

STATE RESPONSIBILITY - HARNESS OUTER SPACE DEBRIS

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ABSTRACT

The subject outer space acquired importance in International Law when the first Sputnik was launched in the orbit by USSR on Oct. 4th 1957. Since then, number of manned and unmanned satellites and probes into outer space and celestial bodies have been launched by some other states as well. These acts of different states in the outer space led to the United Nations to make rules and regulations in this part of the universe. This law was named as space law as it deals and regulates the relation amongst the states, their relation with International organization in the sphere of outer space, celestial and Moon (Dr H.O. Agarwal). The growth of use and exploration of outer space resulted in the increase of orbital space debris which is both a consequence of and a potential hindrance to space activities. The risk posed by space debris initiated the need to address the challenges posed to the sustainability in outer space. The Protection, preservation of the access to and usability of outer space in a long term requires that measures to be taken to mitigate action to ensure and remedial measures for existing and future space activities. As this include technical measures which depends on adequate legal mechanism to be regulated. Various treaties has been initiated by the United Nations, the deficiencies in law for space debris remediation mechanisms originate from the fact that although technical concepts have been developed the legal framework for outer Space activities does not impose any obligations for debris removal and on-orbit servicing (C. Rada popova). The treaties are there for use and exploration of outer space as legal mechanism. Absolute liability cannot be fixed because of State Sovereignty and so state liability do not arise, but in outer space there is no sovereignty jurisdiction and so state parties can be made absolutely liable and internationally responsible. Further guidelines need to be framed ensuring global Standard of care and sustainability. Transparency shall be the global phenomena in the use of outer space. It is the need of the hour to initiate legal measures and fix state responsibility both at global and national level to attain Environmental Sustainability.

KEY WORDS: Environmental Sustainability, United Nations, Space Law, Absolute Liability

INTRODUCTION

The subject of outer space acquired importance in international law when the first sputnik launched in the orbit by USSR on 4th Oct, 1957. Since then, a number of manned and unmanned satellites and probes into outer space and celestial bodies have been launched by some other states as well. These acts of different states in the outer space led to the United Nations to make rules and regulations in this part of the universe. This law was named as space law as it deals and regulates the relation amongst the states, their relation with international organisations in the sphere of outer space, celestial bodies and moon.

The growth of use and exploration of outer space resulted in the increase of orbital space debris which is both a consequence of and a potential hindrance to space activities. The risk posed by space debris initiated the need to address the challenges posed to the sustainability in outer space. The protection, preservation of the access to and usability of outer space in the long term requires measures to be taken to mitigate and ensure remedial measures for existing and future space activities. As this includes technical measures which depend on adequate legal mechanisms to be regulated. Various treaties have been initiated by the United Nations, the deficiencies in law for space debris remediation mechanisms originate from the fact that all though technical concepts have been developed the legal framework for outer space activities does not impose any obligations for debris removal and on orbit servicing.

The law of outer space acquired importance in international law. since then, a number of satellites are launched into outer space by other countries. The acts of different states resulted in the necessity to make rules and regulations for the use of outer space and other celestial bodies. This law which was made to regulate the activities in outer space is based on the mutual relations of the state and their relation with the international organisation which is referred as space law.

HISTORY:

Initially the question of peaceful uses of outer space was considered by the United Nations and it is recognised that it is to be treated as a common heritage of mankind in outer space as it belongs to all mankind in 1958. In this year it was also recognised that there is common interest of mankind in outer space. The outer space shall be used only for peaceful purposes.

In the year 1959 to have another organ to specially in the international cooperation in the peaceful uses of outer space. In this regard a committee for the peaceful uses of outer space has been established with two sub committees one the legal subcommittee and the other scientific subcommittee. Discussions before the sub committees continued and in the year 1963 United Nations general assembly adopted declaration of legal principles governing the activities of the state exploration and use of outer space.

The general assembly resolution 2222(XXI) dated 14th December 1966 through a resolution adopted unanimously the text of the Treaty on principles governing the activities of States in the exploration and use of outer space including moon and other celestial bodies. Though the Treaty was not signed by all the states but had binding effect to the states which are parties to it, but to all states in view of the fact that the rules of outer space has come into existence through international customer law.

This Treaty was considered to be a landmark in establishing a legal Regime on outer space. It is clear that this Treaty was concluded with the inspiration by the great prospects opening before mankind as a result of man's entry into outer space. It recognised the common interests of all mankind in the progress of the exploration and the use of outer space for peaceful purposes. The main objective of this treaty is the exploration and the use of outer space should be carried on for the benefit of all people whether they are economically or scientifically developed. This Treaty was to bring broad international cooperation in the scientific as well as legal aspects of the exploration and the use of outer space for peaceful purposes and such cooperation will contribute to the development of mutual understanding and strengthening of friendly relations between states and people. It is very clearly mentioned that the moon and other celestial bodies shall be used by all the state parties exclusively for peaceful purposes. The establishment military bases, installation and fortification, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies shall be forbidden. The use of military personnel per scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall not be prohibited. As such under the Treaty another agreement has been entered on the rescue of astronauts, the return of astronauts and the return of objects launched into outer space.

The agreement has been entered to render more possible assistance to astronauts in the event of accident, distress or emergency landing, the immediate and safe return of astronauts and also written of the objects launched into outer space. This is considered as an important aspect in protection of astronauts when he lands in a different Sovereign state owing to accident, distress, emergency or unintended landing. The contracting party shall take all possible steps rescue them and render them all necessary assistance. It shall inform the launching authority and also battery general of the United Nations on the measures taken by it. Another significant aspect which has been included along with the safety of the astronaut and his return along with the object launched he is the international liability for the damage caused by the space object. Exploration of outer space recognised as the common interest of all mankind and it shall be for peaceful purposes. It is believed that even precautionary measures have been taken by the states and inter-governmental organisations involved in the launching of space objects, on some occasions damage may be caused by such objects. The damage may be loss of life, personal injury, impairment of health or loss of or damage to property of States or of persons, natural or judicial or property of International Governmental organisations. This convention ensures the international rules and procedures concerning liability for damage caused by space objects and to ensure prompt payment of full and equitable measure of compensation to the victims of such damage. The launching state is absolutely liable to pay compensation for damage caused by its space object on the surface of the earth to the aircraft in flight. Such a claim for compensation of damage shall be presented to a launching state through diplomatic channels. Another important aspect to be considered when a space object is launched into Earth orbit or beyond the launching state shall register the space object by means of an entry in an appropriate registry which it shall maintain. The secretary general shall maintain register in which the information concerning each space object carried on its registry shall be recorded.

In addition to the above conventions draft principles on remote sensing was adopted in 1986 by the legal subcommittee and held that remote sensing of the earth from space shall be carried out for the benefit and the interests of all the countries irrespective of their degree of economic, social, scientific and Technological development and moreover to consider the needs of the developing countries.

The relevant principles for the use of nuclear power sources in outer space has gained momentum when the nuclear and radioactive materials and its use was preferred by the countries. These principles confer that the launching state prior to its launch in order to ensure that a thorough and comprehensive safety assessment is conducted and made publicly available. When a space object appears to malfunction with risk of re-entry into the earth with radioactive materials the launching state has to inform UN and States concern.

Although the use and exploration of outer space has settled principles, article IV of the Treaty of outer space does not altogether prohibit military activities in the outer space, some prohibited types of activities are being carried on by the

states due to the lacunae in the Treaty. In the year 1998 the general assembly recognised the deficiency like a wide range of military uses of outer space like remote sensing, reconnaissance, communication, navigation and weather observations are not covered by the Treaty. Thus, the use of outer space for the military purposes has given rise to the problem of arms race in the outer space. The extensive use of outer space for military purposes has been condemned by the states in a number of international forums. This has become a universal problem and so in 1996 reaffirming the importance and urgency of preventing the arms race in outer space and general assembly requested the conference on disarmament to re-establish the ad hoc committee on the prevention of arms race in outer space in the year 1996. No substantial progress is made in the year 2000. Egypt introduced a draft resolution for the prevention of arms race in outer space

INTERNATIONAL SCENARIO:

The United Nations committee on the peaceful uses of outer space has paid attention to the issue of preventing and minimizing. The legacy of over 50 years of space flight has brought a number of technical and scientific developments and achievements and also led to the growing population of space Junk. The issue of space debris was highlighted in 2013 with the Collision of Ecuador's first and only satellite in the orbit, Pegasus and particles from the fuel tank of the Soviet rocket over the Indian ocean.

The uncontrolled re-entries into the Earth's atmosphere of NASA's US upper Atmosphere Research Satellite (UARS) and Germany. Rontegensatellite X-ray telescope satellite (ROSAT) in 2011 illustrated that space debris is a growing Issue on Earth. On Feb 10th 2009 the first collision of two Intact space craft occurred in outer space. Iridium 33 a US communication Satellite and COSMOS 2251 a decommissioned Russian Satellite collided as the two objects passed over northern Siberia. This intersection caused two distinct clouds of debris to extend through a substantial part of low earth orbit. Several other accidental collisions or conjunctions in outer space have been Identified and this has contributed to the creation of public awareness of the issue of space debris and attracted more media and attention.

Another recent incident that dramatically increased the amount of catalogued fragmentation debris in outer space and public interest was the intentional destruction by China of its own orbiting fengyung -Ic weather Satellite by an anti - Satellite (ASAT) device in 2007. The European Space Agency (ESA) is too old to control the uncontrolled Satellites in orbit for the removal of debris

The Satellites ERS and EnVISAT both suffered major fractures which have led to them drifting uncontrolled in low earth orbit. The outcome of these accidents led to slightly different legal issues in the context of the current International, European and UK legal framework.

Space debris has been the focus of scientific and technical analysis for many years but has not achieved any legal recognition. It is a fact that there are difficulties inherent in the negotiation and drafting of any future legal regulations on space debris.

TREATIES:

The 'Magna carta' of the space law is the outer space Treaty of 1967. The Provisions are too generic to deal with the complex problems of space debris. But no internationally accepted definition exists for space debris. Yet another treaty convened by United Nations in the year 2007.

The United Nations committee on the peaceful uses of outer space has paid particular attention to the issue of preventing and minimizing the creation of space debris. Every year, states and organizations exchange information on their space debris research at the committee's Scientific and Technical Subcommittee.

The result of those discussions has been a set of space debris mitigation guidelines which were endorsed by the General Assembly. In addition to scientific research, the national and international legal aspects of space debris mitigation measures are the discussed in sub committees. To help in the discussions a compendium of space debris mitigation standards has been compiled by UNOOSA at the request of the States. Along with ongoing scientific and legal discussions.

The recovery and return of space debris is the main part of 1968 Rescue agreement "The Treaty requires that state parties return any foreign' space objects discovered in their territory to their owners and that they notify the Secretary general of any their such discovered objects.

SPACE DEBRIS -THE LEGAL ISSUES:

The outer space Treaty of 1967 includes Debris as any man -made object that is either:

- Earth-orbiting and is non- functional with no reasonable expectation of assuming or resuming its intended function.
- Re- entering the Earth atmosphere.

This outer space Treaty offers minimal on guidance as to the mitigation of space debris at state level, with much interpretation left to the interpreters. This concept covers fragments and component parts of space objects as well as decommissioned objects or failed space craft and spent upper stages of launchers. Thus the decommissioned Russian Satellite Cosmos 2251, would therefore be Space debris. For example, it provides that state parties to the outer space with due regard to the corresponding interests of all other State parties to the Treaty'.

This interpretation can be used to oblige state parties to avoid the creation of, reduce or even remove space debris to allow all states to participate in the exploration and use of outer space with minimal risk of debris.

CONCLUSION:

Various treaties have been initiated by the United Nations, the deficiencies in law for space debris remediation mechanisms originate from the fact that although technical concepts have been developed the legal framework for outer Space activities does not impose any obligations for debris removal and on-orbit servicing. The treaties are there for use and exploration of outer space as legal mechanism. Absolute liability cannot be fixed because of State Sovereignty and so state liability do not arise, but in outer space there is no sovereignty jurisdiction and so state parties can be made absolutely liable and internationally responsible. Further guidelines need to be framed ensuring global Standard of care and sustainability. Transparency shall be the global phenomena in the use of outer space. It is the need of the hour to initiate legal measures and fix state responsibility both at global and national level to attain Environmental Sustainability.

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