
Graduate Certificate in Space Law

Space Dispute Resolution.

Arbitration: A form of dispute resolution in which a neutral third party, the arbitrator, considers arguments and evidence from both parties and makes a binding decision. In space law, arbitration can be used to resolve disputes between states or between private entities involved in space activities.

Blackbox: A device that records data from a space vehicle or spacecraft, which can be used in the event of an accident or incident to understand the causes and determine liability.

Concurrent jurisdiction: A situation in which two or more legal systems have the authority to hear and decide a case. In space law, this can occur when a dispute involves both a state and a private entity, or when multiple states have jurisdiction over a particular space object or activity.

Debris mitigation: The practice of reducing the amount of debris in orbit around the Earth, including defunct satellites, spent rocket stages, and other objects. Debris mitigation is an important aspect of space law, as it helps to ensure the safety of space activities and prevent collisions that could damage operational spacecraft or create additional debris.

Exclusive economic zone (EEZ): A sea zone prescribed by the United Nations Convention on the Law of the Sea over which a state has special rights regarding the exploration and use of marine resources, including energy production from water and wind. The EEZ extends from the baseline of the coastal state out to 200 nautical miles.

Freedom of space: A principle of international space law that affirms the right of all states to explore and use outer space for peaceful purposes. This principle is enshrined in the Outer Space Treaty of 1967 and is a fundamental tenet of space law.

Global navigation satellite system (GNSS): A system of satellites that provides positioning, navigation, and timing services to users on Earth. Examples of GNSS systems include the Global Positioning System (GPS), GLONASS, Galileo, and BeiDou.

Hot pursuit: A principle of international law that allows a state to pursue a vessel or aircraft that has committed a crime or violated its laws into the territory of another state, provided that certain conditions are met. In space law, hot pursuit may be used to pursue a space object that has caused damage or poses a threat to other space objects or to people on Earth.

International law of outer space: The body of law that governs the exploration and use of outer space, including the moon and other celestial bodies. International space law is based on a series of treaties, agreements, and principles, including the Outer Space Treaty of 1967 and the United Nations Convention on the Law of the Sea.

Liability for damage: The responsibility of a state or private entity for damage caused to another state or its

property as a result of space activities. Liability for damage is an important principle of space law, and states are required to provide assurances of financial responsibility for their space activities.

Launching state: The state that launches or procures the launching of a space object, or from whose territory or facility a space object is launched. The launching state is responsible for the space object and any damage it may cause, and is subject to the provisions of international space law.

Moon Agreement: The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, adopted by the United Nations in 1979. The Moon Agreement establishes principles for the exploration and use of the moon and other celestial bodies, including the prohibition of military activities and the sharing of benefits from space resources.

National legislation: Laws and regulations adopted by a state to govern its space activities and ensure compliance with international space law. National legislation may include provisions for licensing and regulating private space activities, as well as liability for damage caused by space objects.

Non-interference: A principle of space law that prohibits states from interfering with the space activities of other states, including the launching of space objects, the operation of spacecraft, and the exploration of celestial bodies.

Peaceful purposes: A principle of space law that requires states to use outer space for peaceful purposes only, and to refrain from the threat or use of force against other states or their space objects.

Remote sensing: The collection and analysis of data about the Earth's surface and atmosphere using space-based sensors and instruments. Remote sensing is an important tool for a wide range of applications, including environmental monitoring, disaster response, and resource management.

Res communis: A legal principle that holds that certain resources, such as the high seas and outer space, are the common heritage of mankind and should be used for the benefit of all. The principle of res communis is enshrined in the Outer Space Treaty of 1967 and is an important principle of space law.

Registration: The process of recording the launch and characteristics of a space object with the United Nations, as required by the Registration Convention of 1975. Registration provides a means of identifying space objects and their owners, and is an important tool for ensuring transparency and accountability in space activities.

Reusable launch vehicle (RLV): A space launch vehicle that is designed to be used for multiple flights, either by returning to Earth or by being refueled and relaunched from orbit. RLVs are an important technology for reducing the cost and increasing the accessibility of space.

Safe havens: Areas of the Earth's surface or atmosphere that are designated as safe for the return of spacecraft or space vehicles in the event of an emergency. Safe havens are an important consideration in the design and operation of space systems, and are an important aspect of space law.

Sovereignty: The exclusive right of a state to exercise jurisdiction over its territory, including its airspace and

territorial waters. In space law, sovereignty is limited to the Earth's airspace and does not extend to outer space, which is considered to be *res communis*.

Space debris: Objects in orbit around the Earth that are no longer functional or are otherwise abandoned, including defunct satellites, spent rocket stages, and fragments of spacecraft. Space debris poses a significant risk to space activities, as collisions with operational spacecraft or other debris can cause damage or loss of function.

Space object: Any object launched into outer space, including spacecraft, satellites, and other vehicles. Space objects are subject to the provisions of international space law, and their launching states are responsible for their operation and any damage they may cause.

Spaceport: A facility used for the launching of space vehicles, including rockets and other spacecraft. Spaceports are subject to regulations and licensing requirements, and are an important consideration in the safe and responsible conduct of space activities.

Space situational awareness (SSA): The ability to monitor and track objects in orbit around the Earth, including spacecraft, satellites, and space debris. SSA is an important tool for ensuring the safety and sustainability of space activities, and is an important aspect of space law.

Space traffic management (STM): The regulation and coordination of space traffic, including the movement of spacecraft, satellites, and other objects in orbit around the Earth. STM is an important aspect of space law, as it helps to ensure the safety and sustainability of space activities.

Space weather: The conditions in space, including the Earth's magnetosphere, ionosphere, and thermosphere, that can affect the performance and safety of space systems. Space weather is an important consideration in the design and operation of space systems, and is an important aspect of space law.

Telemetry: The measurement and transmission of data from a space vehicle or spacecraft to a ground station. Telemetry is an important tool for monitoring the performance and status of space systems, and is an important aspect of space law.

Transparency and confidence-building measures (TCBMs): Actions taken by states to increase transparency and build confidence in their space activities, including the sharing of information, the conduct of joint exercises and experiments, and the establishment of communication channels. TCBMs are an important aspect of space law, as they help to build trust and cooperation between states and reduce the risk of misunderstandings and conflicts.

United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS): A United Nations committee that is responsible for promoting the peaceful use of outer space and ensuring compliance with international space law. UN COPUOS is composed of representatives from member