United Nations Office on Space Affairs

Sebastián Ávila Cabal & Gabriela Klinger Alvarado

SIMULATION 2024

COMMITTEE GUIDE

UNOOSA

CCBMUN XXII

Contents

1. Presidents' Letter

Dear Delegates,

We would like to give you a warm welcome to the UNOOSA (United Nations Office for Outer Space Affairs) at CCBMUN. Primarily, we will introduce ourselves as your chair: Sebastián Ávila Cabal, and Gabriela Klinger Alvarado from Gimnasio la Colina. We can proudly say that we have been part of the MUN for several years, fulfilling the role of delegates and presidents. During these past months, we have worked extremely hard to prepare a committee in which every member will be able to play a crucial part and to deliver an exceptional performance so that you have a challenging and interesting experience.

This year, we decided to be presidents of the United Nations Office for Outer Space Affairs (UNOOSA), because we believe that this model is an opportunity for all of you to be aware of the current situations of outer space. In addition, we believe that activities like this strengthen social and critical thinking and are a unique opportunity to learn about the current issues affecting society, whilst obtaining skills that will serve you in your academic and personal lives. We want this model to be an unforgettable experience, in which you can learn about the different characteristics of your delegation, the worrying situation of Outer Space problems, and the solutions that can be found. We have chosen these topics so that you will not only be informed and discuss current problems, but you will also become aware of the great changes that must be generated today in order to safeguard humanity's future. We want you, at the end of these days of debate, not only to develop a passion for the Model UN, but to develop a genuine interest in transforming your environment.

We understand that this may be your first UN model so we want to encourage you to approach us if you have any questions and need help with any of the preparation. We also want you to feel confident and to trust your skills and abilities. We also had our first model, and we know it is not easy, which is why we will do everything we can to help you, both with your portfolios and when debating. Remember that if you have any questions you can write to us at the committee's email (unoosa@ccbcali.edu.co) so that we can help you. We have high expectations for this model, and we are confident that they will be met.

Yours sincerely,
Sebastián Ávila Cabal and Gabriela Klinger Alvarado
Presidents of UNOOSA.

2. Simulation Topic: *Updating the Outer Space Treaty*

Written by Lia Alvares and Sofía Brenes for CCBMUN XXI

I. History/Context

The "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies," more commonly known as the "Outer Space Treaty" (OST), is a multilateral treaty that forms the basis of international space law. It sets the entirety of the legal framework on the way space should be utilised, and therefore how space exploration should be executed. The primary objective of the OST is the implementation of international law governing space exploration, weapons testing, and territorial claims. The treaty legally binds signatory parties to use outer space solely for peaceful purposes.

Figure 1. Signing of the Outer Space Treaty on January 27, 1967.

The Outer Space Treaty was originally drafted by the UNOOSA Legal Subcommittee in 1966, nearly 10 years after the space race began and space exploration was at a boom. The United Nations Office of Outer Space Affairs had been created in 1958, yet there was no framework or international law by which to regulate space exploration. It is important to note space exploration began in 1957 when the Soviet Union (present-day Russia) launched the world's first intercontinental ballistic missile, which is launched into outer space and travels through it to reach its target. Shortly after that, it launched Sputnik 1, the first artificial satellite.

These events developed into the space race, where the United States and the Soviet Union sought to achieve superior spaceflight and aerospace capabilities. Intercontinental ballistic missiles are considered weapons of mass destruction (WMD), and their development, which

drew so much attention to space, raised an alarm for the international community. There was already sufficient concern about a nuclear war on Earth to have to be worrying about a nuclear war in space.
For this reason, in 1963, the UN General Assembly unanimously adopted the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space in resolution 1962. This declaration prohibited the introduction of weapons of mass destruction into space. The Outer Space Treaty was largely based on this declaration, only it added several new provisions. It was then agreed upon in the General Assembly in 1966, the same year it was drafted, and the treaty was open for signature by the three depository governments (Russian Federation, United States, and United Kingdom) in January 1967 to enter into force in October 1967.

The treaty is divided into 17 articles, which mainly highlight the following principles:

1. 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;
2. Outer space shall be free for exploration and use by all States;
3. Outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means;
4. 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;
5. The Moon and other celestial bodies shall be used exclusively for peaceful purposes;
6. Astronauts shall be regarded as the envoys of mankind;
7. States shall be responsible for national space activities whether carried out by governmental or non-governmental entities;
8. States shall be liable for damage caused by their space objects; and
9. States shall avoid harmful contamination of space and celestial bodies.

(You may use this link to access the complete treaty:
https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html)

It is important to note, however, that the provisions of the OST, despite defining the entirety of law in space, are extremely broad, whilst lacking specifics. This is particularly problematic considering the fact that, by principle, the OST cannot be practically enforced. There is no governing body or law-enforcing entity in space, and, therefore, the only information we have of any activity is that provided by nations and those who represent those nations, for example, the astronauts of the ISS.

The only implication for not complying with the treaty is sanctions, which have never been instituted upon a nation, despite the fact that they have participated in activities that are not particularly in compliance with the OST, such as ASAT (anti-satellite) testing. This means a nation, and perhaps even individuals and private companies, might simply ignore the treaty if they so wished.

Also, within the OST there is no definition of the term “weapons of mass destruction.” It is commonly understood that these include nuclear, biological, and chemical weapons. However, while the treaty prohibits nations from deploying or stationing WMDs in outer space, there is legally no way to determine whether a country is doing so, since there is no definition of weapon of mass destruction in the treaty. The OST also does not prohibit the launching of missiles, which could be armed with WMD warheads, through outer space. Yet, due to the fact the treaty emphasises the peaceful use of outer space, some analysts have concluded that the treaty could broadly be interpreted as prohibiting all types of weapons systems in outer space. There are simply so many legal loopholes within the treaty that it is subject to interpretation for most activities in outer space, for which reason it is necessary to update the treaty.

Despite these fallacies within the treaty, historically, it has only been subject to challenge once. In 1976 eight nations traversed by the equator convened in the Colombian capital, Bogota, to draft the Bogota Declaration. These were Colombia, Ecuador, Congo, Indonesia, Kenya, Uganda, and Zaire, with Brazil present as an observer. Under General Assembly resolution 1803, every nation has the right to permanent sovereignty over their natural wealth and resources within their territory. These nations believed that Article II of the Outer Space Treaty, which states “outer space, including the moon and other celestial bodies, is not subject to national appropriation,” abridged their right to control natural resources.

As it turns out, circling the Earth’s equator at an altitude of around 36,000 kilometres, there is the geostationary orbit (GEO). Satellites stationed in this orbit revolve at speeds which match the rotation of the Earth, so they seem stationary. This allows them to observe and collect data continuously over specific areas. The declaration stated the unique properties of GEO are created by the Earth itself, therefore it is a natural resource. Since these nations are located at the equator, they consider GEO a natural resource, which they should have control over. This is because if the borders of these nations were projected into outer space, satellites located within these borders would never leave those boundaries, hence making them a "natural resource."

Geostationary orbit is actually scarce, as only a few satellites can be stationed upon it, so equatorial nations considered they should control sections of GEO to station their satellites.

Doing so, technically, would not go against the OST as they would not be appropriating outer space but rather exercising sovereignty over their natural resources. Eventually this declaration was dismissed by the international community, and meanwhile it was not seen as an attempt to undermine the treaty, it did highlight how the treaty could be subject to interpretation.

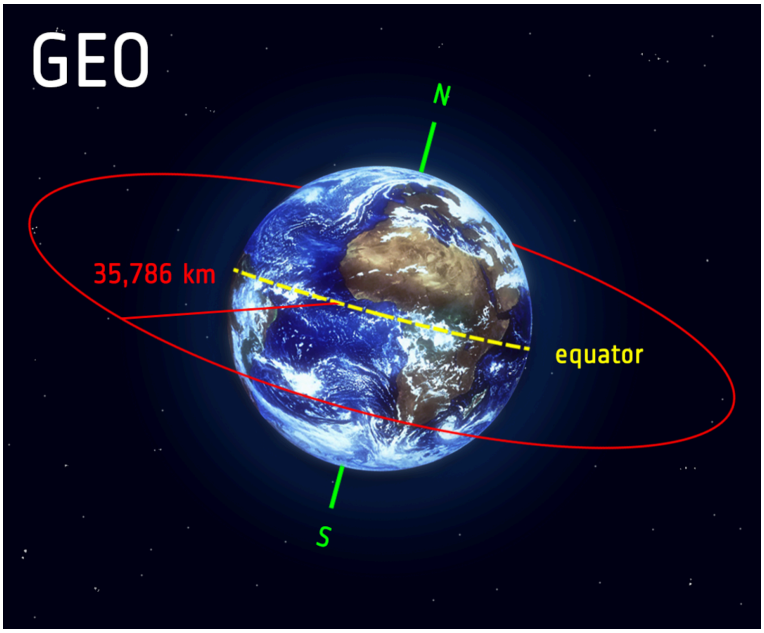

Figure 2. Image created by the European Space Agency to label the geostationary orbit (GEO) in relation to Earth.

Aside from the Outer Space Treaty, international space law is underpinned by four other international treaties overseen and enforced by UNOOSA and UNCOPUOS. These are the Rescue Agreement, the Moon Agreement, the Liability Convention, and the Registration Convention. Historically, the Outer Space Treaty has been the most prominent of the five existing treaties governing space, for it set the foundation of international space law.

However, as it lacked numerous details, the other treaties could fill in the loopholes found within the OST. The problem is that, for example, the Moon Treaty, which attempted to prevent commercial exploitation of outer space resources, has not been ratified by China, Russia or the U.S. In fact, only 18 nations are parties to the treaty, only 5 have ratified it, and another 4 are signatories. It has not been ratified by any state that engages in self-launched human spaceflight. This has only demonstrated how states would rather remain merely within the boundaries of the vague Outer Space Treaty, rather than to be further limited by more detailed treaties such as the Moon Treaty. This leads to the question of how effective the OST really is.

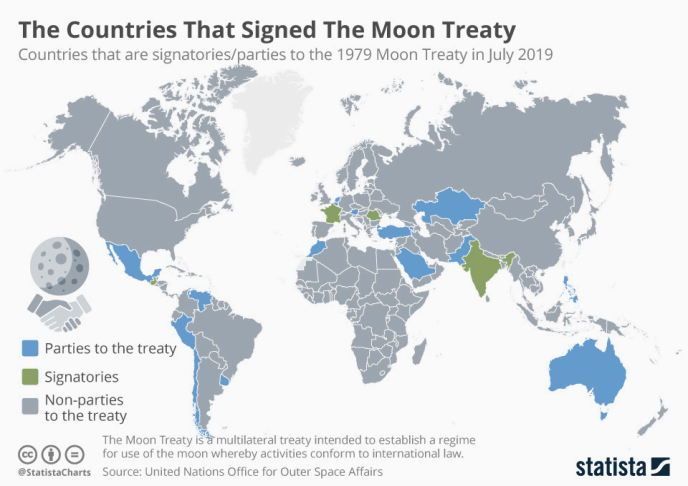

Figure 3. This chart shows the countries that are signatories (highlighted in green) and parties (highlighted in blue) to the 1979 Moon Agreement in August 2023.

I. Current Situation

On October 13, 2020, the U.S. Department of State and NASA established the Artemis Accords alongside Australia, Canada, Italy, Japan, Luxembourg, the United Arab Emirates, and the United Kingdom. The Artemis Accords are a set of guidelines surrounding the Artemis Program in its efforts to return humans to the moon by 2024, and establish a lunar base by 2030. The Artemis Program also aims to land the first woman and person of colour on the moon. Due to this, the Artemis Accords would seem like progress in settling this issue, however several key nations such as Russia and China refuse to sign the accords. Russia stated the Artemis Program is too "U.S.-centric" to participate in it in its current form. It has also expressed concerns that this program and the accords are a power grab from part of the U.S. and its allies, considering the lack of any African or South American founding partner states.

Moreover, the accords have become controversial due to the fact the U.S. has promoted these outside the normal channels of international space law, such as the UNCOPUOS. Therefore, the signing of the accords represents a significant political attempt to codify key principles of space law and apply them to the program. As a result, they could have significant influence on any subsequent governance framework for human settlement on any celestial body, for example, Mars. For this reason, many nations with prominent space programs have refused to participate in the Artemis Program, as it would entail signing the Artemis Accords and thus having the quasi-legal American rules imposed upon them. This may not only affect the development of the program, but it may also be considered a challenge to the Outer Space Treaty, as the

accords aim to impose their own principles with major importance, rather than enforcing the already established international space law.

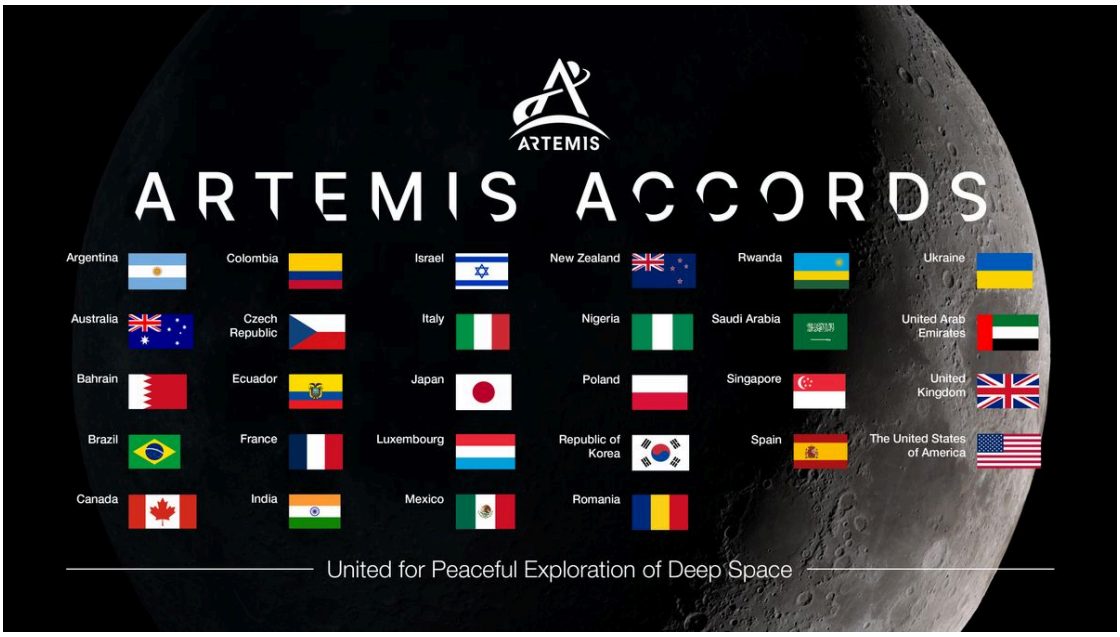

Figure 4. Image provided by the Artemis Program highlighting the nations part of the program and signatories to the Artemics Accords.

Furthermore, there is the issue regarding the legality of ICBM and ASAT testing. On one side, there are intercontinental ballistic missiles (ICBM). These have ranges between 6,000 and 9,300 miles, making virtually any target in the world vulnerable; a nuclear weapon can be launched from a rocket into outer space before gliding down to its target with pinpoint accuracy through these missiles. So far only 7 nations possess ICBMs, the United States, China, Russia, and North Korea with both land-based and submarine-launched ICBMs, India with only land-based, and France and Britain with only submarine-launched. It is speculated that Israel may also possess ICBMs, however this has not yet been confirmed.

The New START Treaty ensured the reduction of both the American and Russian nuclear arsenals as well as of the missiles and bombers capable of delivering such weapons, such as ICBMs. Therefore, these were never much of a concern. However, since Russia suspended the New START on February 21 of this year, there has been an exponential increase in ICBM testing from part of both Russia and the United States as never seen before. In the midst of this, North Korea has been testing ICBMs non-stop since its first test back in 2017. The U.S., alongside Japan and South Korea, condemned North Korean ICBM tests in a joint statement on July 15, 2023, despite the fact the U.S.U.S. has tested multiple ICBMs, particularly throughout this year.

The Outer Space Treaty prohibits the stationing and/or deployment of weapons of mass destruction in outer space; however, it does not prohibit the launching of ballistic missiles, even though these could be armed with WMD warheads, through space. This means international law could be condoning ICBM testing as there are no regulations against it in place, and the provisions of the OST do not prevent it despite the fact these missiles armed with weapons of mass destruction travel through space constantly during ICBM tests.

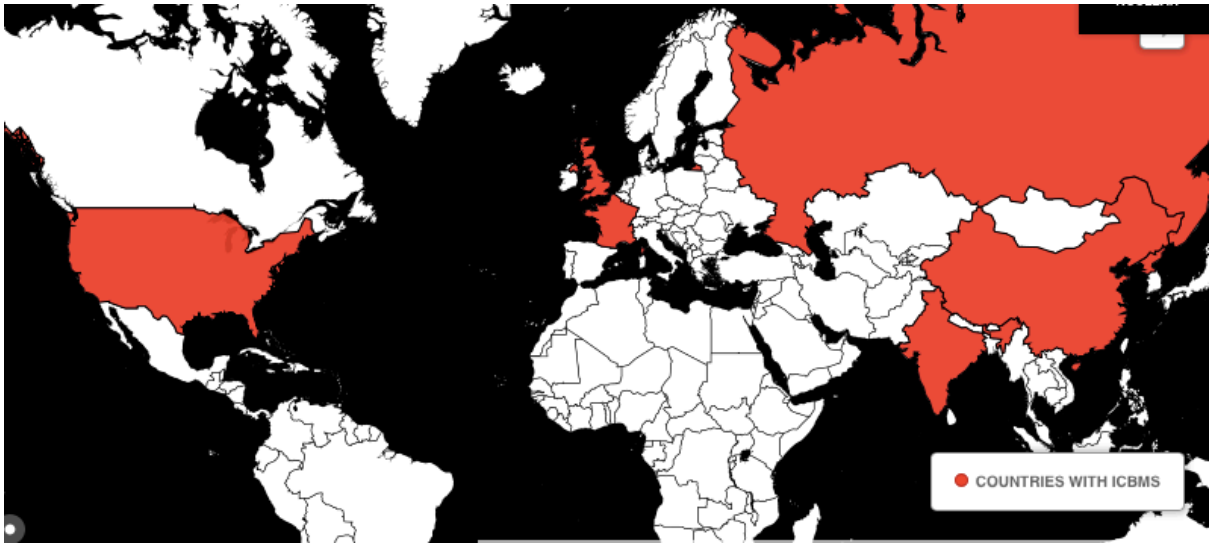

Figure 5. Map of the countries (highlighted in red) that have ICBMs.

Additionally, ASAT testing is another major concern in regards to the effectiveness of the Outer Space Treaty. As nations such as Russia and China have stated their interest in the militarisation of space, anti-satellite weapons (ASAT), have become a major concern to the international community. Since 2007, when China conducted its first ASAT test after several decades of ASAT technology being dormant, Russia, the U.S.U.S., India, and, of course, China, have exponentially increased their activity in ASAT testing.

Arms control experts have long foreseen an arms race in outer space as an imminent threat, and with the increase of ASAT technologies and testing, they believe this could incite an inevitable conflict in outer space. As stated by the fourth article of the OST, “States Parties to the Treaty undertake not to place in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.” As ASAT weapons are not weapons of mass destruction, under the treaty they would be considered conventional weapons and so, in all technicality, they would be allowed in space. However, since the Outer Space Treaty foments the peaceful usage of outer space and prohibits any military activities on celestial bodies, the usage of ASAT weapons and the testing of these are frowned upon by the international

community. This, nonetheless, does not stop the usage of ASATs, and if it escalates any further it could lead to conflict in outer space, as many analysts have already concluded. Therefore, it is of vital importance to update the OST, not only to prevent the further development of ASAT weapons, but also of ICBMs.

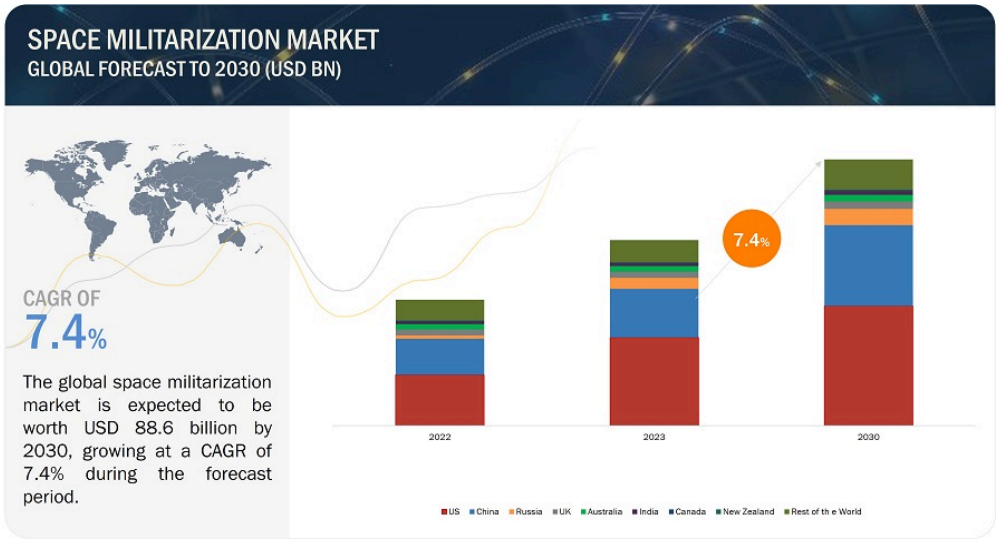

Figure 6. This image demonstrates the current and potential economic growth of the space militarization market, thus highlighting the increasing military intervention in space with ASAT weapons and ICBMs.

It is also important to note the seemingly lack of regulation of the Outer Space Treaty with respect to private companies and organisations. The provisions of the treaty mainly focus on nations and their activities, whilst being deficient in any sort of guidelines as to what private companies can do in outer space. For this reason, organisations such as Lunarland and the International Lunar Lands Registry have exploited this omission and have been offering the sale of plots of land on a celestial body, therefore appropriating the moon and its resources as their own.

These organisations justify their activity by stating that celestial bodies are not subject to national appropriation, so technically private companies and individuals could make claims on celestial territories as they are not nations, nor are they affiliated to a government. Despite this, the private ownership of land on the moon is absurd given that, even if an individual owns territory on the moon, how can this individual access their territory, and what function do they serve if there are no settlements on the moon?

These organisations may not seem like a cause for concern for they are rather preposterous at the moment. Nonetheless, they do highlight the lack of control the OST has over private

institutions if they have reached such an extent where anyone can both buy and sell useless territories on the moon. By analysing these sorts of activities, it is clear that there is a necessity to update the OST. Regardless of its legal loopholes, challenges, and omissions, it is still the basis for international space law, so if humanity wants to ensure even the slightest success in outer space, it is necessary to make the OST functional.

I. Key points of the debate

- Omissions within the OST that do not allow for weapons to be regulated in outer space
- The unregulated liberties of private companies in space
- The development of ASAT weapons as a threat to international security
- Establishing repercussions for not complying with the OST
- Maintaining outer space as a peaceful domain for free exploration and use
- National appropriation of outer space and its resources
- Addressing legal gaps within the OST

II. Guiding questions

1. Is your country a signatory of the Outer Space Treaty?
2. Does your country have any ambitions in militarising space? If so, how has your country taken part in this?
3. Is your country a signatory of all five space treaties? If not, does it have any particular motives for not being as such?
4. How relevant is your country's space program on the international spectrum? Describe the program.
5. Does your country believe the Outer Space Treaty should be updated? If so, how? If not, why?
6. What would incite a conflict in space in the eyes of your country? How can the updating, or not updating, of the treaty help prevent this?
7. Are there any particular articles in the OST that your nation considers should be altered?

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