

CISMUN
2015 

DISARMAMENT AND
NATIONAL SECURITY
AGENDA: PREVENTING ARMS RACE



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UNITED NATIONS GENERAL ASSEMBLY (DISEC)

AGENDA: PREVENTING ARMS RACE

LETTER FROM THE EXECUTIVE BOARD

Dear Delegates,

Congratulations on getting the opportunity to participate in CISMUN 2015.

To the veterans of MUN, I promise you a very enriching debate that you've never experienced before and to the newcomers, I am really excited to be a part of your maiden voyage. Our primary purpose is to learn as much as we can from this rewarding process. We have an amazing opportunity here at CISMUN to learn from one another's valuable international perspectives, so we intend to deeply explore the complexities of these issues. What we desire from the delegates is not how experienced or articulate they are. Rather, we want to see how she/he can respect disparities and differences of opinion, work around these, while extending their own foreign policy so that it encompasses more of the others without compromising their own stand, thereby reaching a unanimously acceptable practical solution.

The background guide intends to guide you with the nuances of the agenda as well as the Council. The Guide chronologically touches upon all the different aspects that are relevant and will lead to fruitful debate in the Council. It will provide you with a bird's eye view of the gist of the issue. However, it has to be noted that the background guide only contains certain basic information which may form the basis for the debate and your research.

You are the representative of your allotted country and it is our hope that you put in wholehearted efforts to research and comprehensively grasp all important facets of the diverse agenda.

All the delegates should be prepared well in order to make the council's direction and debate productive. After all, only then will you truly be able to represent your country in the best possible way. We encourage you to go beyond this background guide and delve into the extremities of the agenda to further enhance your knowledge of a burning global issue. In our discussions, we encourage the respectful exchange of ideas and the creative transformation of conflict. Our involvement in this meaningful experience will hopefully leave us inspired, determined, and empowered to take action. We are excited to meet you.

May the force be with you!

PREVENTION OF AN ARMS RACE IN OUTER SPACE

INTRODUCTION

Space-related news has been present in abundance ever since the launch of the Soviet Union's satellite Sputnik in 1957; the challenges associated with space exploration excite interest within communities and governments alike, and the potential space represents for the advancement of human endeavor makes it a topic that is worthy of being placed at the top the agenda for the international community. However, with more countries gaining the capability to launch satellites or rockets for technological, scientific, and even militaristic purposes, it is clear that the legislation and cooperative frameworks which define the way in which the world engages with space-bound objects on a bi-lateral and multilateral level, are severely outdated. Space lasers, space-based missile launches, and other initiatives to militarize space have pushed the boundaries of what international space treaties have recognized as legitimate pursuits of science and technology. Their presence is real, and their danger is very real. The need for cooperation and regulation on this front grows increasingly dire, and a more comprehensive and progressive conversation is required on this topic.

International Framework One of the main vehicles for advancing the discussion of prevention of an arms race in space (PAROS) is its legal framework. Internationally, the core of legal space related framework is made up of the Outer Space Treaty (1966) and the Moon Agreement (1984). This framework differs slightly by region, namely between Europe, Latin America, Asia-Pacific, and Africa. The Outer Space Treaty and the Moon Agreement Fifty years ago, United Nations General Assembly, adopted its landmark resolution 1962 (XVIII) on 13 December 1963, better known as the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. One of the most significant aspects of this resolution is the designation of the use of outer space to be "in accordance with international law, including the Charter of the United Nations (1945), in the interest of maintaining international peace and security and promoting international cooperation and understanding."

While the Declaration officially initiated the global dialogue on outer space, it was not until 19 December 1966 when this Declaration became a legally binding treaty. This was made possible by the adoption of General Assembly resolution 2222 (XXI), which adopted, in its annex, the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, on 19 December 1966. Also referred to as the Outer Space Treaty, the treaty came into force in 1967, and has been ratified by 102 Member States. In terms of International peace and security, a central component of the Outer Space Treaty (1966) is the prohibition of nuclear weapons, weapons of mass destruction, or any other type of weapons stationing in outer space.

The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, an elaboration of the Outer Space Treaty, was adopted on 5 December 1979, though it did not come into force until 1984, when Austria, Chile, The Netherlands, The Philippines, and Uruguay ratified it. Also known as the Moon Agreement (1984), the main difference

between this agreement and the Outer Space Treaty (1966) was the explicit and specific prohibition of “any threat or use of force, any other hostile act or threat of hostile act on the Moon (or other celestial bodies in the solar system) and any use of the Moon (or other celestial bodies in the solar system) in order to commit such acts or threats in relation to the Earth, the Moon, spacecraft, personnel of spacecraft or man-made space objects.” Thus, the Moon Agreement (1984) goes one step further than prohibiting weapons in outer space; it bars all threats and acts of hostility, weapons-related or not. Regional Agreements and Instruments While the international framework for outer space is certainly older and more prominent than its regional counterparts, there are notable developments that have occurred in the regional realm over the past several decades. The first example was the Framework Agreement between the European Community and the European Space Agency, signed on 25 November 2003. However, the Framework served as merely the precursor for the more comprehensive European Space Policy of 22 May 2007, the first purely European based space law.

The European Space Policy has two main parties, the European Space Agency (ESA) and the European Union (EU). Unlike UN resolutions on space, the European Space Policy (2007) has barely any mention of weapons or militarization with regards to space.³⁰⁰ However, in an earlier note from 2004, the Council of the European Union detailed the defense purposes for pursuing space legislation. The European Space Policy (2007) focuses instead on the potential of scientific and technological advances in many contexts, namely commerce, environment, and humanitarian efforts. In 2010, the Council of the European Union adopted a resolution, which outlined the EU’s goals and aspirations concerning its collaboration with the ESA, made possible by the inclusion of space the year before as a sub-section in the Treaty of Lisbon (2007). The same year, the Council of the European Union also adopted a Code of Conduct for Outer Space Activities (2007), providing a basis on which to collaborate with countries outside the EU. One example of the Code of Conduct being put into practice is the partnership between Europe and Africa.

The European Commission, ESA, and EU Member States’ relationship with the African Union Commission, Regional Economic Groups, and African states is defined mostly by space technologies and their application in order to contribute to African states’ technical and institutional capabilities with regards to space. The Code outlines principles that respect “the security, safety and integrity of space objects in orbit” and mitigate “outer space from becoming an area of conflict.” It is the ultimate goal of the Council to become adopted into a large-scale ad hoc international conference by as many countries as possible. The Organization of American States (OAS) is the primary continental forum for Latin America and the Caribbean, however, it has not yet adopted any framework relating to regional space law. The Space Conference of the Americas fills that void by serving as the Latin American region’s forum for space issues and dialogue. The Conference was jointly created by individual Latin American states in order to gain more direct benefits from the technological and scientific applications that space has to offer.

The Conference has been held every few years since the initial convening in Costa Rica in 1990. There have now been six Space Conferences, with each of them, excluding the initial

one, resulting in a declaration named after the host city. The Santiago Declaration (1993), Punta del

Este Declaration (1996), Declaration of Cartagena de Indias and Plan of Action (2002), Declaration of San Francisco de Quito: Regional Space Agreement for Human Security and Development and Action Plan (2006), and Pachuca Declaration (2010) all contain agreed upon principles and action items concerning the promotion and development of a regional space framework, such as multilateral cooperation mechanism enhancement, protection of the environment, and the promotion of education in the applications of space-related research.

Through intense collaboration with national governments of Latin America and the Caribbean, as well as the United Nations Office for Outer Space Affairs (UNOOSA), the Space Conference of the Americas works to build consensus among participating Member States on the peaceful uses of outer space. They work toward this goal by devising and implementing various “strategies to promote the practical use of space applications to support programs with a high degree of social content for the region.” Other regions also have established regional space framework. The Asia-Pacific Space Cooperation Organization (APSCO) was formed in 2005 and currently has nine signatory countries. Its mission is to utilize peaceful space based methods to promote sustainable economic and social development in the Asia-Pacific region. APSCO is headquartered in Beijing, China, and was solely funded by the People’s Republic of China until 2007. The Asia-Pacific Regional Space Agency Forum (APRSAF) was established in 1993 after a declaration made at the 1992 Asia-Pacific International Space Year Conference. The APRSAF, jointly organized by various host countries in conjunction with relevant ministries of the Japanese government, holds conferences annually and is the most widespread regional space body in the Asia-Pacific, though it does not include legal framework. Its goal is broader in nature than APSCO’s, and is deliberately designed to serve as a flexible framework for all space-related cooperation.

It is divided into four working groups – Earth Observation, Space Education and Awareness, Space Environment Utilization, and Communication Satellite Applications—each with their own objectives and activities. APRSAF is open to a large variety of space-oriented entities, not only states and their governments. There has also been serious discussion concerning the creation of an African Space Agency, facilitated by the biannual meetings of the African Leadership Conference on Space Science and Technology for Sustainable Development (ALC). Most recently, the Fourth ALC, held in Kenya in 2011, resulted in the Mombasa Declaration on Space and Africa’s Development. The Declaration highlighted key goals such as harnessing space technology to protect the natural environment and contribute to human welfare, as well as strengthening and developing space technology and education in the region. As with its Latin American and Asia-Pacific counterparts, the Mombasa Declaration on Space and Africa’s Development (2011) reaffirms previous assertions that space shall be utilized and developed for only peaceful purposes, but it does not explicitly mention weaponization or militarization of space pertaining to a specific region.

ROLE OF THE UNITED NATIONS SYSTEM

There are four main entities within UN system that address this topic:

- (1) the main legislative body is the General Assembly First Committee;
- (2) the Conference on Disarmament (CD), an independent and specialized organ established by the General Assembly;
- (3) the Group of Governmental Experts (GGE) called for by the General Assembly and
- (4) the UN Office for Outer Space Affairs (UNOOSA)

The United Nations Office for Disarmament Affairs (UNODA) also provides support on this issue to Member States. It is important to distinguish between the work that General Assembly Fourth Committee does on the peaceful uses of outer space as substantively different from the discussions in General Assembly First Committee on this topic, although related, the focus is considerably different. General Assembly First Committee The General Assembly First Committee is the primary UN body that deals with the topic of Prevention of an Arms Race in Outer Space (PAROS). Each year, the First Committee adopts a resolution on the topic of PAROS, the most recent one being resolution 67/30 of 11 December 2012. The First Committee officially requested that the discussion of a treaty on PAROS be taken up by the CD, in resolution 36/99 of 9 December 1981. Also pertinent to PAROS, General Assembly resolution 64/49 of 12 January 2010 deals with "Transparency and confidence-building measures in outer space activities." This has also been a recurring resolution and was adopted in its initial form by First Committee during its 36th session in 1981. The main points and goals of this resolution include the appointment of a group of governmental experts to conduct a study on the issue, achieving "conditions conducive to further measures of disarmament," and promoting confidence building measures that break down feelings of "mistrust" and "misunderstanding." In 1990, the First Committee requested the Secretary-General, with the aid of a group of governmental experts, to conduct a study on the topic, specifically including applications of available technologies and identification of useful instruments and mechanisms of international cooperation. A report containing the findings of that study (A/48/305) was released by the Secretary-General in 1993. Several documents and ideas were discussed in the more relevant capacity of the CD throughout the following years. During the GA's 65th session in January 2011, the First Committee once again requested that a study be conducted by the Secretary-General and a group of governmental experts, to commence its work in 2012.

Conference on Disarmament (CD) The CD was established in 1979 as the international community's forum for multilateral disarmament negotiations. Although it is technically an independent body of the UN, the CD reports to the First Committee annually or as needed, and its Secretary-General serves as Permanent Representative of the UN to the Secretary-General of the CD. Important work was carried out on and off by the CD's Ad Hoc Committee on PAROS during the 1980s and early 1990s, but no agreement could be reached. Despite not having offered a solid document relating to any topic since 1996,

members of the CD, namely the Russian Federation, People's Republic of China, and Canada, submitted various drafts and working papers regarding PAROS from 1998-2007. Progress was finally made when the Russian Federation and People's Republic of China jointly submitted their draft Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects (PPWT) to the CD on 29 February 2008. Since then, CD Member States such as the Group of 21 (the Non-Aligned Movement Member States of the CD), have expressed their support for the draft PPWT as a starting point for negotiations. Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities The Group of Governmental Experts (GGE) on Transparency and Confidence-Building Measures (TCBMs) in Outer Space Activities held their first session in July 2012 in New York to discuss proposals from individual governments, political changes and technological progress since 1993, and specific topics related to TCBMs. The GGE is comprised of 15 experts from different Member States. The UN Office for Disarmament Affairs (UNODA) serves at the GGE's secretariat, and the GGE has begun consulting work for the UN Institute for Disarmament Research (UNIDIR). The GGE's second session was held in early April 2013 in Geneva, Switzerland. This session resulted in a solid draft document, which was finalized at its third session, held back in New York in July 2013. This report of the GGE will be presented to the First Committee at the 68th session of the General Assembly in New York Later in 2013.

United Nations Office for Outer Space Affairs (UNOOSA) UNOOSA, located at the United Nations Office in Vienna, Austria, is, among other things, responsible for maintaining the "United Nations Register of Objects Launched into Outer Space," which resulted from the Convention on Registration of Objects Launched into Outer Space (1962). UNOOSA serves as the secretariat for the UN Committee on the Peaceful Uses of Outer Space (COPUOS), which falls under the purview of the Fourth Committee. COPUOS is an important space-related body in the UN and mainly deals with the promotion of positive uses of space, while the First Committee focuses on disarmament and limiting the negative uses. UNOOSA also manages the United Nations Platform for Spacebased Information for Disaster Management and Emergency Response (UNSPIDER). UNOOSA has two sections: the Space Applications Section (SAS), which organizes and carries out the United Nations Programme on Space Applications, and the Committee Services and Research Section (CSRS), which provides secretariat services to COPUOS. The CSRS also prepares and distributes reports and publications on international space activities and on international space law. While not having a direct relation to the mandate of the First Committee, UNOOSA nevertheless remains an indispensable source of research and coordination in the mission of PAROS. UNOOSA's Programme on Space Applications has organized, hosted, and contributed to over 150 workshops, conferences, and training activities relating to the promotion of the peaceful uses of outer space.

Case Study: Development of the Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT)

The first appearance of a draft Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT) was in the form of a working paper, presented by the Permanent Representative of China to the CD in 2000. After a second working paper was introduced by China in 2001 offering a concrete proposal for an international legal instrument for PAROS, Russia joined in and assisted in creating and submitting a new version in June 2002. In response issued the next month, the Permanent Representative of the United States of America submitted to the CD a copy of a statement they had made at a recent space security conference, expressing that there was no need for further space legislation and that the Outer Space Treaty (1967) was sufficient. The Russian and Chinese delegations continued PAROS related work by submitting comments and suggestions for their proposal involving international legal instruments for space in both 2006 and 2007. Finally, in February 2008, Russia and China presented the draft PPWT. The main component of the draft is Article II, which states that Member States agree to not “place in orbit around the Earth any objects carrying any kinds of weapons,” “install such weapons on celestial bodies and not to place such weapons in outer space in any other manner; not to resort to the threat or use of force against outer space objects.” Official comments eventually surfaced when the United States addressed the CD in August 2008. The United States pointed out that the use of the word “hostile” is extremely vague, and would actually include the jamming of radio frequencies, among other temporary and reversible processes. They also observed that the draft PPWT does nothing to prohibit terrestrial-based antisatellite weapons or missile-defense systems.

The draft PPWT defines the terms “outer space,” “outer space object,” “weapon in outer space,” “placed,” “use of force,” and “threat of force.” While this is most certainly a start to increased clarity in the language of an agreement on PAROS, it is not enough for many experts. Many believe that a treaty must also prohibit groundbased weapons which target space-based objects. There has also been anxiety over how to address dual-use (commercial and military) space technologies. The European Space Policy (2007), for example, emphasizes increased usage of dual-use space technologies and closer cooperation between the civilian and military space sectors.

CONCLUSION

While there have been several important treaties and agreements agreed upon concerning PAROS, broad language and the lack of definitive goals are two of the main obstacles in securing the international legal framework for preventing the weaponization and militarization of outer space. One such broad interpretation of the Outer Space Treaty allows for the launching of ballistic missiles (not a weapon of mass destruction itself) through space, which could just happen to be tipped with nuclear warheads. Another interpretation, of the meaning of “uses of outer space for peaceful purposes,” could

potentially include the pursuit of peace, security, and stability through weaponization and militarization. Delegates should consider questions such as the following: In a space setting, what exactly constitutes a weapon? Could it even be construed to mean a piece of debris that damages a country's satellite? What are the implications for a situation such as that? Are TCBMs the most effective method to preventing an arms race in outer space? Will the continued spread of space technology and information lessen the threat of an arms race? Could regional framework aimed at PAROS be a viable substitute in place of a global treaty? Delegates will be expected to construct specific, relevant, and original solutions for PAROS that could be explored by the First Committee.

PROPOSED PREVENTION OF AN ARMS RACE IN OUTER SPACE

(PAROS) TREATY

Status: Currently being discussed in the Conference on Disarmament (CD).

Background: In 1959, the UN General Assembly established the Committee on the Peaceful Uses of Outer Space (COPUOS) in Resolution 1472 (XIV). This Committee identified areas for international cooperation in the peaceful uses of outer space, devised programs to be undertaken by the United Nations, encouraged research on matters relating to outer space, and studied legal problems arising from the exploration of outer space. During the 1960s and 1970s a number of agreements were adopted to prevent the weaponization of outer space. These include the Partial Test Ban Treaty, formally titled the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (1963), the Outer Space Treaty, formally titled the Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967), the Rescue Agreement, formally titled the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968), the Agreement Relating to the International Telecommunications Satellite Organization "Intelsat" (1971), the Liability Convention, formally titled the Convention on International Liability for Damage Caused by Space Objects (1972), the Launch Registration Convention, formally titled the Convention on the Registration of Objects Launched into Outer Space (1975), the Moon Agreement, formally entitled the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979). Although these treaties ban the placement of weapons of mass destruction in space, they do not prevent states from placing other types of weapons in space. As a result, many states argue that existing treaties are insufficient for safeguarding outer space as "the common heritage of mankind." In order to address this, the final document of the UN General Assembly's Special Session on Disarmament mandated that negotiations should take place in what is now the Conference on Disarmament (CD), "in order to prevent an arms race in outer space" that are "held in accordance with the spirit of the [Outer Space Treaty]." In 1985 the CD established an ad hoc committee to identify and examine issues relevant to PAROS such as the legal protection of satellites, nuclear power systems in space, and various confidence building measures. The United States resolutely opposed giving the committee a negotiating mandate, preferring bilateral talks with the Soviet

Union. The committee convened each year through 1994. No further committee meeting occurred due to objections made by the United States. In 1990 the United States stated that it “has not identified any practical outer space arms control measures that can be dealt within a multilateral environment.” With its large missile defense program and technical advantages in potential space weaponry, the United States has consistently refused to negotiate PAROS in the CD.

Obligations: Under the draft treaty submitted to the CD by Russia in 2008, State Parties would commit to refrain from placing objects carrying any type of weapon into orbit, installing weapons on celestial bodies, and threatening to use force against objects in outer space. State Parties would also agree to practice agreed confidence-building measures. A PAROS treaty would complement and reaffirm the importance of the 1967 Outer Space Treaty, which aims to preserve space for peaceful uses by prohibiting the use of space weapons, the development of spaceweapon technology, and technology related to “missile defense.” The treaty would prevent any nation from gaining a military advantage in outer space.

Compliance: When disputes arise between State Parties, they will first attempt to settle through negotiation and cooperation. If this fails, the situation may be referred to the executive organization of the treaty. Recent Developments Group of Governmental Experts on Transparency and Confidence Building Measures in Outer Space Activities Report (GGE) to the First Committee Following the report of the Group of Governmental Experts (GGE) on Transparency and Confidence-Building Measures (TCBM) in Outer Space Activities (A/68/189), on 29 July 2013, the GGE presented their final report to the First Committee on 27 September 2013.

The document aimed to provide recommendations that would enhance transparency in outer space through cooperation, consultations, information exchange, and risk reduction notifications. It is seen as a welcome move towards a strong international commitment to a long-term sustainable, stable, and secure space environment. The extensive technical expertise in various aspects of space that comprised the group allows for a rigorous set of criteria to evaluate “proposed transparency and confidencebuilding measures.” From there, the “criteria can help inform future discussions in this committee and in other forums regarding the implementation, demonstration and validation of specific measures”. Moreover, the Chairman of the GGE on TCBM Victor Vasiliev noted, in his speech, that in addition to important policy recommendations, the GGE provides the opportunity to see diversity among UN bodies addressing space security issues. He notes the GGE did not want to “undermine sovereign rights,” and stressed the nature of the Report of the GGE is voluntary in nature and reiterated many existing international instruments. In his recommendations to the First Committee, Vasiliev urged Member States to review and implement proposed TCBMs through their national mechanisms, for the Committee to seriously consider how to further TCBMs in Outer Space, and to decide on appropriate venues for universal consideration and support for TCBMs.

Member States have expressed their support for the GGE Report for its role in furthering steps towards better cooperation in prevention of arms in outer space. Prevention of the Placement of Weapons in Outer Space (PPWT) The United Nations Institute for Disarmament Research (UNIDIR) hosted a Eurasian regional seminar on “building confidence for Eurasian space activities through norms and behaviours”. Updates to the PPWT were presented to participants by the Head of Division for Multilateral Disarmament for the Department for Security and Disarmament Affairs of the Ministry of Foreign Affairs of the Russian Federation, Andrey Malov. The new draft of the text “seeks to prohibit the placement or use of anti-satellite technology of any kind in outer space, though it does not prohibit the testing of such technology on air, land or sea. It also permits the use of antisatellite technology for defensive purposes.” These changes were made in hope to allow enough flexibility to command the necessary support in the international community to move the discussion forward. Malov also pointed out a new provision in the text that permitted a state that believes another state will interfere with their legitimate peaceful use of space to request formal consultations, hoping the feature would provide a mechanism for peaceful resolutions in outer space. Many participants felt a legally binding instrument, such as the PPWT, is preferable, but in the interim, a non-binding instrument is a good step.

European Union

The European Union (EU) has worked towards the Secretary-General’s request for UN members to develop “concrete proposals for [Transparency and Confidence Building]” and released their latest draft on 16 September 2013. These changes to the Space Code of Conduct are derived from comments and suggestions the EU received during the May 2013 Open-ended Consultations in Kiev, Ukraine, attended by 140 experts in the various fields relating to space from 61 countries. The draft has been hailed as significant progress from the previous version, tightening the language and avoiding vagueness that raised concerns in previous versions. Of note was the reference to “legitimate defence interests of States,” which was seen as troublesome given that it could be interpreted subjectively. Nonetheless, the new draft clarifies the “right to individual or collective self defence in the face of vehement criticism that the right may be pursued by states to legitimize acts of weaponization.” While the reference to the right to self-defense has been retained, it has been balanced with the principle of refraining “from the threat or use of force against the territorial integrity or political independence of any state or in any manner inconsistent with the purposes of the Charter of the United Nations” in an effort to reflect customary international law, as enshrined in the UN Charter. The most recent draft, moreover, has made it clear that it does not conflict with existing treaties or conventions and is consistent with “previous International legal instruments, declarations, principles, and guidelines.”

Nonetheless, the new draft is seen to have taken a significant step forward, with several of the practical measures calling for more transparency, influenced by the language of existing UN instruments including the Report of the GGE on TCBM. The next conference to discuss the Code of Conduct was held in Bangkok, Thailand November 2013.

CONCLUSION

This topic touches on the many complicated aspects of discussing an area not owned by a single Member State, especially when addressing security. The slow progress in creating a substantive is reflective of the complicated nature; however, the recent changes to the PPWT and EU Space Code reflect the shared urgency in the international community to address the continued concern of preventing an arms race in outer space. Finally, the space missions launched by China and India demonstrate the continued desire to become a space nation, which increases the likelihood for space debris and the necessity to address the growing potential for arms race in space between those aiming to be a space nation and those already with an established space program.

AVOIDING A SPACE ARMS RACE

Forty years ago this month, the Senate approved the Outer Space Treaty, which bars signatory states from placing into orbit any objects carrying nuclear and other weapons of mass destruction. Although it has helped protect space for peaceful uses by all countries, the treaty has not closed off all threats to the safety of military and civilian space assets and the pursuit of other types of space-based weapons.

For instance, some countries have developed offensive weapons capabilities that can shoot down satellites in orbit using ground-based ballistic missiles. The United States is now contemplating “defensive,” space-based, kinetic-energy missile interceptors. The time has come once again for states to engage in dialogue on space security and avert a new and dangerous arms competition in the heavens.

As if to highlight the problem, China recently used a projectile carried into space by a ballistic missile to shatter one of its weather satellites orbiting about 850 kilometers above the Earth into thousands of fragments. The highly irresponsible experiment—the first of its kind since U.S. and Soviet anti-satellite testing in the 1980s—reaffirms the vulnerability of surveillance and communications satellites to attack.

At the same time, the Bush administration's fiscal year 2008 budget request includes \$10 million for initial work toward a space-based missile interceptor test bed. According to the Pentagon budget documents, testing of a handful of kinetic missile interceptors might begin by 2012. Once proven, the United States could significantly expand the number of orbiting interceptors providing a thin, “multishot” defense against intercontinental missiles.

Russia and China worry that U.S. ground-based missile defenses, combined with possible space-based weapons systems, could threaten their offensive nuclear deterrent forces and early-warning satellites. Today, Russia has an arsenal of approximately 800 long-range, nuclear-armed missiles, which will likely shrink significantly in coming years. China deploys approximately two dozen such weapons.

For some defense planners, the Chinese satellite shoot-down underscores the need, as stated in the official 2006 U.S. space policy, “to promote and protect U.S. security and space assets.” As Air Force Maj. Gen. William Shelton said recently to Inside the Pentagon, “As the capability evolves on the part of the people [who] would want to do us harm in space, you've got to stay ahead of them.” But because the United States may not be able to stay ahead technologically and cannot always protect its satellites, it would benefit from agreements that limit the military space capabilities of all countries.

Unfortunately, international discussions that might produce new understandings on maintaining the peaceful use of space have been stymied until, perhaps, now. For years, China and Russia have called for talks at the 65-nation Conference on Disarmament (CD) on “prevention of an arms race in outer space.” Until very recently, the Bush administration had been opposed to even discussions on space weapons, favoring negotiations on a fissile material cutoff treaty (FMCT), which would halt production of nuclear material for bombs. But on March 23, the president of the CD presented states with a package that would allow for nonbinding discussions on space weapons issues, as well as longoverdue negotiations on an FMCT. The proposal has the support of a wide majority of countries, including the United States . Leaders in Washington , Beijing , Moscow , and elsewhere should seize the opportunity for cooperative solutions. First, member states at the CD should explore options for limiting the testing or use of ground-, sea-, air-, or space-based weapons, including lasers and projectiles, against satellites or other space-based objects, as well as for legally binding standards for the mitigation of space debris.

A formal agreement through the CD, which works by consensus, would be difficult to achieve. Congress could help improve prospects by denying proposed funding for space-based missile interceptors. These are not critical to U.S. missile defense needs and could prompt Russia and China to accelerate work on less-costly countermeasures and retain more of their offensive nuclear-armed missiles. If talks at the CD do not begin or become deadlocked, the nearly 100 signatory states of the Outer Space Treaty could seek to formally clarify that the treaty was

also meant to ban non-nuclear Earth-orbiting weapons designed to strike satellites or missiles—weapons that would undermine space security for all. The treaty clearly allows states-parties to establish interpretations of the original treaty to take into account developments not anticipated in 1967.

As an interim step, like-minded states might also establish a less formal “code of conduct” for space security, whether or not all governments choose to participate. The goal would be to establish stronger norms against dangerous activities in space, including flight tests that simulate hostile attacks against satellites and the deployment of anti-satellite and space weapons. It is foolhardy to deny that an offensive-defensive space arms competition is in the offing and could have unwanted consequences. The international community stands at a critical space-security crossroads that requires responsible and visionary global leadership.

IMPORTANT PAST UN RESOLUTIONS

<http://www.un.org/documents/ga/res/51/a51r044.htm>

<http://www.un.org/documents/ga/res/43/a43r070.htm>

<http://www.un.org/documents/ga/res/47/a47r051.htm>

<http://www.un.org/documents/ga/res/45/a45r055.htm>

http://www.unoosa.org/pdf/gares/ARES_62_020E.pdf

IMPORTANT LINKS

1. <http://www.reachingcriticalwill.org/images/documents/Resources/Factsheets/outerspace.pdf>
2. http://www.fas.org/programs/ssp/nukes/ArmsControl_NEW/nonproliferation/NFZ/NP-NFZPAROS.html
3. <http://www.globalissues.org/article/69/militarization-and-weaponization-of-outerspace>
4. <http://www.un.org/disarmament/publications/studyseries/en/SS-34.pdf>
5. <http://www.spacenews.com/commentaries>
6. http://www.fas.org/programs/ssp/nukes/ArmsControl_NEW/nonproliferation/NFZ/NP-NFZPAROS-TXT.html
7. <https://unoda-web.s3.amazonaws.com/wp-content/uploads/2014/01/OuterSpace-Fact-Sheet-Jan-2014.pdf>
8. <http://www.unidir.org/files/medias/pdfs/conference-report-eng-0-63.pdf>
9. <http://www.globalissues.org/article/69/militarization-and-weaponization-ofouter-space>
10. <http://www.oosa.unvienna.org/>
11. <http://www.un.org/disarmament/publications/studyseries/en/SS-34.pdf>