Southern China International MUN

Official Background Guide

Disarmament Committee (DISEC): Promoting peaceful exploration and use of outer space through international management of militarization of space

Agenda overseen by Jack Kim

1. Descriptions of the Issue

1.1 History of the Issue

Extinguishing the differences between militarization and weaponization can be confusing for the people who are just starting to research this topic. Generally speaking, **militarization** of space would be act of using space for military purposes while **weaponization** of space being the act of placing weapons onto space. In the conference of Disarmament, delegates use these two terms quite ambiguously.[11] This is because the definition of the militarization of space can be a deciding factor whether a certain country should be accused of militarization or not. The articles of the Outer Space Treaty condemn the militarization of space but does not specifically prohibit the weaponization of space. The media and other resources will certainly have their own views on militarization. One might state that militarization only refers to the action of using satellites to target and attack other space crafts, while others define it more loosely. This report provides a framework for delegates to find out what their countries' stances and definitions on the militarization of space would be. The main goal of this committee is to make sure that explorations and use of outer space is carried out peacefully through the management of militarization. Disputes between delegates shall happen due to the different definitions that delegates present, and alliances will be formed when definitions can agree on each other. Treaties have been formed to prevent conflicts regarding space militarization. It is also why an ad hoc committee has been created to only focus on the issues explicitly relevant to the Prevention of an Arms Race in Space (**PAROS**). It is mandatory for delegates to solidify their own stances on the militarization of space and be ready to defend their positions when necessary.

"The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.[13]

"Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.[13]

"There shall be freedom of scientific investigation in outer space, including the moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation."[13]

This statement traces all the way back to 1967, January 27, when the Outer Space Treaty was formed and agreed by the three depository countries to make sure outer space exploration was happening for peaceful purposes and for secure reasons. This treaty was created to allow space explorations to be open to all nations and to not be subject to national sovereignty. Satellites and rockets were launched into space for earth, space and moon observation. Due to the fact that satellites can observe and cover a wide range of areas with precision, countries started to use them for military purposes and to search for confidential information that can become a big advantage when gathered. Other countries gradually started to develop their own space technologies, soon launching their own satellites and rockets to explore space and gather information.

Rockets and Satellites should be distinguished before further discussion. **Rockets** are cylindrical projectiles that flies to space and can travel further with the fuel that gets put in before launching it. Rockets carry **satellites**, which are vehicles that do not have any propulsion abilities (this means that they cannot travel on their own). Rockets are launched to place satellites onto desired orbits. There are nine types of Satellites, which includes communications satellites, remote sensing satellites, navigation satellites, LEO, MEO, HEO, GPS, GEO, drone satellites, ground satellite and polar satellite.[14] The first rocket that went high enough into space was a V2 Missile that was launched by Germany in 1942. However, the well-known rocket that actually launched a satellite into space was Sputnik, launched in 1957 by the USSR.

In 1962, European nations decided to have two different agencies – one was given the role of developing a launching system while the other one was responsible for developing space crafts. **European Launch Development Organization (ELDO)** and **European Space Research Organization (ESRO)** are the agencies explained accordingly.[7]

In 1998 November 20, all of the world's attention was focused onto the International Space Station, which was launched as a symbol of space peace and cooperation. It was a joint project

between five participating space agencies: ESA, CSA, JAXA, Roscosmos and NASA.[15] This space station serves as a microgravity and space environment research laboratory for members of the station to conduct research and experiments on wide ranges of fields.[15] Even though all this effort was put in to make countries work together to strengthen the space technology, countries were not always eager to share their information and technologies to other countries. Countries preferred to keep the space technology within their borders.

Series of advanced strategic missile projects were started by the US Air Force in the late 1950s. It was under the designation Weapon System WS-199A, which was a weapons development program for the purpose of researching and developing new strategic weapons system for Strategic Air Command. 12 test launches happened for a few months between 1958 to 1959.[6] These launches did not turn out as successful and was modified with an Altair Upper Stage to create an anti-satellite weapon.[6] The use of high-altitude nuclear explosions to destroy satellites was put into consideration when observers noted the damaging effects of electromagnetic pulse (EMP) caused by the explosions on electronic equipment during the Hardtack teak test in 1958.[6] Other area of research included the research on energy weapons like the nuclear-explosion powered proposal developed by the Lawrence Livermore National Laboratory until it was cancelled in 1977.[6] The whole concept of anti-satellite weapons was given low priority until a successful USSR program became widely known in the US. This then led to the development of the ASM-135 ASAT, resulting in success until the program was cancelled in 1988. The Soviet Union kept their research and space programs secret and out of reach to keep them away from the west powers from knowing. Not a lot about the USSR's space programs are known as much as the US. However, there are information about when the USSR started to work on their anti-satellite technologies. It was rather from 1956 or 1959 from Nikita Kruschev or Vladmir Chelomei. In 1960, Chelomei was given the assignment of developing the UR-200 rocket, which was the rocket that allowed anti-satellite weapons to be launched into orbit. The UR-200 was followed by a "Istribitel Sputnikov" (satellite destroyer) program.[6] This "kamikaze" type space craft will co-orbit their enemies equipped with shrapnel warheads. They would then explode themselves near enough the enemy space crafts to knock them out. Other experiments that were conducted by the USSR were arming the space station with the Rikhter R-23 autocannon, a single fire cannon that has one of the highest rates of fire in history.[6] Years from then, the Soviet Union started to work on directed-energy weapons for their ASATs. They also developed the Polyus spacecraft, which was designed to destroy Strategic Defense Initiative Satellites.[6] These two superior powers worked on their space technologies to exploit and take advantage of the extraterrestrial environment to compete and win the war that could have happened in the form of World War 3.

United States of America and Union of Soviet Socialist Republics had to undergo 44 years of continuous war from 1947 to 1991, resulting in economic recession and political entanglement in countries they were battling and engaged in. Then the US and USSR had a space race, which peaked in 1969 when United States landed Apollo 11 and had the first mankind stepping on the moon. In 1987 April, USSR and USA signed a five-year agreement on space cooperation, which made the two leading powers work in unity to develop space technology allowing the technological progress to gain speed. After the fall of the USSR, United States is inevitably, now the leading and most advanced country in space technology.

United Nations General Assembly established the **Committee on the Peaceful Uses of Outer Space** in 1959 in Resolution 1472. This committee was meant for working towards global cooperation on the use of outer space and to study legal problems that rose from the exploration of outer space. For a decade between 1960s to the 70s, numerous agreements took place in order to prevent the weaponization of space. The treaties include the Partial Test Ban Treaty, Treaty on the Principles Governing the Activities of States in Exploration and Use of Outer Space, Agreement on the Rescue of Astronauts, Convention on International Liability for Damage Caused by Space Objects, the Launch Registration Convention and the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.[4]

The treaties that have been mentioned above successfully ban the use of weapons that causes mass destruction but do not prevent countries from placing other types of space weapons onto space. This is why countries started to complain about the insufficiency of treaties and agreements, leading to the establishment of the ad hoc committee led by the Conference on Disarmament.[4] This committee held meetings for a little less than a decade until the US objected with the stance of believing that a multi-lateral environment was not suitable when dealing with the measures of outer space arms control.

Countries that have launched satellites onto space are mostly MEDCs: only **North Korea** and **India** are countries that have launched satellites despite their economic disadvantage. More Economically Developed Countries that have placed this technology onto Earth's orbit include **China**, **USA**, **South Korea, Japan, Russia, Sweden, Ireland, France, Denmark** and **Germany**, some of them being assisted and subsidized by the government.[2]

1.2 Recent Developments

Anti-Satellite weapons are surface-to-space or air-to-space missiles and are possessed by countries ranging from **United States**, **Russia**, **India** and **China**. All these countries, in some way, have already started to use space as a way of militarizing and for the country's interest and security, but this fact can be denied or contradicted depending on the definition of militarization of space. The more countries possess this technology, the higher the possibility of disrupting space peace

China National Space Administration (CNSA) directs all space programs conducted by the republic of China. As being the first Asian country to launch a manned spacecraft to space, it is one of the major countries involved with space technology and development.[3] Despite its public stance against the militarization of space, China is involved with sophisticated satellite projects and testing technologies that can counterspace missions.[3]

On 6 June 2018, the European Commission presented a new program. The program's goal is to ensure continuous investment in EU space activities, encourage scientific and technical progress and support competitive and innovative progress of the European space industry. For the period 2021-2027, the European Commission proposes a budget of 16 billion euros to be distributed and invested in different branches of space programs, including Galileo, EGNOS, Copernicus, SSA and GOVSATCOM.[7]

The current project that is being carried out by the United States Air Force, called "Project Thor," brings the unreachable dreams and fantasies to reality. Kinetic bombardment, once an unreachable dream, is now becoming one of the deadliest weapons available – the damages equivalent to the ones of nuclear weapons that do not have the troubles of nuclear radiation nor fall out. While some call it an innovation, others perceive it as an alarming news. "Tungsten Thunderbolts," or "Rods from God," which are the nick names for this project, uses no explosive[1]and relies only on the enormous amount of speed that gravity pushes the tungsten down upon.[10] This is an example of how countries can be deploying weapons in space without being accused, due to the fact that the Outer Space Treaty only mentions Nuclear Energy when they mention weapons of mass destruction.

However, it is becoming a reality due to the efforts put in by the United States. The whole concept behind this force is to manage and take care of space as human's presence grows

[1] Explosives are substances used in bombs or shells, which can be made to explode.

rapidly due to the continuous growth in aerospace industries and development of technologies that allow space to be more accessible.[9] On June 18th 2018, President Donald Trump signed Space Policy Directive-3, assigning the Pentagon to create the sixth military branch responsible for space missions.[9]

2. Emphasis of the Discourse

2.1 Right Wing Approach (Conservative)

Either wing approach would make sense when the goal of promoting peaceful exploration and use of outer space is mentioned. However, when international management of militarization of space kicks in, it changes the whole subject. This is because some countries already have militarized or weaponized space in some sort of ways while others are barely even starting to send their own satellites out of Earth.

A conservative approach would then only apply to countries that are planning to gain profits from exploiting space militarily or are doing so already. This is because out of 195 countries, only 9 countries have orbital launch capabilities. Countries who have already weaponized space with the so called "anti-satellite weapons" might not want to have their actions to be managed by any third parties or organization. This would be disadvantageous for countries who are already trying to use the act of weaponizing space as a way of putting political pressure against other countries.

Countries who do not have adequate space technologies to compete with the leading powers will endorse and support the international management of militarization of space because not managing it at all can cause a whole world war happening in space. Countries who did take some kind of an action towards militarizing space or using space to develop certain technologies might or might not want to agree with internationally managing militarization. Conservative approach towards this issue in those countries would be to focus on the particular country's interest. This conservative approach is being exercised by the **USA**, the country involved with numerous space activities and development.

2.2 Left Wing Approach (Liberal)

A left-wing approach on the topic of internationally managing the militarization of space would be believing that management and cooperation could lead to prosperity and development in all

nations. A liberal approach would encourage diplomatic actions to be enforced between all nations to use the extra-terrestrial environment for peaceful and wise purposes.

An example of a liberal approach would be the acts taken by the **European Union (EU)**. This is because the European Union had worked together for decades on developing space technology and making sure all nations within this faction of the globe to benefit scientifically and technologically. European Union opposes the idea of a conservative approach, which would be against working with other countries, especially to work on a technology that has an enormous amount of power and demand.

Since the creation of the **United Nations**, its goals and motives all fell behind promoting peace and security for the struggling nations. A liberal approach on this topic would be suitable to the purposes of the United Nations. It can also assure them that militarization does not fully happen in other countries. This is because a liberal approach encourages global cooperation, hence preventing the happening of a space warfare when countries start to use space as a way of militant action.

2.3 Stance of Intergovernmental Organizations

One of the most well-known intergovernmental organization is the **United Nations**. Out of all the branches that divides the houses, United Nations Institute for Disarmament Research specifically tackles the issue of militarization of space. Their responsibility and purpose are making sure that militarization does not happen. Their main goal is to ensure peaceful use of outer space and prevent countries from fully weaponizing space. Their stance can be reaffirmed by the UN resolution called "**Prevention of an Arms Race in Outer Space (PAROS)**", which supports on the ban of the weaponization of space.

United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) is a committee established in 1958. Their stance on internationally managing the militarization of space can be quite easily deduced by the name of the committee. Its main purpose is the promote peaceful uses of outer space and prevent any forms of violence that can happen when exploitation happens in an unstandardized way.

It is also important to consider the stance of the **European Union**. Nations within the European Union had already started to work together on space technology decades ago in order to compete with the commanding powers like the US and Russia. Internationally managing the militarization of space could allow European nations and all the other Asian and American

nations to cooperate and work together without the possibility of having an uncontrollable space outbreak.

2.4 Stance of Developed Countries

To maintain world peace as mentioned and promised in the UN Charter, it is crucial for countries to come together and manage militarization of space to ensure that space explorations and outer space is being carried out and used in peaceful purposes. Therefore, it makes sense for developed countries, who have the capabilities of developing space technology, to form alliances and hold meetings to make sure that all countries can improve and benefit from exploring space without having to deal with conflicts, especially in regards to military.

The **United States** and the Soviet Union competed against each other by strengthening their military technologies like missiles and satellites to gain political superiority over each other for half a century until the treaty on Conventional Armed Forces in Europe was negotiated. The arms race can also be the reason why USA is so many steps ahead from other countries in this space game. Conference on Disarmament held meetings to have an isolated discussion with countries about restricting and forming laws on the use of outer space and militarization. USA believed it would be better off discussing the topic of outer space arms control with the USSR privately.[4] USA constantly refused to negotiate PAROS in the CD. This is because USA was aware of all the technical advantages they had over other countries regarding defense missile programs and potential space weaponry, like the Rod from God. Thus, the US has a conservative stance on this issue as it appears that they prioritize their own interests. Furthermore, the US wants to establish their sixth military force, adding to the initial five. This indicates the state's willingness to outrun its competitors without external help or cooperation.

2.5 Stance of Developing Countries

Referencing back to Article 1 of the Outer Space Treaty, all nations of the world have the right to explore space irrespective of their degree of economic or scientific development.[13] Developing nations therefore, have the right to be part of this conference and work with developed countries to come up with ways on internationally managing the militarization of space, with the larger goal of promoting peaceful uses of outer space and exploration.

3. Possible Solutions

3.1 In favor of Developed Countries

In order to enhance the security of Outer Space, the debris that are floating around the orbit of the earth should be better taken care of. Space debris is one of the greatest concerns that deals with space security. The tracking and elimination of these debris can act as a basic framework for countries to start from before managing militarization and weaponization of space.[12] As a lot of developed countries already own a certain vehicle in space in some way or another, managing their activities can increase transparency. Furthermore, establishing certain keep-out zones for satellites can also be something that can act as another step towards managing space activities of nations.[12]

3.2 In favor of Developing Countries

Developing nations can invest some money to raise public awareness on the dangers of the militarization of space. This can motivate public awareness, allowing more people to be skeptical about actions that might be taken by countries who are trying to militarize space.[12] Delegations of developing countries can also work on linking delegations with stances against the militarization of space to come together to strengthen and maximize the opposition.[12] Developed countries that has adequate space technologies can help developing countries can provide rockets for developing countries to put their satellites on. Developed countries can also include developing countries in discussions to provide developing countries a chance to contribute to the whole process of internationally managing the militarization of space.

4. Keep in Mind the Following

Outer Space Treaty and US/USSR ABM Treaties have been formed without a precise definition on outer space. There is also a lack of boundaries between air space and outer space, which opens up a chance for countries to validify their ideas, which are commonly commercial or military-related. Technical difficulties are present when countries try to come up with a demarcation for air space or outer space.[11] The reason behind this is that it is uneasy to obtain agreement on measurable physical parameters. The boundaries that exist in between these two environments are not exactly stable and may change depending on time, atmosphere, and other physical phenomena.[11] Considering the fact that the topic is trying to strive for peaceful uses of outer space, there is a need for countries to bring this specific dilemma and consider this factor when writing their resolutions.

The Goal is to promote peaceful exploration and use of outer space, through the prevention of space warfare and conflict involving the militarization and weaponization of space. Militarization would be the broader term that would eventually include weaponization. International management of militarization of space would mean strengthening the Outer Space Treaty, conducted in an international level to make sure that space explorations and missions are happening for peaceful purposes, let alone the militarization. Strengthening the laws and encouraging international cooperation would allow the reduction of space-related conflicts and stop countries from fully militarizing and weaponizing space, which can potentially escalate into space wars.

When researching your country's stance, focus on your country's current relations with other countries along with their economic status and their progress on space technology. For starters, here are some questions to help out:

1. What would be the result in exploiting space as means of military advantages of a country?
2. What would be an appropriate definition that majority of delegates can agree on when debating about militarization?
3. Why do some countries have different stances on militarization on others?
4. To what extent can the world be prevented from militarization or even weaponization?
5. What are the measures that the Disarmament Committee can take in order to internationally manage the militarization of space?
6. What makes militarization and weaponization of space such a major issue for nations to talk about managing?

5. Evaluation (Summary)

If all the weaponry developments that happened during the Cold war is put into consideration, weaponization of space has already begun. Militarization however, is defined whether specifically or broadly depending on a country. It is still a controversial topic that heats and starts debates between delegations in the actual United Nations. The flaws that have been left by the past leaders decades ago are allowing countries to use those treaties as loopholes to make themselves innocent from actions that can potentially be accused of militarization. Hence, it is a global agenda for nations of the Disarmament Committee to focus on making sure that militarization is managed and controlled in an international level. Broad terms exist and some countries have clearer stances than others, which is why it is mandatory for countries to research meticulously on their country's

stance and even start thinking about what their countries would do in the context of space militarization.

6. Bibliography

1. Council, European. “EU Space Policy.” *Consilium*, 16 Jan. 2020, www.consilium.europa.eu/en/policies/eu-space-programmes/.
2. The Editors of Encyclopaedia Britannica, Britannica. “List of Satellites.” *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 23 Apr. 2015, www.britannica.com/topic/list-of-satellites-2024625.
3. Erwin, Sandra. “Defense Intelligence Report: China in Steady Pursuit of Space Capabilities to Outmatch U.S.” *SpaceNews.com*, 17 Jan. 2019, spacenews.com/defense-intelligence-report-china-on-steady-pursuit-of-space-capabilities-to-outmatch-u-s/.
4. I, NT. “Proposed Prevention of an Arms Race in Space (PAROS) Treaty.” *Nuclear Threat Initiative - Ten Years of Building a Safer World*, 2017, www.nti.org/learn/treaties-and-regimes/proposed-prevention-arms-race-space-paros-treaty/.
5. Keller, Jared. “The Pentagon's New Super Weapon Is Basically A Weaponized Meteor Strike.” *Task & Purpose*, Task & Purpose, 15 Apr. 2019, taskandpurpose.com/kinetic-bombardment-kep-weaponry.
6. Pedia, Wiki. “Anti-Satellite Weapon.” *Wikipedia*, Wikimedia Foundation, 31 Dec. 2019, en.wikipedia.org/wiki/Anti-satellite_weapon.
7. SALINI, Massimiliano. “Legislative Train Schedule.” *European Parliament*, 2019, www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-mff-eu-space-programme.
8. WakimotoMonday, Takuya. “Weaponization of Space Will Harm the United States More than It Gains.” *The Space Review: Weaponization of Space Will Harm the United States More than It Gains*, 2017, www.thespacereview.com/article/3647/1.
9. Williams, Matthew S. “The Militarization of Space: What a ‘Space Force’ Would Look Like.” *Interesting Engineering*, Interesting Engineering, 20 Aug. 2019, interestingengineering.com/the-militarization-of-space-what-would-a-space-force-look-like.
10. Writers, Staff. “US Project Thor Would Fire Tungsten Poles at Targets from Outer Space.” *Space Daily*, 2018, www.spacedaily.com/reports/US_Project_Thor_would_fire_tungsten_poles_at_targets_from_outer_space_999.html.
11. Alves Péricles Gasparini. *Prevention of an Arms Race in Outer Space: a Guide to the Discussions in the Conference on Disarmament*. William S. Hein & Co., 2011.
12. Nations, United. *Outer Space and Global Security*. UNIDIR, 2003.

13. Matignon, Louis de Gouyon. “The Outer Space Treaty of 1967 and the Main Principles of Space Law.” *Space Legal Issues*, 26 Sept. 2019, www.spacelegalissues.com/space-law-the-outer-space-treaty-of-1967-and-the-main-principles-of-space-law/.
14. International, OMICS. “Types of Satellites and Applications.” *Types of Satellites and Applications | Global Events |USA| Europe | Middle East | Asia Pacific*, 2015, www.omicsonline.org/conferences-list/types-of-satellites-and-applications.
15. Pedia, Wiki. “International Space Station.” *Wikipedia*, Wikimedia Foundation, 22 Jan. 2020, en.wikipedia.org/wiki/International_Space_Station.