SPECPOL STUDY GUIDE #Letsbeeunited

RUŞEN BARAN ALATAŞ Board Member BILEL ELAREM BOARD MEMBER

ABDULKARIM DOUGHAN ACADEMIC ASSISTANT





Letter from the Secretariat

Dear Delegates,

It is with great honor and enthusiasm that I welcome you to ITUMUN 2025, where innovation, diplomacy, and collaboration come together to shape a brighter future. As Secretary-General, it is my privilege to witness the incredible passion and dedication each of you brings to this conference.

For this year's ITUMUN, we challenge you to think beyond borders and redefine the possibilities of multilateral cooperation. As a university rooted in engineering and technical excellence, we have embraced our unique identity by curating committees and agendas that emphasize industrial development, technological advancement, and critical technical issues. Whether debating economic policies, grappling with emerging technologies, or navigating historical turning points, you will be tasked with crafting solutions that not only address the challenges at hand but also inspire progress.

Model United Nations is more than just an academic exercise—it is a platform for you to develop critical thinking, refine your communication skills, and foster a spirit of teamwork. This conference is your opportunity to step into the shoes of world leaders, embracing the responsibility and influence that comes with these roles.

On behalf of the entire ITUMUN team, I wish you the best of luck in your preparations and during the conference itself. We are here to support you every step of the way, ensuring that your ITUMUN experience is both impactful and unforgettable. I look forward to seeing the energy and ideas you bring, and the lasting connections you will forge throughout this journey.

Warm regards,

Roya Alhariri Secretary-General ITUMUN 2025



Letters from the Committee Board

Dear Delegates,

It is our honor and privilege to welcome you to the Special Political and Decolonization Committee (SPECPOL) at this year's Model United Nations conference. As members of the Chairboard, we are excited to guide you through thought-provoking discussions, dynamic debates, and collaborative diplomacy.

This year, SPECPOL will address two pressing and multifaceted issues that hold significant implications for international peace and stability:

- 1. **The question of Western Sahara:** a long standing territorial disputes between Morocco and Polisario front
- 2. International Collaboration in Outer Space: Focusing on Governance, Preventing Militarization, and Guaranteeing Fair Access to Space for All Countries

As delegates of SPECPOL, you will play a pivotal role in crafting innovative and pragmatic solutions to these two critical issues. This committee encourages you to research extensively, engage critically, and bring a collaborative spirit to the debate. Whether you are exploring the political intricacies of Western Sahara or addressing the governance challenges of outer space, remember to approach these issues with sensitivity to their historical, political, and ethical dimensions.

We look forward to witnessing your dedication, ingenuity, and passion for diplomacy during the course of this conference. Please do not hesitate to reach out to us with any questions or concerns as you prepare for the committee via email: <u>arembilel18@gmail.com</u>, <u>rusenbaranalts@gmail.com</u> or Whatsapp: +90 552 731 17 82, +90 552 549 28 05 respectively.

Wishing you the very best of luck, Sincerely, Bilel Elarem, Ruşen Baran Alataş Chairboard of SPECPOL



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1. Introduction to the Committee

The Special Political and Decolonization Committee, known as SPECPOL, is the fourth committee of the United Nations General Assembly. Following the dissolution of the League of Nations in 1946, this committee was tasked with addressing the issue of the remaining Trust Territories. However as the territories gained their independence, the committee's workload subsided. As a result, the fourth committee merged with the Special Political Committee (previously created as the seventh of the main committees to deal with specific political situations). The Fourth Committee, revitalized in its role and significance within the General Assembly, now remains a vital organ within the UN. It attends to a broad range of issues regarding decolonization, consequences of nuclear radiation, the question of peacekeeping operations, assessment of special political missions, cooperation with the United Nations Relief and Works Agency, and the strive towards worldwide space cooperation.

2. Agenda Item I: The Question of Western Sahara

2.1. Introduction to the Agenda Item

The issue of Western Sahara is one of the most complicated and enduring cases in territory-related disputes of modern history. The region is mainly claimed by the Kingdom of Morocco and the Sahrawi Arab Democratic Republic (SADR) of the Polisario Front. Each side has its reason that supports its existence over the region, but none of them has been proven to be the rightful claimants. It is our main objective to address the issue on an acceptable path that would encourage both parties to have common ground to overcome the dispute.

To address the progression of the events that led to the current situation, we can take the initial steps by observing the region's decolonization. Today's Western Sahara (formerly a Spanish colony by the name of "The Spanish Sahara) did not gain independence until Spain retreated from the Sahara in 1975, long after the International Decolonization Acts. After Spain left the area Morocco annexed it, and yet this action was only recognized by the United States and Israel. On the other side of the equation the nationalist movements of Sahrawi -known as the Polisario Front- were chasing their sovereignty by fighting Spain since 1973; they continued to perform their acts against Morocco. On 27 February 1976, Polisario Front formed the SADR; it is recognized by 44 United Nations (UN) member states and an active member of the African Union (AU). Even though they are a founding member state, Morocco withdrew from the Organization of African Unity in 1984 due to its admission as a member state of the SADR.



2.2. Key Terms

Berm: A flat or raised strip of land, often created in order to separate or protect an area. In this agenda it refers to the Moroccan Berm in Western Sahara that separates the Polisario Front' area.

Ceasefire: An agreement, usually between two armies, to stop fighting and allow discussions about peace.

Colony: A country or area under full or partial political control of another country and occupied by settlers from that country.

MINURSO: Short for the United Nations Mission for the Referendum in Western Sahara, established by Security Council resolution 690 of 29 April 1991 in accordance with settlement proposals accepted on 30 August 1988 by Morocco and the Polisario Front.

Polisario Front: "the Frente Popular para la Liberación de Saguia el-Hamra y de Río de Oro" or "Frente POLISARIO" is the name of the nationalist movement by the Sahrawi people.

Referendum: A vote in which all the people in a country or an area are asked to give their opinion about or decide an important political or social question.

Withdrawal: The process or action of a military force moving out of an area.

2.3. Historical Background

The history of Western Sahara has various complex issues that are still not defined today. The region was initially colonized by Spain in 1884. Throughout Spanish sovereignty, the local people and nations such as Morocco and Mauritania still forced their way into the region.

2.3.1. Spanish Colonization and the Formation of Spanish Sahara (1884–1956)

In the year 1884 Spain declared their sovereignty formally over some parts of Western Sahara during the Berlin Conference, in the midst of the European scramble for Africa. Under Spanish authority the region was not initially called the Spanish Sahara, the region was mainly divided between Rio de Oro and Saguia el-Hamra, but with time the name became the Spanish Sahara. Spanish control expanded inland, relying on treaties with local tribal leaders to consolidate power. However, the colonial administration faced resistance from the indigenous Sahrawi tribes, which largely adhered to a nomadic lifestyle and Islamic traditions, resisting foreign dominion.



Colonial activities offered an easy solution for the growing lack of raw materials and resources due to an increasing population and the rapid development of new technologies in Europe. Spain was no different from the other European countries in that their invasion of Western Sahara was for economic exploitation and geopolitical interests. Key resources, such as phosphate deposits in Bou Craa and access to Atlantic fisheries, became central to Spain's colonial strategy. However, this exploitation was accompanied by minimal investment in the social or economic development of the Sahrawi people.

2.3.2. Moroccan Claims and Regional Tensions

In 1956, Morocco gained independence from French colonialism dating back to 1912. It claimed various territories it regarded as historically Moroccan, including Western Sahara, parts of Algeria, and Mauritania. King Mohammed V, who assumed leadership of Morocco after independence, perceived these claims as a restoration of the former territorial integrity of Morocco. However, these territorial ambitions triggered tensions with neighboring countries since they involved disputed areas already molded by colonial borders and would have been subject to the realities of local politics. Even before independence, anti-colonials had claims over Moroccan territory in Spanish Sahara.

2.3.3. Decolonization Pressures and Growing Sahrawi Resistance (1950s–1960s)

The post-World War II era saw a surge in anti-colonial movements across Africa, catalyzed by UN resolutions advocating for self-determination. The UN's 1960 Declaration on the Granting of Independence to Colonial Countries and Peoples put additional pressure on Spain to decolonize Western Sahara. Simultaneously, Sahrawi resistance began to grow. Initial uprisings were scattered, but the discovery of lucrative phosphate reserves in the 1960s intensified demands for self-rule. In response to both internal resistance and international pressure, Spain announced in 1967 the establishment of the General Assembly of the Saharan People, a limited and ultimately ineffective measure to appease local demands.

2.3.4. The Emergence of the Polisario Front and Spain's Withdrawal (1970–1975)

In 1973, the Polisario Front was founded as a revolutionary movement advocating for Sahrawi independence. The Polisario Front quickly gained support among the local population then formed armed resistance against Spanish colonial forces and positioned itself



as the legitimate representative of the Sahrawi people. This movement gained more power and after the withdrawal of Spain, it led to the formation of a new country.

Over time as Spain's colonial position weakened, external actors, including Morocco and Mauritania, intensified their territorial ambitions. In 1974, Spain announced its intention to hold a referendum on self-determination. However, Morocco and Mauritania, stood by their historical claims and opposed this initiative. Morocco appealed to the International Court of Justice (ICJ) for validation of its claims, but in 1975, the ICJ ruled that even though some historical ties exist for Morocco, these do not amount to sovereignty and affirmed the Sahrawi people's right to self-determination.

In the same year Morocco launched the Green March, mobilizing 350,000 civilians to cross into Western Sahara in order to assert its claims. This act, combined with mounting internal and international pressure, led Spain to form the Madrid Accords of 1975, wherein it agreed to withdraw from Western Sahara and divided administrative control between Morocco and Mauritania. Crucially, the Sahrawi people were excluded from these discussions.

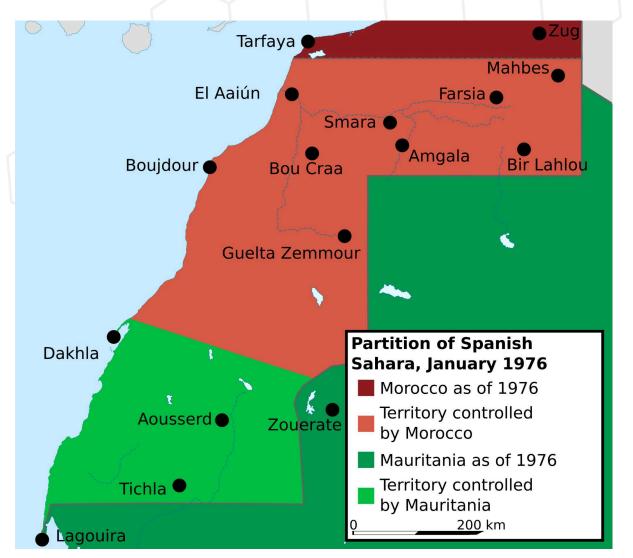


Image: The initial partition of the region after the withdrawal of Spain



2.3.5. Post-Spanish Withdrawal and the Establishment of SADR (1976)

Spain's withdrawal in 1976 left a complex situation in the region. Moroccan and Mauritanian forces claimed the territory instantly. In response, the Polisario Front proclaimed the Sahrawi Arab Democratic Republic (SADR) on February 27 1976, the day after Spain's withdrawal. Following Morocco and Mauritania's partition of Western Sahara, the Polisario Front faced severe military and logistical challenges, forcing its leadership to seek refuge and support elsewhere, Tindouf was the location that would be most suitable in this case. So Algeria emerged as a crucial ally to provide political, military, and humanitarian assistance. Algeria's backing was motivated by both ideological alignment with anti-colonial and self-determination movements and strategic interests in countering Morocco's regional ambitions. Establishing the SADR's government while in exile in Algeria allowed the Polisario Front to operate from a secure base, organize its armed resistance, and garner international recognition and support for the Sahrawi cause.+

The ensuing conflict saw significant escalation, including the construction of a defensive sand wall by Morocco in the 1980s to secure territory under its control. This fortification known as the Berm, the Moroccan Western Sahara Wall, or the Moroccan Wall became the second-largest wall in the world after the Great Wall of China symbolizing the enduring division and militarization of Western Sahara.



Image: The Berm that Morocco constructed



2.3.6. Progression of the Conflict after 1976

After the establishment of the SADR, the Western Sahara conflict entered a more intense phase marked by military confrontations, diplomatic maneuvers, and international interventions. The Polisario Front, supported by Algeria, engaged in guerrilla warfare against the Moroccan and Mauritanian forces. In 1979 Mauritania withdrew from the conflict, ceding its claims to the Polisario Front, which intensified the struggle between Moroccans and the Sahrawi movement. Morocco responded by consolidating its control over most of the territory and extending the Berm to encompass key areas. By the late 1980s, the conflict had reached a military stalemate, prompting both parties to seek a political resolution. The UN concluded their search for political resolution in 1991 through a ceasefire, later followed by the establishment of the United Nations Mission for the Referendum in Western Sahara (MINURSO). This mission aimed to organize a referendum allowing the Sahrawi people to choose between independence and integration with Morocco. However, disputes over voter eligibility and political disagreements have repeatedly delayed the referendum, leaving the status of the territory unresolved.

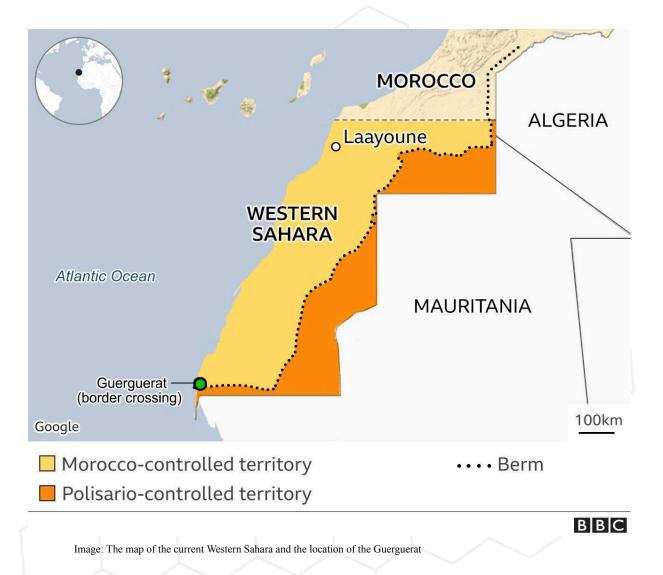
2.4. Current Situation / Focused Overview

The conflict in Western Sahara is one of the most complex territorial disputes in modern history. It is rooted with a colonial legacy and compounded by regional and international interests, the issue remains unresolved despite decades of negotiation, armed confrontation, and UN involvement. As of 2025, unfortunately the region is still known by its ongoing hostilities, diplomatic complexities, and significant human rights concerns.

2.4.1. Renewed Hostilities and Military Escalation

After decades of relative stability since the ceasefire brokered by the United Nations in 1991, the conflict between Morocco and the pro-independence Polisario Front reignited in November 2020. The resumption of armed clashes was triggered by a standoff at the Guerguerat border crossing, a critical trade route linking Morocco to Mauritania and sub-Saharan Africa. The Polisario Front declared the ceasefire void, citing Moroccan actions in the demilitarized zone as provocations. Since then, sporadic but persistent military confrontations have continued, underscoring the fragile nature of the conflict. Morocco has intensified its military presence in the region, fortifying the defensive sand wall, which separates Moroccan-controlled territory from areas claimed by the Polisario Front. The Polisario, backed by Algeria, has resumed its guerrilla-style attacks, primarily targeting Moroccan forces near the wall. The escalation has heightened tensions in the broader Maghreb region, particularly between Morocco and Algeria, whose relations are already strained.





2.4.2. Diplomatic Developments and United Nations Efforts

The diplomatic landscape surrounding Western Sahara has undergone significant shifts in recent years, with global powers taking divergent positions on the issue. The European Union's relationship with Morocco over Western Sahara has faced legal scrutiny. In October 2024, the European Court of Justice ruled that EU-Morocco trade agreements, particularly those involving agricultural and fisheries products, must have the consent of the Sahrawi people. This decision has added another layer of complexity to the region's economic and political dynamics.

The United Nations has long been involved in efforts to resolve the Western Sahara conflict, primarily through the MINURSO. In recent years, the UN has explored alternative solutions. In October 2024, UN Special Envoy Staffan de Mistura proposed a partition plan that would divide Western Sahara into an independent state in the south and Moroccan-controlled areas in the north. Both Morocco and the Polisario Front rejected the proposal, highlighting the deep-seated impasse in negotiations. Meanwhile, the UN Security



Council extended MINURSO's mandate until October 2025, emphasizing the need for renewed dialogue and compromise.

2.4.3. Regional and International Implications

The conflict in Western Sahara has significant implications for regional stability and international relations:

Algeria-Morocco Relations: The rivalry between Algeria and Morocco has escalated to unprecedented levels, with the Western Sahara issue serving as a flashpoint. Algeria has supported the Polisario Front since their establishment. Algeria severed diplomatic ties with Morocco in 2021, and military posturing on both sides has increased. The dispute has hindered regional cooperation and economic integration in the Maghreb.

Geopolitical Rivalries: The involvement of major powers, such as the United States, France, and the European Union, reflects the broader geopolitical stakes in Western Sahara. The region's resources, including phosphate deposits and fisheries, add to its strategic importance.

African Union Dynamics: The AU has recognized the SADR as a member state, aligning with the Polisario Front's position. This has created tensions between Morocco and the AU so although they are founding members Morocco withdrew from organization as an act of protest then rejoined in 2017 after decades of absence.

2.4.4. Human Rights and Humanitarian Issues

Human rights concerns in Western Sahara remain a pressing issue. The Moroccan government has been accused of suppressing dissent and silencing pro-independence activists. Human rights organizations have documented cases of harassment, arbitrary detention, and unfair trials targeting Sahrawi activists. The situation has drawn criticism from international watchdogs, which have called for greater transparency and accountability. The humanitarian situation is also dire. Tens of thousands of Sahrawi refugees continue to live in camps in Tindouf, Algeria, where they rely on international aid for survival. These camps are managed by the Polisario Front, and conditions remain challenging due to limited resources and protracted displacement. The lack of a political resolution has left many refugees in limbo, with little hope for a sustainable future.

In conclusion as of 2025, the Western Sahara conflict is still unresolved so the region remains as the only Non-Self-Governing Territory, with no clear pathway to a lasting solution. Renewed hostilities, shifting diplomatic alliances, and entrenched positions have deepened the impasse. While the international community continues to advocate for a peaceful resolution, the lack of consensus among key stakeholders has perpetuated the



region's instability. For the Sahrawi people, the dream of self-determination remains elusive, overshadowed by geopolitical rivalries and unresolved historical grievances.

2.5. Major Parties Involved

United States of America: In December 2020, the United States became the first major global power to recognize Moroccan sovereignty over Western Sahara. This recognition was part of a broader deal in which Morocco normalized diplomatic relations with Israel under the Abraham Accords. The move has emboldened Morocco's position but has also drawn criticism from pro-independence advocates and human rights organizations.

France: Colonial actions of France still have important effects over the region. In a notable development, French President Emmanuel Macron in late 2024 expressed support for Morocco's autonomy plan for Western Sahara. This plan proposes limited self-governance for the Sahrawi people under Moroccan sovereignty. France's endorsement has reinforced Morocco's diplomatic position but has alienated Algeria and the Polisario Front.

Algeria: Algeria remains the Polisario Front's most steadfast supporter, providing political, military, and humanitarian assistance. The rivalry between Algeria and Morocco has deepened, with the Western Sahara issue at its core. Algeria has condemned Morocco's diplomatic gains and has called for a referendum on self-determination for the Sahrawi people, in line with United Nations resolutions.

Mauritania: Mauritania maintains a policy of "positive neutrality" on the Western Sahara issue, balancing relations with both Morocco and the Polisario Front. Due to their involvements in the past, Mauritania now avoids direct engagement. It supports UN-led efforts for a peaceful resolution, emphasizing regional stability. Despite its neutrality, Mauritania remains sensitive to external actions that could impact its regional relationships, as demonstrated by its reaction to France's 2024 policy shift on Western Sahara.

2.6. Points to be Addressed

- How can the principle of self-determination for the Sahrawi people be reconciled with Morocco's claims of territorial integrity?
- Should a referendum on self-determination be organized? If so, what would its structure and criteria look like?
- How can the United Nations Mission for the Referendum in Western Sahara (MINURSO) be strengthened?



- What role do neighboring countries play in the conflict, and how can their interests be managed to foster a peaceful resolution?
- How does the conflict impact regional stability in North Africa?
- What role should regional organizations like the African Union play?
- How can international organizations provide more effective support to displaced populations while ensuring neutrality?
- How can disputes over the exploitation of natural resources in Western Sahara (e.g., phosphates, fisheries) be resolved in a way that benefits local populations?
- Should third-party mediators or additional stakeholders be involved to support negotiations?
- What would a fair and lasting peace agreement look like?
- What role should SPECPOL play in proposing a framework for resolving the conflict?

2.7. Possible Solutions

Revive the idea of a referendum: To achieve the original aim of MINURSO, convince both sides of the conflict to participate in a possible referendum.

Regional Dialogue Platform: Establish a regional platform, involving Algeria and Mauritania, to address broader security and economic concerns linked to the conflict and reduce external interference.

Implement a partition plan: Come up with different ideas to make sure they can accept to make some compromises so the area can be divided between both sides.

Encourage establishing a joint government: Provide international guarantees to overcome the necessity of security so both nations can cooperate in the region for their mutual desire and receive the beneficial aspects of the Western Sahara together.

Confidence-Building Measures: Suggest culturally sensitive initiatives to foster trust, such as joint development projects, cross-border trade agreements, or cultural exchanges between Moroccan and Sahrawi communities.

Sustainable Refugee Solutions: Develop long-term plans for improving the living conditions of Sahrawi refugees in Tindouf camps and exploring voluntary repatriation options if feasible.



3. Agenda Item II: International Cooperation in Outer Space

3.1. Introduction to the Agenda Item

The exploration and utilization of outer space represent one of humanity's greatest scientific and technological achievements. However, the rapid expansion of space activities—driven by state and private actors—has brought forward critical challenges that demand international cooperation. As outer space becomes increasingly accessible, questions of governance, militarization, and equitable access to its benefits have taken center stage in global discourse.

Effective governance in space is vital to ensuring that activities are carried out peacefully, sustainably, and for the benefit of all. The existing legal frameworks, such as the **Outer Space Treaty (1967)**, provide a foundation, but advancements in technology and the involvement of private companies necessitate updates to these frameworks to address issues like resource exploitation, space debris, and jurisdiction over commercial entities.

The militarization of space poses another urgent concern. While treaties like the Outer Space Treaty prohibit the placement of weapons of mass destruction in space, they do not fully address the deployment of other forms of military technology, such as anti-satellite weapons. The growing geopolitical competition risks turning space into a contested and weaponized domain, threatening global security.

Equally pressing is the need to ensure fair access to space for all countries, especially those from the developing world. The dominance of a few nations in space exploration raises questions about equitable resource sharing, access to satellite technology, and participation in decision-making processes. Without proactive measures, the benefits of space exploration may become concentrated in the hands of a few, exacerbating existing global inequalities.

In summary, this agenda item seeks to address these interconnected challenges by fostering international collaboration to:

- Strengthen governance mechanisms for outer space.
- Prevent the militarization and weaponization of space.
- Guarantee equitable access to space technologies, resources, and opportunities

3.2. Key Terms

The Space Race: a 20th-century competition between the Cold War rivals, the United States and the Soviet Union, to achieve superior spaceflight capability.

Orbit: An orbit is a regular, repeating path that one object in space takes around another one. An object in an orbit is called a satellite.

Celestial Body: In astronomy, the term celestial body is used for all the physical bodies and objects out there in space including stars, planets, galaxies, gas clouds, and so on.

Space Debris: Broken pieces of rockets, satellites, and spacecraft stuck in Earth's orbit causing a danger to other objects entering or orbiting Earth's atmosphere.



Sovereignty: Is the ability of a state, country, or people to rule over itself or others. **WMD:** WMD is a weapon of mass destruction either biological, chemical, radiological, or nuclear weapon that has the ability to significantly harm many people.

Kinetic Energy Weapon: A kinetic energy weapon is a projectile weapon based solely on a projectile's kinetic energy to inflict damage to a target, instead of using any explosive, incendiary/thermal, chemical or radiological payload

3.3. Historical Background

The pursuit of space exploration has been a defining feature of modern history, catalyzed by the Cold War rivalry between the United States and the Soviet Union. The **Space Race** of the mid-20th century not only showcased technological achievements but also underscored the need for international norms to prevent the militarization and misuse of outer space. This period laid the foundation for discussions on space governance and collaboration.



• Origins of the Space Race (1950s)

The Space Race began in earnest after the launch of **Sputnik 1** by the Soviet Union in **1957**, the world's first artificial satellite. This achievement marked a turning point in global perceptions of technological and military power. In response, the United States founded **NASA (National Aeronautics and Space Administration)** in **1958** and prioritized space exploration as a matter of national security.

The race to space mirrored Cold War tensions, with both nations vying for ideological superiority. While the U.S. emphasized freedom and innovation, the USSR sought to showcase the strength of its state-controlled system.

• Key Milestones in the Space Race

- Yuri Gagarin (1961): The Soviet Union achieved another victory with Yuri Gagarin, who became the first human to orbit Earth aboard the spacecraft Vostok 1.
- Apollo 11 Moon Landing (1969): The United States responded with the successful moon landing in 1969, as astronauts Neil Armstrong and Buzz Aldrin became the first humans to set foot on the Moon. This marked a decisive moment in the Space Race, demonstrating U.S. technological dominance.



• Impact of the Space Race on Space Governance

The intense competition underscored the risks of militarizing space. The launch of satellites capable of reconnaissance and communication introduced fears of space-based weapons.

These concerns led to the drafting of the **Outer Space Treaty (1967)**, the first major milestone in space governance and a landmark agreement that remains the cornerstone of international space law. Signed and ratified by over 100 countries, the treaty established key principles, including:

- \rightarrow The use of outer space for peaceful purposes only.
- \rightarrow A prohibition on national claims of sovereignty over celestial bodies.
- → The ban on placing weapons of mass destruction in orbit or on celestial bodies.
- → The principle that outer space shall be freely explored and used for the benefit of all humankind.

• Legacy of the Space Race

Although it was driven by rivalry, the Space Race paved the way for international collaboration in space exploration. Technologies developed during this era laid the foundation for modern satellite systems, global communications, and future space missions.

The end of the Space Race transitioned into an era of détente, with initiatives such as the **Apollo-Soyuz Test Project (1975)**, where American and Soviet spacecraft docked together in orbit, symbolizing cooperation despite ongoing geopolitical tensions.

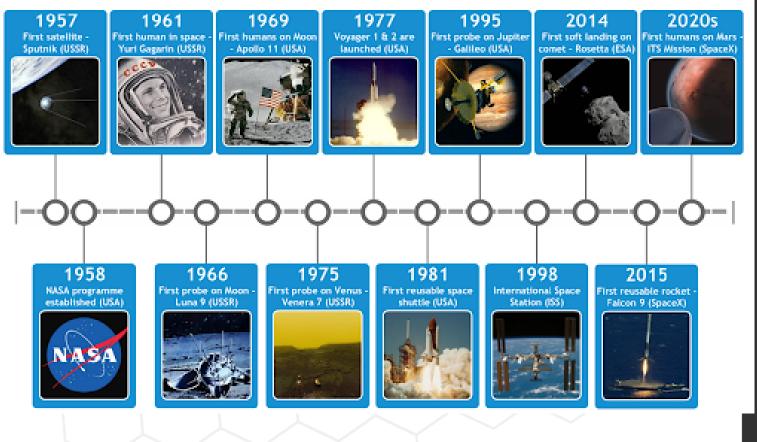
• Relevance to Current Space Governance

The legacy of the Space Race still shapes global space politics. Many of the major spacefaring nations, such as the United States, Russia, and China, continue to approach space exploration with both competitive and cooperative strategies.

The framework for space governance that emerged during the Space Race, while foundational, has not kept pace with the challenges of the modern era, including private sector involvement, resource exploitation, and militarization.



Here are some of the key events in the space race:



Space Exploration - Timeline Overview

In the following decades after The Space Race, several additional treaties were introduced to address specific aspects of space activities. These included the <u>Rescue Agreement (1968)</u>, which set protocols for assisting astronauts in distress; the <u>Liability Convention (1972)</u>, which clarified nations' responsibilities for damages caused by their space objects; and the <u>Registration Convention (1976)</u>, which required states to register their space objects for transparency. The <u>Moon Agreement (1979)</u> sought to regulate the use of lunar resources but failed to gain widespread support. These treaties expanded the legal framework for space governance while highlighting gaps that persist to this day.

The Cold War period also brought concerns about the militarization of space. The **Anti-Ballistic Missile (ABM) Treaty (1972)** indirectly limited the weaponization of space by restricting missile defense systems, but the development of anti-satellite weapons (ASATs) during the late 20th century demonstrated the ongoing risks of militarization.

Amid these tensions, the establishment of collaborative projects like the <u>International Space</u> <u>Station (ISS)</u> in the 1990s marked a turning point in global cooperation. The ISS, a joint



venture involving the United States, Russia, Europe, Japan, and Canada, became a symbol of peaceful collaboration and shared scientific progress in space.

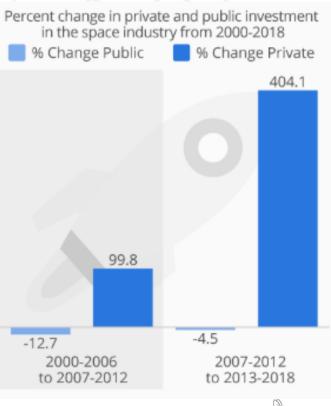
More recently, the emergence of private space companies and new spacefaring nations has added complexity to the landscape of space governance. The commercialization of outer space marks a significant shift in the dynamics of space exploration and utilization. What began as a domain dominated by government programs has transformed into a rapidly expanding industry involving private corporations, entrepreneurs, and startups. This transition has brought remarkable innovation but has also introduced new challenges for governance, equity, and sustainability.

• Early Beginnings of Commercialization (1970s–1990s)

The early stages of space commercialization were defined by the emergence of private satellite companies and commercial launch services. During this time, companies such as **Intelsat**, founded in 1964, became pioneers in global satellite communication. These early ventures operated under tight national regulations to ensure compliance with international treaties like the **Outer Space Treaty**. Another significant development was Europe's **Arianespace** program, which in 1979 became the world's first commercial launch service provider. By offering its launch services to private and government clients alike, Arianespace paved the way for a competitive commercial space industry. These initial efforts demonstrated the potential of the private sector to contribute to space activities, even though government programs still dominated the field.

• The New Space Era (2000s–Present)

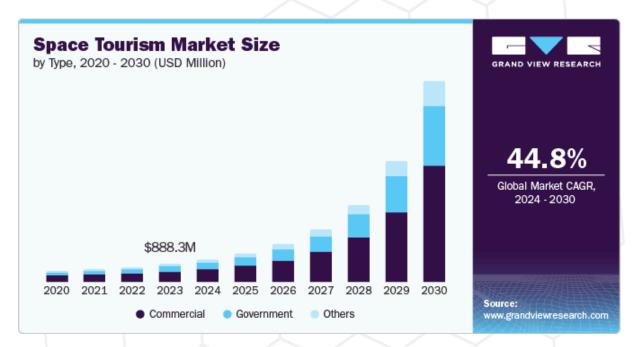
The turn of the 21st century ushered in the "New Space Era," a period marked by rapid innovation, private investment, and increased competition. Companies like SpaceX, Blue Origin, and Virgin Galactic transformed the industry by introducing cost-saving technologies such as reusable rockets. SpaceX's Falcon 9 rocket, for example, revolutionized space transportation by significantly lowering the cost of orbital launches. At the same time, Blue Origin, founded by Jeff Bezos, sought to make space tourism a reality with its New Shepard spacecraft, offering suborbital flights for private customers. Alongside these advances, companies like Planetary Resources began exploring asteroid mining as a future source of rare metals and other resources. While these





ventures remain in their infancy, they have captured the imagination of both investors and governments, highlighting the shift from government-led exploration to a thriving private industry.

A look at the space tourism market size and its future value predictions would highlight the rapid growth of the private sector:



Challenges Introduced by Commercialization

Despite its many benefits, commercialization has introduced complex challenges to the governance and sustainability of outer space. One major issue is the lack of comprehensive regulation for private-sector activities. Treaties like the **Outer Space Treaty** were written during a time when space exploration was dominated by state actors and are therefore ill-equipped to address the activities of modern private enterprises. For instance, national laws like the **U.S. Commercial Space Launch Competitiveness Act (2015)** allow private companies to mine resources from celestial bodies, raising questions about how this aligns with the treaty's principles of shared access and non-appropriation. Additionally, the rapid proliferation of satellites, particularly from mega constellation projects like **SpaceX's Starlink**, has led to concerns about orbital overcrowding and the generation of space debris. These developments threaten the long-term sustainability of space exploration and call for updated international regulations to manage commercial activity responsibly.

In an attempt to ensure and sensitize about space sustainability, a report was published by the United Nations Office for Outer Space Affairs (UNOOSA) with collaboration with The European Space Agency which indicated the number of satellites being launched as seen in the graph below:





To sum it all, this historical trajectory highlights both the progress and the persistent challenges in achieving effective governance, preventing militarization, and ensuring fair access to outer space. As humanity continues to expand its presence beyond Earth, the need for stronger international frameworks and deeper cooperation has become more urgent than ever.

3.4. Current Situation / Focused Overview3.4.1 Governance challenges

The governance of outer space is becoming increasingly complex due to rapid advancements in technology and the growing involvement of both state and private actors. While the **Outer Space Treaty (1967)** remains the foundational framework, it was drafted during an era



dominated by government-led space exploration and does not fully account for modern developments. Below are key governance challenges, illustrated with examples:

• Resource Ownership and Utilization

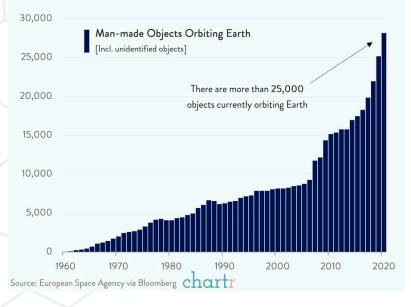
The ambiguity surrounding the ownership and utilization of resources in outer space is one of the most pressing governance challenges. The **Outer Space Treaty (1967)** prohibits national sovereignty over celestial bodies and declares space as the "province of all mankind." However, it does not provide clarity on whether private entities can extract resources or under what legal framework this should occur.

For instance, In 2015, the United States passed the Commercial Space Launch Competitiveness Act, allowing private companies to mine and use resources from celestial bodies such as asteroids and the Moon. This legislation was followed by a similar law in Luxembourg in 2017, which aimed to attract private investors to its burgeoning space mining sector. These national laws have sparked significant controversy and debate at the international level, as they potentially conflict with the treaty's principles. Critics argue that without a unified global agreement, these actions could lead to a "space rush," where technologically advanced nations exploit resources at the expense of others, undermining the idea of space as a shared heritage.

• Space Debris Management

The growing amount of space debris-remnants of defunct satellites. rocket stages, and collision fragments—is one of the most significant threats to sustainable space exploration. With over 27,000 pieces of debris tracked by the U.S. Department of Defense, the risks to operational satellites and human missions are increasing. While the UN Space **Debris Mitigation Guidelines** (2007)encourage states to minimize the generation of debris, these guidelines are non-binding, resulting in inconsistent implementation across nations.

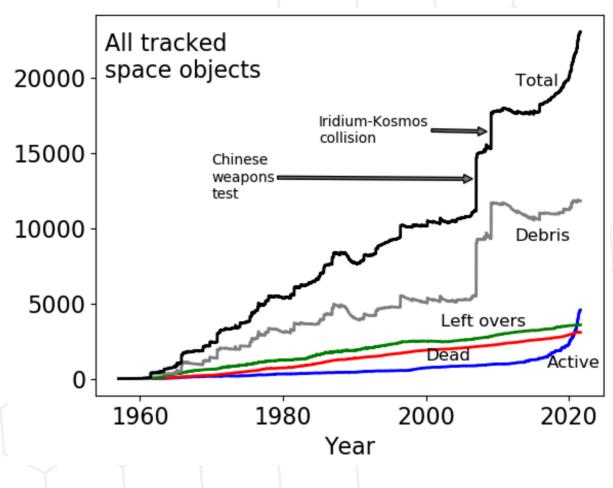
Space Junk: A Growing Problem



As an example, the **2021 Russian ASAT test** is a clear demonstration of the dangers posed by space debris. In this incident, Russia launched a missile to destroy one of its own defunct satellites, creating over **1,500 pieces of trackable debris** and thousands of smaller fragments. The debris cloud endangered the safety of the **International Space Station (ISS)**, forcing



astronauts to take shelter. This event drew widespread international criticism, highlighting the urgent need for binding agreements to prevent such actions. Despite this, no international treaty currently exists to enforce accountability for debris-causing activities, leaving a significant gap in space governance.



Jurisdiction and Accountability

Private companies like **SpaceX**, **Blue Origin**, and **OneWeb** are playing an increasingly prominent role in space exploration and satellite deployment, but the regulatory framework to govern their activities remains unclear. The **Outer Space Treaty** places responsibility on nations to supervise their private actors, but enforcement mechanisms are weak, and there is no uniform standard for accountability.

For example, SpaceX's **Starlink megaconstellation** project, which plans to launch over **40,000 satellites**, has raised concerns about orbital congestion and radio frequency interference. In 2022, Starlink satellites narrowly avoided collisions with the Chinese **Tiangong space station**, prompting China to file a complaint with the United Nations. Incidents like this demonstrate the challenges of managing private-sector activities in the absence of a robust international regulatory framework. Without clear



jurisdictional rules, disputes over orbital slots and collision risks are likely to escalate, threatening the sustainability of space operations.

• Fragmentation of Governance

The lack of a unified global governance body for space activities leads to fragmented approaches among nations. While organizations like the **UN Committee on the Peaceful Uses of Outer Space (COPUOS)** provide forums for discussion, they lack the authority to enforce regulations or resolve disputes.

The **Artemis Accords**, a U.S.-led initiative signed by over 20 countries, aim to establish principles for lunar exploration and resource utilization. However, the accords have been criticized for bypassing multilateral frameworks like COPUOS and favoring the interests of spacefaring nations. For example, countries like Russia and China have refused to join, viewing the accords as a unilateral attempt to set rules for lunar activities. This fragmentation undermines global cooperation and highlights the need for a more inclusive and universally accepted governance framework.

3.4.2 Militarization risks and developments.

The militarization of outer space has become an increasing concern as nations develop and deploy technologies with both civilian and military applications. While the **Outer Space Treaty (1967)** prohibits the placement of weapons of mass destruction (WMDs) in orbit or on celestial bodies, it does not comprehensively address other types of weapons or military activities. Below are the primary risks, supported by real-world examples:

• Development and Testing of Anti-Satellite (ASAT) Weapons

The development and testing of ASAT weapons remain a key concern. Nations like the United States, China, Russia, and India have demonstrated capabilities to destroy satellites, raising the risk of escalation and increasing space debris.

In 2007, China conducted an ASAT test, destroying its defunct weather satellite, **Fengyun-1C**, with a missile. The explosion created over **3.000 trackable debris** fragments, many of which remain in orbit, posing risks to operational satellites. This test marked a turning point in the weaponization of space, drawing condemnation from the international community.



Similarly, India's **Mission Shakti** in **2019** destroyed a low Earth orbit satellite, generating concerns despite assurances that debris would burn up in Earth's atmosphere. These events



underscore the growing risk of geopolitical rivalries extending into space, highlighting the absence of binding treaties to regulate such activities.

• Establishment of Military Space Commands

The creation of military divisions dedicated to space operations reflects the increasing militarization of this domain. Nations view space as critical to their national security, with satellites providing strategic advantages in communication, surveillance, and navigation.

The establishment of the U.S. Space Force in 2019 marked the formal recognition of space as a warfighting domain. Its mandate includes protecting American satellites and ensuring dominance in space. China's Strategic Support Force, established in 2015, integrates space, cyber, and electronic warfare capabilities, reflecting its holistic approach to modern warfare. Similarly, France's Space Command, launched in 2019, aims to safeguard French space assets. The creation of these military divisions illustrates how nations are positioning themselves to compete in space, raising concerns about escalating tensions and the potential for conflict.



• Dual-Use Technologies

Many space technologies, such as navigation systems and observation satellites, have both civilian and military applications, making it difficult to distinguish between peaceful and militarized activities.

China's **Beidou Navigation Satellite System**, completed in **2020**, provides critical positioning data for both civilian applications, like navigation and disaster management, and military operations, such as missile guidance. Similarly, Russia's **GLONASS system** is integral to its defense strategy, supporting operations like troop movements and precision targeting. These technologies highlight the blurred line between civilian and military use, creating challenges for regulating space activities and ensuring transparency.

• Weaponization of Space

Though WMDs are banned in space, there is no explicit prohibition on deploying conventional weapons or conducting other military operations. This loophole has led to growing concerns about an arms race in space.

The <u>Prevention of an Arms Race in Outer Space (PAROS)</u> initiative has been a topic of debate at the United Nations since the 1980s. While countries like China and Russia support legally binding measures to prevent weaponization, the United States has resisted, arguing that existing treaties like the **Outer Space Treaty** are sufficient. This division has stalled



negotiations, leaving space vulnerable to militarization. The failure to achieve a binding agreement under PAROS underscores the urgent need for renewed international dialogue to address these challenges.

The development of **kinetic kill vehicles** and **directed-energy weapons** also demonstrates the potential for future space-based warfare.

In summary, the militarization of space is no longer a theoretical concern. Events like ASAT tests, the creation of military space forces, and the development of dual-use technologies demonstrate the growing risks. Without robust international agreements to address these issues, the peaceful use of space may be jeopardized.

3.4.3 Inequities in access to space technologies and resources

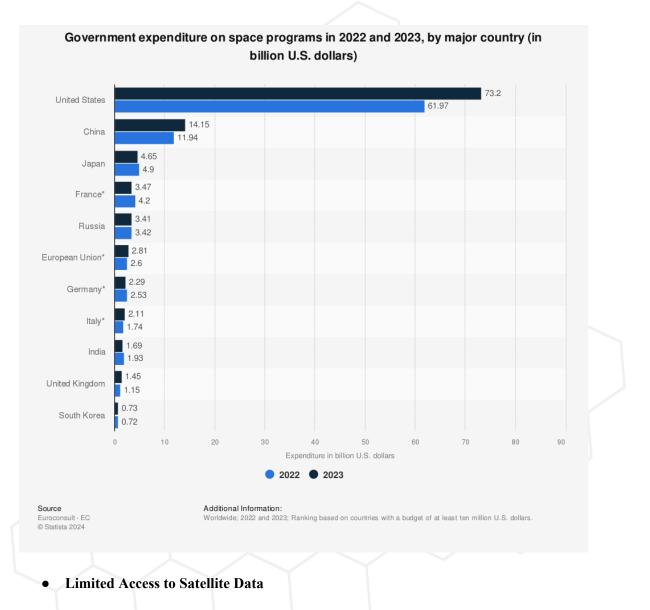
The exploration and utilization of outer space are increasingly shaping the global economy, communication systems, and technological development. However, significant disparities exist in how countries access and benefit from space activities. These inequities can be attributed to differences in financial resources, technological capabilities, and political influence. Below are the key dimensions of inequity, illustrated with real-world examples:

• High Costs as a Barrier

The financial burden of developing and launching space technologies remains a primary obstacle for many countries. While a handful of wealthy nations dominate space exploration, smaller or developing nations often struggle to afford even basic satellite launches.

Space programs like NASA (USA) and CNSA (China) spend billions of dollars annually on cutting-edge missions, while most developing countries can only afford to launch small satellites or participate in joint initiatives. For instance, the **Mars Perseverance Rover mission (2020)** cost NASA approximately **\$2.7 billion**, a figure far beyond the reach of many nations. Meanwhile, Ghana's **GhanaSat-1**, launched in **2017**, exemplifies the financial barriers faced by developing nations. The satellite, developed by Ghanaian students with support from the Japanese Space Agency (JAXA), cost approximately **\$500,000**. While this represents a major achievement for Ghana, the project's reliance on foreign funding highlights the challenges many countries face in independently accessing space. For comparison, the cost of a SpaceX Falcon 9 launch exceeds **\$60 million**, underscoring the disparity in resources available to different nations.





Satellite data is essential for applications such as disaster management, agriculture, and urban planning. However, access to such data is often limited for developing nations, as many advanced imaging satellites are owned by private companies or spacefaring nations.

During the **2020 locust plague** that devastated parts of East Africa, affected countries like Kenya and Ethiopia relied heavily on satellite imagery provided by the European Space Agency (ESA) and NASA to track and predict the movement of swarms. The lack of domestically operated satellites in the region meant delays in accessing high-resolution data, exacerbating the crisis. This example highlights the need for greater global investment in capacity-building for developing nations to reduce reliance on external actors.

• Exclusion from Decision-Making

Global space governance is often dominated by spacefaring nations, leaving smaller countries with limited influence over policies that affect them. This exclusion perpetuates inequalities in access to resources and technologies.

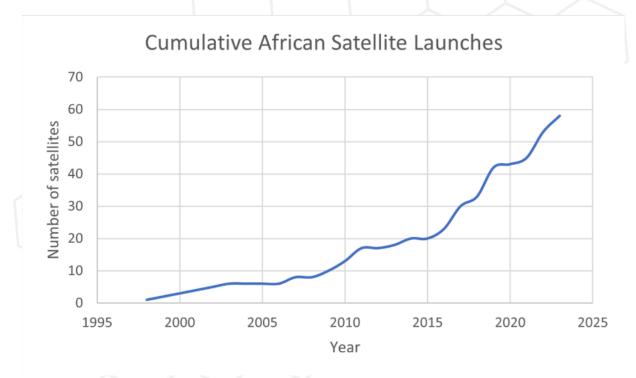


The **Artemis Accords**, a U.S.-led framework for lunar exploration, has been criticized for favoring the interests of major spacefaring nations. Non-signatory countries, many of which are developing nations, have expressed concerns that the accords prioritize resource extraction and commercialization over inclusivity and equitable access. For instance, the accords' emphasis on using lunar resources has raised fears of monopolization, further marginalizing smaller nations that lack the means to participate in such initiatives.

• Regional Efforts to Bridge the Gap

In response to these inequities, many regions have initiated collaborative programs to pool resources and expertise.

The African Space Policy and Strategy, for instance, aims to build regional capacity for space exploration. Similarly, the Asia-Pacific Space Cooperation Organization (APSCO) promotes joint missions among its member states.



In the graph above, even though a significant increase is seen in the number of african satellite launches, a total of roughly 60 satellites is of no importance in front of the numbers seen by the big 6 governments and the financially capable private companies.

To summarize, the disparities in access to space technologies and resources reflect broader global inequalities. While wealthier nations and private companies continue to dominate the field, collaborative efforts like regional partnerships and open-data initiatives offer hope for a more inclusive future. However, significant work remains to ensure equitable access and participation in the benefits of space exploration.



3.5. Major Parties Involved

China:

Through the **China National Space Administration (CNSA)** established in 1993, China has rapidly proven itself to be a space juggernaut. Major achievements include the **Tiangong space station**, the **Chang'e lunar exploration program**, and the **Tianwen-1 mission**, which successfully deployed a rover on Mars in 2021. However, it often operates independently due to tense relations with the US. On the political spectrum, Chinese representatives play a pivotal role in fostering international partnerships. China intends to push for legally binding instruments to prevent an arms race in outer space while criticizing other countries for refusing to negotiate such terms, spearheading along with China the disapproval of the Artemis Accords. However, China has also faced criticism over its role in the alarming growth of space debris around Earth's orbit. In 2023 alone, China eclipsed its previous record of 186 with an outstanding 222 launch attempts. To make matters worse, the explosion of a Chinese rocket stage, spread thousands of debris fragments across Earth's low orbit.

India:

Led by the Indian Space Research Organisation (ISRO), India's space program focuses on cost-effective innovation and accessible technology. With its significantly lower budget relative to their counterparts, the ISRO has achieved impressive milestones, including the Chandrayaan Lunar Mission, the Mangalyaan Mars Orbiter Mission, and the Gaganyaan human spaceflight project. It has emerged as a competitive player in commercial space launches and international collaborations with France, the United States, and the UAE. Giving president to similarly lower budgeted space programs such as Saudi Arabia, United Arab Emirates, and Rwanda space programs. Following India's increasing partnership with the United States (namely through the Artemis Accords) the growing tension between India and China raises further security concerns. Reflecting their geopolitical rivalry -which spans disputed borders, the Indian Ocean, and technological competition- the growing tension between India and China is a main source of worry over the militarization and weaponization of space.

The United States:

Spearheaded by NASA, the United States space program is a global leader in space exploration and innovation. In the background of its infamous space race with Russia, the United States has achieved historic milestones, such as the Apollo Moon landings and Project Gemini. The US still pioneers space exploration through the Mars Rover Mission, the James Webb Space Telescope, collaboration with the private sector, and the Artemis Program. In a daring effort to get back to the moon and an even bigger ambition of reaching Mars, the US has begun its project with the Artemis Accords. With almost a quarter of Earth's nations signing on to the non-legally binding accords, the United States believes that with the terms presented, it will "not only take our astronauts to space, but we launch our values of peace,



respect for the rule of law, of open science, of sustainable activities". The unprecedented scale of international collaboration via the Artemis Accords isn't free of criticism, primarily from China and Russia.

Russia:

Managed by **Roscosmos**, Russia's space program traces back to the Soviet era, marked by iconic achievements such as launching **Sputnik** (the first artificial satellite) and sending the first human, Yuri Gagarin, to space in 1961. In recent decades, Russia has played a crucial role in maintaining the **International Space Station (ISS)**, and it remains a key player in global space governance and exploration. However, challenges such as funding limitations and shifting geopolitical dynamics have affected its prominence on the global stage. Even though Russian representatives in the UN have expressed "aims to ensure continuous consideration of all aspects of preventing an arms race, doing so inclusively, comprehensively and in line with established practice", and with the date of deorbiting of the ISS approaching, it isn't likely that Roscosmos will continue collaboration with NASA. Russia has expressed its intention to develop its replacement for the ISS; including strengthening ties with the Chinese space program by signing an agreement to build a lunar base (the ILRS) at the lunar south pole, backed by countries such as Egypt, Pakistan, and South Africa; as well as refusing to join the US-led Artemis accords with the former head of Roscosmos claiming the Artemis Accords were "illegal" and not in compliance with international law.

The European Space Agency:

The European Space Agency (ESA), founded in 1975, unites 22 member countries to lead Europe's space efforts. Members including France, the United Kingdom, Italy, Germany, and Luxembourg have all shown unprecedented collaboration while still achieving great missions through their own space programs. The ESA focuses on scientific exploration, environmental monitoring, and satellite technology, and has crossed milestones in missions that include the Rosetta mission, and the Ariane launch vehicles. ESA works closely with NASA, JAXA, and other agencies to promote international cooperation and sustainable space development. Notably in developing national guidelines to reduce debris during launch and on-orbit operations; collaborating with NASA on the Artemis Program; as well as raising awareness through workshops to address, analyze, and improve international space collaboration, sustainability, and technology.

The Private Sector:

As the space domain grows more accessible via new technologies and less costly access to Earth's orbit, small and developing countries and private actors are transforming this ecosystem. Private companies such as **SpaceX**, **Blue Origin**, and **Rocket Lab** have transformed the space industry by lowering costs and increasing accessibility. Leading the way with reusable rockets and commercial space missions, including crewed flights to the **International Space Station** (ISS) and concentrating on space tourism and lunar exploration.



Through collaboration with the public sector, private companies have made crucial technological advances and have expanded human presence in space through innovation and commercialization. The private sector however has also had its fair share of criticisms. Questions about its purpose, goals, and sustainability were raised. The most pressing however is the environmental toll on the planet with the rapid increase of space debris caused by the thousands of satellites launched yearly. Private actors are called to protect the environment, create a sustainable long-term process for space exploration, and maintain international relations.

3.6. Previous Attempts to Solve the Issue and Analysis

Treaties, agreements, and cooperative frameworks have all been used in the decades-long endeavour to address governance, militarisation, and fair access in space. Here are some significant initiatives, arranged by area of focus, along with a review of their positive and negative aspects.

3.6.1 Governance frameworks and treaties

1. Outer Space Treaty (1967)

- **Objective**: Establish basic principles for the peaceful use of outer space.
- Key Provisions:
 - Space is the "province of all mankind" and must be used for peaceful purposes.
 - Prohibition on the placement of weapons of mass destruction in orbit or on celestial bodies.
 - States are responsible for their national activities in space, including those of private actors.
- **Impact**: The treaty laid the foundation for international space law and has been widely ratified, including by major spacefaring nations.
- Shortcomings:
 - Fails to address modern issues such as resource mining, private sector activities, and orbital overcrowding.
 - Lacks enforcement mechanisms.

2. Moon Agreement (1979)

- **Objective**: Extend governance principles to celestial bodies, emphasizing equitable resource sharing.
- Key Provisions:
 - Declares the Moon and other celestial bodies the "common heritage of mankind."
 - Requires an international regime to govern resource exploitation.
- **Impact**: The agreement has only been ratified by a small number of countries, with major spacefaring nations like the U.S., Russia, and China refusing to sign.



• Shortcomings:

• Seen as restrictive by nations with advanced space programs.

3.6.2 Demilitarization efforts and guidelines.

1. <u>Anti-Ballistic Missile (ABM) Treaty (1972)</u>

- **Objective**: Limit the development and deployment of missile defense systems, indirectly preventing the militarization of space.
- **Impact**: Helped reduce tensions during the Cold War but was abandoned in 2002 by the U.S.

2. UN Resolutions and Initiatives

- **Example**: UN General Assembly Resolutions like <u>A/RES/55/32 (2000)</u>, promoting the Prevention of an Arms Race in Outer Space (PAROS).
- **Impact**: These resolutions are non-binding, and while they foster dialogue, they lack the authority to enforce compliance.

3.6.3 Capacity-building and inclusivity efforts.

1. International Telecommunication Union (ITU) Spectrum Allocation

- **Objective**: Manage the use of radio frequencies and orbital slots to prevent monopolization.
- **Impact**: The ITU ensures fair access to satellite communication frequencies and mitigates conflicts over orbital resources.
- **Shortcomings**: Wealthier nations and private companies often dominate, given their ability to launch satellites rapidly and secure prime slots.

2. UNOOSA Capacity-Building Initiatives

- **Objective**: Support developing nations through training programs, technical assistance, and partnerships.
- Impact: UNOOSA initiatives, like the KiboCUBE program, have enabled countries like Kenya and Guatemala to deploy small satellites in collaboration with JAXA.

3.6.4 Collaborative Efforts.

1. International Space Station (ISS)

- **Objective**: Foster international collaboration in scientific research and exploration.
- **Impact**: The ISS is a symbol of peaceful cooperation, involving contributions from the U.S., Russia, Europe, Japan, and Canada.
- **Shortcomings**: Political tensions, such as those between the U.S. and Russia, threaten the continuity of such projects.

2. Artemis Accords (2020)

• **Objective**: Establish guidelines for lunar exploration and resource utilization.



- **Impact**: Signed by over 20 countries, the accords emphasize transparency, peaceful purposes, and interoperability.
- Shortcomings:
 - Criticized for being U.S.-centric and bypassing broader international frameworks like COPUOS.

Efforts to address governance, militarization, and equitable access in outer space have achieved varying degrees of success. While foundational treaties like the Outer Space Treaty set important precedents, they require modernization to remain relevant. Collaborative initiatives like the ISS and UNOOSA programs show the value of international cooperation, but political and economic disparities continue to hinder equitable access and effective governance.

3.7. Points to be Addressed

- How can the existing treaties be updated to address modern challenges like private sector activities, resource mining, and orbital overcrowding?
- Should there be an international body to oversee space activities? If so, what responsibilities and powers would it have?
- What measures can be introduced to prevent an arms race in space?
- How can transparency and confidence-building measures between nations reduce the risks associated with military uses of space?
- What steps can be taken to ensure that developing nations have access to space technologies and resources?
- How can international organizations support capacity-building in space exploration for countries with limited resources?
- What global strategies can be implemented to manage space debris and ensure the sustainability of space activities?
- Should binding regulations or financial penalties be introduced for nations or companies that contribute to orbital congestion and debris generation?
- How can collaboration between governments and private companies be regulated to promote innovation while maintaining accountability and fairness?
- What role should private companies play in contributing to equitable access and sustainability in outer space?



3.8. Possible Solutions

Efforts to improve governance, prevent militarization, and ensure equitable access to outer space must address gaps in existing frameworks while fostering collaboration. Potential approaches include:

- **Modernizing Treaties**: Update the Outer Space Treaty and related agreements to address issues like resource mining, private sector activities, and orbital debris.
- **Regulating Militarization**: Strengthen international norms and treaties, such as a binding Prevention of an Arms Race in Outer Space (PAROS) agreement.
- **Promoting Inclusivity**: Expand UNOOSA capacity-building initiatives and create global funding mechanisms to support developing nations' access to space technologies.
- Establishing a Unified Space Governance Body: Create a robust multilateral platform under the UN to mediate disputes and oversee equitable use of space resources.
- **Encouraging Public-Private Partnerships**: Balance private sector innovation with international regulations to prevent monopolization and ensure responsible practices.

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