UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS (UNOOSA)

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1.1. Welcome Letter from the Secretary-General

Esteemed Delegates,

As the Secretary General of BRCMUN, I am honored and pleased to welcome you all to our conference. On behalf of the entire BRCMUN team, I would like to express our gratitude for the many difficulties we have faced. We have worked with passion, dedication, and great care to present a conference that we are really proud of.

My name is Ecenaz Anbarlı, I am a student of Beyhan-Rıfat Çıkılıoğlu Anatolian High School. BRCMUN, what once seemed like a distant dream, has now become our reality. I am honored to serve as Secretary General at such a prestigious conference alongside an academic team whose dedication and depth of knowledge continue to impress me every day. Since I first started at the United Nations, it has held a place in my heart, and my passion for it has only grown stronger over time.
Of course, none of this would have been possible without the endless support of our organizing team. Our whole team is ready to work for you.

The planning of the BRCMUN started at once, and it was incredibly inspiring to witness how deeply we all care about this conference. We aim to show that the United Nations Model is more than just a simulation. It is a stage for young voices, a platform for diplomacy, and a space for change.

Finally, I want to express my deepest gratitude to those who have been with me on this path, to my MUN predecessors who have shaped today's standards, and most importantly, to you for being here, participating, and believing.
Thank you for joining us on this journey.

With the most sincere regards,

Ecenaz Anbarlı
Secretary-General

anbarliecenaz@gmail.com

1.2. Welcome Letter from the Deputy Secretary General

Dear Participants,

I am very excited and sincerely grateful to welcome you all to BRCMUN25. As Deputy Secretary General, I am proud to be part of a conference that has been built on months of dedication, hard work, and an unwavering belief in what we do. From the moment the idea of BRCMUN25 was born, every member of our team has poured their hearts into making this more than a conference, but a shared experience that we can all grow from.

My name is Çınar Efe Buluş, I am a student of Beyhan-Rıfat Çıkılıoğlu Anatolian High School. Since I first stepped into the world of MUN, I have found something that challenges me, inspires me, and gives me a place where my voice matters. This feeling has only grown stronger with each conference. It has been an incredible journey to be able to participate in the creation of BRCMUN25 from scratch, a journey for which I am truly grateful.

This conference is not just about speeches and decisions. It's about learning to listen, understand, and work together. It's about discovering what kind of leader, thinker, and changemaker you can be. And to see so many passionate individuals gathered here today proves that we are on the right track.

I would like to express my gratitude to everyone who contributed to this process, especially the brilliant organization and academic teams.

But most of all, thank you for being here; your presence means everything to us. You are the one who makes BRCMUN special.

I wish you an unforgettable and inspiring conference.

Best Regards,

Çınar Efe BULUŞ
Deputy-Secretary General

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1.3. Welcome Letters from the Chairboard

Esteemed Delegates,

I would like to send my sincerest greetings to all the participants at the United Nations Office for Outer Space Affairs (UNOOSA) in the spirit of BRCMUN'25. I am Ömer Tuna Meşe, and I am honored to be the President Chair for this simulation. With my dedicated Vice-Chair and Rapporteur by my side, I look forward to interacting with each of you and witnessing the input you will have towards our committee.

The focus for the current year—Militarization and Weaponization of Outer Space—is one of the most complicated and pressing problems at the global level. The precarious balance between the peaceful investigation of outer space and its weaponization is becoming more fragile. As the world struggles to achieve technological supremacy, the chances of turning outer space into a new arena for war rise exponentially. In the framework of this committee, delegates will be challenged to think critically, hold diplomatic negotiations, and devise pragmatic measures for the peaceful use of outer space for generations to come.

To first-time delegates: I recognize the emotions you undergo in stepping into a committee room for the very first time. Uncertainty, nervousness, and anticipation are all very real and are a part of the normal process. Be aware that all the veterans began as you did. Don't be afraid to raise your placard; your voice counts here. You will make mistakes, and it is through those mistakes that you will learn. We, your chairboard, are here to help you through this process. While diplomacy and creativity will guide your resolutions, it is equally important to respect the rules of procedure. MUN is built upon the principles of structure, mutual respect, and collaboration. Following the rules not only keeps the debate productive but also ensures that every delegate has a fair chance to contribute.

It is my hope that this committee is more than just a discussion forum for you. I hope it becomes a memorable experience, a challenge to remember, and a source of pride. Let us work to make UNOOSA at BRCMUN’25 an unforgettable experience for all participants.

Warmest regards,

Ömer Tuna MEŞE
President Chair

omertnamese@gmail.com

Dear Delegates,

I am truly honored and excited to serve as the Vice-Chair of the UNOOSA committee at BRCMUN'25. Since my very first year of high school, Model United Nations has been more than just an academic activity for meit has been a platform where I discovered my voice, expanded my perspective on global issues, and developed a deep passion for diplomacy and international relations. Over the years, I have participated in several conferences, and now I am beyond thrilled to be on the academic team of such a crucial committee. Our agenda, "**The Militarization and Weaponization of Outer Space**", is a multidimensional topic that involves scientific, legal, and political concerns. Ensuring the peaceful use of outer space and preventing the escalation of an arms race beyond Earth is not only the responsibility of world powers, but also of us, the youth who will shape the future. I truly believe that each of you will bring valuable, creative, and solution-oriented ideas to this committee. Throughout our sessions, I will do my best to provide a respectful, inclusive, and productive environment where every voice is heard. I look forward to meeting you all and working together to make this committee a memorable and enriching experience.

With best regards,

Eslem Hüma DOĞAN
Vice-Chair

humaeslemdogan@gmail.com

Honorable Delegates,

First of all, I am very happy to be at this beautiful conference and I thank all the BRCMUN'25 team for their hard efforts. I will serve as a rapporteur in the UNOOSA committee. My name is Nilda Şahbaz, and I am very honored to be on this committee. As your rapporteur, I'll be responsible for documenting the discussions, decisions, and outcomes of our committee. I'll also be working closely with the dais team to make sure everything runs smoothly and fairly. To help us achieve this, I kindly ask each of you to pay close attention to the rules of procedure and show respect not only for the process but also for each other. Good diplomacy starts with good manners, and the quality of our committee depends on the professionalism you bring to it. Mun has been very helpful to me in expressing myself, creating the environment of discussion that I love so much, and making new unforgettable friends. I hope you will have such a wonderful experience as well. Our Agenda Item "**The Militarization and Weaponization of Outer Space"** is a very suitable and good topic for discussion. And I sincerely recommend that you research this topic thoroughly and especially master the topic Anti satellite weapons and testing.

With best regards,

Nilda ŞAHBAZ
Rapporteur

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2. Introduction to the Committee: United Nations Office of Outer Space Affairs

2.1. Historical Background of the Committee

The United Nations Office for Outer Space Affairs was initially established as a small specialized unit within the United Nations Secretariat to serve the Ad Hoc Committee on the Peaceful Uses of Outer Space, established by United Nations General Assembly resolution 1348 (XIII) of 13 December 1958.The unit was moved to work under the Department of Political and Security Council Affairs in 1962 and was transformed into the Outer Space Affairs Division of that Department in 1968. In 1992, the Division was transformed into the Office for Outer Space Affairs within the Department for Political Affairs. In 1993, the Office was relocated to the United Nations Office at Vienna. At that time, the Office also assumed responsibility for substantive secretariat services to the Legal Subcommittee, which had previously been provided by the Office of Legal Affairs in New York.
Questions relating to the militarization of outer space are dealt with by the Conference on Disarmament, based in Geneva.

The United Nations Office for Outer Space Affairs (UNOOSA) was established in response to growing global interest in space exploration during the Cold War, particularly after the Soviet Union launched the first artificial satellite, Sputnik 1, in 1957. Recognizing the potential for both scientific advancement and military competition in outer space, the United Nations created the Committee on the Peaceful Uses of Outer Space (COPUOS) in 1959 to encourage international cooperation and prevent the militarization of space. To support the work of COPUOS, UNOOSA was formally established in 1962 as part of the UN Secretariat. Initially operating under the Department of Political Affairs, UNOOSA was later relocated to the United Nations Office at Vienna in 1993. Today, UNOOSA plays a central role in promoting the peaceful use of outer space, implementing international space law, maintaining the UN Registry of Objects Launched into Outer Space, and assisting developing countries in accessing space technology and data for sustainable development.

2.1.1 Early Space Race and Cold War Context

The Space Race grew out of the Cold War between the United States and the Soviet Union, the most powerful countries after World War II. For a half-century, the two superpowers competed for supremacy in a global struggle across a variety of areas, from military might to consumer goods. Space was a crucial and new arena for the Cold War rivalry. Before a watchful world, each side sought to demonstrate its superiority through impressive feats in rocketry and spaceflight. In addition to these milestones, technologies used for spaceflight had further applications. Rockets could launch missiles, while satellites could keep an eye on adversaries.

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Some 12 more countries and international organizations have signed on to the ambitious initiative, Sergey Savelyev, deputy general director for International Cooperation at the Russian state space agency Roscosmos, said in May, according to media reports.

2.1.2 Outer Space Treaty (1967) and Other Legal Milestones

The Outer Space Treaty (OST), signed in 1967, is widely regarded as the foundational legal framework for international space law. It was adopted during a time of heightened Cold War tensions and sought to ensure that the exploration and use of outer space would be carried out for the benefit of all humankind. The treaty prohibits the placement of nuclear weapons or any other kinds of weapons of mass destruction in orbit or on celestial bodies and explicitly forbids the establishment of military bases or fortifications on the Moon or any other celestial

body. It also affirms that outer space shall be free for exploration and use by all states and that no state may claim sovereignty over outer space or any celestial body.

According to many people the Outer Space Treaty (OST), which was signed in 1967, is the most important legal document for international space law. It was passed during a time of high tensions in the Cold War and aimed to make sure that everyone would benefit from the exploration and use of outer space. The treaty says that nuclear weapons and other weapons of mass destruction can't be put in orbit or on celestial bodies. It also says that military bases or fortifications can't be built on the Moon or any other celestial body. It also says that all states should be able to explore and use outer space, and that no state can claim ownership of outer space or any celestial body.

Several other important international legal documents, in addition to the OST, have had an impact on how space is governed: The Rescue Agreement (1968) goes into more detail about Article V of the OST and says that people must help astronauts in trouble and get them back to their home country safely.• The Liability Convention (1972) sets rules for who is responsible for damage caused by space objects to other countries or their citizens.• The Registration Convention (1976) says that countries must tell the world about the space objects they send into orbit around Earth or beyond.• The Moon Agreement (1979) was meant to apply the ideas of the OST to the Moon and other celestial bodies, such as the idea that the Moon is the "common heritage of mankind." But it hasn't been signed and isn't very well known.

Even with these important steps forward, there are still big holes in international space law when it comes to making outer space a military and weapons-free zone. Current treaties don't say anything about using regular weapons in space or deploying anti-satellite weapons (ASATs), which makes the law unclear in a rapidly changing tech world. This lack of laws shows how important it is to strengthen multilateral dialogue and update international rules to keep outer space a peaceful and cooperative place.

2.2. General Information about the Committee

UNOOSA works primarily to implement the decisions of the UN General Assembly and of the UN Committee on the Peaceful Uses of Outer Space. The office has the dual objective of supporting intergovernmental discussions in the Committee and its Scientific and Technical Subcommittee and Legal Subcommittee, as well as assisting developing countries in utilizing space technology for development.

The mandate has been adjusted several times to allow the Office to undertake, among other tasks, the coordination of the inter-agency cooperation within the United Nations on the use of space technology UN-Space, implementing the United Nations Programme on Space

Applications and the UN-SPIDER Programme for disaster risk management and emergency response.

The Office also coordinates and cooperates with space agencies and intergovernmental and non-governmental organizations involved in space-related activities and, on behalf of the United Nations Secretary-General, the Register of Objects Launched into Outer Space. The office also helps poor nations suffering from climate change-related problems by helping them access satellite images for free.

UNOOSA is headed by a Director appointed by the UN Secretary-General, from 2023, this is Aarti Holla-Maini of Belgium and the UK. The Director's Office is responsible for public outreach, the Register of Objects in Outer Space, and programmes for youth engagement.

It has two sections: the Committee, Policy, and Legal Affairs (CPLA), headed by Takemi Chiku from Japan, and the Space Applications Section (SAS), headed by Lorant Czaran from Romania. The CPLA fulfills the Office's secretarial duties to the Committee on the Peaceful Uses of Outer Space, its subcommittees, and its working groups. It also convenes and services the Inter-Agency Meeting on Outer Space Activities, known as UN-Space, which is the central inter-agency coordination mechanism in the UN system on overarching space matters. UN-Space meets annually to discuss current and future activities, emergent technologies of interest, and other related matters, particularly regarding the global development agenda. The section is concerned with the establishment of a legal and regulatory framework governing space activities and actively fosters capacity-building in space law and policy.

The Space Applications Section works on building capacities in the practical application of space technology and space-derived information for development. The Programme concentrates its efforts on ensuring the equal access of all countries to new space-based technologies, especially developing nations. To facilitate capacity building with a focus on developing countries, the office provides three initiatives:

> -The Human Space Initiative focuses on public outreach to promote increased awareness among Member States of the benefits of space technology and its applications.
>
> -The Basic Space Technology Initiative enhances access to space application tools for sustainable development through building capacity in basic space technology.
>
> -The Basic Space Science Initiative supports the growth of small research groups in universities and research institutions in developing countries in the fields of astronomy and space science.

The Programme also focuses efforts on the potential of space-based information for disaster management and emergency response. The UN-SPIDER programme (established in 2006) helps to achieve this objective by being a gateway to space information for disaster management support, serving as a bridge to connect the disaster management and space

communities, and being a facilitator of capacity-building and institutional strengthening, in particular for developing countries.

3. Introduction to the Agenda: The Militarization and Weaponization of Outer Space

3.1 Definitions and Key Differences

Outer Space militarization refers to the utilization of space technology and infrastructure for military purposes. It entails utilizing satellites for communications, surveillance, reconnaissance, and navigation that support military forces on Earth.

These actions are not necessarily aggressive and have existed as part of military activity since the middle of the 20th century. Examples include intelligence collection using satellite imagery or the use of space-based systems for secure military communications. These are regarded as examples of militarization. What is particularly notable is that these systems aim not to cause harm but to augment terrestrial military prowess. Weaponization of Outer Space, however, refers to the actual placement or available use of weapons in space. This may include basing offensive weapons in space, placing missile installations in space, or using ground-based technology to attack and destroy space objects like satellites. Weaponization implies an intent to conduct aggressive operations within and out of space and thus represents a serious escalation in the militarization of outer space. Whereas militarization is concerned with support and strategic advantage without direct combat, weaponization takes into account offensive systems that can be used to destroy or incapacitate space or ground targets. For example, anti-satellite (ASAT) weapons, which may be used to destroy satellites, fall under this concept of space weaponization. Similarly, concepts such as space-based missile systems or directed-energy weapons come under this notion.

The distinction between the two concepts matters. Militarization is already an official and regular practice for spacefaring states and is not specifically prohibited by international law. Weaponization is far more controversial because it can escalate conflict into outer space and poses serious challenges to international security and the peaceful uses of space. This also has legal significance.

The Outer Space Treaty of 1967 allows for military use of space on certain terms but absolutely prohibits placing nuclear weapons or other weapons of mass destruction in orbit or on the surface of celestial bodies. It does not prohibit, however, the use of conventional weapons in space on a practical level, enabling disparity and legal ambiguity. Briefly, militarization of outer space addresses support-related, non-belligerent use of space technology by a military, while weaponization involves the deployment or design of offensive

systems that can inflict harm in outer space. This distinction remains at the forefront of international debate and diplomatic efforts to forestall an arms race in outer space

3.2 Importance of Agenda Item

The agenda item “The Militarization and Weaponization of Outer Space” addresses one of the most pressing and complex challenges of our era. As outer space becomes increasingly accessible due to technological advancements, the presence of military activities in this domain is rapidly expanding. While the militarization of space, such as the use of satellites for surveillance, navigation, and communication, has already become a norm, the shift towards weaponization, including the development and potential deployment of anti-satellite weapons and space-based offensive systems, marks a dangerous turning point.

This trend raises serious concerns regarding global security, legal accountability, and the long-term sustainability of outer space. A potential arms race beyond Earth’s atmosphere could undermine decades of diplomatic efforts to preserve space as a peaceful environment for scientific exploration and cooperation. Moreover, space debris resulting from military conflict could irreversibly damage orbital routes and threaten both civilian and commercial satellites, upon which the modern world heavily depends.

The agenda is also highly relevant in terms of international law. Existing treaties, such as the Outer Space Treaty of 1967, do not fully address the weaponization of space beyond weapons of mass destruction. This legal ambiguity leaves room for interpretation and limits the ability of the international community to prevent aggressive behavior in orbit.

In this context, it becomes increasingly vital for the United Nations, and particularly for UNOOSA, to take proactive steps to prevent conflict in outer space. Through this committee, delegates will be expected to explore legal, technical, and diplomatic mechanisms that can reinforce the peaceful use of space, build transparency and trust among nations, and protect the shared heritage of humanity from militarization.

3.3 Scope and Global Implications

The militarization and weaponization of outer space are a growing concern with both technical and political dimensions. The scope of the issue includes not only traditional military activities like the use of satellites for surveillance and communication but also more alarming trends such as the testing of anti-satellite (ASAT) weapons, the development of space-based missile systems, and even the exploration of directed-energy weapons like lasers and kinetic projectiles. These advancements blur the line between defense and offense, raising fears of an arms race in orbit and a serious threat to international stability.

The global implications of weaponizing space are vast. Space is a shared domain with no borders, meaning that any weapon deployed or used in space could affect not just one nation but the entire world. For instance, the destruction of a satellite by an ASAT weapon creates space debris that can damage or disable other satellites, putting at risk essential global services like weather monitoring, GPS navigation, international communication, and even banking systems. Moreover, the rise of space-focused military doctrines by major powers has increased strategic tensions on Earth, leading to uncertainty and reduced trust between nations.

At the diplomatic level, the absence of binding, updated, and enforceable international regulations makes this issue even more complex. The Outer Space Treaty of 1967, while foundational, does not cover modern threats such as conventional weapons or private military use of space technologies. As space becomes more accessible to both state and private actors, the need for inclusive and forward-thinking governance grows. The militarization of space is not just a question of security; it challenges the principles of equity, sustainability, and peaceful cooperation that the international community has long aimed to uphold.

4. Current Situation and Stakeholders

4.1 Major Space Powers and Their Military Capabilities

The militarization of space is no longer a theoretical issue, but an actual reality influenced by the plans and capabilities of a handful of leading space powers. The United States, China, Russia, India, and a number of members of the European Union have all poured a great deal of resources into space-based militaries, facilities, and doctrines. Not only do their actions establish the tone for international space policy, but also the probability of an arms race above the atmosphere.

The United States is the world's leading space power both in civilian and military applications. It possesses hundreds of military satellites employed for intelligence, missile detection, guidance (with the help of the Global Positioning System), and secure communication all over the globe. In 2019, the U.S. solidified its space supremacy commitment by establishing the United States Space Force (USSF), a new branch of the military responsible for the defense of American interests in space. Research funding by the U.S. Department of Defense also goes towards directed-energy weapons, anti-satellite (ASAT) technologies, and space-based defense against missiles. Although the U.S. openly supports the peaceful use of space, the nation also reserves the capability to defend its space assets from any threat against them—militarily if required.

China is fast becoming a space power with increasing space-based military capabilities. China's space warfare operations are handled by the People's Liberation Army Strategic Support Force (PLASSF), under which space, cyber, and electronic warfare are all grouped together. China stunned the international community with a test ASAT in 2007 that shot down

one of its own satellites, creating thousands of debris pieces. China since then launched a series of satellites with the capability to move alongside other satellites—potentially as kinetic or electronic weapons. China is also developing hypersonic glide vehicles that can use space trajectories to evade conventional missile defenses.

Another former space superpower, Russia retains a large space-based military program from the Soviet era. Russia's GLONASS system underpins its military forces globally, and its early warning satellites are invaluable for missile detection. Russia test-fired a contentious ASAT in 2021 against the deceased Kosmos 1408 satellite, generating more than 1,500 objects that can be tracked as debris and provoking international outcry. Russia is also assumed to be developing space-based electronic warfare technologies with the capability to jam or spoof satellite signals. Russia's official military doctrine specifically identifies space as a combat zone of a strategic nature, and its space endeavors exhibit both defensive as well as possible offensive intent.

India, though relatively new to space-based military activities, made great strides in the past few years. In 2019, India carried out its inaugural ASAT test under the aegis of Mission Shakti and successfully destroyed a satellite in the low Earth orbit. Though the move was defended as a deterrent capability, the test put the focus on its entry into the select group of nations possessing direct ASAT capability. India also established a Defence Space Agency (DSA) and is developing space reconnaissance, encrypted communications satellites for the armed forces, as well as secure navigational systems like GPS. India's dual-purpose space ventures, controlled partly by the Indian Space Research Organisation (ISRO), supply both scientific and strategic assets for national defense.

The European Union, especially France, Germany, and Italy, also contributes increasingly to space security. France created its Space Command (Commandement de l’Espace) in 2019 and launched defense and intelligence satellites. The EU runs the Galileo satellite navigation system that sends open and encrypted signals, facilitating civilian infrastructure and European defense. EU states focus primarily on regulation and peaceful cooperation, yet are increasingly actively engaged in the debates about counter-space security—particularly against the backdrop of increasing global tension and weakness in commercial satellite networks.

These nations—through investments in military satellites, ASAT programs, space-based intelligence infrastructures, and sophisticated rocket capabilities—are redrawing the map of space in international security. Though most of the developments are couched in defensive or preemptive terms, the uncertain transparency, the absence of arms control treaties, and the dual uses of most technologies preclude a clear distinction between deterrence and provocation. This new terrain calls for the immediate creation of new international norms, legally binding treaties, and measures for establishing trust so that outer space can continue as a secure and stable medium for everyone.

4.2 Anti-Satellite (ASAT) of Weapons and Testing

Anti-satellite weapons (ASAT) are space weapons designed to incapacitate or destroy satellites for strategic or tactical purposes. Although no ASAT system has yet been utilized in warfare, a few countries (China, India, Russia, and the United States) have successfully shot down their satellites to demonstrate their ASAT capabilities in a show of force. ASATs have also been used to remove decommissioned satellites.

ASAT roles include: defensive measures against an adversary's space-based and nuclear weapons, a force multiplier for a nuclear first strike, a countermeasure against an adversary's anti-ballistic missile defense (ABM), an asymmetric counter to a technologically superior adversary, and a counter-value weapon.

Use of ASATs generates space debris, which can collide with other satellites and generate more space debris. A cascading multiplication of space debris could cause Earth to suffer from Kessler syndrome.

4.2.1. Soviet Union

Soviet space-based defense system research started as a reaction to the danger of orbital bombardment and ballistic missiles. Initial attempts involved the Polyot interceptor, initially tested in 1963, combined with an effective orbital ASAT test in 1968. Initial development discussions can be dated back to 1960, when the UR-200 rocket was approved by Nikita Khrushchev for anti-satellite missions. Official work started in 1961 with the Istrebitel Sputnikov (IS) program, which translates to "destroyer of satellites."

The intercept system employed a co-orbital method, in which a missile would be launched into an adjoining orbit of the target satellite. It passed through one or two orbital paths before detonating a shrapnel warhead in close vicinity to incapacitate the satellite. The interceptor, weighing approximately 1400 kg, employed onboard radar guidance and was successful at a range of approximately one kilometer from the target.

Development problems with the UR-200 resulted in initial testing with R-7 rockets. Polyot 1 and 2, which flew in 1963 and 1964, performed initial intercept tests. Subsequently, the project switched to the R-36-based Tsyklon-2 launcher. A modified Tsyklon-2A was utilized for additional IS tests in 1967 and 1968. These tests proved the system can destroy satellites with explosive fragmentation. A record-breaking achievement took place in 1968 when Kosmos 248 was eliminated by Kosmos 252.

23 launches together constituted the IS test series. The system was deemed operational in 1973. The tests were restarted in 1976 due to the perceived threat from the US Space Shuttle, which was thought to be capable of executing a surprise first-strike.

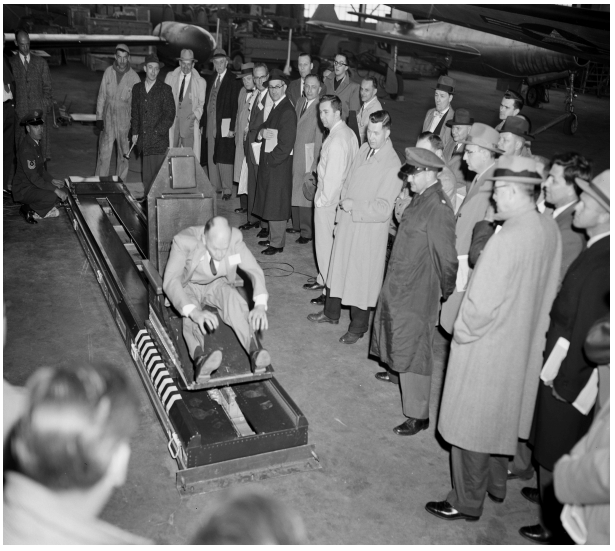
The IS system was adapted for combat at higher altitudes and redeclared operational in 1979. All IS testing ended in 1983 on the orders of Yuri Andropov, and efforts to restart the program later were unsuccessful. During the early 1980s, the Soviet Union also created an air-launched ASAT capability using modified MiG-31D jets under the 30P6 "Kontakt" system, which was based on 79M6 missiles. Other test systems also comprised space station-mounted autocannons and Skif-DM/Polyus orbital laser

During the same year, Soviet leader Mikhail Gorbachev was presented with a new design for an ASAT called "Naryad," delivered by UR-100N rockets.

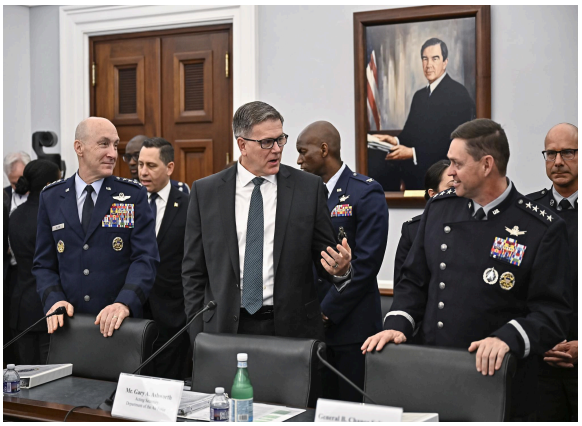
4.2.2. United States

The United States Air Force started WS-199A missile programs in the late 1950s, including the Bold Orion air-launched ballistic missile (ALBM) for the B-47 Stratojet. Although the project did not achieve its intended objectives, the missile was subsequently altered to an anti-satellite weapon with a range of 1,770 km. It undertook a test flight against the Explorer 6 satellite, where the missile reached to within 6.4 km of its intended target; however, its application was restricted to nuclear warheads.

A companion program, Lockheed's High Virgo, was adapted from the Sergeant missile to be launched from the B-58 Hustler. The project planned to intercept Explorer 5 in 1959; however, contact was lost after launch, which prevented thorough evaluation. Both programs were terminated by the early 1960s.



The United States also experimented with using nuclear explosions to eliminate satellites, with tests like Hardtack Teak in 1958 and Starfish Prime in 1962 testing the effect of electromagnetic pulse (EMP) on satellites and communications. The Nike Zeus missile, adapted for ASAT and designated Mudflap, remained in service until 1966, before being replaced by the USAF Thor-based Program 437, which remained in service until 1975.



Research on directed-energy weapons was also conducted, such as a proposed X-ray laser facility at the Lawrence Livermore National

Laboratory (LLNL) in 1968. This project was ultimately canceled in 1977, but X-ray laser work restarted in the 1980s as a component of the Strategic Defense Initiative (SDI).

The U.S. ASAT program gained speed in the 1980s after learning of Soviet ASAT research. The Vought ASM-135 ASAT missile, based on the AGM-69 SRAM and an Altair upper stage, was tested in flight from an F-15 Eagle. The first successful intercept was on 13 September 1985, when the missile destroyed the Solwind P78-1 satellite at 555 km altitude. Despite the success, the program was terminated in 1988.

In 2008, the United States Navy carried out Operation Burnt Frost, where the rogue USA-193 satellite was destroyed by an RIM-161 Standard Missile 3. The operation was initiated due to concern over the toxicity of the satellite's hydrazine fuel, which endangered individuals within its reach along its re-entry trajectory. The operation resulted in 174 identifiable pieces of debris, the final one of which re-entered the Earth's at

The U.S. formally halted direct-ascent ASAT missile tests in 2022.

4.2.3. Strategic Defense Initiative and the Cold War

The 1983 Strategic Defense Initiative (SDI) was intended to counter nuclear warheads, but some of the systems developed also had ASAT potential. The SDI effort gave a massive stimulus to both US and Soviet ASAT programs, with many systems being developed for both anti-ballistic missile (ABM) and ASAT missions. Initially, the United States had planned to deploy a constellation of around 40 platforms with a total of up to 1,500 kinetic interceptors. By 1988, the plan had evolved into a four-phase development process. The first phase, Brilliant Pebbles, would constitute 4,600 small kinetic interceptors in low Earth orbit, each weighing 45 kg, and their sensors.

Later stages would involve larger platforms and energy weapons such as lasers and charged particle beam guns, constructed from existing technologies such as MIRACL. The first stage was to be operational by 2000 at a cost of $125 billion.

Despite the technological issues, both the United States and the Soviet Union invested heavily in these programs. The USSR, in particular in the 12th Five-Year Plan, focused on testing orbital laser platforms, which resulted in the failed 1987 launch of the Polyus platform. In 1989, though, both countries started to reduce their expenditure on SDI, and the Russian Federation halted all SDI-related research in 1992.

Development of space-based ASATs was reinitiated by Vladimir Putin's government as a response to renewed U.S. activity in the aftermath of the fall of the Anti-Ballistic Missile Treaty. Though details of such efforts are not certain, the U.S. has continued work on space-based ASAT systems through initiatives such as the Experimental Spacecraft System (USA-165), the Near Field Infrared Experiment (NFIRE), and the space-based interceptor (SBI).

4.2.4. Russia

Following the fall of the Soviet Union, the MiG-31D program was halted as a result of decreased funding allocated to defense. Nevertheless, the Russian Air Force restarted the program in August 2009. Moreover, the Sokol Eshelon, an experimental laser system based on the A-60 aircraft, had its development resumed in 2012.

There have been several test firings over the years, with significant fires noted in December 2016, March 2018, and December 2018, two of which were carried out from a transporter-erector-launcher (TEL). In September 2018, a new anti-satellite (ASAT) missile variant was spotted being transported by a MiG-31.

Russia conducted a direct ascent ASAT missile test against low Earth orbit satellites on 15 April 2020. On 16 December 2020, it was tested once again. In November 2021, Russia successfully destroyed Kosmos 1408 using an ASAT missile, forming a debris field that impacted the International Space Station. US intelligence reported in 2024 that Russia is potentially developing an anti-satellite weapon based on nuclear technology, though details on whether it's employing nuclear weapons or a nuclear-powered system were not available.

4.2.5. China

The People's Republic of China disabled the Fengyun-1C weather satellite on January 11, 2007, when it performed a direct ascent anti-satellite (ASAT) test using an SC-19 missile equipped with a kinetic kill warhead. The missile launched from a mobile Transporter-Erector-Launcher (TEL) at Xichang and collided head-on with the satellite when it was in a polar orbit at an altitude of 865 kilometers. In doing so, it created over 40,000 debris fragments larger than one centimeter, thereby greatly contributing to the space debris.

SC-19 missile system was reportedly tested many times, like in 2005, 2006, 2010, and 2013. China launched a suborbital rocket in May 2013, which was initially described as a scientific experiment on ionosphere study, but was, as per U.S. sources, possibly a test of a new ground-based ASAT capability for targeting U.S. satellites in geostationary orbit.

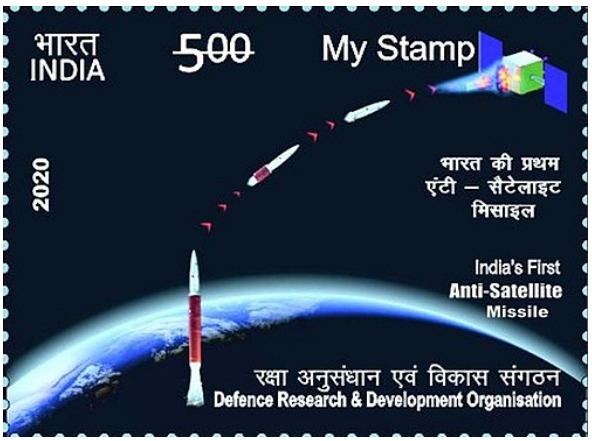
China conducted the Dong Neng-3, an exoatmospheric missile with potential to be an ASAT weapon, on February 5, 2018. Despite Chinese state media declaring the test as defensive in nature, it represented a significant advancement in their ASAT program.

4.2.6. India

During the 97th Indian Science Congress, DRDO Director General Rupesh confirmed that India was developing an anti-satellite weapon. In 2010, DRDO's Dr. Vijay Kumar Saraswat indicated that India "had all the building blocks" to create such a weapon to target satellites in low Earth and polar orbits.

In 2012, DRDO developed that the country possessed critical technologies for an ASAT weapon employing radars and interceptors of the Ballistic Missile Defence Programme. The programme was formally sanctioned in 2017.

India conducted its first ASAT test, Mission Shakti, successfully on 27 March 2019. The test was conducted at Odisha's Integrated Test Range, where the Microsat-R satellite was destroyed at an altitude of 300 km in low Earth orbit (LEO). The missile hit the target after 168 seconds, and India became the fourth country with ASAT capabilities. India asserted that the test was a deterrent and not against any specific nation.



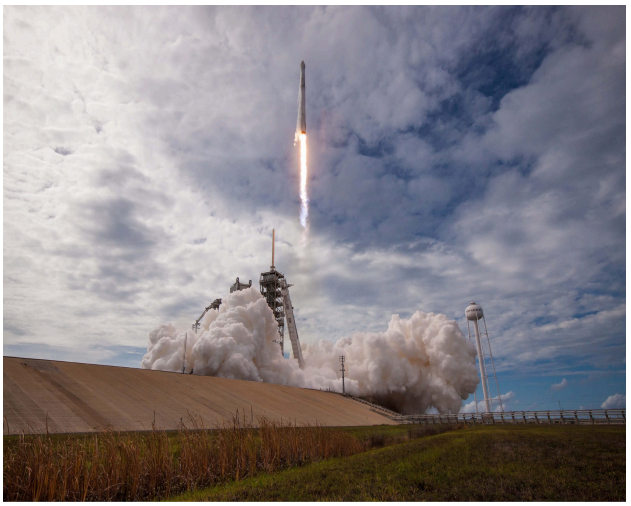
In a release, India's Ministry of External Affairs clarified that the test was conducted at low altitude so that the debris would degenerate in weeks' time. The majority of the debris would be set to burn in the atmosphere, but some would endure up to one year. The U.S. and Russia both reacted to the test, with the U.S. showing concern over space debris, and Russia inviting India to join the Russian–Chinese proposal for a ban on space weapons.

4.2.7. Israel

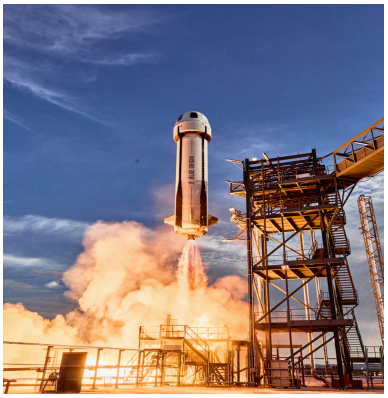
The Arrow 3 or Hetz 3 is an anti-ballistic missile, currently in service. It provides exo-atmospheric interception of ballistic missiles. It is also believed (by experts such as Prof. Yitzhak Ben Yisrael, chairman of the Israel Space Agency), that it will operate as an ASAT.

In November 2023, Israel's Arrow 3 missile defense system successfully intercepted a missile above the Earth’s atmosphere launched by Houthi rebels in Yemen. While it was not a satellite, this was the first time a missile was intercepted in space during wartime, demonstrating the theoretical capabilities of such a system to intercept a satellite.

4.3. Role of Private Actors in Space Security



Private actors have evolved from marginal players in space exploration to key players contributing to the global space environment over the past decades. Companies like Elon Musk's SpaceX have transformed space transportation through reusable rockets like Falcon 9 and are heavily invested in satellite-based internet platforms like Starlink, which also have military uses. Bezos's Blue Origin is a developer of heavy-lift launchers and a developer of capabilities to support sustained space presence, including that of national defense clients. Northrop Grumman, a veteran defense contractor, develops military satellites and missile defense systems, and Boeing and Airbus are prominent providers of civilian and military-capable space-based technologies to the U.S. and European authorities. These actors are not just driving development but are also directly involved in projects that are related to national security and are thus vital but complicated players in space security regulation.



While international space law, and especially the Outer Space Treaty (OST), obliges states to hold accountable the activity of non-governmental entities that fall within their jurisdiction, in real life, government control of private space players is weak or intermittent. While some nations do not have legal frameworks to manage commercial launches, others prefer to turn a blind eye to or even promote dangerous practices to serve a strategic interest. Several also conduct private missions under classified government contracts, most of them concerning intelligence collection, surveillance, or satellite monitoring, and making civilian and military purposes obscure from each other. For instance, imaging satellites run by private companies could serve the purposes of agricultural mapping and battlefield monitoring, leaving doubts to establish their neutrality and the likelihood of conflict escalation.

Another central concern is transparency. While governments are prompted (and in some cases required) to make public their space endeavors through the frameworks of the United Nations, there is no obligation of the same sort on private entities. Private companies are not required to make public the full specifics of their payloads, the character of their clients, or their medium to long-term operational goals. The absence of transparency can lead to strategic misconceptions or even anticipatory measures by states based on partial information. As the private space industry grows in power and potential, organizations like UNOOSA and COPUOS must strive to introduce international guidelines, obligatory reporting mechanisms,

and ethical standard-setting measures for private actors in sensitive space areas. Without regulation, private company presence could destabilize peaceful multilateral relations and complicate arms control in space.

5. Legal Framework and Challenges

5.1. Overview of International Treaties

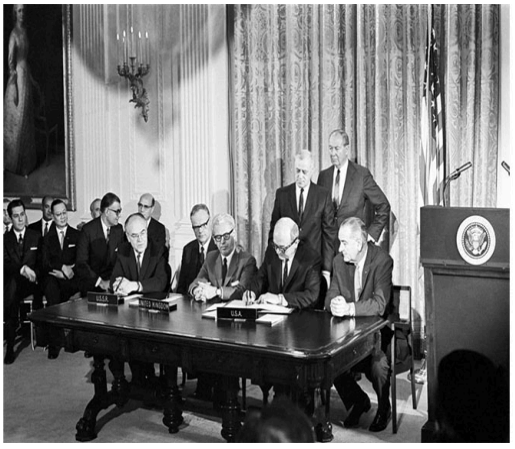
The militarization and weaponization of outer space have long been the subject of global concerns. To preclude the possibility of conflicts in extraterrestrial space, many conventions and treaties have been established over the decades. The most prominent of such agreements is the Outer Space Treaty of 1967, which is considered the foundation of international space law. The treaty particularly prohibits the use of nuclear weapons in orbit and requires the Moon and other celestial bodies to be used only for peaceful activities.

The other major treaties include the Rescue Agreement (1968), the Liability Convention (1972)—which spells out state responsibility for damage caused by their space assets—and the Registration Convention (1976), which requires states to inform the United Nations of objects they have launched into outer space. Although the Moon Agreement (1979) attempted to set a more specific framework for the exploitation of lunar resources, its ratification has been very limited.

Together, the treaties provide the basis for the peaceful exploration of outer space. However, they are lacking in their enforcement mechanisms and were drafted at a time when space technology was far less advanced.

5.2 Gaps and Ambiguities in Current Space Law

The legal framework governing outer space was largely created during the Cold War era, a time when only two superpowers— the United States and the Soviet Union—dominated space activity. As a result, key documents like the Outer Space Treaty (OST) of 1967 were drafted to avoid nuclear escalation in orbit but failed to foresee the dramatic evolution of space technology and the expansion of military capabilities beyond Earth. The OST prohibits the placement of weapons of mass destruction (WMDs) in outer space and bans military installations on celestial bodies, but it does not address the deployment of conventional weapons, nor does it restrict the development and testing of anti-satellite (ASAT) systems. Consequently, many states have found



ways to exploit these legal gaps under the claim of "self-defense" or "technological advancement."

One of the most serious deficiencies in the current legal regime is the lack of enforcement and verification mechanisms. Unlike arms control treaties on Earth, such as the Chemical Weapons Convention or the Non-Proliferation Treaty, space law lacks an inspection or monitoring body capable of verifying whether a satellite is for civilian or military purposes. The OST encourages transparency and peaceful use, but it offers no legal obligation for nations to disclose the capabilities of their space assets. This is particularly problematic in the case of dual-use technologies, where a satellite designed for Earth observation or telecommunications can also serve military surveillance or targeting functions. Additionally, the absence of universally accepted definitions for key terms such as "peaceful use," "aggression," or even "weapon" allows powerful states to interpret space law in ways that suit their national interests, weakening international trust.

Another critical ambiguity arises from the role of private actors and commercialization in space. When the main treaties were drafted, space was strictly a government domain. Today, however, the involvement of private companies, such as SpaceX, Blue Origin, Northrop Grumman, and others, has transformed space into a competitive, semi-commercial arena. These actors are not directly bound by international treaties, and instead, the responsibility falls on states to regulate their behavior. Yet many countries either lack the capacity or the political will to fully supervise private launches or satellite operations. Furthermore, the increasing use of classified military contracts and the lack of international transparency requirements mean that powerful nations can effectively deploy military systems in space while claiming peaceful intent. This legal ambiguity makes international cooperation difficult and poses long-term risks to the sustainability and safety of outer space.

In summary, the current body of space law is outdated and insufficient to regulate the emerging realities of space militarization and weaponization. Without clear definitions, enforceable obligations, and mechanisms for transparency, the international community remains vulnerable to escalation, miscalculation, and conflict beyond Earth. As outer space becomes more crowded and contested, UNOOSA and its member states face the urgent task of modernizing legal frameworks, developing new multilateral agreements, and establishing institutions that can oversee responsible behavior in space.

5.3 Calls for New Agreements

As space becomes increasingly crowded and strategically important, many states and experts are calling for updated international agreements that address today’s challenges. These proposals include banning all forms of weapons in orbit, establishing clear definitions of military activities in space, and implementing transparency and confidence-building measures.

Institutions such as the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and its member states have suggested proposals such as a Code of Conduct for Outer Space Activities, as well as further treaties that would ban harmful Anti-Satellite (ASAT) testing. However, consensus has been difficult to reach under the pressures of geopolitical rivalry and competing national agendas.

Despite the challenges faced, your inputs in this committee have the potential to impact the current conversation and foster cooperation. As young diplomats, it is critical that you explore new, yet practical, legal frameworks that can help ensure outer space as a realm of peace and mutual gain.

6. UNOOSA's Role and Past Actions

6.1.Contributions to Peaceful Use of Space

The United Nations Office for Outer Space Affairs (UNOOSA) plays a vital and leading role in ensuring that outer space remains a domain of peace, cooperation, and shared benefit. As the secretariat of the Committee on the Peaceful Uses of Outer Space (COPUOS), UNOOSA serves as the world's central platform for coordinating international dialogue on space governance. In its 2024 report, the Committee reaffirmed its commitment to upholding international space law—particularly the Outer Space Treaty—emphasizing that space must be used for peaceful purposes only, prohibiting the placement of nuclear weapons or weapons of mass destruction in orbit. UNOOSA has encouraged all nations to join and adhere to this legal framework, which ensures that outer space remains accessible to all humankind, without national appropriation. In a world with growing numbers of satellites and private actors in space, UNOOSA advocates for transparency and confidence-building through the sharing of information, the development of space situational awareness capabilities, and cooperation on space traffic management and debris mitigation.

The organization also directly supports the United Nations Sustainable Development Goals (SDGs) by helping developing countries access and apply space technologies to address challenges like climate change, disaster response, food and water security, and environmental monitoring. Programs such as "Access to Space for All" and the KiboCUBE initiative allow emerging space nations to participate in satellite deployment and microgravity experiments. Recognizing the mounting threat of space debris, UNOOSA promotes the adoption of international debris mitigation guidelines and supports the development of new technologies for satellite servicing and cleanup. It also emphasizes inclusive growth in the space sector, empowering women through initiatives like Space 4Women and fostering education and capacity-building through regional centers. Above all, UNOOSA's work is grounded in the belief that space must remain a peaceful frontier—free of conflict, guided by international cooperation, and used to improve life on Earth for all nations.

In addition to its core missions, UNOOSA continues to expand its influence by fostering innovation, strengthening global partnerships, and preparing the international community for the complex challenges of tomorrow's space environment. Through high-level forums, workshops, and initiatives such as the "Space2030" Agenda, UNOOSA is shaping a long-term vision that aligns space exploration and innovation with human development and environmental sustainability. The Office actively supports regional cooperation, encourages the responsible behavior of commercial actors, and promotes inclusive policy frameworks that reflect the interests of both spacefaring nations and those just beginning their journey into space. By hosting global dialogues on topics like the safe use of satellite mega-constellations, the prevention of an arms race in space, and the fair governance of lunar and planetary exploration, UNOOSA ensures that space remains a global commons—governed not by power, but by principles. As space becomes more crowded and competitive, UNOOSA's role as a neutral convener and guardian of peaceful space cooperation has never been more critical. Its unwavering dedication to equity, sustainability, and peace in outer space continues to inspire trust, unity, and action among nations.

6.2.Advocacy for Disarmament and Transparency

Within the framework of increasing interest in space by the military, the promotion of disarmament and transparency is an urgent task for such international institutions as the Office for Outer Space Affairs of the United Nations (UNOOSA). As there is increasing tension between space powers and dual-purpose technologies become more prevalent, UNOOSA holds an important diplomatic and norm-generating task in advancing the peaceful nature of space. UNOOSA lacks enforcement mechanisms such as those used by military groups or the security councils but acts through the creation of norms, technical cooperation, policy guidance, and multilateral fora such as the Committee on the Peaceful Uses of Outer Space (COPUOS).

The advocacy of UNOOSA for disarmament is centered on the prevention of an arms race in space by persuading all states to desist from deploying weapons in space, avert the creation of anti-satellite (ASAT) technology, and dedicate their space programs to peaceful objectives. UNOOSA promotes a range of United Nations General Assembly (UNGA) resolutions—particularly the recurrently reaffirmed Prevention of an Arms Race in Outer Space (PAROS) resolution—which, as not legally binding, articulates key political expectations and captures the majority view of the international community. UNOOSA also offers venues for discussion in which disarmament ideas, such as no-first-deployment assurances or prohibitions against kinetic ASAT tests, can be proposed and debated by a broad spectrum of actors.

Apart from disarmament, transparency and confidence-building measures (TCBMs) are also at the heart of UNOOSA's mandate. The organization encourages voluntary

information-sharing mechanisms under which states can share their space activities, i.e., launch plans, satellite functions, and orbital parameters. Such measures are intended to avoid misperceptions, promote mutual trust, and lower the chance of accidental escalation or war. UNOOSA also calls for the application of the UN Register of Objects Launched into Outer Space, a list of all registered satellites and space objects, providing a valuable transparency mechanism. Through the promotion of initiatives such as the Long-Term Sustainability (LTS) Guidelines, UNOOSA contributes to the development of norms surrounding responsible action in space, such as the prevention of space debris and the peaceful coexistence of civil, commercial, and military actors.

However, UNOOSA's activities are confronted with certain limitations. Other states are not willing to share sensitive national defense information or even trust the motives of other nations, particularly with increasing geopolitical rivalries. Moreover, there are no mechanisms for verification, thus it is not possible to determine with certainty whether states are implementing disarmament principles. To overcome such limitations, UNOOSA has urged the extension of international cooperation and the establishment of new, consensus-building guidelines integrating transparency technology with political trust. In addition, UNOOSA cooperatively engages with other UN organizations, i.e., the Conference on Disarmament and the First Committee of the UN General Assembly, for the harmonization of space policy with international disarmament objectives.

In sum, UNOOSA's promotion of disarmament and transparency is not only necessary for avoiding the militarization of space, but also the long-term accessibility, security, and sustainability of the space environment. As the world increasingly militarized space, UNOOSA is still one of the sole neutral, internationally recognized mechanisms by which peaceful norms can be advanced and future war can be averted.

7. Questions to Ponder

- **What legal mechanisms can be introduced to ban or regulate the placement of weapons in outer space?**

- **What kind of verification or inspection systems could be implemented to ensure countries are complying with demilitarization agreements in space?**

- **How can spacefaring nations address the growing problem of space debris caused by ASAT testing, and what role can international cooperation play in managing this issue?**

- **How can international space law ensure fair and equal access to outer space for all countries, regardless of their economic or technological status?**

- **How can the international community improve transparency and information-sharing among states to prevent conflicts in outer space?**

- **To what extent should major space powers be held accountable for the potential weaponization of outer space?**

- **How can the international community ensure that private space actors operate within a fair and regulated framework?**

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