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Committee on the Peaceful Uses of Outer Space

Atharv Patil & Shreyan Arora
Chairs

COPOUS

Letter from the Chair

Esteemed delegates,

Welcome to the 14th iteration of Moody's Model United Nations conference. Your chairs for the COPUOS Committee are Atharv Patil and Shreyan Arora.
Atharv Patil is a 7th grader here at Moody Middle and he has been doing Model UN for over 2 years. Over the years he has learned a lot from committees and wants to display his skills and help newer delegates learn more about MUN. He currently has 3 awards and can't wait to earn more this year! Atharv also loves playing cricket and he is the captain of his cricket team.

Shreyan Arora is also a 7th grader at Moody and he has been doing Model UN for over 1 year. He has learned not to give up and to stay strong and work with everybody. He wants to pass his knowledge to younger delegates and teach them the world of Model UN. He currently also has been to over 6 conferences and has won 3 awards; he wants to excel and learn from delegates in COPUOS to earn more awards this year. Shreyan also enjoys playing the drums and playing pickleball. Shreyan and Atharv are prepared and very eager to be your chairs for the copuos committee and we want to meet you as soon as possible!
COPOUS stands for Committees of the Peaceful Uses of Outer Space. This committee will be taking place in the United Nations Headquarters in New York City which is the home of COPUOS. This committee will take place in 2026 as outer space related conflicts are at an all time high this year. As a reminder this committee is not about the future and is mainly about current day space inhabitants. It is important to discuss these topics because of the strong gravitational pull they have towards the evolution of the world. In this committee your fellow delegates and you are working together to bringing peace to space. You also need to understand the severity of the views on if space should be a free space or if colonization is downright bad. We want to enforce the real life feel to this committee to find solutions that are realistic that might work in the real world. Another problem that you need to solve is being able to control outer space. Enjoy this committee and remember, the solution is in your hands.

These are some reminders we want to make sure you know. Firstly, the dress code to our committee is Western Business Attire. This includes a suit, formal dress, etc. We request for all delegates to dress appropriately. Position papers are not required but we highly recommend them, and they are required to win an award. Papers must be submitted to hcps-patilak1@henricostudents.org and hcps-aroras1@henricostudents.org by 5:00 PM on April 10th, 2026 with editor access. Please do not use any AI or any inappropriate help. If you are found using any AI you will immediately be disqualified. Finally, the most fun part, awards. As chairs we are looking for a confident delegate that helps other delegates grow and doesn't overpower the committee. Our goal for all delegates is to make sure they learn and have a lot of fun! Just as a firm reminder all awards are final.

Your Chairs,
Atharv Patil & Shreyan Arora

MMSMUN XIV

George H. Moody Middle School Model United Nations

COPOUS

Topic 1: *Preventing the Colonization of Outer Space*
Topic 2: *Ensuring the Long-Term Sustainability of Outer Space Activities*

Committee Overview

The Committee on the Peaceful Uses of Outer Space (COPOUS) was set up by the General Assembly in 1959 to allow space exploration to benefit all humans around the world. This committee is tasked with reviewing international cooperation on peaceful uses of outer space. The everlasting committee was vital in making the five treaties including the 1967 Outer Space Treaty, the 1968 Rescue Agreement, the 1972 Liability Convention, and the 1975 Registration Convention. The committee is also known for making the 1979 Moon Agreement, and five principles of outer space such as, promoting cooperation, and setting frameworks for sustainable use of space for all humankind. These treaties and principles define space as free for exploration, ban weapons of mass destruction in space, prevent territorial claims, and ensure responsibility for space objects, forming the foundation for global space governance. 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 thus provides a particularly unique forum in a global setting to monitor and share these developments

taking place. The Committee has two subordinate bodies: The Scientific and Technical Subcommittee, and The Legal Subcommittee, which were formed in 1961. The Committee annually reports to the Fourth Committee of the General Assembly, adopting a resolution on international cooperation in the peaceful use of outer space each time. COPUOS has made many developments in the global development framework in terms of competency for space activities, development of international cooperation, and development to ensure the use of benefits in space technology in solving different challenges in the world such as climate change, disaster response, and development in space. This particular committee requires the different members of the delegation to cooperate with each other to develop in further exploration in space.

Topic I: Preventing the Colonization of Outer Space

Topic Background

In 2026, the United Nations Committee on the Peaceful Uses of Outer Space, or COPUOS, is at a crossroad as the need for rapid lunar missions hampers the original spirit of the 1967 Outer Space Treaty or OST. The ideological crossroad hangs on the question of whether the space domain should be maintained as the “global commons” or whether resource development violates the ban on appropriation by national means. Current Governance and Challenges The Outer Space Treaty (OST) Framework:

Articles I and II of the OST remain the primary legal barriers to colonization, mandating that space be the “ province of all mankind” and not subject to “ national appropriation by claim of sovereignty, by means of use or occupation”. Sovereignty Debate: Major spacefaring nations are increasingly split. The U.S-led Artemis Accords promote a model where signatory nations can extract and own space resources, arguing this is “use” rather than

"appropriation". Conversely, many nations in the Global South and competitors like the International Lunar Research Station (ILRS) (led by China and Russia) advocate for more inclusive frameworks to prevent a "first-come", "first-served" colonial expansion. Modern Colonization Risks: Private entities, most notably SpaceX have proposed large-scale settlements (on Mars) that challenge Earth-based jurisdiction, with some corporate terms of service already claiming Mars as a "free planet" not subject to Earth's sovereignty.

Current Status

The main problem arises from either individual states or private actors colonizing outer space resulting in unequal control, access, or exploitation of celestial territories and outer space resources. Colonization used in the context of "beyond Earth" entails more than the traditional notion of settlements in a territory, including also economic domination, legal authority, and strategic advantage. As technological advances and capabilities continue to grow, there is an increasing likelihood that a small minority of technologically advanced actors hold disproportionate influence over space activities, contradicting the principle of outer space as the province of all humankind. Key challenges include a lack of meaningful international regulation for the long-term presence of humanity in space, ambiguity on the legal standpoint of resource extraction in space, and the expanding roles of private companies operating on behalf of national countries in space. Specifically, these challenges are the risk of de facto ownership, the exclusion of lesser developed countries and the degradation of the norms of peaceful and collaborative space exploration. Several states and private entities such as the United States, China, and India currently plan and develop missions with the aim of sustained human presence on the Moon and, in the

longer run, Mars. These mission plans include building habitats, research facilities and infrastructures to support mining or the extraction of fuel. Whereas they are presented as scientific or economic activities, they may, if not regulated, result in the de facto establishment of exclusionary zones. Even though it may seem like these issues only address a few countries, these issues affect the whole globe. Countries like Japan and Germany rely on space in the LEO Low Earth Orbit).

Little to no relative initiatives have been taking place. Efforts in this field have thus far been minimal and are mainly concentrated on already available legal frameworks and debates within COPUOS. Still, the mainstay has remained the 1967 Outer Space Treaty, which created the basis for application when it revealed that outer space is not owned by any country and should be used for peaceful purposes with the interest of all nations taken into consideration. Its openness to resource exploitation and settled presence has already prompted a new wave of debate. While the Moon Agreement of 1979 attempted to limit exploitation with its assertion that celestial bodies, as well as their resources, are the common heritage of humanity, its limited-ratified effect lessened its significance. New questions that arise make COPUOS a forum where discussions about responsible conduct in space, transparency, and long-term sustainability of outer space activity are raised.

Analysis and Solution

The United Nations Committee on the Peaceful Use of Outer Space, also known as COPUOS, is facing new challenges as the number of nations and organizations exploring space for their purposes is on the increase. When the committee was formed, only a few nations had space programs but day by day space is getting more cramped with satellites that

have been and may continue to cause conflicts, accidents, and most importantly inequality. First there is the problem of space debris, which means the old satellites and parts of the satellite are orbiting the earth at a high speed and may interfere with other satellites and space stations. Although there are guidelines on how to reduce space debris, the guidelines are voluntary, and as a result, the nations do not follow the guidelines.

Another topic is the military use of outer space. Although the OST prohibits the placement of WMDs in outer space, it does not address other military uses of outer space. The absence of clear guidelines on the use of space may generate tension between the states. COPUOS can assist in this area by encouraging mutual understanding and trust through the exchange of notifications on the launch of objects into outer space.

Inequality in the use of outer space is another topic that is emerging. Developing countries are not in a position to take advantage of the use of outer space technology. However, satellite technology is useful in dealing with natural disasters. Finally, the arrival of space companies has brought about a new set of legal issues. In space law, the government is responsible, but the arrival of space companies has brought about a new dimension. COPUOS may help by encouraging all countries to enact laws that require space companies to comply with safety, environmental, and sustainability standards.

To handle the increase in private companies and the resulting risk of collisions (debris), COPUOS should mandate that any entity launching a satellite must: Deposit a fee into a centralized UN-managed insurance fund (a form of environmental, or "green," tax for space). Show proof of active debris removal

capacity or end-of-life disposal before being allowed to launch, making companies liable for their junk.

Through the provision of guidelines, cooperation, and equal opportunities, space may be made peaceful, safe, and useful for all humanity.

Questions to Consider

1.What constitutes the "colonization of outer space" here? Also, what is involved in colonization? Is it only land ownership or ownership of resources and economic domination?

2. What changes could be implemented to the Outer Space Treaty to make its impact more adequate and still include many of the sufficient ideas it already had?

3.What is the role that the State should play in monitoring the countries such as China, Russia, and even America so as not to allow them to create exclusive areas or monopolies of any kind?

4.Who is qualified to exercise the right to use space resources such as minerals, water, and fuel? Whether these resources should be the right of all nations, and how a share of these may be allotted to nations that are not yet developing space technology is completely up to you.

5.What might be the appropriate place for international cooperation, sharing, and building capacity in lowering the disparity of space programs in the world?

6.What can be done to address the issue of avoiding conflict, competition, or rivalry with regard to outer space in the matter of the Moon and Mars through transparency and confidence-building measures among states?

Topic II: Ensuring the Long-Term Sustainability of Outer Space Activities

Topic Background

However, at the time of the formation of COPUOS in 1959, space activities were only conducted in a few

technologically advanced nations. The initial governance of space activities only concentrated on ensuring that there was no conflict arising from space activities and that there was peaceful use of space. This led to the formation of the 1967 Treaty of Outer Space,as stated in topic 1, which laid down some of the basic principles of space law, including the peaceful use of space, prohibition of national sovereignty, and that space is the province of all humankind. Other treaties have been formulated, including those concerning the safety of astronauts, damage, and registration of space objects. These initial treaties did not include environmental sustainability and commercial activities, as these were not of major concern at that time.

The sustainability of the activities that are being carried out in outer space is one of the most important issues that the COPUOS committee is challenged to address. Space is considered to be one of the most important components of our society at present, due to the fact that space domain is being utilized for different activities such as communication, weather observation, as well as the reaction to natural calamities. Therefore, the increase in the activities and usage of outer space also leads to the need to protect from any damages that may affect the activities and usage of deep space in the future. Long-term sustainability is a concept that refers to the activities being carried out in outer space today, not limiting the future generations from utilizing this extraterrestrial environment.

Current Status

With the developments that took place in the field of space technology, the number of satellites and space missions increased steadily. There was a buildup of non-functional satellites and space debris in the latter half of the twentieth century. Collisions between satellites and the destruction of satellites resulted in thousands

of pieces of space debris moving at incredibly high speeds. This proved the fact that it was possible to interfere with satellites and space stations due to the presence of space debris. In the above scenario, COPUOS has come up with guidelines on Space Debris Mitigation. This was done with the sole aim of minimizing the generation of space debris and disposing of the satellites at the end of their life span. It was a remarkable achievement on the part of COPUOS to understand the fact that sustainability was a global issue. This was a voluntary action and was adopted by different countries in different ways. With some countries having stringent laws, but others could not do anything about the situation. This was due to reasons such as limited technical capacity, financial, and even political instability.

The increasing rate of space activity in the twenty-first century increased concerns about sustainability. Advances in launch capacity made space more accessible, and the costs came down to the point where more countries and more commercial actors could take part in space. The launch of large satellite constellations for communication and internet access missions increased the congestion of low Earth orbit.

Geopolitical tensions also fueled the development of military and dual-use space capabilities, which increased the risk of events that generate space debris. These dual-use space capabilities are often deployed in large groups, thus increasing the likelihood of collisions. Although a collision may not seem like a big deal, even small collisions can cause big debris clouds and overtime these debris clouds will pollute the space. Another factor was the lack of enforcement mechanisms in international space law. The current international space law framework is founded on cooperation and good faith. This has resulted in a situation where there is less consistency in

space activity, and this is one of the factors that have contributed to sustainability issues.

Currently, outer space is more congested than it has ever been in history with thousands of satellites in outer space. In addition, there are millions of pieces of space debris, particularly in low Earth orbit, which is the most utilized and valuable space. There are also plans to visit other celestial bodies such as the Moon. This may potentially cause sustainability problems in outer space if not well addressed and legalized. The COPUOS has been the major platform for addressing such issues. While it has been effective in creating dialogue and cooperation, it lacks the authority to enforce any kind of regulations. This has meant that the sustainability of outer space has become dependent on the trust, transparency, and cooperation of nations.

Space debris poses the biggest threat currently, as even small objects can cause destruction to satellites. Overcrowding in space also leads to the threat of collisions. There is a threat of inequality between nations because, for developing nations, the use of space-based services will not be possible because they will not be able to afford the implementation of new and advanced sustainability measures. The emergence of private space actors has also given rise to a challenge. Although conventions and laws are already formulated regarding space, all the conventions and laws are state-based. Private space actors are the ones undertaking most space missions. There are also fears about the military use of space, which could lead to conflicts and threaten the peaceful use of space.

To overcome these issues, many countries(have started developing capabilities for space situational awareness, which will enable them to better manage their satellites in orbit. Additionally, many countries have started developing their own licensing mechanisms to deal with private

entities and ensure that they behave responsibly. Numerous countries are rapidly developing Space Situational Awareness (SSA) and space domain awareness to manage orbital debris and enhance security. Key actors include the U.S, Russia, China, and EU nations (France, Germany, Italy, Spain). Emerging players like the UAE, Saudi Arabia, Brazil, India, and South Korea are also accelerating their space capabilities. International cooperation in terms of information exchange and mitigation of collisions has also been enhanced, and studies are also conducted to mitigate and remove space debris from orbit. To address the challenge of sustainability of space at an international level, COPUOS has come up with guidelines on the sustainability of space in 2019. It has been made clear that nations must behave in a transparent way in space activities.The UN Register of Objects Launched into Outer Space, maintained by UNOOSA on behalf of the Secretary-General, records data on space objects to identify launching states, establish liability for damage, and promote safe, peaceful space activities. It serves as the primary international public record, listing satellites and debris, as required by the 1976 Registration Convention. Moreover, the UN Register of Objects Launched into Outer Space and capacity building in new space-faring nations are also important for sustainability in space.

Analysis and Solutions

The long-term sustainability of outer space is increasingly jeopardized by an unsustainable, "first-come, first-served" model of orbital usage, where 60 years of activity have largely ignored environmental consequences. The current crisis is not just a technical challenge, but a "wicked problem" combining complex orbital mechanics with intense political, economic, and legal friction, making systemic action difficult.

Key Impacts of Inaction on Space

Sustainability **The Kessler Syndrome:** The accelerating accumulation of space debris-ranging from 36,500 objects larger than 10 cm to millions of smaller fragments-threatens a chain reaction of collisions, potentially rendering critical Low-Earth Orbits (LEO) unusable. Economic and **Operational Risks:** The rising density of junk increases costs for operators who must dedicate resources to collision avoidance maneuvers and protective shielding. **Scientific Disruption:** Mega-constellations and debris are causing unprecedented light and radio-frequency pollution, impairing crucial astronomical research. **Atmospheric and Ground Pollution:** As satellites burn up on re-entry, they deposit metals and chemicals into the stratosphere, contributing to ozone depletion and altering atmospheric dynamics.

Why Issues Remain Unaddressed: Cost, Cooperation, and Governance High Economic and Technical Barriers: Active Debris Removal (ADR) technology is still in the prototype phase. It is costly, and there is no agreed-upon funding model for who pays for cleanup. Lack of **International Consensus**: While UNOOSA has adopted 21 non-binding guidelines for sustainability, there is no enforcement mechanism, and national regulations vary widely. **Dual-Use Concerns**: Technologies designed to remove debris could be repurposed as Anti-Satellite (ASAT) weapons, causing distrust among major spacefaring nations (e.g., USA, China, Russia), which stalls cooperation. **Legal Ambiguity**: The 1967 Outer Space Treaty, specifically articles on liability and "harmful contamination," does not clearly define what constitutes "debris," making it legally treacherous to attempt removing a non-operational object. **"Growth Over Green" Mentality:** Regulations have historically been lax to avoid hindering the rapid expansion of the commercial space industry. For long-term sustainability, the

shift from voluntary, high-level guidelines to binding, international standards is critical to ensure that space remains a usable resource for future generations.

Questions to Consider

1. Enforcement of "Soft Law": Since international guidelines like the UN LTS Guidelines are currently non-binding "soft law," how can the global community move toward an enforceable international legal framework that prevents "local solutions to a global problem"? These local solutions are known to cause bigger issues due to them colliding with each other thus creating a bigger problem.
2. Liability for "Zombies": If a defunct satellite (a "zombie") from one nation threatens a live satellite from another, who bears the legal and financial responsibility for the costs of a collision or the preemptive removal of that debris?
3. Dual-Use Technology Concerns: How can we ensure that Active Debris Removal (ADR) tools: such as lasers, nets, or harpoons: are used strictly for sustainability and not misperceived as covert anti-satellite weapons?
4. Equity in Orbital Access: As mega-constellations occupy a vast number of orbital slots, how can we prevent dominant spacefaring nations and corporations from effectively "locking out" developing nations from utilizing Low Earth Orbit in the future?
5. Environmental Externalities: Beyond orbital collisions, what are the long-term atmospheric impacts of frequently launching rockets and burning up thousands of satellites in the upper atmosphere. Also, how do

they directly affect countries that rely on satellites and the clear “space domain” to manage activities like tracking phones, updating services like google maps, or just the info they provide for large space companies like NASA or SpaceX?

Works Cited

UNITED NATIONS PROCEEDINGS United Nations/Republic of Korea Workshop on Space Law United Nations Treaties on Outer Space: ACTIONS at the NATIONAL LEVEL.

Mitchell, Rachel. "Into the Final Frontier: The Expanse of Space Commercialization, 83 MO." 2018.

FIFTY YEARS of the OUTER SPACE TREATY Tracing the Journey.

European Space Agency. ESA Space Environment Report 2025. European Space Agency, 2025, www.esa.int/Space_Safety/Space_Debris/ESA_Space_Environment_Report_2025.

Inter-Agency Space Debris Coordination Committee. IADC Space Debris Mitigation Guidelines. IADC, www.iadc-home.org

National Aeronautics and Space Administration. NASA Orbital Debris Engineering Model (ORDEM 3.1) Users Guide. NASA Orbital Debris Program Office, 2019, orbitaldebris.jsc.nasa.gov.

Secure World Foundation. Insight: Understanding Space Sustainability. Secure World Foundation, 2023, www.swfound.org.

United Nations. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies. 1967