**FORMUN‘18**

**Study Guide – UNOOSA**

## International Policies on National Expansion in Outer Space

**Introduction**

Outer space can be defined as the physical universe outside the earth’s atmosphere, which lies beyond the currently undefined upper limit of a state’s sovereign airspace. It was declared free for exploration and use by all states and incapable of national appropriation by a 1963 UN General Assembly resolution.[[1]](#footnote-1)

In this era of technological advancement and commercialization, the opportunities to explore outer space and expand humankind’s knowledge of the universe are limitless. Due to the utilization of outer space, quantum leaps have been made in the field of advanced medicine, broadband, communication, weather forecasting, financial operations etc. We are now able to predict the weather, expand our frontiers, communicate with clarity, obtain geospatial information and make agriculture and other natural resource management efficient and sustainable.

However, this scientific progression in outer space is not without its challenges. At the beginning of the space age, the use of outer space was restricted to only a few nations that had the required resources to carry out space explorations. Furthermore, the resources that these nations possessed were also limiting and could not cause any lasting damage. Man could not imagine the world of today; where information obtained from outer space could yield benefits in almost all facets of our lives. Therefore, it is not surprising that the policies suggested at the time lacked foresight and did not focus on the holistic picture.

The world of today is the result of a radical, scientific revolution over the decade, where the growth and evolution of the global economy has led to an increasing number of nations and organizations being interested in outer space exploration and its boundless implications. The need for viable, international policies and legal framework regulating national expansion in outer space is growing day by day in order to ensure that all nations and organizations make efficient use of outer space and its capabilities in a safe manner to avoid irresponsible acts with damaging consequences.

**History**

The space age began in the 1950s when the International Council of Scientific Unions proposed an International Geophysical Year since the period between July 1957 and December 1958 was one of peak solar activity. As part of their IGY activities, both the US and the USSR announced plans to launch Earth-orbiting satellites. But at the same time, both countries were also developing intercontinental ballistic missiles. When the United States proposed partial disarmament to control weapons testing in space, the Soviet Union declined any agreement. One of the Soviets' ICBMs eventually developed into the R-7 rocket that carried Sputnik into orbit.

After Sputnik's launch, when satellites streaking across the sky became an increasingly common sight, the US again pushed to bar the use of space for military ends. President Eisenhower looked to the Antarctic Treaty - which stipulated all activities on Antarctica be peaceful and that all scientific data gathered at research stations there be publicly available to all nations - as a guide and proposed a similar treaty be adopted for space exploration. That space should be a peaceful arena was a long-held belief of Eisenhower's; he'd established NASA, the civilian space agency, in 1958 as a way of separate space exploration from national military programs. Seeking to solidify the Test Ban Treaty of 1962 which prohibited both nations from testing nuclear weapons in the atmosphere, in outer space and under water, the US and the USSR submitted proposals in 1966 to solidify space as a peaceful arena. The articles of the treaty were finalized and signed on Jan. 27, 1967. Properly called the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, the treaty was enforced on Oct. 10, 1967.

Space law, in a broad sense, can be described as an interdisciplinary bucket of various different types of established law that may govern or apply to man’s interaction or activities dealing with the “outer space” domain (Lyall & Larsen 2013, pg. 2). The first of these five treaties was the Outer Space Treaty, which required nearly 10 years of negotiation following the launch of Sputnik in 1957 to be ratified (Weeks 2012, pg. 47). As the first effort to regulate space activities, this piece of legislation became the cornerstone of future international space law as it codified principles such as the peaceful use of outer space among space-faring nations and the extension of the rule of law into outer space (Weeks 2012, pg. 47). The next four treaties signed through 1984 would largely build upon the overarching principles of the Outer Space Treaty of 1967 and would include topics including the rescue responsibilities for astronauts, liability for the damage caused by space objects, the identification of launched space objects, and the activities allowed by signatories on the Moon and other “celestial bodies” (UNOOSA 2015).[[2]](#footnote-2)

Fifty years later, the Outer Space Treaty and its successors still remain appropriate but it is important to note that the interpretation is being heavily influenced by politics and commercial interests. Additional rules and legal frameworks are needed in this era when international cooperation on treaties is fragile and questionable in order to protect the environment and prevent wars.

**International Treaties**

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

Each of the treaties stresses the notion that outer space, the activities carried out in outer space and whatever benefits might be accrued from outer space should be devoted to enhancing the well-being of all countries and humankind, with an emphasis on promoting international cooperation.[[3]](#footnote-3)

1. **The "Outer Space Treaty"**

Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies

Adopted by the General Assembly in its resolution 2222 (XXI), opened for signature on 27 January 1967, entered into force on 10 October 1967

1. **The "Rescue Agreement"**

Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space

Adopted by the General Assembly in its resolution 2345 (XXII), opened for signature on 22 April 1968, entered into force on 3 December 1968

1. **The "Liability Convention"**

Convention on International Liability for Damage Caused by Space Objects

Adopted by the General Assembly in its resolution 2777 (XXVI), opened for signature on 29 March 1972, entered into force on 1 September 1972

1. **The "Registration Convention"**

Convention on Registration of Objects Launched into Outer Space

Adopted by the General Assembly in its resolution 3235 (XXIX), opened for signature on 14 January 1975, entered into force on 15 September 1976

1. **The "Moon Agreement"**

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies

Adopted by the General Assembly in its resolution 34/68, opened for signature on 18 December 1979, entered into force on 11 July 1984.

Even though the Outer Space Treaty prohibits any nation and by extension, corporation from claiming ownership of a celestial body, legal loopholes in the treaties may lead to the same outcome. Martin Elvis, a senior astrophysicist at the CfA, says that provisions in the treaty allow nations to exploit resources, including through establishing research stations, and bar others from disrupting such endeavors. In some cases, this could amount to de facto ownership, Elvis said. As China and Japan plan moon landings, and corporate leaders eye their own space ventures, the loophole has gained importance.[[4]](#footnote-4)

Furthermore, the Outer Space Treaty assumes that the lunar surface is more or less uniform so that the occupation of one region will not deprive others of important natural resources. However, high-resolution surface mapping shows that this assumption is inaccurate and some parts of the moon are unquestionably more useful than others.

The Peaks of Eternal Light are tiny. In general, they occur along the rims of craters and so tend to be a long and thin. Known peaks are just a few meters wide and perhaps a hundred meters long, like a strip at the edge of a football field. Another valuable resource on the moon is water ice, which is thought to exist in some craters near the South Pole which are in permanent darkness. The ice here is likely to be leftover cometary debris which has never melted away. Therefore, these are likely to be occupied first.

It should also be noted that the USA, China and Russia have not signed, acceded or ratified the **Moon Treaty.** Much like the Space Race in the 1950s between USA and Russia (formerly the Soviet Union), China and India both aspire to launch their own space missions before the other country in an assertion of strength.

If the past is any indication, this calls for an international policy that not only seals the loopholes in the Outer Space Treaty but also prevents any violence or instability when it comes to extra-terrestrial exploration.

1. https://www.britannica.com/topic/international-law/International-cooperation#ref795081 [↑](#footnote-ref-1)
2. http://www.e-ir.info/2015/06/16/current-space-law-limitations-and-its-implications-on-outer-space-conflicts/ [↑](#footnote-ref-2)
3. http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html [↑](#footnote-ref-3)
4. https://scienceblog.com/486623/astrophysicist-warns-outer-space-treaty-loophole-can-corporations-celestial-bodies/ [↑](#footnote-ref-4)