DISARMAMENT AND INTERNATIONAL SECURITY COMMISSION ACADEMIC GUIDE









SECRETARIAT

It is a pleasure for us, Nicolás, Antonia, Julio and María Camila, students of International Relations, Jurisprudence, History, Finance and Political Science and Government, to form the 15th Secretariat of the Model United Nations of our alma mater, the Universidad del Rosario.

We are excited to present an event that transcends being more than a space for discussion

about the problems that affect today's society. We are dedicated to continuing the legacy of this event, building new stories with every step we take, not only in our country but around the world.

The General Secretariat has proposed a diversity of committees with a real impact, collaborating with various local, national and international entities. On the other hand, the General Directorate has worked on the organization and rigor of a Model that will host more than 400 people, national and international, including the participation of delegations from different parts of the world.

We hope you enjoy MUNUR and obtain unforgettable learning and experiences, both on a personal and professional level. We have worked tirelessly to deliver an event that leaves a lasting mark. We welcome you to the Model United Nations of the Universidad del Rosario!

Nicolás Amador Peñaranda Secretary General

Antonia Hernandez Botero Director General

Julio Pola U.

Julio Pitta Urrea

Undersecretary General

amila Lalcedo,

Maria Camila Salsedo Underdirector General



WHAT IS? MUNUR

The Model United Nations of the Universidad del Rosario, MUNUR, marks a milestone by being the first of its kind at the university level in Colombia. It stands as a space of and for students, covering different educational levels and latitudes, where the word becomes a vital exercise. It is a corner that allows students to explore the vast universe of the international system, nurturing and getting involved with the various current, historical and future problems.

MUNUR had its origins as a project created by students from the Colegio Mayor de Nuestra Señora del Rosario, who, following global trends, decided to immerse themselves in this type of academic challenges. Currently, it remains a student initiative that not only promotes healthy discussion, but also the forging of friendships, the celebration of diversity and inclusion in a world that longs to strengthen fraternal ties.

In this sense, the topics explained in this document are subject to modifications made by the MUNUR Secretariat in the exercise of its functions. Participants will be duly informed when

this guide is finalized. Only the Secretary General and the Director General of the conference have the authority to make changes to this academic guide. MUNUR assumes no responsibility for erroneous statements made by other staff members regarding this document.

The Sponsor, Faculty Advisor or delegation manager of each participating institution must ensure that all their delegates participating in this committee read this academic guide in its entirety. Likewise, if a participant enters as an individual delegate, he or she assumes said responsibility. By registering for MUNUR, you accept the terms and conditions of the conference, that is, all the policies and conditions described in the Handbook and in this academic guide.

Similarly, this document contains the information that the delegates of this committee must take into account during the days of MUNUR. Here are compiled the procedural rules that both the Boards of Directors and the delegates must follow to guarantee the proper development of the debate within the committee. Together, we create a space where the voice of each student is a fundamental piece to build a more promising future.



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WELCOME LETTER SECRETARY GENERAL

Dear young people,

I extend a cordial greeting to you.

If you stopped to read this letter, I would like to greet you pleasantly and introduce you to our model. Here you can find the way in which we make MUNUR a model that connects the old with the new. Welcome to the event of my loves, to which I gave my work and heart, welcome to MUNUR!

To begin, I introduce myself: I am Nicolás Amador, student of Political Science and History at the Universidad del Rosario and I have the honor of being the Secretary General of MUNUR. I am very happy to be part of this dream and, during these days, I want to provide you with the best possible experience, seeking to make this a committee, an SGA and an unforgettable model for you.

I have high expectations for this model. Therefore, I not only hope that you have the best attitude during these days, but also a vast academic preparation that can be your key tool to propose innovative, realistic ideas that allow you to achieve everything you propose. Remember that you will be the ones who will shape the course of your committees and the model with your decisions, so you must find a way to make the most of your qualities to achieve the objectives you set.

Something I have learned throughout my time on the circuit is that if a delegate wants to become "the best", he must seek to have integrity. An upright delegate is one who achieves a balance, one capable of managing a lobby, reaching agreements, giving memorable speeches, producing notable writing, masterfully personifying his character or his foreign policy and, above all, above, a delegate with values and who enjoys the committee in which he is participating.



Don't be afraid to take risks. After all, the point of participating in these types of events is to grow while learning and, therefore, I hope to see in the model delegates who are not afraid to defend what they believe in. Be intelligent, creative and strategic, find a way to convince others about the points you propose. Speak with confidence and self-assurance and, above all, enjoy MUNUR and make friends. Model United Nations are always excellent excuses to meet people with whom you can form great friendships.

Finally, I would like to tell you that if you have any questions, comments or suggestions, I will always be a message away.

I wish you much success and the best of luck in this great experience.



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Nicolás Amador Peñaranda Secretary General



WELCOME LETTER UNDERSECRETARY GENERAL

Hello everyone, Hola, Bom dia gente, Bonjour, 안녕하세요, my name is Julio Pitta and I will be your Undersecretary General for this 15th edition of MUNUR. I am an eighth semester student of International Relations and second semester of International Business Administration at my alma mater, the Colegio Mayor de Nuestra Señora del Rosario. Together with Nicolas, Antonia and Maria Camila we have prepared some fantastic days and with this letter I open the doors for you to challenge yourself, to give your best and show that the stars are not the limit.

If you want to know a little more about me, I am a person passionate about languages, international cinema, African and security studies and Millonarios FC. I hope that these coming days are the most incredible for you and you feel all the excitement, you have the strength to tear down the unbreakable walls of Ba Sing Se, the resilience to look for that yellow umbrella, the will to move forward with the power of strength and Above all things, may you never stop being yourself. Fight until the end and as a Colombian movie from the 2000s said "dreams are the only worthwhile investment in life", be willing to bet everything on them, because in the end, you are the only ones who can limit your path. .

juliopittaurrea@gmail.com (+57 3002262264) He loves and appreciates them:

Wie Pola U.

Julio Pitta Urrea Undersecretary General



WELCOME LETTER DSG OF UNITED NATIONS

"Passion is not blind, it is visionary." Stendhal

Hello everyone!

My name is Laura Camila González Cruz, student of International Relations and Political Science and Government at the Universidad del Rosario. Active member of different academic and institutional groups and a woman passionate about sharing with her family and friends, topics related to diplomacy, history and travel around the world. I stand before you currently taking the position of SGA of the United Nations at MUNUR 2024, a responsibility that together with José Luis we seek to project as an example of resilience, discipline,

academics and comprehensive respect.

Within the Model United Nations circuit in which I have been involved for several years, I have allowed myself to explore, define and strengthen the different skills that distinguish us as young people and leaders of our societies. For many the United Nations is a simple game and for others just an entity that remains but is not visible in itself; For me, he is an actor of interconnection, between those of us who are passionate about debate, teaching and the search for teamwork.

I have always dreamed of having an SGA that has a high level of experience, that moves through its deepest passions and tastes, and that also demonstrates the value of our voice and vote. Therefore, I would like to mention that leaving a legacy that has been handed down to me for several generations, I will always ensure that I am critical and sensitive to what is presented, generating



trust in all those who see in us a path to improve transversally and demonstrating the academia and strength that characterizes MUNUR until it now reaches its 15th version.

Without a doubt, this letter is also aimed at thanking those who have accompanied me and who have helped me see everything special that arises from the Model United Nations. Starting with my eternal duo, José Luis, thank you for continuing to fulfill dreams together, for putting up with me and for connecting from moment zero with our ideas, thoughts and personalities to take our greatest goals to the stars. As well as many more who know it and I have mentioned it repeatedly, where my participation, leadership and creation in these meetings make me happy and guide me day by day.

Finally, I hope that with your participation in MUNUR, you can see everything that inspired you to change, to put your passion into flight and, like me, you manage to find and have a wonderful closeness with many of those who in your time could have been your teachers. and life partners. I invite you to take

lauracgonzalez2406@gmail.com (+57 3143219361) the risk of trying everything that interests you, to be selfconfident and to demonstrate that your capabilities and human quality can take you to the top of the mountain without even realizing the process that was involved.

Without further ado, we hope that both José Luis and I enjoy this new version of the Model United Nations of the Universidad del Rosario (MUNUR XV), a space in which tradition and innovation increase to put our creativity and academics to flight. and who act as key actors for our growth and development in our personal, academic, social and professional lives.

Fondly,

Laura Gonzalez DSG of United Nations



WELCOME LETTER DSG OF UNITED NATIONS

"Dismiss sadness and melancholy. Life is kind, it has few days and only now do we have to enjoy it." Federico García Lorca

Delegates,

Welcome to the United Nations Deputy Secretary General of the 15th edition of MUNUR, for me it is an honor that you participate in this beautiful project that together with Laura and our staff we have built so that you have an experience of academic and personal growth. My name is José Luis Sánchez, a Jurisprudence student at this Colegio Mayor and a great lover of poetry and Spanish literature in general.

If I could define this SGA in one expression, it would be Plus Ultra. An empire was built under that motto and it has been my philosophy of life since then. Always going beyond is what led me to launch myself as a United Nations SGA, to build a project that is a reflection of Rosarista values, maintains the tradition that has always characterized MUNUR and is at the forefront of innovation. In the same way, the committees of this SGA cover different areas of knowledge so that delegates can have a range of options to build solutions from the various areas of knowledge, in which academia and human quality are the protagonists of all committees. In this 15th edition of MUNUR I invite you to leave your comfort zone because it is these experiences that allow us to learn great lessons, not only academic but personal. For this reason and as Lorca says, live these moments to the fullest, because



They know if the committee can meet people with whom they can establish great friendships, as has happened to me several times.

Likewise, I would like to thank a very special person for me, my eternal and beautiful couple Laura. Thank you for wanting to venture on this ship together because it has not been easy. However, I can't imagine what this SGA would be like without your great knowledge, passion, and love for traditional committees. I couldn't have had a better couple because we understand each other very well and you put up with me, which I know is not an easy task, and I have been able to find in you a great friend and confidant. Along with this, I want to thank all the people I have met on the circuit because I have been able to learn a lot from them and each of those learnings have been reflected in this SGA so that it is a learning possibility based on the lessons of two years of delegating and being staff on the national circuit.

joselu.sanchez19@gmail.com (+57 3508624900) Finally, I wish you the best of luck for those days of MUNUR, may you enjoy every second both inside and outside the committee, may you create the most realistic, viable and innovative solutions possible. So that with MUNUR they not only follow Lorca's words, but they can also go Plus Ultra to build their path and their empire wherever they go, because if so they will manage to distort Lorca himself and ensure that there is a possible tomorrow and hope.

With love and affection.

Jose Luis Sanchez DSG of United Nations



WELCOME LETTER PRESIDENT

Dear Delegates,

It is an immense pleasure to receive you as one of the dais in the DISEC committee alongside Alejandra and Jose at a new edition of the Model United Nations at the University of Rosario, MUNUR 2024. For me, it is an honour to have you here. To venture into a project with such an important committee as DISEC on United Nations SGA is truly exciting.

As a member of the dais for this instalment of the model, I would like to introduce myself.

My name is Catalina Hoyos, I'm 20-year-old and student of Political Science and International Relations at Pontificia Universidad Javeriana. I hope this committee will be to your liking, especially considering that the topic we will be addressing has been one of my greatest interests since I joined the United Nations World.

In addition to the rigorous concepts, I hope that this committee will have the opportunity to develop and explore your negotiation, public speaking, and teamwork skills. I am here to support and assist you in this process, and I hope that this experience will not only be educational but also rewarding, allowing you to grow both as delegates and as individuals.

Without further ado, I warmly welcome you all and look forward to your active participation in DISEC and MUNUR 2024. I am excited to work with all of you and make this an unforgettable experience.

Welcome!

Catalina Hoyos

President Catalina.hoyos.g.0@gmail.com (+57 3178108966)





WELCOME LETTER PRESIDENT

Esteemed Delegates,

Whenever we think of MUN we might encounter the thought that it is just playing to represent a role. That is not true, we are discussing and debating the core of international relations and believing that one day we may have, in the real-world-scenario, the power to

take these types of decisions. Hello esteemed delegates, my name is Jose Restrepo, I am a 22 years old student at Universidad de Rosario majoring in Law and International Relations, with a minor on criminal law, international humanitarian law, and security.

Also, for the past 3 years I've been working in a criminal law firm, and after that I held a position at the Colombian Congress, focussing on sustainable development and the implementation of the PND. Last year I had the pleasure of being Vice President of URDiplomats, the student group that travels to HNMUN, the Model of United Nations of Harvard, where I was a delegate of the United Kingdom in the Legal Committee. I've been in MUN for over 12 years either as secretary general, delegate or dais.

My main expectations for the committee are strong and strategic use procedure, hard negotiation and academic speeches, moreover in a committee like this one. Also, being one





of my main focus on my International Relations major, I'll be overviewing a strong foreign policy (being out of foreign policy is my biggest ick).

I do hope you have an amazing time, you make friends, bring ideas to the discussion and focus on trying to deliver the best. This, by giving your 200% on all negotiations, speeches and also **drafting.** I could not be happier to be your dais for the next few days. If you have any inquiry about the procedure or the topic itself, feel free to write an email.

Best regards,

José Francisco Restrepo

President restrepolubojosefrancisco@gmail.com (+57 3017228182)





WELCOME LETTER PRESIDENT

Esteemed delegates, I am pleased to welcome you to DISEC of MUNUR 2024.

My name is Alejandra Llinás, I am a 5th-semester student of International Relations at the Universidad del Rosario, and I have the honor to be one of the Presidents of this committee. I am a loving fan of DISEC and, in general, of the traditional committees. Given the difficulty expected from this committee, i hope we could be as pedagogical as possible without disturbing the academic level expected from all of you. In this experience, I hope you all have the opportunity to enjoy a United Nations scenario.

I understand the importance of protocol and of foreign policy when directing a DISEC, nonetheless, within this committee, we also expect to see innovation and imagination. You are using the real-world experience to make decisions and plans according to them. This committee is a blank slate for all of you to use wisely, but above all, to create something you are proud of. I value effort, more than I do correctness, so do not worry if it is the first time you will be experiencing a MUN, I will always be available to answer any questions. Additionally, this will also be a learning experience for myself, so I hope we get to learn as much as possible through this incredible opportunity.

Finally, I wish all of you the greatest of success in this model. MUN is an experience that





allows all people to grow and learn in the best way possible. It is a place to get to know new friends and also know yourself. I hope you appreciate this opportunity to the maximum of its capabilities and prepare yourself for a challenging but fulfilling experience that hopefully will stay with you for a long time.

Please do not hesitate to contact me in case of any questions, doubts, or concerns about the guide, the committee, or the model itself. My door will always stay open.

Alejandra Llinás

President allinascsfr@gmail.com (+57 3213087838)





ABSTRACT

The development of space race, particularly in East Asia and Russia, and the proliferation of anti-satellite (ASAT) weapons pose a significant threat to the security and delimitation of the geostationary orbit (GSO). The absence of a robust regulatory framework and the presence of weapons in the GSO create uncertainty, increase the risk of collisions and the destruction of critical space infrastructure, and contribute to the militarization of space. These developments raise serious concerns about the long-term stability and security of the GSO and the potential for armed conflict in space. The diplomatic and legal efforts are needed to establish a clear regulatory framework that bans space weapons and promotes the peaceful use of space.

Keywords: outer space, anti-satellite weapons, geostationary orbit, militarization of space collisions, East Asia and Russia



ABOUT THE COMMITTEE

INTRODUCTION TO THE COMMITTEE

The Disarmament and International Security Commission (DISEC), also known as the United Nations First Committee, is one of the six main committees of the United Nations General Assembly. Founded in 1945, DISEC is responsible for discussing and formulating strategies to address disarmament challenges and promote arms reduction worldwide. It examines issues related to nuclear disarmament, conventional arms control, non-proliferation of weapons of mass destruction, and conventional arms regulation.

Since its inception, DISEC has played a crucial role in promoting disarmament and the regulation of conventional weapons and weapons of mass destruction. Over the years, it has witnessed forums where crucial international treaties have been negotiated and adopted for the international community, such as the Nuclear Non-Proliferation Treaty (NPT) and the

Chemical Weapons Convention (CWC). In addition, the Commission also promotes global security through different strategies and branches, such as conflict prevention, peacekeeping, combating terrorism and promoting regional stability. (United Nations, n.d.)

DISEC not only addresses critical issues related to disarmament and security, but also serves as a forum for member states to engage in constructive dialogue on these issues. It provides a platform for countries to express their concerns, present their views and seek common ground on these critical issues. In its mission to promote disarmament and security, DISEC has addressed a wide range of issues, including arms control and security in outer space, among others.

Despite its achievements, the international system faces significant weapons-related threats. The proliferation of nuclear weapons, where nations such as North Korea or Iran continue to pursue exorbitant nuclear capabilities, space weapons and the development of advanced military technologies are creating increasingly complex challenges to global security surpassing making tension in the international system and raising the probability of a New World War

HISTORY OF THE COMMITTEE

In the early years After the establishment of the United Nations after World War II, the requirement to address issues concerning disarmament and international security was recognized. was established in 1952 as the First Committee of the United Nations General Assembly, stated in Article 11, Chapter 4 in the charter of the United Nations, known as DISEC (Disarmament and International Security Committee), with 51 delegations, the first commission was entrusted with tackling these pressing matters. (UNODA, n.d.)

Initially, DISEC's primary focus was on disarmament endeavors, seeking to mitigate the dangers posed by the proliferation of weapons of mass destruction and conventional arms. It swiftly emerged as a pivotal forum for negotiating, drafting, and adopting landmark arms control agreements, such as the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the Comprehensive Nuclear-Test-Ban Treaty (CTBT). These accomplishments underscored DISEC's significant role in shaping the global security structure.

As the international security landscape evolved, DISEC adapted accordingly, broadening its scope to encompass a broader array of security challenges extending beyond traditional disarmament concerns. This expansion facilitated DISEC's engagement with emerging threats, including terrorism, cyber warfare, and illicit arms trafficking, thus reflecting the evolving nature of security risks in the contemporary world.

Moreover, this commission has a close relation of cooperation with other offices and commissions of the UN chart as the United Nations Disarmament Commission, that is under the Security Council mandate, and the Geneva-based Conference, that has the support of the United Nations Office for Disarmament Affairs (United Nations, n.d.).

COMPETENCE OF THE COMMITTEE

The competence of DISEC focuses on different disarmament related issues and makes recommendations, consensus principles and guidelines according to the topic, the principal objective of the committee is the weapons regularization with the purpose of total disarmament and guaranteed security in the international order giving these proposals to the states members and the security council.

In addition, DISEC seeks to propose solutions to challenges in the international security regime, considering all matters of disarmament and international security within the scope of the Charter of the United Nations and also promotes principles of cooperation in the maintenance of international peace and security.

Furthermore, the DISEC's scope turns around seven essential thematic clusters that are: (i) nuclear weapons, (ii) conventional weapons, (iii) other mass destruction weapons, (iv) disarmament aspects of the outer space, (v) regional disarmament and security, (vi) other disarmament measures, and (vii) disarmament machinery. For the outer space, DISEC has a joint panel discussion with SPECPOL about the security challenges in the outer space, for the 72nd session (Permanent Mission of Switzerland, 2017, page 70).

See below for a list of resolutions of the UN General Assembly and COPUOS documents of particular influence on the space activities of States. (UNOOSA, n.d.)

Resolution	Year	Title
A/RES/72/78	2017	Declaration on the fiftieth anniversary of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies
A/RES/68/74	2013	Recommendations on national legislation relevant to the peaceful exploration and use of outer space
A/RES/62/101	2007	Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects
A/RES/59/115	2004	Application of the concept of the "launching State"
A/RES/55/122	2000	International Cooperation in the Peaceful Uses of Outer Space
RES 1721 (XVI)	1961	International Co-operation in the Peaceful Uses of Outer Space
ST/SPACE/49	2010	Space Debris Mitigations Guidelines of the Committee on the Peaceful Uses of Outer Space
A/AC.105/934	2009	Safety Framework for Nuclear Power Source Applications in Outer Space

Table of own creation, information from United Nations Office for Outer Spacer Affairs (n.d)

ABOUT THE TOPIC

TOPIC

The Security and Delimitation of the Geostationary Orbit (GSO)

INTRODUCTION

Celestial bodies turn in the own axis, as the Earth takes 24 hours to complete once. Moreover, the celestial bodies turn around other bodies as the Earth take around 365 days to complete once around the Sun, the route that bodies follows are orbits and the NASA defined them as:

a regular, repeating path that one object in space takes around another one. An object in an orbit is called a satellite. A satellite can be natural, like Earth or the moon. Many planets have moons that orbit them. A satellite can also be man-made, like the International Space Station. (NASA, n.d.)

According to the laws of physics, each orbit can have a different shape. The most common is the elliptical orbit, which resembles an oval. The orbits of planets are almost circular. The orbits of comets exhibit distinct shapes. They exhibit a high degree of eccentricity or flattening. They resemble thin ellipses rather than circular forms. Satellites orbiting the Earth, including the Moon, are not always the same distance from the Earth. Sometimes they are closer to one another, and sometimes farther away. The closest point of a satellite to Earth is called its perigee. The closest point is the apogee. In the case of planets, the point in their orbit closest to the Sun is called the perihelion. The farthest point is referred to as aphelion. During summer in the Northern Hemisphere, the Earth reaches its aphelion. The duration required for a satellite to achieve a complete orbit is referred to as its period. For instance, the Earth has an orbital duration of one year. The angle between the orbital plane and the Earth's equator is called the inclination. (NASA, n.d.) Unless something pushes or pulls it, an object in motion will remain in motion. This statement is commonly known as Newton's initial law of motion. In the absence of gravity, a satellite in Earth's orbit would travel in a straight line into space. It is pushed toward the Earth by gravity. There is a constant struggle between the satellites' tendency to move in a straight line, or momentum, and the pull of gravity, which is pulling the satellite backward (NASA, n.d.).

An object's momentum and the force of gravity must be balanced for an orbit to occur. If an object's momentum is too high, it will pass by at full speed and will not enter orbit. If the momentum is too small, the object will be dragged down and will crash. When these forces are balanced, the object consistently falls towards the planet. However, due to its lateral velocity, it is able to avoid colliding with the planet. The velocity required to maintain an orbit is known as orbital velocity. The orbital velocity is approximately 17,000 miles per hour (ca. 27,359 km/h) at an altitude of 150 miles (ca. 241 km) above the Earth. Satellites with higher orbits exhibit slower orbital velocities (NASA, n.d.).

Geostationary orbit is a circular orbit around the Earth at an altitude of 35,786 kilometers above the equator. At this altitude, satellites orbit at the same speed as the Earth where it rotates on its axis. GEO is used by satellites that must stay constantly above one particular place over Earth, such as telecommunication satellites. This will ensure that an antenna on Earth will always remain pointed towards the satellite without moving. It can also be used by weather monitoring satellites, because they can continuously observe specific areas in order to see how weather trends emerge there.

Satellites in geosynchronous orbit cover a large range of Earth, so as few as three equallyspaced satellites can provide near-global coverage. This is due to the fact that at this distance from Earth, a satellite can simultaneously cover extensive areas. This is comparable to being able to perceive a greater portion of a map from a distance of one meter, as opposed to a distance of one centimeter. To view all of Earth at once from GEO, far fewer satellites are needed than at a lower altitude (ESA, 2020). The orbit is similar to that of stationary objects from the Earth's perspective. This space is ideal for communications satellites, because it allows wide and constant coverage of much of the Earth. This makes it a highly desirable location for communication, navigation, and weather monitoring satellites. (Rodriguez, n.d.)

Image 1: Georeferencing



Source: European Space Agency

However, the increasing reliance on space-based technologies and the growing competition between major powers, particularly in Eastern Asia and Russia, is raising concerns about a potential new arms race in outer space, creating a tense environment. Nations are developing

capabilities to disrupt, damage, or destroy satellites belonging to other countries This raises the possibility of conflict escalating into the space domain, with potentially devastating consequences for communication networks, critical infrastructure, and global security.

HISTORIC CONTEXT

The interest for outer space stated in the Cold War, the United States and the Soviet Union put their attention on space as the perfect opportunity to demonstrate their own technological supremacy. For that reason, each country invested thousands of million of their budgets in order to put into orbit the first artificial satellites as the Sputnik 1 in October 1957, or sending the first humans to the Moon as Neil Armstrong with the Apollo 11 mission in July 1969. Image 2: Sputnik 1 Satellite Orbit



Source: European Space Agency

Furthermore, the first military satellites were created for basic tasks of reconnaissance,

communications, weapons verifications, weather data recollection, etc. However, between these great feats the powers saw the necessity of regulating their actions in outer space, in order to have many legal tools to become a counterweight between each other. In 1960, the US President, Eisenhower, proposed that the Principles of the Antarctic Treaty be applied to outer space too. That implies that outer space is only for scientific and peaceful uses and no one can claim sovereignty over the space and any bodies as the Moon. After some position changes around the possibility of establishing mass destruction arms in outer space or celestial bodies, the US and the URSS stated in the General Assembly that their position is refraining to set massive destruction arms in outer space (US Department of State, n.d.). Image 3: The signing of the Outer Space Treaty



Source: British Pathé

For that reason, in January 1967 the United States, the Soviet Union and the United Kingdom

signed the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies. This treaty established that all the parties have to share the benefits of scientific research and development, and the prohibition to the claiming any type of sovereignty in order to avoid some countries trying to establish their territory in space, taking into account the difficulty to draw borders in outer space and celestial bodies. Moreover, the treaty created the prohibition of trying any kind of massive destruction arms or building military installations on the Moon or celestial bodies. In terms of the orbit, the treaty materialized the proposal of prohibition of setting arms in the Earth orbit (US Department of State, n.d.). In the first articles, some authors conclude that are essential elements:

• Recognition of the common interest of mankind in the exploration and use of outer space, including the Moon and other celestial bodies, as an area for space activities of all

all countries, without any difference in their economic and scientific development; such exploration and use having become "the province of all mankind"

- Recognition of the freedom of outer space, including the Moon and other celestial bodies, for exploration and use by all States, on a basis of equality and in accordance with international law;
- Stipulation of free access to all areas of celestial bodies;
- Recognition of the freedom of scientific investigation in outer space, including the Moon and other celestial bodies, and promotion of international cooperation in such investigation;
- Renunciation of national appropriation of outer space, including the Moon and other celestial bodies, by any means; and
- Confirmation of the applicability of international law, including the Charter of the United Nations, to activities in the exploration and use of outer space, the Moon, and other celestial bodies, in the interest of maintaining peace and security and promoting international cooperation and understanding. (Kopal, 2008).

This treaty established in the article VI the principle of international responsibility for all the States members by all their national activities in the outer space, including the Moon. This means that if some state member infringes one of these obligations, their non-compliance might be taken to the ICJ. The principle of responsibility also applies to nongovernmental organizations, but they require authorization and implies and supervision from a state member and that member also might be responsible for the possible violations committed by these organizations. After this treaty, the responsibility was extended by the Space Convention Liability that entered in force in 1972, where different terms of damage and launching including loss or damage in property of States and intergovernmental organizations.

Nevertheless, this treaty has important consequences in the legal status of outer space. In that terms, some equatorial countries like Colombia, Brazil, Congo, Indonesia, Zaire, Uganda, and

Kenya expressed their disagreement with the prohibition to claim sovereignty in outer space, specifically in the geostationary orbit. These countries manifested that according to the International Law, they have specific right of economic exploitation as in the Law of the Sea regime (Pienizzio, 2022). From this moment, the discussion turned around the different types of orbits and its importance in economic exploitation and development. The geostationary orbit as a natural resource, the signatories of the Bogotá's Declaration defined the GEO as:

The geostationary orbit is a circular orbit on the Equatorial plane in which the period of sidereal revolution of the satellite is equal to the period of sidereal rotation of the Earth and the satellite moves in the same direction of the Earth's rotation. When a satellite describes this particular orbit, it is said to be geostationary; such a satellite appears to be stationary in the sky, when viewed from the earth, and is fixed on the zenith of a given point of the Equator, whose longitude is by definition that of the satellite. (Signatories, 1976).

Image 4: Satellite ATV-4



In addition, following this position



Source: European Space Agency

of a peaceful use of outer space since the 80s some countries such as the United States, Japan, Canada and European countries decided to start one project of an International Space Station in order to join efforts in the

scientific investigation and economic development of outer space. After, Russia decided to enter the project too and finally, the International Space Station was created, as one of the most important goals of international cooperation and diplomacy.

In 1998, the ISS was launched to Earth orbit and nowadays is still in office (NASA Encyclopedia, 2023).

Furthermore, it is important to highlight the role of the principles of international law that are applicable to outer space, as the principle of non-appropriation, cooperation and peaceful use. This principle creates a scenario in which space cannot be the object of any arms race; however, in the absence of an express prohibition and a coercive mechanism for States to comply with this principle, it has given rise to the creation of anti-satellite weapons. This leads to a contradictory situation between the legal framework and reality.

CURRENT SITUATION

Legal instability in the use of the geostationary orbit (GEO) has generated growing international concern in recent years. The lack of a clear and binding regulatory framework to regulate activities in GEO has created uncertainty and opened the door to ambiguous interpretations of what actions are legal. This legal uncertainty has led to a climate of

competition and mistrust among international actors in the international system.

The possibility of GEO collisions due to anti-satellite weapon (ASAT) operations has further exacerbated these concerns. ASATs are weapons specifically designed to target and destroy satellites in orbit, which poses a serious risk. Conducting ASAT operations in GEO significantly increases the risk of accidental collisions with other operational satellites, which could trigger a cascade of catastrophic events and generate an even greater amount of space debris.

These actions, both the legal instability in the use of GEO and ASAT operations, are contributing to a worrisome trend toward the militarization of space. The militarization of space involves the use of space and space assets for military purposes. Changing the perception of space into a potential battlefield has led to increased competition for dominance and control

of the Earth's orbit, which in turn has fueled an arms race in space. Also, it is significant to highlight that just six countries have developed anti-satellite weapons: China, Russia, United States, France, India, and Japan.

These developments raise serious concerns about the long-term stability and security of the geostationary orbit in the space environment. The absence of a sound regulatory framework and the presence of weapons in geostationary orbit pose a threat to the sustainability of peaceful space operations.

RELEVANT ACTORS

State Actors

- China: The growing space program of China, which has made an international impact this past decade, has led to anti-satellite missile (ASAT) testing and construction of a space station with possible military applications (BBC, 2023). China's space program, focused on its military capabilities and space economic interests, seeks to establish itself as a dominant space power (CFR, 2023).
- Russia:The modernization of its space forces, demonstrations of ASAT capabilities and unusual maneuvers of some satellites fuel uncertainty about its intentions, which has led to doubts about other state acts that they consider double standards (BBC, 2023).
- India: India has emerged as a major player in space exploration, with successful missions to Mars and the Moon. Its focus on developing reusable launch vehicles and low-cost space missions could disrupt the established space industry.
- United States: the US has a position very interesting because they are developing their own ASATs program but, also, they reject the ASATs use, and they proposed to ban these weapons. (BBC, 2023).

Other Actors

- National Space Agencies (NSAs): NASA (USA), ESA (Europe), Roscosmos (Russia), JAXA (Japan), CSA (Canada), CNSA (China) these agencies have historically played a crucial role in space exploration and development, including the operation of numerous satellites in geostationary orbit for various purposes (ESA, 2023). However, competition and potential national security concerns have led some to shift their focus to other interests.
- United Nations (UN): The UN, through its Office for Outer Space Affairs (UNOOSA), plays a vital role in promoting the peaceful uses of outer space and fostering international cooperation (UNOOSA, 2023). However, the lack of a strong legal framework explicitly prohibiting space weapons such as ASATs hinders its effectiveness.
- North Atlantic Treaty Organization (NATO): Although traditionally focused on land and air security, NATO has increasingly expressed concern about the militarization of space and its potential impact on the security of its member states (NATO, 2023).
- Telecommunications companies, satellite manufacturers, space service providers: These companies rely heavily on geostationary orbit for their operations, including communications, Earth observation and navigation services (ESA, 2023).
- European Union (EU): EU Space Program established the interest and policies of the State members around the outer space based on research and cooperation. Also, about the ASATs, the European Union rejects all the policies around the development of these weapons as the Russian kinetic direct anti-satellite weapon.
- **Companies:** the private sector has an important role, because companies as SpaceX star to incurs in the space race and in the satellite market. Then, they could be an objective of the ASATs.

CASE STUDY

From the beginning of the space race to the present day, there has been a particular growth in the development of potential military technologies in parts of the Asian hemisphere, which has generated significant international concern about the possible emergence of a new space arms race. The United States, Russia, China, and India stand out as countries with superior technological advancement in this area, contributing to international insecurity due to their possession of weapons of intelligence, especially of the anti-satellite (ASAT) type.

Moreover, the anti-satellite is a new modality of weapon that are focused to destroy any kind of satellites. Its invention is closely related to that of satellites, since during the Cold War, while the United States and the Soviet Union were thinking about how to put more satellites into orbit, they were also thinking about how to destroy those of their adversaries. Currently, there are the modalities of anti-satellites weapons that are divided in two groups. The first one is the ASATs that use the kinetic energy: (i) the direct-ascent missiles, this ASATs are those that are launched from the ground and impact directly on satellites, destroying them; and (ii)

the co-orbital ASATs that are those that are put in the same orbit of the satellite and get close to them, after attack them by different methods including direct collision, fragmentation or using robotic weapons.



Image 5: Satellite missile

Source: Aerospace Security



The ASAT is a crucial component in this new dynamic, being a piece of metal with its own guidance system, installed on a ballistic missile that makes use of kinetic energy for the destruction of satellites. Although the record of this type of weaponry dates back to 2007 with the first destruction of a satellite by China, which was followed by the United States in 2008, India and Russia in 2019, the statement issued by the Pentagon on May 15, 2020, points to Russia for the test of an ASAT that was not aimed at a satellite, which is interpreted as evidence of Russia's intentions in space.

For more than a decade, Russia and China have proposed talks on a treaty that would prohibit the placement of any weapons in orbit or on celestial bodies, as well as the use of force against outer space objects. However, the United States has responded to this proposal from the Pentagon, classifying it as a double standard position arguing this is in line with its deployments of ground-based lasers and a series of satellite jamming systems to deny and degrade the capability of weapons that rely on satellite-derived information. However, it reiterated that this project did not significantly address terrestrial ASAT systems. The United

States also pledged not to conduct such a test in April 2022, delegitimizing this space race.

Currently, Russia is developing a ASAT program that created a kinetic direct missile. This weapon is in the testing phase, and was testing against the Kosmos-1408 in November 15th 2021. However, the Russian ASATs program is not new, it has their precedent in the creation of two launch platforms for a potential Vympel Anti-Satellite weapon system. After, the USSR dissolution the program was put in hold until 2009 the Russian Air Force resume the program. The next step was the developing of anti satellites weapons as the Sokol Eshelon that is a prototype of a laser system, these prototypes are being tested for RPO in the GEO and LEO. The successful technologies developed by the ongoing Russian programs may be used for non-aggressive applications, such as surveillance and inspection of foreign satellites. Most of the on-orbit RPO activities done to date match these missions (Valencia, 2021).

Image 6: Predicted Orbital Lifetimes of Chinese ASAT Test Debris



Source: CelesTrak/CSSI

The initial concern of the test against Kosmos 1408 is the impact at the debris level. Since, the debris derived from the impact of ASATs can generate an exponential increase in so-called space debris, which can endanger active satellites, including the International Space Station. The impact of Kosmos 1408 generated around 1500 pieces of trackable debris that were identified by the US Space Command. This event is just comparable with the test of the Chinese ASAT missile in 2007 that created around 2000 pieces of debris (Valencia, 2021).

In December 2022, the United Nations General Assembly (UNGA) adopted a resolution entitled "Destructive testing of direct-ascent anti-satellite missiles," which was initially introduced by the United States. Although 155 countries voted in favor of the resolution, China positioned itself against its adoption, while India chose to abstain.

This increase in military space activities could transform outer space into a new theater of war, increasing the risk of armed conflict, especially accidental or intentional incidents involving military satellites. The destruction of critical infrastructure through ASAT attacks could trigger wider armed conflicts, emerging as a new international security problem in a world where superpowers have been waging space warfare almost since the days of Sputnik.



PROCEDURE

For MUNUR 24, the Disarmament and International Security Committee (DISEC) will follow the Harvard procedure, which will be described in the Handbook. The voting system will largely remain as is, except the inclusion of a new type of vote in addition to the traditional one. This new vote, called a "symbolic vote," is intended for delegations representing National Space Agencies (NSAs). The symbolic vote has a more representative value and allows these delegations to express opinions or positions without having legal consequences or a direct impact on decisions.



DOCUMENTS

For the preparation of the committee's final document, a "draft resolution" will be used, which will retain the traditional structure. For detailed information on the structure and format of the draft resolution, please refer to the MUNUR 2024 handbook. This handbook provides clear guidelines for the understanding of the delegates.



QARMAS

- Does the outer space have to be the object of sovereignty claims as stated in the Bogotá Declaration?
- The current regulation of the International Law is enough to face the new challenges around the disarmament of the outer space?
- Is the outer space an appropriate place where countries should develop satellites and ASATs according to the International Law?
- How might the lack of specific regulation of GEO delimitation affect resource exploitation rights by countries located on the Equator?
- How could the International Space Station (ISS) serve as a model for international cooperation in the management and sustainable use of GEO?
- What is the relation between the ASATs and the geostationary orbit (GEO)?
- Is there a need for a jurisdiction that allows states to have ASAT technology?
- How ASATs might be a threat to the international security?
- What is the relation between the ASATs and principle of peaceful use in the outer space?
- Which must be the role of the private sector around the development of anti-satellite weapons?
- Should there be a specific legal framework for the consequences of the use of the ASATs?
- How Stats should manage the aspect of the space debris generated with the US of ASATs?

GLOSSARY

- Weapons of mass destruction (WMD): refers to weapons with a high destructive potential, such as nuclear, chemical or biological weapons.
- Space orbit: the curved path that an object in space (such as a star, planet, moon, asteroid, or spacecraft) takes around another object due to gravity (ESA, 2020).
- Geostationary orbit (GEO): Orbit around the Earth at about 35,786 kilometers above the equator. These are satellites that are ideally used for communications, navigation and weather monitoring.
- Satellite: natural object (moon) or spacecraft (artificial satellite) orbiting a larger astronomical body (Britannica, n.d.).
- Anti-satellite (ASAT) weapons: These are weapons designed to destroy or disable satellites in orbit. This poses a significant risk to space security and the stability of space operations.
- **Militarization of space:** The use of space and its resources for military purposes, including the deployment of weapons or activities that could lead to armed conflict in space.
- GSO collision: Risk of collision of satellites in geostationary orbit, especially due to ASAT operations or space debris accumulation.
- International Space Station (ISS): International Space Station operated by multiple countries. It is used for scientific research and as a base for space exploration.
- **Bogota Declaration:** Declaration made by equatorial countries in 1976 that called for special rights in the economic exploitation of the geostationary orbit (GSO).
- ITU (International Telecommunication Union): Specialized agency of the United Nations responsible for information and communication technology issues, including frequency management for satellites in the GSO.
- **Principle of peaceful use:** principle of International Law applicable to outer space that implies that no state might use space for military purposes and/or development of conventional weapons or weapons of mass destruction.

- **Principle of non-appropriation:** principle of International Law applicable to outer space that implies that no state might claim sovereignty in outer space. Then, the outer space does not belong to any state.
- International State Responsibility: situation in which a state finds itself when an international court declares that it has failed to comply with its international obligations under a treaty or jus cogens obligations.
- Equatorial Line: imaginary line around the middle of Earth. It is halfway between the North and South Poles, and divides Earth into the Northern and Southern Hemispheres (National Geographic, n.d.).
- Debris: <u>broken</u> or <u>torn pieces</u> of something <u>larger</u> (Cambridge Dictionary, n.d.)



Image 7: Anti-Satellite Weapons

Anti-Satellite Weapons

THREATENING THE SUSTAINABILITY OF SPACE ACTIVITIES

ANTI-SATELLITE (ASAT) WEAPONS are weapons that are designed to deceive, disrupt, deny, degrade, or destroy space systems.



Some ASAT weapons are designed to destroy satellites by hitting them with a high-speed missile, which can produce a massive amount of debris.

The destruction of a single 10-ton satellite can generate:

8-14 million objects 1mm-1cm in size

250-750,000 objects 1-10 cm in size

5-15.000 objects >10cm in size Source: Union of Concerned Scientists



The Impact of Destructive ASAT Weapons

There are two types of destructive ASAT tests:



Weapons that are placed into orbit and maneuver close to a target and attack it by various means, including direct collision, fragmentation, or using robotic arms.

Dabris

Direct-ascent (DA) Missiles that are launched from the Earth's surface or from the air to destroy a satellite target.

Types of Direct-ascent ASAT Weapons



Tilustration is of the canister containing the PL-19 missile; no image of Nudol missile is available.

Since 1959, there have been 80 ASAT tests carried out by four countries.



Destructive ASAT tests generate thousands of debris objects that spread across vast distances. Not all the tests depicted above generated debris. Tests with known debris are shown below.





Source: Visual Capitalist

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DISARMAMENT AND INTERNATIONAL SECURITY COMMISSION ACADEMIC GUIDE

