

Committee on the Peaceful Uses of the Outer Space (COPOUS)

STUDY GUIDE

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TOPIC:

Preventing the Weaponization of
Outer Space: Satellite Systems and
Anti-Satellite (ASAT) Weapons



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Introduction to the Committee

The United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) is the principal United Nations body responsible for promoting international cooperation in the exploration and use of outer space for peaceful purposes. Established by the General Assembly in 1959, COPUOS serves as the primary forum where Member States develop international legal frameworks, technical guidelines, and cooperative initiatives to ensure that outer space remains accessible, sustainable, and beneficial for all humanity (United Nations Office for Outer Space Affairs [UNOOSA], n.d.; United Nations General Assembly [UNGA], 1959).

Unlike security-focused bodies such as the Security Council, COPUOS does not regulate military conflicts directly. Instead, it addresses issues related to international space governance, including space law, satellite operations, space debris mitigation, sustainable exploration, scientific cooperation, and the peaceful use of emerging space technologies. The committee operates under the principle established by the 1967 Outer Space Treaty, which recognizes outer space as the "province of all mankind" and prohibits the placement of nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies (United Nations, 1967).

COPUOS conducts most of its work through two permanent subsidiary bodies:

- Scientific and Technical Subcommittee (STSC): examines scientific, technical, and operational issues such as space debris, planetary defense, space weather, and the long-term sustainability of outer space activities.
- Legal Subcommittee (LSC): develops and interprets international legal principles governing space activities, including liability, registration of space objects, and the peaceful use of outer space (UNOOSA, n.d.).

Since its creation during the early years of the Space Age, COPUOS has played a central role in developing the international legal architecture governing outer space. It contributed to the negotiation of the five core United Nations space treaties, including the Outer Space Treaty (1967), Rescue Agreement (1968), Liability Convention (1972), Registration Convention (1975), and Moon Agreement (1979). These instruments continue to form the foundation of international space law and influence national space legislation around the world (UNOOSA, n.d.).

Today, COPUOS faces new challenges that did not exist during the Cold War. Rapid advances in satellite technology, the commercialization of space, the emergence of private launch providers, the deployment of satellite mega-constellations, cyber threats, and the testing of anti-satellite (ASAT) weapons have transformed outer space into a strategically contested domain. While the committee lacks enforcement powers, it remains the leading multilateral forum for building international consensus on responsible behavior in space, promoting transparency, and preventing actions that could threaten the long-term sustainability of the orbital environment (UNOOSA, n.d.; United Nations Institute for Disarmament Research [UNIDIR], 2023).

Background to the Topic

Key Terminology

Understanding the technical and legal vocabulary surrounding space security is essential for meaningful debate. The following concepts form the foundation of this agenda.

Satellite Systems

Satellite systems consist of artificial objects intentionally placed into Earth's orbit to perform specific functions. They provide essential services including telecommunications, global navigation (GPS, Galileo, BeiDou, GLONASS), weather forecasting, Earth observation, scientific research, disaster management, financial transactions, and military communications. Because modern societies depend heavily on these systems, satellites have become critical infrastructure whose disruption could have global consequences (National Aeronautics and Space Administration [NASA], n.d.; European Space Agency [ESA], n.d.).

Weaponization of Outer Space

Weaponization of outer space refers to the deployment or use of weapons intended to damage, destroy, or interfere with targets in space or through space-based systems. Although the term is often used interchangeably with *militarization*, the two concepts are distinct. Satellites have long supported military functions such as communications, intelligence gathering, and navigation; this represents the **militarization** of space. **Weaponization**, however, involves developing or deploying systems specifically designed to attack space assets or conduct offensive military operations from or in outer space (Cheng, 2022; UNIDIR, 2023).

Anti-Satellite Weapons (ASATs)

Anti-satellite (ASAT) weapons are systems designed to disable, damage, or destroy satellites. They can be classified into two broad categories:

- **Kinetic ASAT weapons**, which physically destroy satellites using missiles or interceptors and often generate long-lasting orbital debris.
- **Non-kinetic ASAT weapons**, which interfere with satellite operations without physical destruction. These include cyberattacks, electronic jamming, spoofing, directed-energy weapons such as lasers, and electromagnetic interference (Secure World Foundation, 2024).

Space Debris

Space debris refers to non-functional human-made objects orbiting Earth, including defunct satellites, spent rocket stages, and fragments created through explosions or collisions. Debris generated by destructive ASAT tests poses a significant risk because even small fragments travel at speeds exceeding 7 km/s, making collisions potentially catastrophic for operational spacecraft and crewed missions (ESA, n.d.).

Historical Evolution of the Issue

The strategic importance of outer space emerged during the Cold War following the Soviet Union's launch of **Sputnik 1** in 1957. This achievement demonstrated that rockets capable of placing satellites into orbit could also deliver long-range missiles, transforming outer space into an arena of geopolitical competition. In response, the United Nations established COPUOS in 1959 to promote international cooperation and ensure that space would be used for peaceful purposes (UNOOSA, n.d.).

Although the **Outer Space Treaty (1967)** prohibited the placement of nuclear weapons and other weapons of mass destruction in orbit, it did not ban conventional weapons or anti-satellite technologies. Consequently, both the United States and the Soviet Union developed military satellite capabilities for reconnaissance, communications, navigation, and early missile warning throughout the Cold War (United Nations, 1967).

The first dedicated ASAT programs emerged during the 1960s and 1970s, but international concern intensified in the twenty-first century after several highly publicized tests demonstrated the destructive consequences of kinetic ASAT weapons:

- **China (2007):** Destroyed the Fengyun-1C weather satellite, generating more than 3,000 trackable debris fragments and tens of thousands of smaller pieces that continue to threaten spacecraft today (ESA, n.d.).
- **United States (2008):** Intercepted the malfunctioning USA-193 satellite during Operation Burnt Frost, arguing that the mission was necessary to prevent hazardous materials from re-entering Earth's atmosphere.
- **India (2019):** Conducted *Mission Shakti*, becoming the fourth country to demonstrate direct-ascent ASAT capabilities.
- **Russian Federation (2021):** Destroyed the Cosmos 1408 satellite, producing a debris cloud that forced astronauts aboard the International Space Station to seek shelter and renewed calls for stronger international regulations (NASA, 2021).

These events shifted international attention from traditional space exploration toward the growing challenge of maintaining security and sustainability in Earth's orbital environment.

Why Satellite Security Matters Today

Modern economies and governments rely extensively on satellite infrastructure. Satellites support:

- Global Positioning System (GPS) and navigation services;
- Internet connectivity and telecommunications;
- Banking, financial markets, and secure transactions;
- Weather forecasting and climate monitoring;
- Disaster response and humanitarian operations;
- Scientific research and Earth observation;
- Military command, control, intelligence, surveillance, and reconnaissance (NASA, n.d.).

As dependence on these services has increased, satellites have become attractive strategic targets. At the same time, the rapid expansion of commercial space companies, reusable launch systems, and satellite mega-constellations has dramatically increased the number of objects in orbit. This growing congestion complicates traffic management, raises the probability of accidental collisions, and makes international governance increasingly complex (ESA, n.d.; UNOOSA, n.d.).

Existing International Legal Framework

Several international agreements seek to regulate activities in outer space and promote its peaceful use.

Outer Space Treaty (1967)

The **Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space**, commonly known as the *Outer Space Treaty*, remains the cornerstone of international space law. It establishes that:

- Outer space shall be explored and used for the benefit of all countries;
- Outer space is not subject to national appropriation;
- Nuclear weapons and other weapons of mass destruction may not be placed in orbit or stationed on celestial bodies;
- States bear international responsibility for their national space activities, including those conducted by private entities (United Nations, 1967).

Partial Test Ban Treaty (1963)

The **Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water** prohibits nuclear weapon tests in outer space, contributing to efforts to prevent radioactive contamination and the militarization of the space environment (United Nations Office for Disarmament Affairs [UNODA], n.d.).

Guidelines for the Long-term Sustainability of Outer Space Activities

Adopted by COPUOS in 2019, these voluntary guidelines encourage responsible behavior in space operations, including debris mitigation, information sharing, space traffic coordination, and international cooperation to preserve the long-term sustainability of outer space activities (UNOOSA, n.d.).

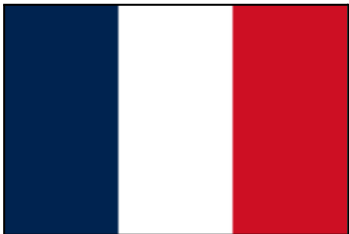
Prevention of an Arms Race in Outer Space (PAROS)

The **Prevention of an Arms Race in Outer Space (PAROS)** is an ongoing initiative discussed primarily within the United Nations General Assembly and the Conference on Disarmament. Rather than a single treaty, PAROS represents a long-standing diplomatic effort to negotiate legally binding measures that would prevent the deployment of weapons in outer space and reduce the risks of conflict. Despite broad international support for its objectives, Member States continue to disagree on verification mechanisms, definitions, and national security concerns, preventing the adoption of a comprehensive treaty (United Nations General Assembly, 2023; UNODA, n.d.).

Key Stakeholders and Positions

Before representing their assigned delegation, delegates should recognize that **space security is characterized by strategic ambiguity**. Many states publicly support the peaceful use of outer space while simultaneously developing military space capabilities to protect their national interests and critical infrastructure. Consequently, delegates should distinguish between **official diplomatic positions**, **international legal commitments**, and **actual technological capabilities**. Effective debate requires balancing national security concerns with the collective responsibility to preserve outer space as a peaceful, secure, and sustainable domain for future generations.

COUNTRY	POSITION
United States of America 	The United States possesses highly advanced civil, commercial, and military space capabilities. It supports responsible behavior, transparency, debris mitigation, and improved space situational awareness. Rather than broad restrictions on military space activities, it generally favors voluntary norms and confidence-building measures. In 2022, it committed not to conduct destructive direct-ascent ASAT missile tests while preserving its right to protect national security interests.
Russian Federation 	Russia maintains major launch, satellite, and military space capabilities. It publicly supports legally binding agreements to prevent the placement of weapons in outer space and promotes PAROS alongside China. However, its 2021 destructive ASAT test generated significant debris and attracted international criticism. Russia is likely to support stronger arms-control agreements while emphasizing strategic parity and opposition to unilateral military dominance in space.
People's Republic of China 	China is one of the world's leading space powers, with extensive civil, commercial, and military capabilities. It supports legally binding measures to prevent an arms race in outer space and advocates equal application of international rules. Nevertheless, its 2007 ASAT test created a large debris field. China is likely to prioritize space sustainability, national sovereignty, equitable access to technology, and restrictions on strategic dominance by major powers.

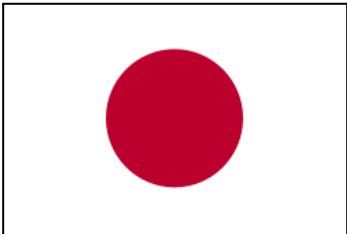
French Republic 	France considers outer space both a strategic domain and a shared environment requiring international protection. It supports responsible military use consistent with international law, transparency, debris mitigation, and improved space surveillance. France generally favors practical norms and confidence-building measures against destructive ASAT activities while maintaining the ability to protect its national and European space infrastructure.
United Kingdom of Great Britain and Northern Ireland 	The United Kingdom supports a secure, peaceful, and sustainable space environment. It has promoted international discussions on responsible behavior and favors voluntary norms, transparency measures, and information sharing over broad treaties that may be difficult to define or verify. The UK is likely to support commitments against destructive ASAT testing and stronger cooperation on debris reduction and space sustainability.
Republic of Korea 	The Republic of Korea has expanded its satellite, launch, scientific, and defense-related space capabilities. It supports the peaceful use of outer space, responsible behavior, and stronger international cooperation. South Korea is likely to favor balanced measures that reduce debris and conflict risks while allowing states to protect critical satellite infrastructure and develop legitimate defensive capabilities.
State of Israel 	Israel operates advanced satellite systems for communications, Earth observation, and national security. It supports the peaceful use of outer space and practical measures that improve transparency, sustainability, and debris mitigation. However, Israel approaches broad arms-control proposals cautiously and emphasizes effective verification and the right of states to protect critical infrastructure and respond to security threats.
Islamic Republic of Iran 	Iran is a party to the Outer Space Treaty and supports the peaceful use of outer space. It favors legally binding measures to prevent weaponization and opposes restrictions that limit developing states' access to peaceful space technology. Iran is likely to emphasize sovereignty, non-discrimination, equitable technological access, and stronger international rules against military competition in outer space.

United Arab Emirates 	The United Arab Emirates has developed one of the Middle East's most advanced civilian space programs, focusing on satellite technology, planetary exploration, and scientific innovation. It supports the peaceful use of outer space, international cooperation, and sustainable space activities. The UAE generally favors responsible behavior, debris mitigation, and the development of international norms while encouraging greater participation of emerging space nations in global governance.
Republic of Türkiye 	Türkiye has significantly expanded its national space capabilities through satellite development, launch initiatives, and technological innovation. It supports the peaceful exploration and use of outer space while recognizing its strategic importance for national development and security. Türkiye is likely to advocate balanced regulations that encourage international cooperation, protect national sovereignty, and promote equitable access to space technologies without limiting peaceful scientific advancement.
Arab Republic of Egypt 	Egypt supports the peaceful use of outer space and has consistently advocated for preventing the weaponization of space through multilateral cooperation. As an emerging space nation, it emphasizes that outer space should contribute to sustainable development, scientific research, and socioeconomic progress. Egypt is likely to support stronger international legal frameworks, particularly those that reduce military competition and guarantee equal access to peaceful space technologies.
Kingdom of Saudi Arabia 	Saudi Arabia has increased investment in satellite technology, space research, and commercial space activities as part of its Vision 2030 strategy. The Kingdom supports the peaceful exploration and use of outer space while recognizing the strategic value of space infrastructure. It is likely to favor international cooperation, responsible behavior, and measures that protect satellite systems while allowing states to develop peaceful national space capabilities.

United Mexican States 	Mexico has consistently promoted the peaceful use of outer space through diplomacy and international cooperation. As a party to the Outer Space Treaty, Mexico supports strengthening international law, preventing an arms race in space, and ensuring that space technologies contribute to sustainable development. Within COPUOS, Mexico is likely to advocate multilateral dialogue, debris mitigation, capacity-building for developing countries, and equitable access to the benefits of space exploration.
Argentine Republic 	Argentina has an established civilian space program focused on Earth observation, scientific research, and satellite development. It supports the peaceful use of outer space and actively participates in international cooperation through regional and global organizations. Argentina is likely to favor measures that strengthen international law, reduce orbital debris, and promote the responsible use of space while preserving access to space technologies for peaceful purposes.
Republic of Colombia 	Colombia views outer space primarily as a tool for sustainable development, environmental monitoring, disaster management, and telecommunications. It supports the peaceful use of outer space and the strengthening of international cooperation to ensure its long-term sustainability. Colombia is likely to advocate transparency, confidence-building measures, debris mitigation, and greater technical assistance for developing countries seeking to expand their space capabilities.
Federative Republic of Brazil 	Brazil possesses one of Latin America's largest space programs, with interests in satellite development, Earth observation, and launch capabilities. It supports the peaceful use of outer space and has traditionally advocated stronger multilateral governance while protecting the right of all states to access space technologies for peaceful purposes. Brazil is likely to support legally binding measures that reduce the risks of weaponization, encourage international cooperation, and preserve outer space as a global commons.

Federal Republic of Germany 	Germany supports the peaceful, secure, and sustainable use of outer space. As an important member of the European Space Agency and NATO, it recognizes the strategic value of satellite infrastructure while promoting international law, transparency, and responsible behavior. Germany is likely to support commitments against destructive ASAT testing, stronger debris-mitigation standards, information sharing, and confidence-building measures that reduce misunderstanding and escalation.
Commonwealth of Australia 	Australia relies heavily on satellites for communications, navigation, environmental monitoring, and national defense. It supports the rules-based international order and favors practical norms of responsible behavior, transparency, space situational awareness, and cooperation with international partners. Australia is likely to endorse measures against destructive ASAT testing while maintaining that states may protect their critical space infrastructure and legitimate security interests.
Italian Republic 	Italy possesses significant civilian, commercial, and defense-related space capabilities and participates actively in the European Space Agency. It supports the peaceful and sustainable use of outer space, international cooperation, debris reduction, and the protection of satellite systems. Italy is likely to favor responsible-behavior norms, transparency measures, and gradual development of stronger international rules while preserving legitimate scientific, commercial, and security activities.
Republic of India 	India is a major space power with advanced launch, satellite, exploration, and military capabilities. Although it conducted a direct-ascent ASAT test in 2019, India maintains that the test was defensive and intended to demonstrate technological capability rather than initiate an arms race. It supports peaceful space activities, national security, and stronger international cooperation, while emphasizing sovereign equality and the right of developing states to access space technology.



State of Japan 	Japan operates an advanced civilian and security-oriented space program and depends extensively on satellites for communications, navigation, disaster management, and defense. It supports responsible behavior, transparency, debris mitigation, and stronger international cooperation. Japan is likely to advocate commitments against destructive ASAT testing and measures that protect the long-term sustainability of outer space while allowing defensive use of satellite technologies.
Kingdom of Spain 	Spain supports preserving outer space as a peaceful, secure, and sustainable environment. Through the European Union and European Space Agency, it promotes international cooperation, transparency, space traffic coordination, and responsible behavior. Spain has supported United Nations initiatives addressing threats to space systems and is likely to favor complementary voluntary norms and legally binding measures, particularly those reducing debris and preventing destructive ASAT activities.
Republic of Portugal 	Portugal's space sector focuses on scientific research, Earth observation, communications, and Atlantic-based satellite and launch activities. It supports the peaceful use of outer space, sustainability, and multilateral cooperation through the European Union and European Space Agency. Portugal is likely to advocate debris mitigation, information sharing, capacity-building, and responsible-behavior standards while ensuring that international regulations do not unnecessarily restrict peaceful innovation.
Hellenic Republic 	Greece supports the peaceful use of outer space and participates in European initiatives involving satellite communications, navigation, security, and scientific research. It is likely to favor international law, transparency, responsible behavior, and measures preventing harmful interference with space systems. Greece would also support debris mitigation and cooperation through the United Nations, European Union, and European Space Agency to reduce the risk of conflict.



Slovak Republic 	Slovakia supports the peaceful, secure, and sustainable use of outer space in coordination with the European Union. It favors international law, transparency, debris mitigation, and norms of responsible behavior. Slovakia is likely to support commitments against destructive ASAT testing, improved information sharing, and stronger cooperation to protect orbital environments while preserving legitimate civilian and security-related space activities.
Bolivian Republic of Venezuela 	Venezuela supports legally binding measures to prevent an arms race and the placement of weapons in outer space. It emphasizes state sovereignty, peaceful use, non-discrimination, and equitable access to space technology for developing countries. Venezuela is likely to oppose frameworks perceived as favoring technologically advanced powers and support broader treaties addressing weaponization rather than relying only on voluntary behavioral norms.
Ukraine 	Ukraine supports international law, transparency, and responsible behavior in outer space, while emphasizing the need to protect satellites from interference and hostile activities. Its position is strongly influenced by contemporary security concerns and the military importance of satellite communications and observation. Ukraine is likely to support restrictions on destructive ASAT testing, attribution mechanisms, information sharing, and accountability for actions that threaten space systems.
Republic of Cuba 	Cuba supports preserving outer space exclusively for peaceful purposes and favors legally binding agreements preventing its weaponization. It emphasizes sovereign equality, multilateral decision-making, and equitable access to the benefits of space science and technology. Cuba is likely to oppose selective or voluntary frameworks that it believes could preserve the strategic advantages of major space powers.

Syrian Arab Republic 	Syria supports the prevention of an arms race in outer space and favors comprehensive, legally binding restrictions on the placement or use of weapons there. It emphasizes national sovereignty, non-interference, and equal access to peaceful space technologies. Syria is likely to align with states advocating treaty-based arms control rather than voluntary norms alone.
Canada 	Canada possesses advanced civil, commercial, and defense-related space capabilities and depends heavily on satellites for communications, navigation, scientific research, and security. It strongly supports norms, rules, and principles of responsible behavior, the Outer Space Treaty, transparency, and long-term sustainability. Canada is likely to advocate restrictions on destructive ASAT testing, confidence-building measures, and gradual development of stronger international rules.

Regional and Supranational Organizations

Unlike individual states, these organizations represent groups of countries with different levels of technological development and security priorities. Their positions generally emphasize regional coordination, international cooperation, and the development of shared principles for the peaceful and sustainable use of outer space.

European Union

The European Union supports preserving outer space as a safe, secure, peaceful, and sustainable environment. It prioritizes international law, transparency, confidence-building measures, and norms of responsible behavior. All EU Member States have committed not to conduct destructive direct-ascent ASAT missile tests. The EU supports voluntary measures as an immediate step while remaining open to future legally binding agreements that are effective, comprehensive, and verifiable.

African Union

The African Union views space technology primarily as a tool for socioeconomic development, including agriculture, communications, disaster management, climate monitoring, navigation, and security. It supports peaceful and equitable access to outer space, capacity-building, technology transfer, and stronger African participation in global space governance. The AU is likely to oppose activities that create debris or restrict developing regions' access to space-based services.

Association of Southeast Asian Nations (ASEAN)

ASEAN promotes peaceful space cooperation, regional capacity-building, and the use of satellites for connectivity, disaster response, environmental monitoring, and sustainable development. It is increasingly addressing space situational awareness and space traffic management through regional dialogue. ASEAN is likely to support transparency, debris mitigation, information sharing, and consensus-based rules while avoiding positions that could intensify strategic competition among major powers.

International Organizations and Non-Governmental Organizations

Although only Member States may negotiate and vote on resolutions within COPUOS, intergovernmental organizations (IGOs) and non-governmental organizations (NGOs) play an essential role in shaping international space governance. Through scientific research, technical expertise, policy recommendations, and capacity-building initiatives, these organizations provide evidence that informs diplomatic negotiations and contributes to the development of international norms governing outer space (United Nations Office for Outer Space Affairs [UNOOSA], n.d.; United Nations Institute for Disarmament Research [UNIDIR], 2023).

Secure World Foundation (SWF)

The Secure World Foundation (SWF) is an independent NGO dedicated to promoting the long-term sustainability, security, and peaceful use of outer space. It produces widely respected research on orbital debris, satellite security, space governance, and responsible behavior while facilitating dialogue among governments, academia, industry, and civil society (Secure World Foundation, 2024).

International Telecommunication Union (ITU)

The International Telecommunication Union (ITU), a specialized agency of the United Nations, is responsible for coordinating the international allocation of radio-frequency spectrum and geostationary orbital positions. By preventing harmful interference between satellite systems and ensuring equitable access to limited orbital resources, the ITU contributes significantly to the safe and efficient operation of space-based communications (International Telecommunication Union, 2024).

European Space Agency (ESA)

The European Space Agency (ESA) is one of the world's leading civilian space organizations. In addition to conducting scientific missions, ESA plays a major role in monitoring orbital debris, developing space situational awareness capabilities, and supporting international efforts to improve space traffic management and the long-term sustainability of outer space activities (European Space Agency, 2024).

Previous United Nations Actions and Resolutions

Since the beginning of the Space Age, the United Nations has served as the primary forum for developing international rules governing activities in outer space. Although the existing legal framework has successfully promoted peaceful exploration and international cooperation, many of its core treaties were negotiated before modern challenges such as anti-satellite (ASAT) weapons, cyber threats against satellites, and large satellite constellations emerged. As a result, contemporary discussions increasingly focus on whether existing agreements remain sufficient or whether additional legal and political measures are required (UNOOSA, n.d.).

The Outer Space Treaty (1967)

The **Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space**, commonly known as the **Outer Space Treaty (OST)**, remains the cornerstone of international space law. It establishes that outer space shall be used for peaceful purposes and for the benefit of all humankind. The Treaty prohibits the placement of nuclear weapons or other weapons of mass destruction in orbit, on celestial bodies, or elsewhere in outer space. However, it does **not** prohibit conventional weapons, anti-satellite systems, or military support satellites, leaving significant legal gaps regarding the weaponization of space (United Nations Office for Disarmament Affairs [UNODA], 1967).

Convention on International Liability for Damage Caused by Space Objects (1972)

The Liability Convention establishes the legal responsibility of launching states for damage caused by their space objects. While it was designed primarily to address accidental damage, it has become increasingly relevant in discussions about space debris generated by destructive ASAT tests. Delegates frequently debate whether existing liability rules are sufficient to address intentional actions that create long-lasting debris fields affecting all space users (UNOOSA, 1972).

Convention on Registration of Objects Launched into Outer Space (1975)

The Registration Convention requires states to provide information regarding objects launched into Earth orbit or beyond. Registration improves transparency, facilitates the identification of satellites, and supports accountability in the event of collisions or harmful interference. Although it does not regulate military activities, it contributes to confidence-building by improving knowledge of objects operating in space (UNOOSA, 1975).

Prevention of an Arms Race in Outer Space (PAROS)

Since the early 1980s, the United Nations General Assembly has annually adopted resolutions entitled **Prevention of an Arms Race in Outer Space (PAROS)**. These resolutions recognize that existing international law alone may not be sufficient to prevent the weaponization of space and

encourage further negotiations on legally binding measures. While PAROS has maintained broad international support, negotiations have made limited progress because states disagree on verification mechanisms, definitions of space weapons, and the relationship between national security and arms control (United Nations General Assembly [UNGA], 2024).

Guidelines for the Long-term Sustainability of Outer Space Activities (2019)

In 2019, COPUOS adopted **21 Guidelines for the Long-term Sustainability (LTS) of Outer Space Activities**. Although voluntary, these guidelines encourage states to improve national regulatory frameworks, exchange information, mitigate orbital debris, enhance space situational awareness, and strengthen international cooperation. They have become one of the most influential normative frameworks for promoting responsible behavior in space operations (UNOOSA, 2021).

Open-Ended Working Group on Reducing Space Threats (2022-2023)

Recognizing the growing risks posed by military activities in outer space, the United Nations General Assembly established the **Open-Ended Working Group (OEWG) on Reducing Space Threats through Norms, Rules and Principles of Responsible Behaviours**. Rather than attempting to negotiate a new treaty immediately, the Working Group focused on identifying responsible behaviors that could reduce misunderstandings, miscalculations, and conflict in space. Its discussions highlighted broad support for increasing transparency and reducing destructive activities while also revealing persistent disagreements regarding legally binding obligations versus voluntary commitments (UNODA, 2023).

GA Resolution 77/41: Destructive Direct-Ascent ASAT Missile Testing (2022)

One of the most significant recent developments was the adoption of **UN General Assembly Resolution 77/41**, which calls upon states **not to conduct destructive direct-ascent anti-satellite missile tests** because such activities generate dangerous orbital debris that threatens all space operations. Although the resolution is not legally binding, it has been endorsed by an increasing number of states and is widely regarded as an important confidence-building measure that could contribute to the development of future customary international norms (UNGA, 2022).

Significance for the Current Debate

Previous United Nations actions demonstrate that the international community broadly agrees on the importance of preserving outer space for peaceful purposes. However, substantial disagreements remain regarding how this objective should be achieved. Some states advocate negotiating new legally binding treaties that explicitly prohibit certain space weapons, while others prefer developing voluntary norms of responsible behavior as a more practical and flexible approach. These competing visions form the core of the current debate within COPUOS and will strongly influence the solutions proposed by delegates during committee sessions (UNODA, 2023; UNOOSA, n.d.).

Current Challenges and Debates

The rapid expansion of space activities has created new legal, political, and technological challenges that were largely unforeseen when the existing international legal framework was established. Today, more countries, private companies, and international organizations operate satellites than ever before, while advances in military technology have increased concerns about the vulnerability of space infrastructure. Delegates in COPUOS must therefore consider how to preserve outer space as a peaceful and sustainable domain while balancing legitimate national security interests, commercial innovation, and international cooperation (United Nations Office for Outer Space Affairs [UNOOSA], n.d.; United Nations Institute for Disarmament Research [UNIDIR], 2023).

Lack of Legally Binding Regulations on ASAT Weapons

One of the greatest challenges facing the international community is that no existing treaty explicitly prohibits the development, testing, or possession of conventional anti-satellite (ASAT) weapons. While the Outer Space Treaty bans nuclear weapons and other weapons of mass destruction in orbit, it remains largely silent regarding conventional weapons capable of destroying satellites. Consequently, states continue to develop counterspace capabilities while interpreting international law in different ways (United Nations Office for Disarmament Affairs [UNODA], 1967).

Growing Orbital Debris

Destructive ASAT tests and accidental satellite collisions generate thousands of debris fragments that may remain in orbit for decades. Even very small debris traveling at orbital velocities can severely damage operational satellites or crewed spacecraft. Because orbital debris does not respect national boundaries, its consequences affect every space-faring nation regardless of who created it, making debris mitigation one of the most urgent issues in contemporary space governance (European Space Agency [ESA], 2024).

Balancing National Security and Peaceful Uses

Many satellites perform both civilian and military functions, including communications, navigation, intelligence gathering, disaster response, and precision timing. This dual-use nature makes it difficult to distinguish peaceful activities from military preparations. While states argue that protecting national security requires resilient space capabilities, others fear that increasing military reliance on satellites may accelerate the weaponization of outer space (UNIDIR, 2023).

Verification and Compliance

Even if states agreed to prohibit certain space weapons or activities, verifying compliance would remain extremely difficult. Many satellites can perform multiple functions, and technologies designed for satellite servicing or debris removal may also be capable of interfering with other spacecraft. The absence of reliable verification mechanisms continues to complicate negotiations on legally binding arms control agreements (Secure World Foundation, 2024).

The Rise of Commercial Space Actors

Private companies have become major participants in the space sector by launching satellite constellations, providing broadband services, and developing reusable launch systems. While commercial innovation has expanded access to space, it has also increased congestion in Earth's orbit and raised questions regarding responsibility, regulation, and coordination between governments and private operators. Existing international treaties primarily assign responsibility to states, creating new governance challenges as commercial activities continue to expand (UNOOSA, n.d.).

Space Traffic Management

The growing number of active satellites and debris has made collision avoidance increasingly complex. Unlike aviation, there is currently no comprehensive international authority responsible for coordinating space traffic. Many experts argue that improved information sharing, standardized operating procedures, and enhanced space situational awareness are necessary to reduce collision risks while preserving freedom of access to outer space (ESA, 2024).

Divergent National Priorities

Perhaps the greatest political challenge is the lack of consensus among Member States regarding the most appropriate approach to space security. Some countries advocate negotiating new legally binding treaties that prohibit certain categories of space weapons, while others favor voluntary norms of responsible behavior that can be implemented more rapidly. Developing countries often emphasize equitable access to space technology and capacity-building, whereas established space powers frequently prioritize strategic stability and operational flexibility. Reconciling these differing priorities remains one of COPUOS's greatest diplomatic challenges (UNODA, 2023).

Case Studies

Historical case studies provide valuable insight into the challenges of regulating military activities in outer space. The following incidents demonstrate how anti-satellite (ASAT) weapons can affect not only national security but also the long-term sustainability of the orbital environment. Together, these examples illustrate why international cooperation remains essential to protecting space as a shared global commons.

China's 2007 ASAT Test

On 11 January 2007, China successfully tested a direct-ascent anti-satellite (ASAT) missile by destroying its own Fengyun-1C weather satellite in low Earth orbit. The test produced more than 3,000 trackable debris fragments and tens of thousands of smaller pieces that continue to orbit Earth today, making it one of the largest single sources of long-lived orbital debris ever created (European Space Agency [ESA], 2024).

International Response

The test received widespread international criticism due to the significant amount of debris generated and the long-term risks posed to satellites and crewed space missions. Many governments viewed the incident as evidence that existing international law was insufficient to regulate destructive ASAT testing, leading to renewed discussions within the United Nations regarding responsible behavior in outer space (United Nations Institute for Disarmament Research [UNIDIR], 2023).

Lessons Learned

- Orbital debris can remain in space for decades, threatening all space users.
- Military actions conducted by one state may have global consequences beyond national borders.
- The incident highlighted the need for stronger international norms governing destructive ASAT testing (ESA, 2024).

India's Mission Shakti (2019)

On 27 March 2019, India conducted **Mission Shakti**, successfully destroying one of its own satellites in low Earth orbit with a direct-ascent ASAT missile. The Indian government stated that the test demonstrated its technological capabilities and strengthened national security while emphasizing that the target was intentionally placed in a relatively low orbit to minimize the long-term persistence of debris (Secure World Foundation [SWF], 2024).

International Response

India defended the test as a legitimate measure to enhance its strategic deterrence capabilities. Nevertheless, several governments and experts expressed concern that any destructive ASAT test increases the risk of orbital debris and may encourage further military competition among regional and global space powers. NASA also reported that some debris briefly increased collision risks for the International Space Station before naturally decaying (National Aeronautics and Space Administration [NASA], 2019).

Lessons Learned

- Emerging space powers increasingly view counterspace capabilities as part of national defense.
- Even lower-altitude ASAT tests can generate debris that threatens space operations.
- Regional geopolitical competition is becoming an important factor in space security discussions (SWF, 2024).

Russia's 2021 ASAT Test

On 15 November 2021, Russia destroyed one of its defunct satellites, **Cosmos 1408**, using a direct-ascent ASAT missile. The test created more than 1,500 trackable debris fragments and hundreds of thousands of smaller pieces. The resulting debris cloud forced astronauts aboard the International Space Station (ISS) to temporarily shelter in their spacecraft as a precaution against possible collisions (NASA, 2021).

International Response

The test was strongly condemned by numerous governments, including the United States, Canada, the European Union, and several other Member States. The incident intensified calls within the United Nations for stronger international norms, increased transparency, and restrictions on destructive ASAT testing. It also contributed to growing diplomatic support for subsequent initiatives, including General Assembly Resolution 77/41 on destructive direct-ascent ASAT missile testing (United Nations General Assembly [UNGA], 2022).

Lessons Learned

- Orbital debris poses immediate risks to both robotic satellites and human spaceflight.
- Military activities in space can rapidly become matters of international concern.
- The incident reinforced the urgency of strengthening international cooperation to reduce space threats and preserve the long-term sustainability of Earth's orbital environment (NASA, 2021).

Possible Solutions and Future Perspectives

As space becomes increasingly important for global communications, commerce, scientific research, and national security, the international community faces the challenge of developing governance mechanisms that preserve outer space as a safe, secure, and sustainable environment. While there is broad agreement that destructive conflict in space should be avoided, Member States continue to differ on how this objective should be achieved. The following proposals represent some of the principal approaches currently under discussion within the United Nations and the broader international space community.

Legally Binding International Agreements

Many Member States argue that existing space law no longer adequately addresses modern military technologies. As a result, several countries have proposed negotiating new legally binding treaties that would prohibit or restrict specific activities, including:

- Destructive direct-ascent anti-satellite (ASAT) missile testing.
- The placement of weapons in outer space.
- Intentional harmful interference with satellites.
- The use of force against civilian space infrastructure.

Supporters argue that legally binding agreements provide greater predictability and accountability than voluntary measures. However, negotiations remain challenging because states disagree on definitions, verification mechanisms, and how to balance arms control with national security interests (United Nations General Assembly [UNGA], 2024).

Transparency and Confidence-Building Measures

Recognizing the difficulty of negotiating comprehensive treaties, many governments support confidence-building measures that reduce misunderstanding and increase trust among space actors. These initiatives seek to improve communication rather than impose legal prohibitions.

Possible measures include:

- Advance notification of satellite launches.
- Voluntary exchange of orbital and operational information.
- Greater transparency regarding national space policies.
- Communication channels between governments during space-related incidents.

- Regular consultations through international organizations.

Such measures can reduce the risk of miscalculation while laying the foundation for future legally binding agreements (United Nations Office for Outer Space Affairs [UNOOSA], n.d.; United Nations Office for Disarmament Affairs [UNODA], 2013).

Strengthening Orbital Debris Mitigation

Given that orbital debris threatens every space operator regardless of nationality, many experts advocate stronger international standards for debris prevention and remediation. Existing voluntary guidelines could be reinforced through national legislation and international cooperation.

Potential actions include:

- Improving end-of-life satellite disposal procedures.
- Limiting debris generation during spacecraft operations.
- Supporting active debris removal technologies.
- Encouraging responsible satellite design and mission planning.
- Discouraging destructive testing that creates long-lived debris.

Reducing debris not only protects current satellites but also preserves access to outer space for future generations (European Space Agency [ESA], 2024).

Enhancing Space Situational Awareness and International Monitoring

As the number of satellites continues to increase, timely information about objects in orbit becomes increasingly important. Many experts recommend expanding international cooperation on **Space Situational Awareness (SSA)** through shared monitoring systems capable of tracking satellites, debris, and potentially hazardous activities.

Improved monitoring could:

- Detect possible collisions.
- Identify unusual satellite maneuvers.
- Improve attribution following space incidents.
- Increase transparency regarding potentially harmful activities.
- Support peaceful dispute resolution through reliable technical data.

While many countries support greater information sharing, concerns remain regarding national security and the protection of sensitive military capabilities (UNIDIR, 2023).

Developing a Global Space Traffic Management System

Unlike civil aviation, outer space currently lacks a comprehensive international traffic management system. As satellite constellations continue to expand, many policymakers advocate creating globally coordinated procedures for satellite operations.

A future international Space Traffic Management (STM) framework could include:

- Standardized collision avoidance procedures.
- Shared orbital data among operators.
- International coordination of satellite maneuvers.
- Common technical standards for conjunction warnings.
- Enhanced cooperation between civilian and military operators.

Although discussions are ongoing, many experts consider STM essential for ensuring the long-term sustainability of Earth's orbital environment (ESA, 2024).

Expanding Public-Private Cooperation

Private companies now operate thousands of satellites and increasingly contribute to launch services, communications, Earth observation, and space exploration. Consequently, effective governance requires close cooperation between governments, commercial operators, academia, and international organizations.

Future initiatives may include:

- Shared best practices for responsible satellite operations.
- Joint research on debris mitigation technologies.
- Public-private partnerships for space traffic management.
- Collaborative emergency response procedures following space incidents.
- Increased information sharing between commercial and governmental operators.

Such cooperation reflects the growing recognition that sustainable space governance cannot rely exclusively on governments (UNOOSA, n.d.).

Promoting Peaceful Scientific Cooperation

Throughout the history of space exploration, scientific collaboration has often continued despite political tensions on Earth. Many Member States therefore advocate expanding international partnerships in scientific research, satellite applications, climate monitoring, disaster management, and space exploration as a means of strengthening diplomatic cooperation and reducing the likelihood of conflict.

Scientific cooperation also enables developing countries to benefit from space technology while contributing to global sustainable development objectives (UNOOSA, n.d.).

The Importance of International Cooperation

Outer space is a global commons whose safety and sustainability depend on the actions of all space actors. No single country can independently prevent orbital debris, manage increasing satellite congestion, or address emerging security challenges. Consequently, durable solutions will require sustained multilateral diplomacy, mutual trust, scientific cooperation, and inclusive participation by both established and emerging space nations.

For delegates in COPUOS, the central challenge is not simply deciding whether additional regulation is necessary, but determining **how the international community can balance national security, technological innovation, commercial development, and the peaceful use of outer space**. Successful resolutions should seek practical, consensus-based solutions that protect the orbital environment while preserving every state's legitimate right to explore and use outer space for peaceful purposes (United Nations, 2024; UNOOSA, n.d.).

Guiding Questions for Delegates

The following questions are intended to help delegates analyze the issue from the perspective of their assigned country, identify national priorities, and develop practical policy proposals. Delegates should consider how their state's political interests, security concerns, technological capabilities, and international commitments influence its position.

1. What measures can effectively prevent the weaponization of outer space while respecting states' legitimate security concerns?
2. Should the international community negotiate legally binding treaties regulating anti-satellite (ASAT) weapons, or are voluntary norms of responsible behavior a more practical approach?
3. How can compliance with future space agreements be monitored and verified without compromising national security or sensitive technologies?
4. What distinguishes the militarization of outer space from its weaponization, and should international law regulate these activities differently?
5. How can governments balance national defense requirements with the principle that outer space should remain a peaceful environment for all humankind?
6. What responsibilities should private companies assume in promoting the safe, secure, and sustainable use of outer space, and should they be subject to additional international regulations?
7. Which measures could most effectively reduce the creation of orbital debris while allowing continued technological innovation and space exploration?
8. How can developing countries obtain equitable access to space technology, scientific cooperation, and capacity-building opportunities without increasing geopolitical tensions?
9. Should the international community establish consequences or accountability mechanisms for destructive ASAT testing or other actions that endanger the orbital environment?
10. How should responsibilities be shared among COPUOS, the United Nations General Assembly, the United Nations Security Council, and other international organizations in promoting space security and preventing conflict?
11. What confidence-building measures could improve transparency, reduce misunderstandings, and strengthen trust among established and emerging space powers?
12. How can international cooperation help prevent an arms race in outer space while preserving freedom of exploration, scientific collaboration, and the long-term sustainability of space activities?

Suggested Readings and Resources

Official United Nations Documents and Resources

United Nations Office for Outer Space Affairs (UNOOSA)

The official portal of the United Nations Office for Outer Space Affairs provides information on COPUOS, international space law, capacity-building initiatives, and current developments in the peaceful uses of outer space. It also contains access to treaties, technical guidelines, and committee documentation.

<https://www.unoosa.org>

United Nations Official Document System (ODS)

The Official Document System is the primary repository for United Nations resolutions, General Assembly reports, COPUOS documents, and records of international negotiations related to space governance and security.

<https://documents.un.org>

United Nations Office for Disarmament Affairs (UNODA) - Outer Space

UNODA provides information on international efforts to prevent an arms race in outer space, including discussions on anti-satellite (ASAT) weapons, transparency and confidence-building measures, and space security initiatives.

<https://disarmament.unoda.org/outer-space>

COPUOS Current Sessions and Reports

Delegates should review recent agendas, annual reports, and the work of both the Scientific and Technical Subcommittee and the Legal Subcommittee to understand the committee's current priorities and ongoing negotiations.

<https://www.unoosa.org/oosa/en/ourwork/copuos>

Outer Space Treaty (1967)

The foundational legal instrument governing activities in outer space. Delegates should become familiar with its principles before proposing new international measures.

<https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html>

Academic Articles and Open-Access Publications

Giommi, P., Arrigo, G., Barres de Almeida, U., et al. (2018). The Open Universe Initiative.

This paper introduces the United Nations Open Universe Initiative, which promotes open access to space science data and international scientific cooperation through COPUOS and UNOOSA. It is an excellent introduction to how the United Nations promotes peaceful collaboration in outer space.

Free access (arXiv PDF): <https://arxiv.org/abs/1805.08505>

Haubold, H. J., Gadimova, S., & Balogh, W. (2010). Contributions of the United Nations Office for Outer Space Affairs to the International Space Weather Initiative (ISWI). International Astronautical Congress.

This article explains how UNOOSA coordinates international scientific cooperation through the International Space Weather Initiative and demonstrates the role of COPUOS in promoting peaceful uses of outer space.

Free access (arXiv PDF): <https://arxiv.org/abs/1011.5663>

Mathai, A. M., Haubold, H. J., & Balogh, W. (2015). United Nations Basic Space Science Initiative (UNBSSI) 1991-2012 and Beyond.

An overview of more than two decades of UNOOSA-led capacity building in astronomy, space science, and international cooperation, particularly benefiting developing countries.

Free access (arXiv PDF): <https://arxiv.org/abs/1503.06654>

Space Policy (Journal)

Space Policy is one of the world's leading journals on international space governance, law, security, and policy. Although some articles require subscription access, many are available as Open Access or as author preprints through institutional repositories.

Journal homepage: <https://www.sciencedirect.com/journal/space-policy>

UNOOSA Publications Library

UNOOSA publishes numerous reports, technical papers, handbooks, and legal studies that are freely available. These publications provide delegates with authoritative information directly from the United Nations.

Free access: <https://www.unoosa.org/oosa/en/publications/index.html>

UNIDIR Space Security Portal

The United Nations Institute for Disarmament Research (UNIDIR) maintains one of the most comprehensive collections of reports on space security, responsible behavior in outer space, anti-satellite weapons, and emerging technologies.

Free access: <https://spacesecurity.unidir.org>

Secure World Foundation Publications

Secure World Foundation publishes annual reports, policy briefs, technical analyses, and the widely cited *Global Counterspace Capabilities* report, all available free of charge.

Free access: <https://swfound.org/publications/>

Space Security Index

The Space Security Index provides annual open-access assessments of military, commercial, civil, and environmental developments affecting global space security. It is frequently cited in academic literature and UN discussions.

Free access: <https://spacesecurityindex.org>

Recommended Open-Access Reports for This Topic

The following reports are particularly useful for delegates preparing for this committee:

- **Global Counterspace Capabilities: An Open Source Assessment** (Secure World Foundation)
<https://swfound.org/publication/global-counterspace-capabilities/>
- **Space Security Portal** (UNIDIR)
<https://spacesecurity.unidir.org>
- **Long-term Sustainability Guidelines for Outer Space Activities** (UNOOSA)
<https://www.unoosa.org/oosa/en/ourwork/topics/long-term-sustainability-of-outer-space-activities.html>
- **Outer Space Treaty (1967)**
<https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html>
- **COPUOS Documentation**
<https://www.unoosa.org/oosa/en/ourwork/copuos/index.html>

International Organizations

Secure World Foundation

Provides comprehensive reports on counterspace capabilities, orbital debris, space sustainability, and emerging trends in international space governance. Its annual publications are among the most frequently cited references in discussions on space security.

<https://swfound.org>

Space Security Index

Publishes annual assessments of global developments in space security, including military space capabilities, international diplomacy, commercial activities, and sustainability initiatives.

<https://spacesecurityindex.org>

United Nations Institute for Disarmament Research (UNIDIR)

Produces research on arms control, responsible behavior in outer space, space security, and emerging technologies. Its Space Security Portal is particularly useful for understanding current international debates.

<https://spacesecurity.unidir.org>

Arms Control Association

Publishes policy analyses, expert commentary, and reports on international negotiations concerning anti-satellite weapons, arms control, and the prevention of conflict in outer space.

<https://www.armscontrol.org>

References

- Arms Control Association. (n.d.). *Space security*. <https://www.armscontrol.org/issues/space-security>
- Bowen, B. (2020). *War in space: Strategy, spacepower, geopolitics*. Edinburgh University Press.
<https://doi.org/10.1515/9781474450528>
- European Space Agency. (2024). *Space safety*. https://www.esa.int/Safety_Security/Space_Safety
- European Space Agency. (2024). *Space debris by the numbers*.
https://www.esa.int/Safety_Security/Space_Debris
- Giommi, P., Barres de Almeida, U., Arrigo, G., Pollock, A. M. T., & Open Universe Initiative Team. (2018). *The Open Universe Initiative* (arXiv:1805.08505). arXiv. <https://arxiv.org/abs/1805.08505>
- Haubold, H. J., Gadimova, S., & Balogh, W. (2010). *Contributions of the United Nations Office for Outer Space Affairs to the International Space Weather Initiative* (arXiv:1011.5663). arXiv.
<https://arxiv.org/abs/1011.5663>
- International Telecommunication Union. (2024). *ITU Radiocommunication Sector (ITU-R)*.
<https://www.itu.int/itu-r>
- Mathai, A. M., Haubold, H. J., & Balogh, W. (2015). *United Nations Basic Space Science Initiative (UNBSSI) 1991-2012 and beyond* (arXiv:1503.06654). arXiv. <https://arxiv.org/abs/1503.06654>
- National Aeronautics and Space Administration. (2019, April 1). *NASA administrator statement on India's ASAT test*.
<https://www.nasa.gov/news-release/nasa-administrator-statement-on-indias-asat-test/>
- National Aeronautics and Space Administration. (2021, November 15). *NASA statement on Russian ASAT test*. <https://www.nasa.gov/news-release/nasa-statement-on-russian-asat-test/>
- Ronzitti, N. (Ed.). (2015). *Space security law*. Brill Nijhoff.
- Secure World Foundation. (2024). *Global counterspace capabilities: An open source assessment*.
<https://swfound.org/publication/global-counterspace-capabilities/>
- Space Security Index. (2024). *Space Security Index 2024*. <https://spacesecurityindex.org>
- United Nations. (2024). *United Nations and outer space*. <https://www.un.org/en/our-work/outer-space>
- United Nations General Assembly. (2013). *Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities* (A/68/189).
<https://documents.un.org/doc/UNDOC/GEN/N13/371/14/PDF/N1337114.pdf>

United Nations General Assembly. (2022). *Destructive direct-ascent anti-satellite missile testing* (Resolution A/RES/77/41).

<https://documents.un.org/doc/UNDOC/GEN/N22/756/35/PDF/N2275635.pdf>

United Nations General Assembly. (2024). *Prevention of an arms race in outer space* (Resolution A/RES/79/65). <https://documents.un.org>

United Nations Institute for Disarmament Research. (2023). *Space Security Portal*.

<https://spacesecurity.unidir.org>

United Nations Office for Disarmament Affairs. (1967). *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*.

<https://disarmament.unoda.org/outer-space/>

United Nations Office for Disarmament Affairs. (2013). *Transparency and confidence-building measures in outer space activities*. <https://disarmament.unoda.org/outer-space/>

United Nations Office for Disarmament Affairs. (2023). *Open-ended Working Group on Reducing Space Threats Through Norms, Rules and Principles of Responsible Behaviours*.

<https://disarmament.unoda.org/outer-space/>

United Nations Office for Outer Space Affairs. (1972). *Convention on International Liability for Damage Caused by Space Objects*.

<https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/liability-convention.html>

United Nations Office for Outer Space Affairs. (1975). *Convention on Registration of Objects Launched into Outer Space*.

<https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/registration-convention.html>

United Nations Office for Outer Space Affairs. (2021). *Guidelines for the Long-term Sustainability of Outer Space Activities*.

<https://www.unoosa.org/oosa/en/ourwork/topics/long-term-sustainability-of-outer-space-activities.html>

United Nations Office for Outer Space Affairs. (n.d.). *Committee on the Peaceful Uses of Outer Space (COPUOS)*. <https://www.unoosa.org/oosa/en/ourwork/copuos/index.html>

United Nations Office for Outer Space Affairs. (n.d.). *United Nations treaties and principles on outer space*. <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html>