



STUDY GUIDE

UNOOSA

“Peacekeeping and sustainable exploration of outer space at the dawn of a new decade”

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MESSAGE FROM THE DAIS

Greetings honourable delegates,

It is undeniably an absolutely heart-warming pleasure to welcome you to the DISEC Committee. I am Airish, an undergraduate student at the University of the Philippines-Diliman majoring in Landscape Architecture. Since 2018, I have been an active member of Model United Nations and have won several awards as a delegate and chaired several conferences across the globe. Undeniably, I believe that MUN has impacted my life positively as it has helped me a lot in conquering my fear of public speaking and has moulded me to be very passionate in debating and talking about diplomatic issues.

At any rate, it is truly an honour to serve as the Committee Director for DISEC. Aside from the passion for this committee, the selected topic is of great importance today in the realms of international and outer space peace and security. Model United Nations is not just about merely speaking on behalf of the country you are representing, but it will also enlighten you about today's most pressing and concerning world issues. As some of you may not be familiar with how Model United Nations work, it can seem overwhelming if you are a beginner, but as they say, as cliché as it may sound, "The beginning is always the hardest". May you see this GIMUN as your opportunity to learn skills you will not get taught in university – about making a great impact on society and how to be a good and empathetic leader. Above all, do not forget to make friends and have fun.

Nevertheless, the success of this conference will not be measured by how many delegates have spoken, but by how much knowledge and the level of awareness it has contributed to them, to enable them to take steps forward in leading while making enigmatic decisions. Having said that, we positively hope that this will be your most memorable experience in being a delegate or a representative of a country by consistently and comfortably demonstrating your leadership, diplomacy and great moral values. We are eager to have an enlightening experience with all of you delegates, and to hear your deliberation on and proposals for these monumental issues!

Sincerely,
Airish Castillo
Chair, DISEC

Greetings honourable delegates,

My name is Aryan Singh, from India, and I am currently a second-year undergraduate at the JSS Academy of Technical Education Noida pursuing a Bachelor of Technology in Information Technology. I am a seasoned Model UN fanatic who has been working in Model UN circuits for the past five years, with decent national and international conference experience. I often work with a range of well-known organisations such as the International MUN (acknowledged by UNESCO, UNDP and the Australian Embassy), Ghent Model UN and several others.

It is an honour to serve this Committee in the capacity of a Chairperson and with that I firmly believe that the current agenda is dynamic in nature when we talk about how Disarmament and International Security needs assessment regarding the issue at hand. We request the delegates do extensive research on the agenda, and the documents provided by us will suffice as the basic guide for understanding the agenda. Nonetheless it is expected that the delegates will showcase their diplomatic skills in the committee by doing extensive research on the agendas. Please remember that this study guide shall act as a mere roadmap. This guide is not all inclusive, although we have done our best to gather all aspects of the agenda given to you.

Having said that, I hope that the delegates will maintain proper decorum and respect for the Chairs and the Committee during the conference. Hope to see you all very soon.

Sincerely,
Aryan Singh
Chairperson, DISEC

1. DESCRIPTION OF THE COMMITTEE

1.1 ABOUT UNOOSA

The United Nations Office for Outer Space Affairs (UNOOSA) was established in 1958, shortly after the launch of Sputnik by the erstwhile Soviet Union, which was the first satellite ever sent to space. Although it started out as an ad-hoc committee, it was formally established by the UN Resolution 1472.

UNOOSA works to help all countries, especially developing countries, access and leverage the benefits of space to accelerate sustainable development. The Committee works towards this goal through a variety of activities that cover all aspects related to space, from space law to space applications.

Its purpose is to govern the exploration and use of space for the benefit of all humanity, and to ensure peace, security and development. The Committee was tasked with reviewing international co-operation in peaceful uses of outer space, studying space-related activities that could be undertaken by the United Nations, encouraging space research programmes and studying legal problems arising from the exploration of outer space.

Under UNOOSA, the five treaties and the five principles of outer space were adopted, which serve today as cornerstones of space research. They are as follows:

1. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies:

It came into effect in 1967 under UN Resolution 2222, and is also known as the Outer Space Treaty.

2. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched Into Outer Space:

It came into effect in 1968 under UN Resolution 2345, and is also known as the Rescue Agreement.

3. Convention on International Liability Caused by Space Objects:

It came into effect in 1972 under UN Resolution 2777, and is also known as the Liability Convention.

4. Convention on Registration of Objects Launched Into Outer Space:

It came into effect in 1975 under UN Resolution 3235, and is also known as the Registration Convention.

5. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies:

It came into effect in 1984 under UN Resolution 34/68, and is also known as the Moon Agreement.

Out of these, the Outer Space Treaty is considered to be the most important when it comes to peaceful use of space, and has defined space missions and international co-operation in research and exploration for years.

1.2 MANDATE AND INSTRUMENTS

The overall mandate of the Committee and its two Subcommittees aims at strengthening the international legal regime governing outer space, resulting in improved conditions for expanding international co-operation in the peaceful uses of outer space. The mandate also specifies that the Committee should support efforts at the national, regional and global levels, including those of entities of the United Nations system and international space-related entities, to maximise the benefits of the use of space science and technology and their applications. Overall, the Committee aims to increase coherence and synergy in international co-operation in space activities at all levels.

1.3 FUNCTIONS AND POWER

UNOOSA help countries build their capacity to develop and make the most out of the space sector through a two-fold approach: on the one hand, providing resources such as training, workshops, conferences and knowledge-sharing portals; on the other hand, complementing these with concrete opportunities for countries to expand their space capabilities, such as fellowships and competitive programmes, some of which specifically target developing countries, for example the Access to Space 4 All Initiative.

In the area of disaster risk reduction, a dedicated programme, UN-SPIDER, helps countries use space data and technologies, such as satellite imagery, to prevent and manage disasters.

UNOOSA also helps countries understand the fundamentals of international space law and increase their capacity to draft or revise national space law and policy in line with international normative frameworks on space. This is particularly important as more and more actors enter the space arena.

UNOOSA supports transparency in space activities, through measures such as the Registry of Objects Launched in Outer Space, which we maintain, and which links each object to the country responsible for it.

UNOOSA works not only to promote sustainable development through space, but also to ensure the sustainability of outer space activities, fostering international solutions to problems such as the rapid increase in space debris, to preserve space for future generations.

UNOOSA works with space agencies and space leaders around the world to devise solutions to challenges that require an international response, such as the threat of a Near-Earth Object impact and the need to accelerate the compatibility of GNSS systems.

1.4 SUBCOMMITTEES:

(A) SCIENTIFIC AND TECHNICAL SUBCOMMITTEE

The Scientific and Technical Subcommittee (STSC) meets every year for two weeks to discuss questions related to the scientific and technical aspects of space activities. Topics for discussion include space weather, near-Earth objects, the use of space technology for socio-economic development or for disaster management support, global navigation satellite systems, and the long-term sustainability of outer space activities.

(B) LEGAL SUBCOMMITTEE

The Legal Subcommittee meets every year for two weeks to discuss legal questions related to the exploration and use of outer space. Topics include the status and application of the five United Nations treaties on outer space, the definition and delimitation of outer space, national space legislation, legal mechanisms relating to space debris mitigation, and international mechanisms for cooperation in the peaceful exploration and use of outer space.

1.5 RECENT HISTORY

The Committee meets annually in Vienna, Austria, to discuss questions relating to current and future activities in space. Topics for discussion include maintaining outer space for peaceful purposes, safe operations in orbit, space debris, space weather, the threat from asteroids, the safe use of nuclear power in outer space, climate change, water management, global navigation satellite systems, and questions concerning space law and national space legislation.

2. TOPIC

“Peacekeeping and sustainable exploration of outer space at the dawn of a new decade”

2.1 HISTORICAL BACKGROUND (AND PAST RESOLUTIONS)

Because space exploration began during the cold war arms race, and could not have occurred without improvements in missile technology, people worldwide worried that it would lay the foundation for a new kind of war in which the Earth would be just one battleground. Thus the UN General Assembly passed its first resolution on the topic in November 1957, just one month after Russia’s first Sputnik launch.

In Resolution 1148, the GA urged “the joint study of an inspection system designed to ensure that the sending of objects through outer space shall be exclusively for peaceful and scientific purposes.”¹

In 1959, in Resolution 1472, the GA established the Committee on the Peaceful Uses of Outer Space (CPUOS). The committee, which meets annually, now has 77 UN Member States. The GA charged CPUOS with studying measures to promote peaceful use of outer space.²

In 1961, the GA asked states to report all launches of objects into outer space to the UN Secretary-General. In 1976, the GA adopted the Convention on Registration of Objects Launched into Outer Space. Since then, 62 states have joined the convention and regularly submit reports of launches originating in their territories. Since there are 193 UN Member States, this is quite a small number of participants. However, many states, especially developing countries, have no space programme. According to UNOOSA, 92% of all satellites, probes, landers, manned spacecraft and space station flight elements launched into Earth orbit or beyond have been registered with the Secretary-General since the convention.³

In 1967, the GA adopted the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. This treaty, generally referred to as the Outer Space Treaty, prohibits the placement of nuclear weapons and other weapons of mass destruction (such as chemical and biological weapons) in space. However, it does not prohibit the basing of conventional weapons there. States that ratify the Treaty agree to the following provisions:

¹ Schmidt, P. Regulation, Limitation and Balanced Reduction of All Armed Forces and Armaments. Proceedings of the Academy of Political Science, 25(2) (1953), 67-79. doi:10.2307/1173267

² UN Office for Outer Space Affairs (UNOOSA). “United Nations Committee on the Peaceful Uses of Outer Space: UNOOSA, ‘History and Overview of Activities’”. (n.d.), http://www.oosa.unvienna.org/oosa/en/COPUOS/cop_overview.html

³ UNOOSA. “Convention on Registration of Objects Launched into Outer Space”. (n.d.), <http://www.oosa.unvienna.org/oosa/en/SORRegister/index.html>

- the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind;
- outer space shall be free for exploration and use by all States;
- outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means;
- States shall not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies or station them in outer space in any other manner;
- the Moon and other celestial bodies shall be used exclusively for peaceful purposes;
- astronauts shall be regarded as the envoys of mankind;⁴
- States shall be responsible for national space activities whether carried out by governmental or non-governmental entities;
- States shall be liable for damage caused by their space objects; and
- States shall avoid harmful contamination of space and celestial bodies.

As of July 2016, 104 UN Member States have ratified the Outer Space Treaty, 25 states have signed but not ratified it, and 64 states have never even signed it.⁵

“Preventing an Arms Race in Outer Space” is a regular item on the GA’s agenda, and typically at least one resolution per year has been passed on the topic in recent years. In 2010, the resolution “was passed by a recorded vote of 178 in favour to none against, with 2 abstentions (Israel, United States).” In addition, a second resolution on transparency and confidence-building measures in outer space activities “was adopted by a recorded vote of 183 in favour to none against, with 1 abstention (United States).”⁶

In January of 2013, the GA adopted “International Cooperation in the Peaceful Uses of Outer Space (A/RES/67/113), which noted the concern regarding an arms race and that spacefaring states should actively contribute to the goal of preventing one.”⁷

⁴ UNOOSA. “Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies,” (n.d.), <http://www.oosa.unvienna.org/oosa/SpaceLaw/outerspt.html>

⁵ UNOOSA. “Treaty Signatures”, (2016), <http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/status/index.html>

⁶ UN General Assembly. (2010, December 8). “General Assembly Notes New Strategic Relationship between Russian Federation, United States, Their Endeavour to Reduce Role, Importance Of Nuclear Weapons,” Press Release GA/11033. (n.d.), <https://www.un.org/press/en/2010/ga11033.doc.htm> For the text of these resolutions, go to <http://www.un.org/en/ga/65/resolutions.shtml>

⁷ UNOOSA, “Committee on the Peaceful Uses of Outer Space”, A/RES/67/113. (2012), https://www.unoosa.org/oosa/oosadoc/data/resolutions/2012/general_assembly_67th_session/ares67113.html

2.2 THE POTENTIAL FOR AND PROBLEMS OF AN ARMS RACE IN SPACE

Despite the cooperation that has emerged for scientific and research purposes, some scholars still suggest that states are likely to develop weapons in space in the future, and that this will likely result in an arms race in space. This idea rests on three premises. First, they point to the fact that all technologies (e.g. airplanes and nuclear technology) have eventually been adopted by states as weapons. States, according to this perspective, will always seek to use new technologies, including technologies that allow for weapons in space, for military purposes.⁸

Second, they argue that any state that initiates the process of weaponising space will have a military advantage over countries that wait to weaponise. The use of weapons in space, from a military standpoint, would provide several advantages. One would be the ability to deploy weapons to any location in the world. This could be used for offensive purposes, such as using weapons on a distant state, or for defensive purposes, such as using anti-ballistic missiles (ABMs) to protect ones' state from attacks that originate in space or on Earth. A second key advantage would be the ability to more easily disable other states' space-based military technology. This could seriously debilitate other states' military technology, including non-space technologies that rely heavily on space-based infrastructure. The US military, for instance, uses satellites for nearly all of its reconnaissance, communication and navigation capabilities on Earth. An attack on its satellites would seriously cripple the US military in these areas. In this case, the threat of potential attacks from those who have weaponised space would drive other states to develop their own weapons programmes. Some scholars thus suggest that the US in particular is likely to seek this advantage, followed by China in response to US actions.⁹

Third, scholars have suggested that the US and China will likely see space as a final space for competition in the future. Hence, just as the USSR and the US competed for military dominance and territorial control during the cold war, the US and China may see space as a ground for competition in the future. This means they will not only develop weapons in space, but may instigate an arms race in their efforts to compete and deter one another.

2.3 NATIONAL DEFENCE SYSTEMS

Immediately after the end of the Cuban Missile Crisis, the US government focused on creating a missile defence system in order to avoid another similar situation from happening again. The Safeguard Program included an arsenal of ballistic missiles, which would be used to intercept any foreign weapon that could reach the USA. Nevertheless, the Program was only designed to protect

⁸ Martindale, M. Evaluating state willingness to pursue space weapons. *Defense & Security Analysis*. 31, (2015), 1-13. 10.1080/14751798.2015.1014159.

⁹ Ibid.

nuclear missile launch sites, and could never have been extended to protect the whole mainland United States.

Due to these technological limitations, the USA sought other ways to avoid nuclear war. The Anti-Ballistic Missile Treaty (ABMT) was signed in 1972 by the United States and the Soviet Union¹⁰, and established limitations on the development of defence systems: only a single system with up to 100 interceptor missiles was allowed, and only a single target could be protected at a time by the system. The reasoning behind the ABMT was based on the supposition that by forcing both superpowers to be vulnerable to nuclear devastation, they would do everything in their power to avoid nuclear confrontation. This was called the principle of Mutually Assured Destruction (MAD)¹¹. After the fall of the Soviet Union, the interest in maintaining the ABMT diminished and it was eventually terminated in 2002 when the United States pulled out.

Since then, the U.S. has developed anti-ballistic missile technology through the Missile Defense Agency, both for domestic use and to share with allies. Russia has also announced that it is also developing similar technologies. Nowadays, the legality and effectiveness of anti-missile technology have not been seriously discussed, even though they are an integral part of space combat and defence.

2.4 DEFINITIONS AND TYPES OF SPACE WARFARE

The existing international legal framework is ambiguous regarding the definition of concepts related to space warfare. While there is no universal legal definition, space warfare can be broadly described as military engagements that take place in outer space. Thus, it can be divided into three categories: ground-to-air, space-to-ground and space-to-space combat. It is very important that the international community recognises these aspects of space warfare and includes them in the existing framework.

Ground-to-air combat, as the name suggests, consists of engaging satellites and any other orbiting object from the Earth's surface. Ground-to-space weapons are usually thought of as ballistic or nuclear missiles. In January 2007, China took the international community by surprise when it conducted the second satellite intercept test ever recorded. The Chinese government launched a land-based ballistic missile which targeted the ageing FY-1C polar orbit satellite. Nations around the world expressed their concerns on the intentions behind the use of said technologies, and how it could threaten the demilitarisation of outer space. During the cold war, the United States and the Soviet Union both developed laser weaponry to use in anti-missile systems, though both programmes were short-lived and achieved limited results.

Space-to-ground combat is probably the most dangerous of the three categories, as it poses a threat to cities and other populated regions around the world. While the use of weapons of mass

¹⁰ UNTC (n.d) <https://treaties.un.org/pages/showDetails.aspx?objid=080000028010ceda>.

¹¹ UN News,

<https://news.un.org/en/story/2014/09/477092-un-officials-call-renewed-global-commitment-ending-nuclear-tests>

destruction in space is outlawed by the Outer Space Treaty¹², the use of laser weaponry, cyber-attacks and tactical weapons remains largely unrestricted. While the use of space-to-space weaponry remains largely theoretical, restrictions on it should also be imposed to stop space from becoming another battleground for military conflict between nations. Space-to-space combat would include orbiting objects attacking enemy satellites, spaceships or space stations¹³.

2.5 Concerns surrounding space debris

Since the Committee on the Peaceful Uses of Outer Space published its Technical Report on Space Debris in 1999¹⁴, it has been a common understanding that the present space debris environment poses a risk to spacecraft in Earth orbit. Space debris is often defined as all man-made objects, including fragments and elements thereof, in Earth orbit or re-entering the atmosphere, that are non-functional. As the quantity of debris continues to grow, the probability of collisions that would cause potential damage will consequently increase. In addition, there is also the danger of damage on the ground, if debris survives the Earth's atmospheric re-entry. The prompt implementation of appropriate debris mitigation measures is therefore considered a prudent and necessary step towards preserving the space environment for future generations.

Historically, the primary sources of space debris in Earth orbits have been: (a) accidental and intentional break-ups which produce long-lived debris and (b) debris released intentionally during the operation of launch vehicle orbital stages and spacecraft. In the future, fragments generated by collisions are expected to be a major source of space debris. Space debris mitigation measures are often divided into two broad categories: those that curtail the generation of probably harmful space debris within the near term and people that limit their generation over the longer term. The former involves the curtailment of the assembly of mission-related space debris and therefore the avoidance of break-ups.

The latter concerns end-of-life procedures that remove decommissioned spacecraft and launch vehicle orbital stages from regions populated by operational spacecraft. Another concerning aspect in this regard is the emergence of electronic and cyber counter-space capabilities. It is enabling a wider range of actors, including States and non-State actors to target and disrupt space objects, including both military and civilian satellites. These capabilities are already being used, targeting objects both in space and on the battlefield.

Like electronic warfare technologies, cyber warfare measures are fast emerging as a viable option for space warfare because they are cheap and easily accessible. Several States, including less advanced ones, have been able to develop cyber warfare capabilities that could interfere with outer space systems and satellite functioning, yet the number of reported incidents of use are few. Many, including the US, the Russian Federation, China and the Democratic People's Republic of Korea, have

¹² UNIDIR Report on Discussions on Prevention of Arms Race in Outer Space in Conference on Disarmament

¹³ United Nations Office of Outer Space Affairs (2018) 2222 (XXI) Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. Retrieved from: <http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html>

¹⁴ United Nations Office of Outer Space Affairs, https://www.unoosa.org/pdf/publications/st_space_49E.pdf

demonstrated their capability and willingness to carry out cyber attacks against non-space targets. While satellites are attractive targets, an attack on them could have serious unintended consequences and has the potential to lead to serious conflict.

Moreover, commercial space satellites may be more vulnerable compared to military assets. Cyber warfare capabilities could become a larger challenge in the coming years for a number of reasons¹⁵.

A basic, crude cyber capability is more easily accessible than other kinetic counter-space capabilities. It can be developed and deployed much faster than an Anti-Satellite (A-SAT) and is much cheaper. The entry barrier for these technologies is fairly low, with many independent hackers available. The deniability factor and difficulty in attribution also makes cyber measures an ideal way to create massive disruptions and damage to space systems¹⁶.

It is important to understand that the existing multilateral regulatory framework is insufficient to cope with the threat to space systems posed by electronic and cyber capabilities, requiring new measures that define norms of behaviour and rules of engagement with this technology¹⁷.

2.6 BLOC POSITIONS

In October 2018, delegates from different nations gathered to discuss the main issues regarding militarisation of outer space, and to establish the new order for preventing celestial conflict. In this discussion, clear positions from different blocs were stated and they are displayed as follows:

Egypt and Africa

Egypt's representative said, "it must not be allowed to turn into another battlefield or a scene for military conflicts that could have catastrophic implications." Echoing the views expressed by the Arab Group, African Group and the Non-Aligned Movement, he stressed that outer space is a shared heritage owned equally by all the peoples of the world and a common asset for humanity. Therefore, there is a clear need for a legally binding instrument to prevent an arms race and fill existing legal gaps. Such an instrument should have a comprehensive scope that includes four prohibitions: the placement of any weapons, defensive or offensive; armed attacks against satellites or any outer space assets; intentional, harmful interference that interrupts the normal functioning of such assets; and developing, testing and stockpiling weapons designed to attack outer space assets.

During the discussion, African countries highlighted how space technologies are becoming increasingly vital to meeting their development needs. Malawi's representative said space technologies are critical to water resource management and climate change responses, recalling

¹⁵ UNIDIR, <https://www.unidir.org/files/publications/pdfs/electronic-and-cyber-warfare-in-outer-space-en-784.pdf>

¹⁶ Anti-Satellite report, <https://core.ac.uk/download/pdf/232686059.pdf>

¹⁷ United Nations. (2018, October 24). Raising Alarm over Possible Space Wars, First Committee Delegates Explore Ways to Build New Order for Preventing Celestial Conflict, Confrontation. <https://www.un.org/press/en/2018/gadis3609.doc.htm>

how the United Nations helped to provide invaluable satellite images that enabled authorities to plan evacuation routes in 2015 during the country's worst flood.

China and Russia

The representatives of China and the Russian Federation highlighted their draft treaty on the prevention of an arms race in outer space, which the delegations submitted to the Conference on Disarmament in 2008 and again in 2014.

Opinions from other countries

While many delegations supported the Chinese-Russian draft treaty, some others expressed divergent views on the initiative. Australia's delegate said the proposal could have counterproductive consequences by allowing an unfettered development of terrestrial and dual-use counter-space systems. In addition, she said, the proposed definition of a space weapon is unworkable and fails to address the problem of terrestrial, dual-use threats and the stockpiling of deployable weapons.

Likewise, the representative of the United Kingdom said the international community must reach a common understanding of what a space weapon is, as any object with manoeuvring capabilities can in theory be used for offensive purposes, he said. While the United Kingdom does not rule out the possibility of agreeing to a legally binding treaty on outer space in the future, he said that before negotiations on such an instrument begin, serious political, technological and practical challenges must be resolved.

Looking forward, South Africa's representative said that while his country supports the Chinese-Russian draft treaty, it is highly unlikely such an agreement can be reached in the Conference on Disarmament in the near future. Therefore, other avenues, such as the General Assembly, should be explored.

3. QUESTIONS A RESOLUTION MUST ANSWER

- Provide a definition of militarisation and weaponisation and elaborate upon what qualifies as peaceful use of outer space.
- Are the existing legal frameworks in place sufficient? If not, what alternative and new legal measures can be taken to strengthen the regulatory mechanism governing outer space exploration and usage?
- What measures can be taken to stop the development of an arms race in outer space? What mechanisms can be used to include all nations – regardless of whether they are capable of reaching space – and encourage co-operation?
- What loopholes do the existing regulatory mechanisms have and how can they be provided for?
- How can Anti-Satellite weapons be regulated while maintaining nations' inherent right to self defence? What changes can be made in the existing regulatory framework for the same matter?
- Which technologies should be restricted to ensure the peaceful uses of outer space? How can we stop both present and future spacefaring nations from developing them?
- Should defensive anti-missile systems be considered illegal? How can a clear distinction between what is defensive and offensive space weaponry be established?
- What can be done to prevent creation of space debris in future?
- What can be done for mitigating the adverse effects of existing space debris?
- How can the threat to space exploration efforts by cyberwarfare be handled?
- What confidence-building and transparency measures can be taken to bolster multilateral co-operation, especially among nations with considerable space exploration capabilities?
- How can the UN restrict non-peaceful uses of space without affecting commercial activities and information gathering?
- How can countries help to reach a peaceful and suitable resolution, and what would be the role of UNOOSA in this process?

4. SUGGESTED READING

This study guide and the cases mentioned are meant to give a brief overview of the issue at hand, allowing you to see not only what the UN has tried in the past, but how it has learned, or not learned, from these mistakes and how it has changed its policies in recent times. There are many more cases and situations that can be of great help in learning more about the issue, and there are many resources that have not been used in this guide. You can find below some of the useful readings you might want to take a look at in order for you to have a broader understanding of the topic.

Amnesty International. UN: Global Arms Trade Treaty a step closer after resounding vote, (2013), [Website].

<https://www.amnesty.org/en/latest/news/2012/11/un-global-arms-trade-treaty-step-closer-after-resounding-vote/>

Jessup, P. and Taubenfeld, H. Controls for Outer Space and the Antarctic Analogy, New York: Columbia University Press, 1959, p. 252

Report of the Ad Hoc Committee on the Peaceful Uses of Outer Space, General Assembly document A/4141 of 14 July 1959

United Nations Office for Outer Space Affairs (UNOOSA). From here you can also see the official treaty documents and more : <http://www.oosa.unvienna.org/>

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6. COUNTRIES PRESENT IN THE COMMITTEE

Echoing the views expressed by the Arab Group, African Group and the Non-Aligned Movement, outer space is a shared heritage owned equally by all the peoples of the world and a common asset for humanity. Therefore, there is a clear need for a legally binding instrument to prevent an arms race and fill existing legal gaps. Such an instrument should have a comprehensive scope that includes four prohibitions: the placement of any weapons, defensive or offensive; armed attacks against satellites or any outer space assets; intentional, harmful interference that interrupts the normal functioning of such assets; and developing, testing and stockpiling weapons designed to attack outer space assets.

1. Argentina reiterated the fundamental role played by the Outer Space Treaty in promoting the peaceful uses of that realm, welcomed its adoption of the Guidelines for the Long-term Sustainability of Outer Space Activities, while expressing support for negotiations within the Disarmament Conference towards a legally binding treaty to prevent an arms race in outer space.
2. Australia's space agency is the primary source of advice to the Government on related civil policies and will continue to drive further innovation across the economy. "Space is democratizing and the barriers to accessing space are tumbling as the sector is disrupted by technology that is far cheaper to build, launch and maintain," as the representative said. Unfortunately, more space activity means more debris, which in turn will increase costs for commercial and civil activities. Australia supports initiatives that prevent an arms race; it does not support either of these initiatives. Both would provide limited comfort and could have counterproductive consequences by allowing an unfettered development of terrestrial and dual-use counter-space systems. The proposed definition of a space weapon is unworkable and fails to address the problem of terrestrial, dual-use threats and the stockpiling of deployable weapons. Both initiatives also fail to provide a verification mechanism to determine whether or not weapons have been developed to be placed in space. "Our view is that our efforts are better focused on limiting bad behaviour in space," a representative added.
3. Bangladesh's representative said the socioeconomic benefits derived from the use of outer space have raised their country's stake in undertaking such activities. The benefits should be shared by all countries, as outer space is a province for all. Flagging Bangladesh's support for efforts to prevent an arms race in outer space, the country is co-sponsoring a draft resolution on the issue. The Group of Governmental Experts must maintain an equitable geographical representation. Warning against the placement of anti-ballistic missile systems in this sphere, the country supports the principle of no first placement of weapons in outer space. In addition, any codification for outer space must be inclusive and comprehensive.
4. Brazil highlighted this body's adoption of the Preamble and Guidelines for the Long-term Sustainability of Outer Space Activities and made important decisions on other work. The delegation said the Outer Space Committee is currently advancing the development of a new "Space2030" agenda and an implementation plan intended to maximise the benefits of space activities for implementation of the 2030 Agenda for Sustainable Development.

Describing space as a driver of sustainable development, the representative noted that the Outer Space Committee and the United Nations Office for Outer Space Affairs serve as unique platforms from which to foster international co-operation in the exploration and uses of that dimension for peaceful purposes, global governance of outer space activities, development of international space law, and fostering dialogue among space-faring and emerging space nations.

5. The representatives of China and the Russian Federation highlighted their draft treaty on the prevention of an arms race in outer space. While many delegations supported the Chinese-Russian draft treaty, some others expressed divergent views on the initiative. Australia's delegate said the proposal could have counterproductive consequences by allowing an unfettered development of terrestrial and dual-use counter-space systems. In addition, the proposed definition of a space weapon is unworkable and fails to address the problem of terrestrial, dual-use threats and the stockpiling of deployable weapons.
6. China's representative said his country has always been against the weaponisation of an arms race in outer space, having jointly submitted related United Nations resolutions for many years.
7. The Democratic People's Republic of Korea's delegate said that the Outer Space Treaty stipulates that outer space is a wealth common to humanity and grants sovereign States equal rights to explore it, while encouraging close co-operation among countries. Noting that many developing countries are moving towards acquiring outer space technological capabilities, the representative said the monopolistic position taken by some countries is collapsing, stressing that their anachronistic manoeuvres to check international co-operation in that realm and to contain development should no longer be tolerated.
8. France highlighted several challenges in outer space, including traffic management. With an estimated 7,000 new satellites expected to orbit the planet in the next decade, space traffic management is a crucial issue. Moreover, a great volume of debris is currently in low orbit travelling at high speeds. However, space is subjected to little regulation. Because of its incredible potential and the conflicting positions it arouses, space has become a genuine security issue and an element of strategic stability. States must affirm their desire to address these issues through co-operation and by promoting a vision of power regulated by law based on the United Nations Charter.
9. India, noting that their country's Polar Satellite Launch Vehicle has made four successful missions, said it has also launched 10 satellites, including the heaviest satellites it has built — the GSAT-11 — and its second mission to the Moon, Chandrayaan-2. It has also launched 58 satellites from other countries, he noted, providing updates on the progress of Gaganyaan, the Indian human space flight programme. India has announced a capacity-building programme on small satellite realisation named UNISPACE Nano-satellite Assembly and Training, which will provide excellent opportunities for developing countries in the field.
10. Iran expressed concern about the space policies of the United States, which threaten the sustainability of a peaceful environment and risk triggering a destructive arms competition in that realm. The delegation provided examples of the country's irresponsible space policy and behaviour that violate principles of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial

Bodies, calling on the international community to prevent such a rogue State from putting into action its intention to turn space into a battlefield. At the same time, it rejects any attempt aimed at manipulating space technology into a monopoly governed by a few countries or at imposing restrictions on the transfer of space-related science, technology and services to developing countries.

11. Italy's representative said satellite systems are essential for monitoring land, maritime and air security and in addressing critical issues, such as natural disaster management. A comprehensive and effective international regulatory environment should be established to address the increasing number of objects in space and a growing reliance on space-related resources, infrastructures and activities. A comprehensive voluntary instrument covering substantive aspects of safety, security and sustainability of outer space activities would contribute to globally shared principles of responsible behaviour. These include non-interference in the peaceful exploration and use of outer space, prevention and mitigation of the creation of debris and the preservation of the integrity of the space environment. Implementing transparency and confidence-building measures are crucial steps towards achieving greater safety, security and sustainability of space activities.
12. Japan expressed support for the idea of preventing an arms race in outer space, having participated in substantive discussions, including with the Group of Governmental Experts meeting in 2018. The country recognises the importance of the rule of law in outer space and expressed support for the Outer Space Committee as an effective forum for developing norms of responsible behaviour. Warning that the emergence of large constellations and the increased risks of collision threaten the sustainability of space activities, Japan called upon all Member States to implement the Guidelines on Long-term Sustainability of Outer Space Activities adopted by the Outer Space Committee. The country is seriously concerned about the actual, not abstract, development and deployment of anti-satellite weapons capabilities, including terrestrially based ones. To deal with the problems of debris, Japan will continue to intensify efforts in the field of space situational awareness and in developing related removal technology.
13. Malawi said the country has a clear interest in working with international partners to promote the responsible use of outer space. Related technology holds immense potential and remains pivotal to the 2030 Agenda. Malawi relies on assured access to space-based systems to support its economic prosperity and maintain public safety. Malawi called for more international co-operation and capacity-building for developing countries in using space science and technology. As an agriculture-dependent country, Malawi has also benefited greatly from technical support and training on space technology and interpreting satellite data.
14. The representative of the Russian Federation outlined a number of obstacles to negotiations on a draft treaty on the prevention of the placement of weapons in outer space, proposed jointly by his country and China. Meanwhile, consensus seems to have formed within the international community on transparency and confidence-building measures in outer space activities. The work on guidelines for the long-term sustainability of outer space activities was a good opportunity; however, it turned out to be impossible to elaborate on the issue.
15. The representative of Singapore said outer space should be preserved as a peaceful global common. With the world becoming increasingly reliant on space-based infrastructure and

applications, the international community should face such challenges as space debris and orbital congestion in a co-ordinated way.

16. South Africa's delegation said that Africa's demand for space products and services is among the world's highest as the continent's economy becomes increasingly dependent on space. "In Africa, we see the utilization of outer space as a key driver towards addressing the triple challenges our people confront — poverty, inequality and unemployment." South Africa said the Government is concerned about developments that could prompt an arms race in space and its weaponisation. While its exploration can help to tackle global challenges, space science will also play a key role in achieving the Sustainable Development Goals. The international community has a responsibility to prevent outer space from becoming a new arena for weapons placement. The only way to promote orderly, safe and secure activities is through international co-operation and dialogue, with all States participating on an equal basis. While South Africa supports the Chinese-Russian draft treaty, it is highly unlikely such an agreement can be reached through the Conference on Disarmament in the near future. Therefore, other avenues, such as the General Assembly, should be explored.
17. Syria supports efforts to make the Middle East a zone free of nuclear weapons and weapons of mass destruction.
18. Thailand's representative emphasised the importance of transparent and inclusive development of international frameworks to ensure the peaceful use of outer space. Thailand is drafting the National Space Act to pave the way for the creation of the National Space Agency that will enable the country to manage its space aspirations and ensure all national space activities are carried out in a coherent and responsible manner. The use of space technology, such as earth observation satellites and geo-informatics, can help attain the Sustainable Development Goals, stressing that space-based science and information are critical in reducing disaster risk, developing early-warning systems and guiding search-and-rescue operations.
19. Likewise, the representative of the United Kingdom said the international community must reach a common understanding of what a space weapon is, as any object with manoeuvring capabilities can in theory be used for offensive purposes. While the United Kingdom does not rule out the possibility of agreeing to a legally binding treaty on outer space in the future, the delegation said that before negotiations on such an instrument begin, serious political, technological and practical challenges must be resolved.
20. Speaking on the issue of other weapons of mass destruction were the representatives of Turkey, Argentina, Australia, Thailand, Syria, Brazil, Spain, Myanmar, Italy, Bangladesh, China, United Kingdom, El Salvador, Malaysia, Republic of Korea, Russian Federation, Philippines, Iran, Lithuania, Austria and the Netherlands.