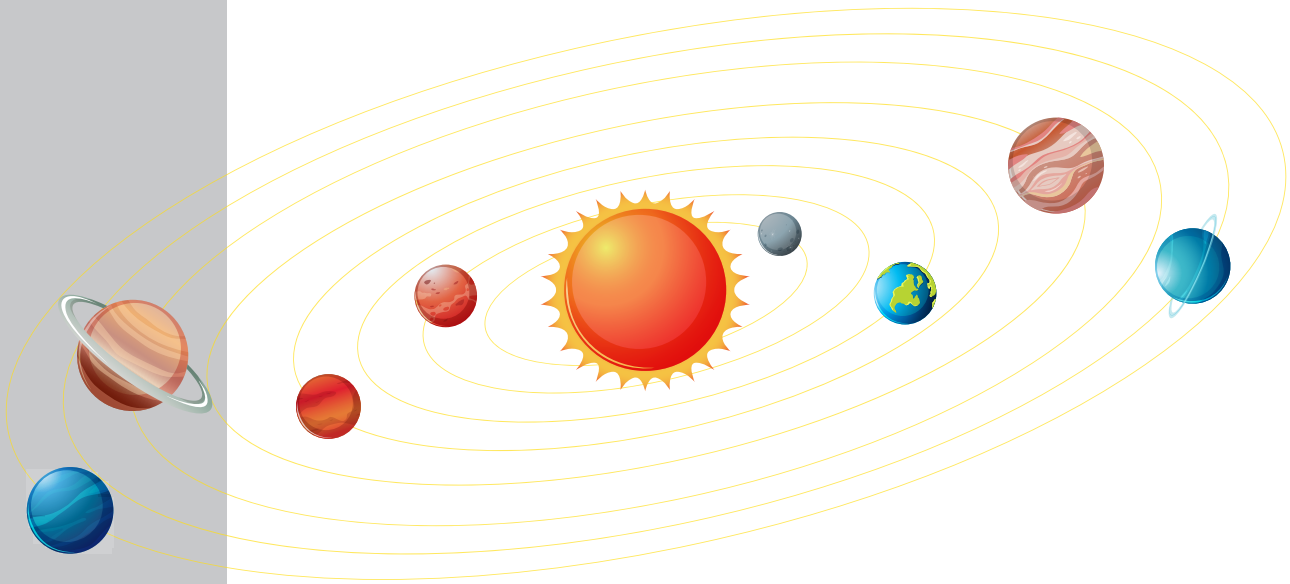


# SPACE TREATIES AND PRINCIPLES

NOVEMBER 2020



## INTERNATIONAL LAW IN OUTER SPACE

In addition to the United Nations Charter, five treaties negotiated at the UN Committee on the Peaceful Uses of Outer Space (UN COPUOS) are considered to form the basis of international space law. The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty) provides the fundamental basis for legal order in outer space, with subsequent agreements elaborating on its key principles.

### Outer Space Treaty (1967)

The exploration and use of outer space shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind.

Outer space shall be free for exploration and use by all States.

Outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

States shall not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies or station them in outer space in any other manner.

The Moon and other celestial bodies shall be used exclusively for peaceful purposes.

Astronauts shall be regarded as the envoys of mankind.

States shall be responsible for national space activities, whether carried out by governmental or non-governmental entities.

States shall be liable for damage caused by their space objects.

States shall avoid harmful contamination of space and celestial bodies.

### Rescue and Return Agreement (1968)

States shall take all possible steps to rescue and assist astronauts in distress and promptly return them to the launching State.

States shall, upon request, provide assistance to launching States in recovering space objects that return to Earth outside the territory of the Launching State.

### Liability Convention (1972)

A launching State is liable to pay compensation for damage caused by its space objects on the surface of the Earth or to aircraft, and liable for damage due to its faults in space.

Provides for procedures for the settlement of claims for damages.

### Registration Convention (1975)

Requires States to maintain national registries of objects launched into space and to provide information about their launches to the UN.

The following information must be made available by launching States as soon as practicable: name of launching State; an appropriate designator of the space object or its registration number, date, and territory or location of launch; basic orbital parameters; and general function of the space object.

### Moon Agreement (1979)

Prohibits any threat or use of force or any other hostile act or threat of hostile act on and around the Moon, and prohibits the installation of weapons and establishment of military bases.

Prohibits the use of the Moon to threaten the Earth, spacecraft, personnel of spacecraft or man-made space objects.

States shall inform the Secretary-General of the United Nations and the international scientific community of activities related to the exploration and use of the Moon, and of any discoveries.

Provides freedom of scientific investigation on the Moon, including the right to collect samples, and promotes the exchange of personnel on expeditions or installations on the Moon.

Provides that the Moon and its natural resources are the common heritage of mankind and that an international regime should be established to govern the exploitation of such resources when such exploitation is about to become feasible.

### **Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (1963)**

Space exploration should be carried out for the benefit of all countries.

Outer space and celestial bodies are free for exploration and use by all States and are not subject to national appropriation by claim of sovereignty or by any other means.

States are liable for damage caused by spacecraft and bear international responsibility for national and nongovernmental activities in outer space.

### **Principles on Direct Broadcasting by Satellite (1982)**

All States have the right to carry out direct television broadcasting and to access its technology, but States must take responsibility for the signals broadcasted by them or actors under their jurisdiction.

### **Principles on Remote Sensing (1986)**

Remote sensing should be carried out for the benefit of all States, and remote sensing data should not be used against the legitimate rights and interests of the sensed State, which shall have access to the data and the analyzed information concerning its territory on a non-discriminatory basis and on reasonable cost terms.

### **Principles on Nuclear Power Sources (1992)**

Nuclear power may be necessary for certain space missions, but safety and liability guidelines apply to its use.

### **Declaration on Outer Space Benefits (1996)**

International cooperation in space should be carried out for the benefit and in the interest of all States, with particular attention to the needs of developing States.

### **Space Debris Mitigation Guidelines (2007)**

These are voluntary guidelines for mission-planning, design, manufacture, and operational phases of spacecraft and launch vehicle orbital stages to minimize the amount of debris created.

## **UNITED NATIONS PRINCIPLES**

In addition to the above treaties, six resolutions known as principles have been adopted by the UN General Assembly for the regulation of special categories of space activities. Although these principles are not

legally binding, they provide internationally approved guidelines on appropriate state conduct.



## Key UN space principles

### **Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (1963)**

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Additionally, UN COPUOS adopted a set of voluntary guidelines on the long-term sustainability of outer space in 2019; these have not yet been adopted by the UN General Assembly but do form part of the network of space governance instruments.

## **CHALLENGES**

Treaty-based law governing outer space leaves unresolved many technical issues related to space governance, including questions about:

- the placement of conventional weapons or use of force in outer space;
- means of international cooperation and universal access;
- long-term sustainability of the space environment;

- space traffic management; and
- such emerging issues as the exploration of celestial bodies and the utilization of space-based mineral resources.

In particular, the implications of the treaty's definition of "peaceful purposes" have been the subject of debate among spacefaring states. The interpretation initially favoured by Soviet officials viewed peaceful purposes as wholly non-military. However, space assets have been developed extensively to support terrestrial military operations; the position that "peaceful" in the context of the OST means "nonaggressive" has generally been supported by state practice. Article IV of the OST bans the placement of weapons of mass destruction in outer space, as well as military activities on celestial bodies, but is otherwise silent on the use of conventional weapons in orbit. While space actors have stopped short of deploying weapons in space or attacking the space assets of another nation from Earth, antisatellite capabilities have been tested by some states against their own satellites—for example, by China in 2007, the United States in 2008, and India in 2019.

## RESOURCES

United Nations Office for Outer Space Affairs, "Space Law Treaties and Principles," <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html#:~:text=ST%2FSPACE%2F61Rev2-,Treaties,Moon%20and%20Other%20Celestial%20Bodies>.

Ivan A. Vlasic, "The Legal Aspects of Peaceful and Non-Peaceful Uses of Outer Space," in Bupendra Jasani (ed.), *Peaceful and Non-Peaceful Uses of Space: Problems of Definition for the Prevention of an Arms Race in Outer Space* (London: Taylor and Francis, 1991).

Frans von der Dunk, ed., *Handbook of Space Law* (Cheltenham: Edward Elgar Publishing, 2015), <https://www.e-elgar.com/shop/gbp/handbook-of-space-law-9781781000359.html>.



[www.spacesecurityindex.org](http://www.spacesecurityindex.org)