Committee: DISEC

Topic: The Question of Preventing an Arms Race in Outer Space

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Summary

The question of preventing an arms race in outer space is incredibly relevant today. Currently, there are many resolutions in place, such as the Outer Space Treaty, to avert such a conflict, yet tension still seems to be rising. This is because since the previous arms race, during the Cold War, many more countries have now developed a significant nuclear arsenal. Some states, such as the US, have strongly considered stationing weaponry in outer space, however this has suggested that new solutions need to be made to avoid an arms race as current actions are proving to potentially not be enough. Significant examples of this include the further development of anti-satellite weaponry, as well as an increase in anti-satellite missile testing. Additionally, lack of consensus on UN resolutions, seen through abstentions from Prevention of an Arms Race in Outer Space (PAROS) treaties, reflects discord within the international community.

Definition of Key Terms

Arms Race - a competition between nations for superiority in the development and accumulation of weapons.

Brinksmanship – the practice of pursuing a dangerous policy to the limits of safety before stopping, especially in politics.

Mutually Assured Destruction – a principle of deterrence based on the idea that the response to the use of nuclear weapons would result in complete annihilation on both sides.

Anti-satellite Weapons (ASAT) - space weapons designed to incapacitate or destroy satellites for strategic or tactical purposes.

Anti-satellite Missile Test – shooting down a satellite using a missile.

Background Information

It only takes looking at the Cold War to realise why the committee needs to prevent another arms race, especially in outer space. Historically, the rapid development of technology has resulted in extreme antagonism between states and has ultimately contributed to an apprehensive atmosphere. A significant example of this is the 1962 Cuban Missile Crisis, where US-Soviet brinksmanship brought the world to the verge of disaster. Considering how far technology has come since then and the increased number of states with nuclear weapons and space programs, the occurrence of an arms race in outer space has apocalyptic potential.

Some may argue that the use or holding of arms in space has its benefits. For example, this would save space on Earth and would ensure efficiency. Moreover, some may see arms races as useful for security, with principles like Mutually Assured Destruction acting as a deterrent, while still allowing advancements to be made. Furthermore, the development of space technology has been ground-breaking in the past, for example the use of satellite communication in phones and financial transactions. Therefore, an argument could be made that the continued research and advancement of arms in outer space may improve human lives through both increased technology and security, while conflict can equally be avoided through principles such as Mutually Assured Destruction.

However, it is clear that an arms race in outer space may have detrimental consequences, especially considering the power of contemporary nuclear weapons. Additionally, it may further reinforce the divide between more economically developed nations that can afford space programs and those that cannot but would still be hugely influenced by an arms race, whether that be through providing resources or simply because of the danger of conflict.

The question currently has a lot of relevance, with countries such as the US, China, India and Russia carrying out anti-satellite missile tests to demonstrate capability. In the last few years, we have also seen the creation of the US Space Force, previously being the Air Force military space program, however gaining independence in 2019. The core principles of this organisation are space security, combat power projection, space mobility and logistics, information mobility, and space domain awareness. Notions of “security” and “awareness” suggest that tension over space exists and needs to be diffused.

Major Countries and Organizations Involved

The United States has played a large role in the build-up of tension surrounding this question. Not only was the US the victor of the last arms race, they have made continuous attempts to dominate both nuclear and space technology afterwards. On multiple occasions, the United States have abstained or voted against UN resolutions to prevent an arms race in outer space, for example the 2009 Proposed Prevention of an Arms Race in Space. Therefore, the state has shown a lack of cooperation in attempted to resolve this issue, further displayed through the establishment of the Space Force.

The People’s Republic of China has been modernizing its military for decades now on the grounds of security, for example to prevent US intervention. This has result in increased antagonism between the nations, leading many to assume that we are heading towards a US-Chinese arms race. The PRC has successfully carried out anti-satellite missile tests since 2007, depicting their technological advancements, but also increasing the fear of this manifesting itself into direct conflict.

The United Kingdom's alliance with the US suggests that it is largely involved in this issue. The US Space Force has expressed its hopes to develop a global monitoring system capable of tracking objects up to 22,000 miles from the Earth. They wish to do this through establishing radar stations in the US, UK and Australia. In July 2021, the chief of the UK's Royal Air Force suggested support for this idea, stating that Britain would be very interested in housing a US radar station. Moreover, the UK has presented a proposal to the UN on the prevention of an arms race in space, details found in the previous attempts section.

Russia played a large role in the Nuclear Arms Race, and its space equipment and well as its political power suggests that it would be involved once more if another one arose. It could be argued that Russia and China have increased cooperation against the West, with the Chinese State Counsellor and Foreign Minister stating the two states are "not an alliance, but better than allies". Additionally, in 2020, both the UK and US accused Russia of firing arms into space and using anti-satellite weaponry.

However, ultimately most countries are relevant to this issue as, even though those with missiles and space programs may adopt the largest roles in the build-up of tension, an arms race in outer space would affect the entire world.

A significant international body is the UN Office for Outer Space Affairs (UNOOSA). This organisation assists nations in the development of their space capabilities through different methods such as conferences and training. They equally run programmes focused on developing countries like Access to Space 4 All, recognising the need for active opportunities for LEDCs. Furthermore, UNOOSA reminds states about international space law, ultimately opening up doors for redrafts and amendments where necessary.

Timeline of Events

Date	Description
1945 - 1990	Nuclear Arms Race
4 October 1957	First artificial satellite and First signals from space (Sputnik-1, USSR)
31 January 1958	US enter Space Race through launching Explorer-1 satellite
12 April 1961	First man in space (Yuri Gagarin, USSR)
1967	Outer Space Treaty
15 July 1970	Cooperative Apollo-Soyuz mission launched
2007	First Chinese Anti-satellite Missile Test
2009	Prevention of an Arms Race in Outer Space adopted
December 2014	Two more resolutions passed (PAROS and "No first placement of weapons in outer space")

2019	Creation of the US Space Force
2020	Russia accused of using anti-satellite weaponry by US and UK
2021	UK proposal on Reducing Space Threats through Norms, Rules and Principles of Responsible Behaviours
July 2021	UK expresses interest in housing US radar station

Relevant UN Treaties and Events

The 1967 Outer Space Treaty is an agreement that governs the activities of states in the exploration and use of outer space, including the moon and other celestial bodies. It was created to address potential issues that may arise out of the development of space technology during the Cold War. The treaty prohibits the placement of weapons of mass destruction in space. It also claims that outer space is a "province of all mankind" and forbids nations from claiming territorial sovereignty over it.

Outer space is governed by space law, consisting of various general international laws, conventions as well as General Assembly resolutions, or more specifically the Outer Space Treaty, the Rescue Agreement, the Liability Convention, the Registration Convention and the Moon Agreement. Some examples of what space law covers include the sharing of information about potential dangers in outer space, the use of space-related technologies, and international co-operation. Furthermore, under the Liability Convention, any object that goes into space must be registered with its launching state, and becomes sovereign territory.

The United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) was also established by UNOOSA in 2006. This programme is responsible for addressing developing nations limited access to specialised technology, therefore aiding in the prevention and management of disasters. The platform’s ultimate objective is to facilitate cooperation and improve the sharing of information for all.

Previous Attempts to solve the Issue

The Prevention of an Arms Race in Outer Space (PAROS) is a treaty submitted by Russia in 2008 and adopted by the UN in 2009. The treaty had 176 votes in favour and none against, however, both the US and Israel abstained from voting. PAROS commits to the refrainment from placing objects carrying any weapons into orbit. It also condemns the installation of weapons on celestial bodies and the use of threat. Ultimately, it reaffirms the importance of the Outer Space Treaty and acts to prevent any nation from getting a military advantage in space. The treaty is currently being discussed once more as a result of the ever changing nature of the issue.

In December 2014, the General Assembly passed two more resolutions on the issue. First, another PAROS treaty that reiterated the need to use space peacefully. The UN also passed a second resolution called “No first placement of weapons in outer space” that emphasised the need to refrain from stationing arms in space, ultimately to prevent potential conflict. This resolution passed with 126 in favour, 4 against, the US included in this, and abstentions form EU member states.

The UK has presented a proposal on reducing space threats through norms, rules and principles of responsible behaviours. The idea behind this is to increase monitoring to reduce misunderstanding, rather than to prohibit. The proposal sees the need for a legally binding agreement on the prevention of an arms race in outer space, but takes a different approach to previous treaties. Currently, there are 164 nations in favour of the UK’s idea.

Possible Solutions

- Ban anti-satellite missile testing – tests could be seen as destructive and ultimately increase tension in the international community, banning them may decrease antagonism and so therefore aid in the prevention of an arms race in space.
- Increase monitoring and transparency – if nations were more open about their actions and intentions, there would be greater awareness and understanding, ultimately minimising the risk of conflict.
- Prohibit the stationing of arms in space altogether – while this would be an unpopular approach, prohibition would ultimately tackle the issue at the source.
- Education – the UN could introduce a programme that educates both citizens and leaders on the risks of an arms race in outer space, therefore acting as a deterrent to conflict.
- Sanctions – a suggestion could be made to the Security Council that sanctions should be increased for all states that breach international space law.

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