



# Maharani Gayatri Devi Girls' School Model United Nations, 2019 $14^{th}-16^{th}\ October,\ 2019$

# ON THE PEACEFUL USES OF OUTER SPACE (COPUOS)

AGENDA: COLONIZATION OF OUTER SPACE WITH SPECIAL EMPHASIS ON THE CHANGES REQUIRED IN EXISTING TREATIES

# **BACKGROUND GUIDE**

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### 1. Letter from the Executive Board

Dear Delegates,

Greetings on behalf of the Executive Board for MGD MUN 2019. At COPOUS, we eagerly look forward to discussing and deliberating upon the most pressing issues facing the world today. The agenda is entirely research driven and since this issue has been at the helm of international news for quite a while, we implore you to be well versed with your country positions and the agenda at large.

Space has been a frontier of development since a long time. There has been a vast amount of technological development due to the development of space projects. A vast array of functions, from remote sensing of ecological and weather activity, to communication and navigation services is being performed via space-based assets.

At any moment, the populations trends around the world are drastically changing. With the ongoing race of over-population, various countries are trying to reduce the population but at the same time they realise it is a difficult process.

While the main purpose of space research is advancing scientific research, uniting different countries and ensuring survival of humanity, efforts are being made in order to explore the possibilities of space colonization in the near future!

All of this shows the need for discussion on the colonization of space, the pros and cons of such a situation and its outcomes. We look forward to an enlightening discussion!

Regards,
Executive Board,
COPOUS,
MGD MUN 2019

# 2. Introduction

When we think of space, or what is usually called outer space, we should differentiate this concept from air space. This has been used to delineate the layer of atmosphere surrounding the Earth in which military and civilian aircraft operate. The upper limit of air space has usually been defined as what a nation can defend by aircraft or missiles. Outer space begins where air space ends. It has also been defined as the altitude at which satellites in orbit encounter aerodynamic drag, normally at an altitude of about 100 miles with satellites burning up at altitudes from 90-70 miles as they descend into the earth's atmosphere.

Colonization refers to the action of appropriating a place or domain for one's own use. As a species, we are approaching an important turning point in our history, and if we make the wrong decisions we might be facing a future of deprivation, over population, hunger, and instability. Ultimately, many believe that we will eventually be forced to colonize space. While we talk about our existence on planet Earth and the extent to which the earth would be able to tolerate the growing human population, it is highly questionable that this planet could last for 200-300 years more; considering the issues like climate change and global warming are on the rise, causing the extinction of many plant and animal species. The deteriorating conditions of life on Earth is one of the core reasons why the topic of discussion for this committee today is 'Colonization Of Outer Space'.

Many arguments have been made for and against space colonization. The two most common in favor of <u>colonization</u> are survival of human <u>civilization</u> and the <u>biosphere</u> in the event of a <u>planetary-scale disaster (natural or man-made)</u>, and the availability of additional resources in space that could enable expansion of human society. The most common objections to colonization include concerns that the <u>commodification</u> of the cosmos may be likely to enhance the interests of the already powerful, including major economic and military institutions, and to exacerbate pre-existing detrimental processes such as <u>wars</u>, <u>economic inequality</u>, and <u>environmental degradation</u>.

No space colonies have been built so far. Currently, the building of a space colony would present a set of huge technological and economic challenges. Space settlements would have to provide for nearly all the material needs of hundreds or thousands of humans, in an environment out in space that is <u>very hostile</u> to human life. They would involve technologies, such as <u>controlled ecological life support systems</u>, that have yet to be developed in any meaningful way. They would also have to deal with the as-yet unknown issue of how humans would behave and thrive in such places long-term. Because of the present cost of sending anything from the surface of the Earth into orbit, a space colony would currently be a massively expensive project.

There are yet no plans for building space colonies by any large-scale organization, either government or private. However, many proposals, speculations, and designs for space settlements have been made through the years, and a considerable number of space colonization <u>advocates</u> and groups are active. Several famous scientists, such as <u>Freeman Dyson</u>, have come out in favor of space settlement.

# 3. Pros and Cons of Space Colonization

The primary argument calling for space colonization is the long-term survival of human civilization. By developing alternative locations off Earth, the planet's species, including humans, could live on in the event of <u>natural or man-made disasters on our own planet</u>.

With so many advancements in the arena of space, most researchers believe that it should not only be limited to exploration, but it should also be about extending the range of human habitat outside the Earth. Space colonization could possibly be our best chance in order to increase the survival prospects of our species.

All these planets and other bodies offer a virtually endless supply of resources providing limitless growth potential. While the resources in space are ginormous, there is a possible chance that some other planet could be able to accommodate the human population. The question is, is there any other planet that could suffice the needs of the entire Human civilization?

Various factors are involved when we think about space colonization. While building a space habitat is not a piece of cake but a creation of a whole new world, keeping in mind the settings that could be suitable for human life to exist. Some of the challenges could be the construction in space, recreating a live-able atmosphere, recycling waste, producing artificial gravity, transporting food and materials to the habitat etc.

It is believed that we may have no choice but to build one of these in the future, be it initiated as a matter of survival or an undeniable demand because of our desire to explore and gain new knowledge by expanding in space. Ultimately, there are also a number of incentives to building such a habitat. For governmental bodies and world leaders faced with a huge and unsustainable population, the concept of a space habitat would be attractive. Using the materials available in the Solar System, there is the potential to build enough surface area within space habitats to possibly house billions and even trillions of people. Populations would have the space to expand sustainably without destroying any current ecosystems, as well as relieving the pressure off Earth to provide resources. The planetary population could be stabilized and supported with the extra space to inhabit and develop agricultural plantations for food.

The expansion into space also offers up a wealth of privatized opportunities, such as access to energy and other interplanetary resources. On Earth, utilizing the Sun's energy via solar cells is a disappointingly inefficient process with unavoidable problems associated with the atmosphere and night. In space, solar panels would have access to nearly continuous light from the Sun, and in Earth's orbit this would give us <a href="#ref1400">1400</a> watts of power per square meter (with 100% efficiency). This abundance of energy would mean that we could travel throughout much of the Solar System without a terribly significant drop in power.

However, one of the biggest disadvantages of space colonization could be demilitarization of outer space. With the ongoing advancements in demilitarizing satellites and space shuttles, various countries have taken the Arms race to space!

Let us understand demilitarization in detail.

In recent years we have seen not only scientific and astronomical success in investigating outer space, but also a remarkable growth in its utilization for a wide range of civilian and military purposes. Today, it is estimated that there are some 1,000 satellites in operation, owned by over 60 countries. Importantly, no longer is exploitation of outer space the preserve of a small group of advanced industrialized countries. A dozen countries currently have the capacity to place an object into orbit and an even larger number own and/or operate satellites. The developing countries, besides the developed ones, are increasingly found to be possessing satellites, and practically every country is a consumer of space-based services in some form or the other.

More and more countries, some 43 nations, own or jointly operate satellites. There are 849 satellites presently in orbit. Of this number, the United States (440), Russia (90), and China (39) own about 67 percent. They are followed by Japan (38), India (18), and France (16). The dominant U.S. position in space is eroding. In addition to other countries placing their own satellites into orbit, a growing number of private companies with names such as Google Earth, Keyhole, Digital Globe, and Space Imaging, sell high-resolution satellite photos on the Internet or make them available free of charge. Customers can acquire images as if they owned their own satellite at a fraction of the cost to build their own or at no cost at all.

A vast array of functions, from remote sensing of ecological and weather activity, to communication and navigation services is being performed via space-based assets. These assets have not till now been threatened from space or the ground and have been able to operate freely. This condition then affects the prospect of space as a common global factor.

# 4.Possibilities of Militarisation leading to colonization

From the outset of the exploration of outer space it has been widely hoped that this new dimension of human endeavor could be a unifying element for the international community but at the same time it could be detrimental. Any kind of exploration and utilization of outer space is likely to have international consequences. The risks associated with a turn towards increased use of outer space not only through military support satellites but in addition through space weapons derive from the assumption that such a development may make it doubtful whether international accord on the peaceful exploration and use of outer space can be reached. If major programmes towards the use of outer space as deployment and operation area for weapons should be implemented, military considerations would likely overshadow all other motives for space exploration and use. Civilian space research and activities might suffer for two reasons:

First, because civilian budgets would come into strong competition with military budgets for States engaging in increased military use of outer space, and

Second, because military competition might make it impossible to work out an international framework for space activities, resulting in the absence of predictability which would be an important condition for the willingness to invest in space activities. The weaponization of space will destroy strategic balance and stability, undermine international and national security, and disrupt existing arms control instruments. Space weaponization and militarization would seriously disrupt the arms control and disarmament process. The efforts of any one state to place armaments in space would disrupt the global balance of power, and encourage others to follow suit, setting in motion a race for strategic dominance that could well lead to weapons testing and further escalation. When one actor assumes a dominant position, rival actors will act similarly in order to maintain deterrence and ensure the security of their respective national interests. The rise of globalization and ever-increasing global inter-connectivity has led to a dependence on space-based technology like the Global Positioning System (GPS) for everything from simple navigation to the coordination of military operations. Such reliance has made the destruction of satellites a priority for military planners in the event of a conflict. As the potential for space-based threats grows, more world leaders will move to protect against the potential destruction of their space-based assets by deploying the necessary technology to deter such an attack. Ironically, the idea of developing the missile defense itself could be an offense under the deception of defense. This evidently puts the nations across the globe to be alarmed and cultivate a possible arms race which could lead these nations to indulge in a never ending competition of equipping themselves

with better, more suitable and technologically advanced space weapons to take the lead in getting full spectrum dominance over each other. This potential arms race will also cost countries vast amounts of money and will put many weapons in space, which increases the likelihood that they will be used. Such an arms race would be expensive because launching weapons into space is incredibly costly.

At present, there is no authenticated proof of any known weapons being deployed in the outer space.

# 5. Research and Development

Apart from the defensive measures, the dependence on satellite directed warfare has led to the development of aggressive means to destroy or counter the space capacity of other countries. The major categorization of these could be: reconnaissance weapons, intelligence weapons, ASAT weapons and direct strike weapons to include Directed Energy Weapons (DEWs), Particle Beam Weapons (PBWs), Kinetic Energy Weapons (KEWs) and nuclear detonations.

- **Space-Based Lasers (SBLs):** These would operate in LEO and destroy hostile ballistic missiles during their boost phase. These are further divided into two types:
  - Chemical Lasers (MIRACL—Mid-Infrared Energy Chemical Laser): This is a joint US-Israeli program to develop a point defense system to defeat mortars, rocket, artillery and cruise missiles.
  - Solid State Lasers (SSLs): The technology is leading from chemical lasers to solid state lasers, as their potential is far greater. They have no ammunition per se; whereas chemical lasers require chemicals, the SSLs require only electricity.
- **Space-Based Missile Interceptors**: The satellites in this system would destroy their targets through kinetic contact i.e. by ramming them with the extraordinary speed possible in LEO.
- **Electro-Magnetic (EM) Rail Guns**: These are probably going to be the heart of any STEW. They are set to replace all conventional cannons in the future and have the utmost potential for deployment in space.

- Evolutionary Air and Space Global Laser Engagement (EAGLE): This project will put mirrors underneath a huge airship. Lasers fired from either the ground/air/space would bounce off these blimp-borne mirrors to track or destroy the enemy missile.
- Space-Based Infra-Red (SBIR): This system will be used to guide ballistic missile defense
  interceptors in three phases i.e. boost, mid-course and terminal. It would also provide
  warning of missile launches and greatly expand capabilities for intelligence, surveillance
  and reconnaissance. It would be deployed in LEO and GEO.
- Space Tracking and Surveillance System (STSS): This will be a constellation of LEO sensor satellites that will track enemy missiles, discriminate between warheads and ecoys and assess the outcome of possible interceptions.
- Anti-Satellite (ASAT) Weapons: A whole range of supporting technologies is presently
  underway for the development of anti-satellite weapons. These include: high powered
  lasers, micro-satellites, Kinetic-Energy Anti-Satellites (KE-ASAT) weapon, Near Field IR
  Experiment (NFIRE), etc.
- **Common Aero Vehicle (CAV):** This project envisions an unmanned maneuverable spacecraft armed with intelligent sensors and loads of munitions. This would have global reach capability against high pay-off targets.
- Rods from Gods: Also called the brilliant space weapon, this would dispatch 20-feet-long
  orbital tungsten or uranium rods that would enter the earth's atmosphere using the
  accelerating force of gravity to attack ground targets at speeds higher than 10,000 km an
  hour.

# 6. National Strategies

Involved in the cold war against USSR, USA were dependent on their capacity to gather information thanks to air intelligence services. The increasing facilities of soviets in terms of interceptors and air defense increased the risk of surveillance, which raised the interest of USA in satellites. Since, the USA planned their political and diplomatic strategy in order to protect the legality of satellite surveillance.

As the years go by, more and more countries develop their own space program (more than 50 nations) and 600 satellites are present in outer space, reshuffling the cards of the balance of powers. This why we are now going to see how the traditional space powers are coping with the rise of new actors in space.

#### The United States of America

In 2002, as a counsellor to G.W. Bush, Condolezza Rice decided to review the US policy regarding spatial activities. The USA have indeed always been, since the Cold War, the most modern and effective in this field, but the gap with other countries tends to diminish. They indeed possess in 2001 110 military satellites whereas the Russian Federation owned 40 of them and the 20 remaining satellites belonged to other nations. The USA fear the rise of Indian and Chinese reconnaissance satellites more and more narrowly-specialized that they could be a threat to the American supremacy regarding space devices. In 1999, the budget of the United States dedicated to militarizing space was about 94,8% of the total of military spatial budget of all the countries. That is why it can easily be said that in order to find an agreement, all member states countries really take the initiative to open the discussion with the USA before they implement their own program concerning arms in space without any international talks.

#### People's Republic of China

People's Republic China as much less spatial engines compared to the USA but this nation has many ambitious projects when it comes to arms race in outer space. Since the 80's, China tries to manage to implement an international treaty about non-armament in space in order to curb the USA's influence in this area that is why PRC has led the negotiations at the UN since many years with the purpose of implementing concrete rules quickly. Their engineers in fact claim that spatial weapons not only threaten China's security but also the world's one.

Nevertheless, China remains quite secretive about its true intentions and about its own spatial development, using the argument of the American supremacy to develop its programs. That is why you delegates should focus your debates on these interrogations regarding China's enrolment and goals in the weaponization of space.

#### The Russian Federation

Russia has been during the second half of the 20th Century a leader in spatial armament, but since the dislocation of the USSR and the end of the Cold War, Russian equipment grew old and the government did not invest enough money to keep it from being outdated because funds were not sufficient. The authorities tried to improve this precarious situation by combining its commercial programs as well as all its militarized spatial programs but it is not yet sufficient to counter dilapidated state of the missiles, which can become rather worrying for the international community.

Furthermore, the Russian government has expressed the same interrogations as China regarding the operations of the USA in space, that is why Russia highly developed since the beginning of the 2000's its technical skills, and the country has now acquired the capacity, on a long-term approach, to reach the level of the USA. It then raises many questions concerning this rise of Russia than is also one of the points you delegates should focus on.

#### Europe

European countries are less involved in the weaponization of space, contrary to the USA. They would rather develop programs aiming at favoring sustainable development, the management of the planet and its economic and social repercussions.

France and the United Kingdom are rather focused on civil development in space than military activities. France practices diverse activities in space such, from launching to Earth observation and plays an important part in the Galileo project. The British are present in space as well but for civil purposes and its programs are far from being militarized as the USA's or China's.

Nevertheless, European countries depend on the USA and would support them if a collation had to be made. Europe could not lead a military operation in space by itself, if the region is involved, it would follow the American power.

# 7. Space Law Treaties and Principles

The Committee on the Peaceful Uses of Outer Space is the forum for the development of international space law. The Committee has concluded five international treaties and five sets of principles on space-related activities.

These five treaties deal with issues such as the non-appropriation of outer space by any one country, arms control, the freedom of exploration, liability for damage caused by space objects, the safety and rescue of spacecraft and astronauts, the prevention of harmful interference with space activities and the environment, the notification and registration of space activities, scientific investigation and the exploitation of natural resources in outer space and the settlement of disputes.

Each of the treaties stresses the notion that outer space, the activities carried out in outer space and whatever benefits might be accrued from outer space should be devoted to enhancing the well-being of all countries and humankind, with an emphasis on promoting international cooperation.

1. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (The Outer Space Treaty) –

Entered into Force: 10 October 1967

Number of Parties: 103 Number of Signatories: 89

**Depositaries**: Russia, United Kingdom, and United States

The Outer Space Treaty was adopted by the <u>UN General Assembly (UNGA)</u> in resolution 2222 (XXI) after being considered by the Legal Subcommittee in 1966. The Treaty added new provisions to the foundation provided by the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, which had been adopted by the General Assembly in 1963 in resolution 1962 (XVIII). The Outer Space Treaty provides the basic framework on international space law, including the following principles:

 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;
- 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.
- 2. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (The Rescue Agreement) –

The Rescue Agreement was considered and negotiated by the Legal Subcommittee from 1962 to 1967. Consensus agreement was reached in the General Assembly in 1967 (resolution 2345 (XXII)), and the Agreement entered into force in December 1968. The Agreement, elaborating on elements of articles 5 and 8 of the Outer Space Treaty, provides that States shall take all possible steps to rescue and assist astronauts in distress and promptly return them to the launching State, and that States shall, upon request, aid launching States in recovering space objects that return to Earth outside the territory of the Launching State.

#### Article 5 –

States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle.

In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties.

States Parties to the Treaty shall immediately inform the other States Parties to the Treaty or the Secretary-General of the United Nations of any phenomena they discover in outer space, including the moon and other celestial bodies, which could constitute a danger to the life or health of astronauts.

#### Article 8 –

A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State Party, which shall, upon request, furnish identifying data prior to their return.

# 3. Convention on International Liability for Damage Caused by Space Objects (The "Liability Convention") –

Entered into Force: 1 September 1972

Depositaries: Russian Federation, United Kingdom of Great Britain and Northern

Ireland and United States of America

The Liability Convention was considered and negotiated by the Legal subcommittee from 1963 to 1972. Agreement was reached in the General Assembly in 1971 (resolution 2777 (XXVI)), and the Convention entered into force in September 1972. Elaborating on Article 7 of the Outer Space Treaty, the Liability Convention provides that a launching State shall be absolutely liable to pay compensation for damage caused by its space objects on the surface of the Earth or to aircraft, and liable for damage due to its faults in space. The Convention also provides for procedures for the settlement of claims for damages.

#### Article 7 –

Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the moon and other celestial bodies, and each State

Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air or in outer space, including the moon and other celestial bodies.

# 4. Convention on Registration of Objects Launched into Outer Space (The "Registration Convention") –

**Entered into Force:** 15 September 1975

**Depositaries:** Secretary-General of the United Nations

The Registration Convention was considered and negotiated by the Legal Subcommittee from 1962. It was adopted by the General Assembly in 1975 (General Assembly resolution 3235 (XXIX)) and entered into force on 15 September 1976.

Building upon the desire expressed by States in the Outer Space Treaty, the Rescue Agreement and the Liability Convention to make provision for a mechanism that provided States with a means to assist in the identification of space objects, the Registration Convention expanded the scope of the United Nations Register of Objects Launched into Outer Space that had been established by resolution 1721B (XVI) of December 1961 and addressed issues relating to States Parties responsibilities concerning their space objects. The Secretary-General was, once again, requested to maintain the Register and ensure full and open access to the information provided by States and international intergovernmental organizations.

# 5. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies(The "Moon Agreement") –

Entered into Force: 11 July 1984

**Depositaries:** Secretary-General of the United Nations

The Moon Agreement was considered and elaborated by the Legal Subcommittee from 1972 to 1979. The Agreement was adopted by the General Assembly in 1979 in resolution 34/68. It was not until June 1984, however, that the fifth country, Austria, ratified the Agreement, allowing it to enter into force in July 1984. The Agreement reaffirms and elaborates on many of the provisions of the Outer Space Treaty as applied to the Moon and other celestial bodies, providing that those bodies should be used exclusively for

peaceful purposes, that their environments should not be disrupted, that the United Nations should be informed of the location and purpose of any station established on those bodies. In addition, the Agreement provides that the Moon and its natural resources are the common heritage of mankind and that an international regime should be established to govern the exploitation of such resources when such exploitation is about to become feasible.

# 8.Space Debris

Space debris, also called space junk, is artificial material that is orbiting Earth but is no longer functional. This material can be as large as a discarded rocket stage or as small as a microscopic chip of paint. Because of the high speeds (up to 8 km [5 miles] per second) at which objects orbit Earth, a collision with even a small piece of space debris can damage a spacecraft. The first collision that destroyed an operational satellite happened on February 10, 2009, when Iridium 33, a communications satellite owned by the American company Motorola, collided with Cosmos 2251, an inactive Russian military communications satellite, shattering both satellites. With the increasing amount of space debris, there are fears that collisions such as that between Iridium 33 and Cosmos 2251 could set off a chain reaction (called the Kessler syndrome) in which the resulting space debris would destroy other satellites and so on, with the result that Low Earth Orbit (LEO) would become unusable. Besides creating a new arms race, the weaponization of space means proliferation of space debris. Such debris, resulting from 50 years of space activity, already poses a considerable hazard to spacecraft. This crowding problem could worsen as a large number of space weapons could be deployed in Low Earth Orbit. The launching and testing of weapons would also increase space debris. Moreover, deploying spacebased weapons in the increasingly crowded realm of LEO would leave less room for civilian systems. Those problems would also occur during periods of peace. If a number of satellites were to be destroyed during the course of a war, some scientists warn, they would create so much debris that it would prevent future satellites from being stationed in space and generally limit space access.

### 9. Current scenario

In recent years many treaties have been proposed to further explore regulation of space weaponization and militarization and its current and potential impacts on space activities. Recent actions from world leaders in space exploration have highlighted the gaps in current space regulations. Large and small countries alike have a vested stake in space militarization as to ensure it remains accessible to developing nations. If countries do pursue space militarization it will lead to conflicts and issues that will have a negative effect on all countries. In 2018 President Donald Trump announced his intention to develop a new arm of military called the Space Force. The mandate of the new branch of military is said to focus on protecting existing communications infrastructure and satellites. Military and communications based activities in space have in the past been handled within the Air Force. This announcement came on the heels of many years of space militarization advancements from Russia and China, the United State"s two main rivals in the field of space exploration. China has developed and tested anti-satellite and anti-ballistic missile weaponry and it is believed this Chinese technology could destroy all US communication satellites. In 2007 China tested this technology by taking out a weather satellite. Russia is also in pursuit of new space weapons, including a mobile laser system to destroy satellites in space and the launch of a new inspector satellite.

While many past United Nations treaties address the militarization of space, the wording leaves much to be interpreted. As it seems militarization is plotting ahead despite the rules in place, the committee must endeavor to either specify the bounds of space militarization or create more effective and clear rules against it.

# 10. Questions a Resolution Must Answer (QARMA)

- How can the *United Nations Office for Outer Space Affairs* create new changes or conventions to aide space colonialization?
- How can different states which as spatial abled contribute in the welfare of regulation in the militarization of space?
- How can the use of military satellites aide any state?
- How can the global community ensure that all the countries come to a consensus on whether to explore the possibilities of Space Colonization or find alternatives for the sustainable inhabitation of human life?
- Is militarisation of space justified?
- What can be inferred from previous conferences and treaties about outer space and to what extent does it apply to the contemporary society?
- Do we need revised policies?
- How can transparency amongst member nations be ensured?
- Can weapons for defense in space be justified?
- Why is it important that outer space be safeguarded from militarisation?
- What solution does the delegate suggest to prevent such a race?

# 11. Links for Further Reading

- https://www.msuilr.org/msuilr-legalforum-blogs/2017/2/16/space-war-the-militarization-weaponization-of-space
- http://www.globalissues.org/article/69/militarization-and-weaponization-of-outerspace
- http://www.aps.org/units/fps/newsletters/2002/july/saperstein.pdf
- http://www.ifpa.org/pdf/BCFR 061807.pdf
- https://idsa.in/system/files/jds\_4\_3\_dsharma.pdf
- https://opus.lib.uts.edu.au/bitstream/10453/37267/2/02Whole.pdf
- http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.ht
   ml
- http://www.nti.org/learn/treaties-and-regimes/treaty-principles-governing-activitiesstates-exploration-and-use-outer-space-including-moon-and-other-celestial-bodiesouter-space-treaty/
- http://www.nti.org/learn/treaties-and-regimes/proposed-prevention-arms-race-space-paros-treaty/
- https://fas.org/programs/ssp/nukes/ArmsControl\_NEW/nonproliferation/NFZ/NP-NFZ-PAROS.html
- https://www.un.org/disarmament/geneva/cd/documents-related-to-prevention-of-an-arms-race-in-outer-space/
- http://www.nuclearfiles.org/menu/key-issues/space-weapons/basics/introductionweaponization-space.htm
- https://www.nasa.gov/about/highlights/AN Structure OtherAgencies.html