
PREVENTION OF AN ARMS RACE IN OUTER SPACE: RESEARCH IN THE PAST, FUTURE OUTLOOK

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ABSTRACT

Prevention of an arms race in outer space is the specter in keeping the celestial bodies and space Properties. One of the most important measures to prevent an arms race in outer space is PAROS resolution that has been raised as a mandate of Conference on Disarmament (CD). In this study we have tried to investigate the challenges of PAROS; and recommend guidelines for achieving its goals in futures. The authors believe that the most important reason on PAROS Current status includes space special place in space powers defense doctrine, contradictory functions of CD members and in legally binding instrument lake on prevention of an arms race in outer space. It's necessary to revolutionize in PAROS; should be taken measures as common understanding of the threats of space weaponization, to increase multilateral and international cooperation and confidence building measures, bilateral security guarantees instead of the threat of mutual destruction and to create a legally binding instrument on prevention of an arms race in outer space.

Keywords: PAROS, Conference on Disarmament, Arms race in outer Space, Legally binding instrument, space security.

1. INTRODUCTION

Space based technologies play an increasingly critical role in the maintenance and development of national and international infrastructures. With the benefits of the wide spread applications of peaceful outer space technology, comes the urgent need for the international community to understand, communicate and cooperatively regulate activates in outer space. Positional dangers such as the dissemination of dual-use technologies, the shift from the militarization of space to weaponization of space, undermine security in outer space as well as prospects for its peaceful use by humanity as a whole.(UNIDIR conference report, 2005: 1)

Arms race is a main threat in space security. For this reason, efforts took place to deal with this issue at international level. Evaluation of an arms race in the Conference on Disarmament was one of the most important measures. The Conference on disarmament (CD) is a unique negotiation forum. CD is the most important institution that has paid attention to this subject. CD has 65 states members and 42 states as observers (Conference on Disarmament, CNS, 2012: 1). It was formed in 1979 as a single multilateral disarmament negotiating forum of the international community. CD was established after agreement was reached among members states during the first special session of the UN general assembly (UNGA) devoted to disarmament (1978). It is the successor of the Ten-Nation committee on disarmament (TNDC), 1960, the Eighteen-Nation committee on disarmament (ENCD), Geneva, 1962-68 and the conference of the committee on disarmament (CCD), Geneva, 1969-78. (Conference on disarmament, NTI: 1)

Multilateral arms control, Non proliferations and disarmament agreements such as the NPT (Nonproliferation Treaty), BTWC (The Biological and Toxin Weapons convention), CTBT (Comprehensive Nuclear Test Ban Treaty) and environmental modification and seabed treaties have been negotiated in CD.

CD Agenda includes:

- Cessation of the nuclear arms race and nuclear disarmament,
- Prevention of arms race in outer space (paros),
- Prevention of nuclear war, including all related matters,
- Effective international arrangement to assure non- nuclear weapons states against the use or threat of use of nuclear weapons, new types of weapons of mass destruction and new system of such weapons, radiological weapons,
- A comprehensive program of disarmament,
- Prohibition of the production of fissile material for nuclear weapons or other nuclear explosive devices,
- Transparency in armaments, consideration and adoption of the annual report and any other report, as appropriate to UNGA.

There is an international consensus on the general principle of the importance and urgency of the preventing an arms race in outer space as shown by the regular adoption by the UN General Assembly, without any negative vote of a number of resolutions since 1990. However there has been a lack of political and diplomatic action, whereas existing frameworks such as the 1967 outer space treaty and 1979 moon agreement are insufficient for dealing with the challenge that we now face. (UNIDIR conference report, 2005: 1)

In this paper we have tried to investigate the history of PAROS and check its current challenges and finally to provide strategies for dealing with its challenges. To achieve this goal, our question would be the recognition of PAROS challenges and obstacles as well as solutions for dealing these barriers? The authors believe that the most important matter in PAROS is the lack of consensus on threats of space security; and creation of a legally binding instrument as a basis for cooperation is the best option for achieving to PAROS objectives.

2. THEORETICAL FRAMEWORK

In this paper will be using the theory of Neoliberalism Institutionalism to explain passive performance reasons in CD on the subject of PAROS resolution and finally recommend ways to deal with its challenges. Neoliberal's institutionalisms believe that there is a deadlock in international system due to subjects such as the lack of trust between international actors and the lack of confidence building security measures to ensure survival and increase in the relative strength to achieve security factor. This theory accepts the lack of central authority in the international system; however there is the possibility of international cooperation via international organizations and institutions. From the perspective of this theory; when there are mutual interests between the states as the most important elements of international system, cooperation will be easily achieved.

This theory emphasizes that in order to prevent domination of a special power or formation of anarchy; special works of international institutions are needed such as:

- to understand reliable and credible measures of other countries,
- to establish necessary regulation,
- to create appropriate conversations at various levels and;
- to facilitate cooperation.

Space is one of the areas of common interest between countries that is ruled by relationship based on an absolute profits. We can prevent the domination of a particular state over outer space and also prevent arms race in outer space as the purpose of PAROS with approaches such as creation of legally binding instrument as a basis for appropriate regulations, confidence building by providing reliable information and facilitation of communications.

3. POLARIZATION IN CD

There are four groups in CD. West group¹, developing group (Group of 21), East Europe group and one group. West group consisted 25 states, developing countries are formed 33 states², East Europe group consisted 6 states Belarus, Bulgaria, Ghazaghestan, Romany, Russia Federation and Ukraine and one group is china.(CD, WILL, 2014)

4. PAROS (Prevention of an Arms Race in Outer Space) and Ad hoc committee

Several UN bodies like UN General assembly first committee, CD, COPUOS³, UN General Assembly Fourth committee and international telecommunications union deal with issues that arise in PAROS.

In 1981 First Committee of UNGA⁴ added space issue to the CD's 1982 agenda under the title 'prevention of an arms race in outer space'. (Estabrook, 2006: 1) The consideration of outer space from an arms control and disarmament perspective has a long pedigree at the CD.(Meyer, 2011: 1) There was 2 resolutions prior to PAROS about prohibition of militarization and weaponization. First resolution (A/RES/36/97) sponsored by Western Europe and other group (WEOG) and was about an effective and verifiable agreement to prohibit anti-satellite systems. The second resolution was (A/RES/ 36/99) sponsored by the Eastern European and other states that wanted CD negotiation about prohibiton of stationing of weapons of any kind in outer space. The PAROS issue is one of the four items at the centre of the agenda debate in the CD and has been the object of one of the linkage.

Each of the issues raised at the CD has a philosophy. Although have been conclude treaties in space and they are banded deployment weapons of mass destructions, but they are deficient and aren't all kinds of weapons as a result some states insisted on inadequacy of the existing treaties to security in space as a common heritage of mankind. In this regard, were raised a debate on prevention of an arms race in outer space in final document of the UN General Assembly's on disarmament. (Proposed PAROS Treaty, 2011)

In the past, china insisted that it would not participate in negotiations on a fissile material measures without concomitant negotiations on PAROS. In 2003 it softened its position agreeing to PAROS "discussion "in lieu of formal negotiations and agenda proposal still on the table; however, consensus using this formulation has not yet been reached. (Estabrook, 2006: 1)

¹. Argentina, Australia, Austria, Belgium, Canada, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Japan, Netherland, New Zealand, Norway, Poland, South Korea, Slovakia, Spain, Sweden, Swiss, Turkey, United kingdom and United states.

². Algeria, Bangladesh, Brazil, Cameron, Chile, Colombia, Cuba, North Korea, Congo, Ikvador, Egypt, Utopia, India, Indonesia, Islamic Republic of Iran, Iraq, Kenya, Malaysia, Mexico, Mongolia, Marrakesh, Myanmar, Nigeria, Pakistan, Peru, Senegal, South Africa, Serilanka, Syria, Tunis, Venezuela, Vietnam and Zimbabwe.

³. Committee on peaceful uses of outer space

⁴. United Nations General Assembly

In 1981, debate over the weaponization of outer space led the CD to begin talks regarding the potential for on PAROS treaty. On 29 March 1985, CD agreed to establish Ad Hoc committee on PAROS for issues relevant to the prevention of an arms race in outer space. (CD, Report of Ad Hoc committee, 1985)

Ad Hoc committee was followed tripartite programme of work:

- A) Examination and consideration of issues relevant to PAROS
- B) Examination and consideration of Existing Agreements relevant to PAROS
- C) Examination and consideration of existing proposals and future initiatives on PAROS.

However, Western opposition, particularly from the United States, thwarted treaty negotiations and the committee was dissolved in 1994. The committee has yet reconvenes despite on annual, near unanimous vote by the UN General Assembly (UNGA) and the CD approving the PAROS resolution. The US is the only country to vote against te resolution, with Israel obtaining. The United States argues that PAROS is unnecessary because there are no weapons and thus no arms race in outer space at this time. (PAROS, FAS, 2014)

On examination and consideration of issues relevant to PAROS, we introduce issues like confidence building measures and terminology and other relevant legal aspects. In CBMs issues like measures to improve the transparency of pre-lunch activities, rules of the road measures and required for monitoring purposes was proposed.

5. PARTIES' VIEW IN PAROS

There are different views on the PAROS at the CD. The major difference is between the US on the one hand and Russia-china on the other hand. Western group and especially US believes that there is no arms race in outer space and nor any significant ongoing development by any state with respect to space weapons. They believe that no need for legally binding instrument or need to revise existing agreement in this respect. Instead, some states in western group had originated and supported proposals to establish international agencies to monitor outer space activates.

In 2006 US national space policy Bush administration explained that the US will preserve its rights, capabilities and freedom of action in space, dissuade or deter others from either impeding those rights or developing capabilities intending to do so; take those actions necessary to protect its space capabilities, responds to inference and deny if necessary, adversaries the use of space capabilities hostile to US national interest.(National space policy of the USA, 2006)

In July 2010 in new US national space policy, the Obama administration released about confidence building measures, bilateral and multilateral transperence to encourage responsible

action about space and achievement to peaceful uses in space. (National space policy of the USA, 2010)

The new policy notes that the united states consider arms control measures if they are equitable, effectively verifiable and enhance the national security of US and its allies.

Bush administration pursue these aims with bilateral but Obama administration in multilateral and bilateral. The Obama administration believes that the Russian-chine's joint draft treaty on prevention of the placement of weapons in outer space (PPWT) would not these criteria

I believe that despite the US Claim that is a important pace, the criteria like equitability, effective, verifiability and enhance the national security interest of the US and its allies are very ambiguous. US with these concepts achieve all aims with a new literature.

The Soviet Union was taken the initiative in 1981 that presented draft treaty prohibiting the placement of weapons in outer space. This initiative was a first pace in tenth special session on disarmament of the General assembly appropriate action to prevent an arms race in outer space.

Russia believed that the existing legal instrument did not prevent lurching into space and testing in space of conventional weapons as well as weapons based on new physical principles like lasers, very high frequency weapons and others.

China and members of group of 21 stressed that existing legal instrument relating to outer space were inadequate to prevent an arms race.(Meyer, 2011: 3)

Developing group are of the views that while existing international legal instruments on outer space, such as the treaty on principles governing the activities of states in the explorations and use of outer space, including the moon and other celestial bodies, prohibit the deployment of weapons of mass destructions in outer space, none of them completely ban the testing, deployment and use of other weapons or weapon systems. Under the present day conditions, the existing measures and instruments are inadequate to prevent an arms race in outer space. They believe that only a legal instrument prohibiting the deployment of weapons in outer space and the prevention of the threat or use of force against outer space objects can eliminate the emerging threat of the weaponization of outer space. This group support for the re-establishment of an Ad hoc committee on PAROS. The conference has examined a number of important issues pertaining to the prevention of an arms race in outer space through this Ad Hoc committee, established by the conference from 1985 to 1984, however, the CD has not been able to re-establish this Ad Hoc committee, owing to lack of agreement on its programme of work. They believe that an arms race in outer space should be preventing through a legally binding

instrument. It must be recognized that outer space is the common heritage of mankind and should be explored and utilities only for peaceful purpose.

6. PAROS' CHALLENGES

Today, PAROS is not in appropriate conditions. There are the major challenges in PAROS including Us dominance, Legally binding instrument lake on prevention of an arms race in outer space, A Special place of space in space actors defense doctrine and contradictory functions of members. Here we will try to explain these challenges, briefly.

6.1 US dominance

US policy about protection of its own space asserts and disturbance of others is an important obstacle to prevention of an arms race in outer space. Today the US department of space continues to invest and work in some space defense like anti satellites and space based weapons capabilities especially anti satellites weapons.

I believed that the deadlock at PAROS is result of US missile defense during the 1990. US security policy in 2002 and ASAT missile test by China in 2007 established disastrous impact on PAROS.

At the sometime, the US is considering possible weapons options and developing the fundamental technologies to weaponize space if the political climate should permit deployment. (Estabrook, 2006: 2)

In April 15, 2010 President Barak Obama said: we will not only extend humanity's reach in space, we will strengthen America's leadership here on earth. (National policy of US, 2010: 1)

6.2 Legally binding instrument lake on prevention of an arms race in outer space

Have weakness in space treaties, has created the risk of different interoperations of ban in arms race in outer space. For example it could be said prohibition of placement of nuclear weapons and other weapons of mass destructions in space has created different interpretations that has caused militarization and weaponization in space . overall there are 3 categories of regimes in the field of space regimes:

1. Activities that have been banned as placement of nuclear weapons and other of mass destructions in outer space;
2. Incentive activities such as the promotion of the peaceful use of outer space for benefits of all humanity;

3. Activities that are permissible and that includes all activities that are neither prohibited nor encouraged in space documents.

In conclusion we can say legally binding instrument like in prohibition of an arms race in outer space is the most important factor that has expanded militarization and weaponization in space. In this regard, have been made efforts. Some countries like Russia and China argued that PAROS is not relevant term or treaty to pursue. On 12 February 2008 they presented draft treaty on the prevention of the placement of weapons in outer space, the threat or use of force against outer space object (PPWT). It was the first and only draft treaty on this issue formally introduced to the CD. There was based on element proposed in working paper to the CD in June 2002 Russia, China and other countries. (CD, UNOG, 2014)

6.3 A Special place of space in space actors defense doctrine

One of the most important aspects of military doctrine is space military doctrine. Its determines how space actors, contributions in space with utilize of military tools. Due to the increasing space role in nation's defense doctrine, space militarization and weaponizations is a priority. US, Russia, china and EU, have greatest impact in it. Prohibition of space pearl harbor and space dominations is US space policy. This policy was followed decisively by bush administration. In this regard, Mac MacLean (white house spokesman) underscored to needs updating in US policies to deal with threats of the presence of other actors. This policy has also pursued cautiously by Obama administration. Overall, it can be said US defense doctrine in space based on the space combat operation with the aim of preventions of space hostile due to advance in space technology. (Estabrook, 2006: 90)

Russia also fears to attack to warning systems and surveillance. Russia considers threats to the systems to attack on its national security. (Space Law, 2008: 63-64) The military doctrines of the Russia in 2010 indicate the new policy of this country in space. Russia considers great importance to the space security and arms race in outer space is a major external threat for its national security. In 2010 military doctrine paragraph 3 articles 2 stipulate that to expand deployment of military forces and resource is a feature of contemporary armed conflict and emphasis on improving space information the developed military satellites. (the military doctrine of Russian federation, 2010) That document can be realized how much space is involved in the Russian defense doctrine and if it national security be threatened, Russia also tend to be an arms race in outer space.

China is a other space player that space is a basic component for defense doctrine. Space deterrence and space active doctrine are china main strategies in outer space. Competition from China and US and regional conformation with India, have been impact to this approach. As well

as EU as other active space actor, that space has a special place in its defense doctrine. EU space doctrine emphasis to modernize in spy technologies to protect space assets.

6.4 contradictory functions of members

Contradictory functions of CD members about PAROS is one of the most important challenges. For example despite 23 countries in Europe union are members of the NATO, there is an underlying contradiction between the EU space policy and the NATO space defense policy that needs to be addressed. On the other hand, some the important members of developing group like India have very closely cooperation with US and Israel in space military objects. Also space military cooperation between China and Pakistan is one of the contradictory in PAROS aims and Parties operations.

7. PAROS' FUTURES

Resolving concerns about arms race in outer space must required additional political commitments as well as confidence building measures content on cooperation in peaceful use of outer space.

7.1 Common understanding on Space threats

In this time the important issue is that common understanding by means of legal undertaking or instrument to prevent the weaponization and arms race in outer space. Space common security concerns, mainly caused by the expansion of space military and arms race in outer space, too. Anti ballistic systems and missile defense systems are two main concerns that the international community has called for prohibition. These are two main source of insecurity and highly threatened space properties. In addition, utilization of military space systems in order to support combat operations can be a threat to target countries national security, also growth of the military space programme can influence on international peaceful use of space.

7.2 Confidence building measures(CBMs)

Securing outer space cannot depend solely on resolutions of the PAROS debate. Rather, immediate measures to manage space activity, mitigate the production of orbital debris, and build transparency must be pursued concurrently. (Estabrook, 2006: 2) There is very important being created verification regime for international agreement on PAROS. in other words to establish international norms for dealing with militarization and weaponization in space is a necessity but it a long process . therefore, it's necessary be considered special attention to important steps would be an important steps in CBMs. In cases such as, to increase disclosing of

space operations, to upgrade information about satellites' in earth orbits. To create code of conduct in space operations and international transfers of space technologies and missiles.

7.3 Legally binding instrument

We said have tacked measures like space treaties in prevention of an arms race in outer space, but perhaps these document would sufficient in the past, but we needed to establish new international norms due to the expansion of the countries space activities. The risks of the weaponization and arms race in outer space are on the rise. So; ensuring peaceful use of outer space and prevention weaponization and arms race in outer space serves the common interests of all countries and is also the common responsibility.

Legally binding instrument is the most reliable method for prevention of an arms race in outer space. Obligations cannot to establish compulsory in outer space arms race issues: therefore its necessary to create commitment is these issues. It provides the task of states on related issues. Additionally, it can be an important step for further actions.

Without an agenda and accompanying negotiating mandate on PAROS, these discussions, regardless of the level of technical substance, will not significance affect space security? (Estabrook, 2006: 2)

7.4 Mutually assured security instead of mutually assured destruction

The efforts to ensure space security on the basis of mutually assured security can was a fundamental action for motion to mutual trust. Mutually assured security can to be accomplished mutually cooperation and sharing. These are elements for common security regime that its aim is prohibition of an arms race and arms placement in outer space.

CONCLUSION

Space security bears on the common welfare of the mankind. All space players should proceed from a long term perspective and make relentless efforts to prevent weaponization and arms race in outer space. Despite the importance of prevention of an arms race in outer space, there are still considerable reluctances on the part of some states to support actual measures to prohibit the weaponization of outer space or control in any additional way the military activities in that area. This resistance may be in irreparable damage in militarization in outer space Failure to address prevention of an arms race in outer space seriously jeopardizes continued access and use of space for peaceful purpose of by all nations. In PAROS reaffirms that according to current space law and international law, space is a global commons intend for peaceful uses, but current space treaty regime does not prevent an arms race in outer space; due to the structural weakness in CD

to negotiate "further measures with appropriate and effective verification mechanism to prevent of an arms race in outer space" according to the resolution (A/C.1/60/L.27).

Today, we have not achieved the goals of PAROS for reasons such as US dominance in space and desire to continue and extent this dominance, lake of legally binding instrument to prevention of an arms race in outer space, especially place of space in space actors defense doctrine and contradictions in announced and action policy in CD members. Due to PAROS capacity in the futures of humans security, for this reasons any negligence in related issues with PAROS, will be in threatening situations national and international security: so we need to pay more attention to PAROS and its goals.

In this paper we try with theoretical approach base institualism liberalism, offer solutions such to create common understanding of space threats, confidence building measures, to create legally binding instrument, mutually assured security instead of mutually assured destruction. We try to offer best solutions, to know current situations in PAROS. Now we need a consensus in all space actors and other country too, for prevention of an arms race in outer space. It will be achieved by international institutions that will follow result like to close up in member's view, to facilities in communications, to reduce tensions and increase confidence.

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