, please don't hesitate to reach out to us. We're here to help. We can't wait to see what solutions this committee comes up with.

Best regards,

Executive Board.

MUN Rules Of Procedure (ROP)

1. Roll Call

- The Chair calls on each country to declare if they are "Present" or "Present and Voting." It refers to the voting procedure on the Draft Resolution, where a delegate can vote "Yes", "No", or opt to "Abstain".
- If "Present and Voting," the delegate cannot abstain from voting. If the delegate chooses to respond with "Present", they may answer with "Present and Voting" on subsequent days, but this is not permissible for "Present and Voting" as this reply must be used consistently from that point forth.

2. Setting the Agenda

- Delegates motion to set the agenda, followed by a formal debate on which topic to discuss first. This motion requires a simple majority to pass.

3. Speakers' List

- After passing a motion to enter formal debate, delegates are placed on a speakers' list to make formal speeches. Time limits are set, and the Chair calls on delegates to speak in order.
- A delegate must raise their placard if they wish to add their name to this list. They can be on this list only once on any occasion.

4. Points

- **Point of Order:** To correct a procedural error by the Chair.
- **Point of Personal Privilege:** For personal discomfort (e.g., if the room is too cold, or if a fellow delegate cannot be heard).
- **Point of Inquiry:** To ask questions about discussion or statements in committee.
- **Point of Parliamentary Inquiry:** To ask questions with regard to the Rules of Procedure.

5. Motions

- **Motion to Suspend the Meeting:** To break for caucuses or adjourn the session.
- **Motion to Close Debate:** Ends the discussion on a topic and moves to voting. Requires a two-thirds majority.
- **Motion to Table the Topic:** Postpones debate on a topic. Requires a majority vote.

6. Yields

- **Yield to the Executive Board:** A delegate yields their remaining time from their speech to the Executive Board. It is to be used as they see fit.
- **Yield to Another Delegate:** A delegate yields their remaining time for another delegate to speak. (This delegate's permission must be sought beforehand)
- **Yield to Points of Information:** A delegate yields their remaining time to Points of Information to the committee.
- **Yield to Comments:** A delegate yields their remaining time to comments from the committee.

7. Caucuses

- **Moderated Caucus:** The Chair controls the speaking order with shorter, focused speeches. The topic selected is a narrowed version of the agenda, chosen by the delegate who proposed the moderated caucus.
- **Unmoderated Caucus:** Informal discussion among delegates not under the moderation of the Executive Board.

8. Draft Resolutions and Amendments

- Delegates collaborate to create draft resolutions, which are formal solutions to the discussed issue.
- **Friendly Amendments:** Accepted by all sponsors without a vote.
- **Unfriendly Amendments:** Need to be voted on to be added.

9. Voting

- **Procedural Votes:** Includes motions and amendments; all members must vote.
- **Substantive Votes:** For resolutions and unfriendly amendments; only "Present and Voting" delegates may vote, and abstentions are allowed.

Introduction to Committee

The Committee on the Peaceful Uses of Outer Space (COPUOS) was set up by the General Assembly in 1959 to govern the exploration and use of space for the benefit of all humanity: for peace, security and development. The Committee was tasked with reviewing international cooperation in peaceful uses of outer space, studying space-related activities that could be undertaken by the United Nations, encouraging space research programmes, and studying legal problems arising from the exploration of outer space.

The Committee was instrumental in the creation of the five treaties and five principles of outer space. International cooperation in space exploration and the use of space technology applications to meet global development goals are discussed in the Committee every year. Owing to rapid advances in space technology, the space agenda is constantly evolving. The Committee therefore provides a unique platform at the global level to monitor and discuss these developments.

The Committee has two subsidiary bodies: the Scientific and Technical Subcommittee, and the Legal Subcommittee, both established in 1961. The Committee reports to the Fourth Committee of the General Assembly, which adopts an annual resolution on international cooperation in the peaceful uses of outer space.

The United Nations Office for Outer Space Affairs (UNOOSA) works to help all countries, especially developing countries, access and leverage the benefits of space to accelerate sustainable development. UNOOSA works toward this goal through a variety of activities that cover all aspects related to space, from space law to space applications.

UNOOSA helps countries build their capacity to develop and make the most out of the space sector through a two-fold approach: on one side, it provides resources such as training, workshops, conferences and knowledge-sharing portals; on the

other side, it complements these with concrete opportunities for countries to expand their space capabilities, such as fellowships and competitive programmes, some of which target specifically developing countries, for example under its Access to Space 4 All Initiative.

In the area of disaster risk reduction, UNOOSA's dedicated programme, UN-SPIDER, helps countries use space data and technologies, such as satellite imagery, to prevent and manage disasters. UNOOSA also helps countries understand the fundamentals of international space law and increase their capacity to draft or revise national space law and policy in line with international normative frameworks on space. This is particularly important as more and more actors enter the space arena.

UNOOSA supports transparency in space activities, through measures such as the Register of Objects Launched in Outer Space, which it maintains, and which links each object to its responsible country.

UNOOSA works not only to promote sustainable development through space but also to ensure the sustainability of outer space activities, fostering international solutions to problems such as the rapid increase in space debris, to preserve space for future generations. UNOOSA works with space agencies and space leaders around the world to devise solutions to challenges that require an international response, such as the threat of a Near-Earth Object impact and the need to accelerate the compatibility of GNSS systems.

Committee Membership

In 1959, the United Nations General Assembly established the permanent Committee on the Peaceful Uses of Outer Space with 24 members. Since then, it has grown to 104 members — one of the largest Committees in the United Nations. In addition to States, a number of international organizations, including both intergovernmental and non-governmental organizations, have observer status with COPUOS and its Subcommittees.

Understanding Law

Charter of the United Nations

Preamble to the Charter of the United Nations

WE THE PEOPLES OF THE UNITED NATIONS DETERMINED to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and to promote social progress and better standards of life in larger freedom,

AND FOR THESE ENDS to practice tolerance and live together in peace with one another as good neighbors, and to unite our strength to maintain international peace and security, and to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and to employ international machinery for the promotion of the economic and social advancement of all peoples,

HAVE RESOLVED TO COMBINE OUR EFFORTS TO ACCOMPLISH THESE AIMS. Accordingly, our respective Governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

The Charter of the United Nations is the founding document of the United Nations. It was signed on 26 June 1945, in San Francisco, at the conclusion of the United Nations Conference on International Organization, and came into force on 24 October 1945.

The United Nations can take action on a wide variety of issues due to its unique international character and the powers vested in its Charter, which is considered an international treaty. As such, the UN Charter is an instrument of international law, and UN Member States are bound by it. The UN Charter codifies the major principles of international relations, from sovereign equality of States to the prohibition of the use of force in international relations.

Since the UN's founding in 1945, the mission and work of the Organization have been guided by the purposes and principles contained in its founding Charter, which has been amended three times in 1963, 1965, and 1973.

The International Court of Justice, the principal judicial organ of the United Nations, functions in accordance with the Statute of the International Court of Justice, which is annexed to the UN Charter, and forms an integral part of it.

International Space Law

The 1960s were a landmark decade for space exploration, featuring milestones like the launch of the first weather satellite (1960), the first human in space (Yuri Gagarin, 1961) and the first moon landing (Neil Armstrong, 1969).

During this decade, the United Nations negotiated and adopted the Outer Space Treaty — the first in a series of international space treaties. Endorsed in 1967 by the then three major spacefaring powers — the United States, the United Kingdom, and the former Soviet Union — the treaty laid the foundation for international space law.

At the height of the Cold War, following the launch of Sputnik 1 in 1957, countries recognized the need for a global legal framework to address the unique challenges and opportunities of space exploration, aiming to ensure "the use of outer space for peaceful purposes." The framework states that space exploration should benefit all people and emphasizes international cooperation in the security of outer space.

Since then, much has happened as rapid technological advancements have drastically changed space activities. The rise of the International Space Station, space tourism, and a booming space market have led to an exponential increase in satellite launches. The surge in activities has created significant space debris, posing a collision risk to operational satellites. So, how has the international community — countries, scientists, and the space industry — adapted to this increased activity to maintain awareness of space developments and ensure space remains peaceful and beneficial for all?

"There's always this perception that the space treaties are from the '60s and outdated. But it's truly the opposite," says Rosanna Hoffmann, a Legal Officer who leads the Space Law for New Space Actors Project at the UN Office for Outer Space Affairs (UNOOSA). Her team collaborates with UN member countries to develop or update their national space laws and policies, ensuring alignment with existing space treaties.

"We help countries implement these treaties nationally, ensuring their daily application," she explains. This work also encompasses non-legally binding declarations and technical legal principles, such as guidelines on space sustainability

and debris mitigation. These instruments *"continue the legacy of the treaties and address current challenges,"* she adds.

Before exploring the space treaties, legal principles, and declarations that protect outer space, it's important to understand the role of the UN's Committee on the Peaceful Uses of Outer Space (COPUOS), established in 1959. This committee provides a vital multilateral platform for the international community — including member countries and observers like the scientific community — to negotiate and develop these key agreements. UNOOSA supports its work.

COPUOS, which has grown from 24 to over 100 member countries and more than 50 observer organizations, meets annually to address the growing number of space-related issues.

International Space Treaties

- **1967: The Outer Space Treaty** — the foundation of international space law, prohibits weapons of mass destruction in space, limits celestial body use to peaceful purposes, and mandates that outer space be freely explored for the benefit of all countries. The treaty, containing 17 articles, also prevents national sovereignty claims over outer space or celestial bodies and holds nations liable for damage caused by their space objects. As of March 2024, 115 countries, including all major spacefaring nations, are party to the treaty.
- **1968: The Rescue Agreement** — expands upon Articles 5 and 8 of the Outer Space Treaty. It mandates that countries take all possible measures to rescue and assist astronauts in distress and return them to their launching country. It also stipulates that countries, upon request, should assist in recovering and returning space objects that land outside the launching country's territory.
- **1972: The Liability Convention** — expands upon Article 7 of the Outer Space Treaty, establishing absolute liability for launching states for damages caused by their space objects on Earth's surface or to aircraft.
- **1976: The Registration Convention** — requires countries to register their orbiting space objects with the UN. The UN Secretary-General maintains this registry, ensuring access to the information provided by countries and international intergovernmental organizations.

- **1984: The Moon Agreement** — stipulates that the Moon and other celestial bodies be used exclusively for peaceful purposes, prohibiting environmental disruption. It requires countries to inform the UN about the location and purpose of any stations established on these bodies and declares the Moon and its natural resources the common heritage of all humankind.

Agenda Explained

What is Debris?

The launch of Sputnik on Oct. 4, 1957, marked the beginning of an intense space race that led to decades of rocket and satellite launches, which eventually resulted in a large amount of space debris.

> Space debris is anything in orbit that is man-made and is no longer in use. It consists of old, inactive satellites; rocket stages; and other discarded hardware.

Smaller pieces of space debris include fragments of vehicles that exploded or collided and bits of insulation and paint that have come off of space vehicles. Generally, the smaller the debris, the more there is of it. This abundance of debris created the need for a military space surveillance to maintain a catalog of all Earth-orbiting objects — active payloads, satellites and debris — along with detailed information about trajectory and point of origin.

Space debris affects everyone especially since almost everything we do in our modern way of life uses satellite technology. Space debris adds to the cost of operating satellites because if debris destroys a satellite, it may take years and hundreds of millions of dollars to restore that satellite's service. Even tiny debris objects can inflict grave harm to critical sensors and spacecraft components. A one-centimeter-sized object is considered lethal if it hits a satellite, and an object down to one millimeter can critically damage a satellite if it hits a critical component. In addition, the growth in space debris will make orbit operations and space flight more hazardous, difficult and more costly if frequent maneuvers are required to avoid debris. A satellite would have to carry extra fuel for these extra maneuvers and would likely need to shield critical areas from collisions with small debris.

The U.S. military is currently tracking about 20,000 objects and has cataloged more than 40,000 objects over the years. Space debris numbers are estimated to rise to

over 100,000 objects in the coming years. Most space debris objects are too small to be tracked but large enough to damage spacecraft. It is estimated that there are hundreds of thousands of objects that could be fatal or catastrophic to a space mission and millions of objects that are capable of causing damage.

What is Debris Mitigation

Space debris removal is the ability to retrieve objects in space and remove them from orbit. It is challenging for several reasons including technical, legal/regulatory, political, and economic. The issue of space debris spans all nations since space is without borders.

Though minimal action has been taken thus far in debris removal, a 1978 paper by Donald J. Kessler and Burton Cour-Palais spawned decades of work characterizing debris in space, including their number, types, and orbits, as well as the creation of voluntary debris mitigation standards that have gained worldwide endorsement.

Mitigating new space debris will only slow the acceleration of the degradation of the space environment. To remediate the environment, positive steps are required including active debris removal (ADR). The recent introduction of new space actors and corresponding increase in space operations has raised the profile of the concept of space sustainability. ADR is an important element to ensuring that the orbital space environment remains viable.

To remove space debris, particularly the large and more dangerous objects, we have to get close to it and maintain the same speed as each object. We then must somehow attach to it, and move it into a lower orbit or reenter it directly into the atmosphere, where it will burn up upon reentry. If the object is a rocket stage with propellant still on board, there is an explosion risk, which is why astronauts never perform this task.

There is also the issue of property rights. There is no easy way to control the small-but-dangerous objects that are not well tracked or not tracked at all. They have more kinetic energy than bullets, and they are moving ten times faster. It is hard to catch a bullet, especially if you don't want to create more junk while doing it.

Increased space debris traffic also equals increased collision risk for launch vehicles and satellites on orbit. If the SSN predicts a collision between a cataloged object and a known operational satellite, they usually attempt to notify the owner/operator. Debris can't be moved, but if the other object is a maneuverable satellite, the object

may be able to move out of the way in time to avoid a collision. Most satellite operators require hours or days to plan and execute a collision avoidance maneuver. Other nations use CSpOC data as well as their own tracking data to protect their satellites. Therefore, high-accuracy assessment and prediction tools are essential for reducing risk to current systems and future launches.

What is New Space Junk

Tiny pieces of space junk only 2 inches (5 centimeters) in size are cluttering a valuable orbital region where some of the costliest satellites reside, a new study has found.

Researchers from the University of Warwick in the U.K. found that the geostationary orbit — a region of space at the altitude of 22,000 miles (36,000 kilometers) — is full of dangerous, previously unseen bits of space junk that could destroy satellites.

The geostationary orbit is quite unique. Satellites at this altitude circle Earth in sync with the planet's rotation, appearing permanently suspended above a fixed spot on the equator. A single satellite in the geostationary ring has a constant view of a vast portion of the globe. This feature has been taken advantage of for decades for things like TV broadcasting, internet delivery, Earth observation and weather monitoring. But, as it appears, those satellites might not be safe up there at all.

"The debris in geosynchronous orbit is a potential minefield," Stuart Eves, the study's co-author and space consultant at SJE Space, said in a statement. *"No one in their right mind would enter a terrestrial minefield without a mine detector. Similarly, no one in their right mind should launch a satellite to GEO without an adequate debris survey."*

The researchers uncovered the previously invisible debris by re-examining a dataset from an earlier space debris survey conducted by astronomers using the 8.3-foot (2.54-meter) Isaac Newton Telescope in La Palma, Canary Islands. They ran the data through new image processing algorithms to distinguish smaller and much fainter fragments than was previously possible in the distant geostationary orbit.

Questions A Resolution Must Answer (QARMA)

1. How should a resolution define "space debris" for regulatory purposes, and should this definition distinguish between defunct satellites, spent rocket

stages, and fragmentation debris given the different removal methods each requires?

2. What legal framework should govern liability when active debris removal operations damage or destroy a functioning space object, particularly when the object's ownership is disputed or unregistered?
3. Should an existing body, such as COPUOS or the Inter-Agency Space Debris Coordination Committee, be granted binding authority to mandate debris mitigation compliance, or should compliance remain voluntary as under current guidelines?
4. What minimum technical and financial capacity should be required of a state before it is permitted to conduct active debris removal missions, and how should the international community support developing spacefaring nations in meeting this threshold without creating dependency on established space powers?
5. What monitoring and verification mechanisms should govern compliance with debris mitigation guidelines, and who should be responsible for enforcement when a state fails to deorbit a satellite at end of life?
6. How should the resolution address the legal ambiguity between the Outer Space Treaty's prohibition on national appropriation and the practical need to assign responsibility, and potentially ownership, over debris removal and remediation?
7. What special provisions should govern debris in the geostationary orbit given its unique strategic and commercial value, particularly regarding smaller, previously untracked fragments identified in recent surveys?
8. How should cross-border challenges, such as debris originating from anti-satellite weapons tests, collisions between objects from different states, or private commercial mega-constellations, be addressed within existing frameworks of state liability and registration?