**Potential Use Cases & Impact**

* **Collision Avoidance & Safety**  
  Provide trusted alerts to satellite operators (both large and small nations) so they can avoid billion-dollar losses from satellite collisions.
* **Support for Developing Countries**  
  Give countries without their own SSA infrastructure affordable access to high-quality orbital data, enabling them to safely operate satellites and join the space economy.
* **Transparency & Trust Building**  
  Enable countries to cross-check data from multiple sources, reducing dependence on a single foreign provider and fostering international cooperation.
* **Military & National Security Benefits**  
  Allow governments to retain sovereignty over sensitive data while still sharing enough to protect their assets and ensure safe operations.
* **Debris Monitoring & Sustainability**  
  Track high-risk debris, inform clean-up missions, and support long-term orbital sustainability planning.
* **Policy & Governance Support**  
  Provide a neutral platform that can back UN, regional, or multilateral discussions with reliable data, helping shape future space traffic rules.
* **Emergency Response**  
  Enable fast detection of drifting satellites or breakup events so nearby operators and nations can take immediate action.
* **Commercial Operator Efficiency**  
  Constellation operators (e.g., Starlink, OneWeb) can integrate into the platform for improved situational awareness and fewer unnecessary maneuvers, saving fuel and costs.

### Treaty Compliance & Obstacles

* **Sovereignty Protected**: Nations share **only the data they choose**; sensitive/military information stays under national control.
* **Neutral Governance**: Platform managed by **UNOOSA** (UN Office for Outer Space Affairs), ensuring no single nation dominates or controls the system.
* **Treaty Alignment**: Supports existing obligations under the **Outer Space Treaty** and **Registration Convention**, while helping reduce liability risks from collisions.
* **Main Obstacles**: Building **trust**, overcoming **geopolitical rivalries**, and ensuring **participation incentives** for major space powers and developing nations alike.

# **Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html)**

The [Outer Space Treaty](https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html) was considered by the Legal Subcommittee in 1966 and agreement was reached in the General Assembly in the same year ( [resolution 2222 (XXI)](https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/outerspacetreaty.html)). The Treaty was largely based on the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, which had been adopted by the General Assembly in its [resolution 1962 (XVIII)](https://www.unoosa.org/oosa/en/ourwork/spacelaw/principles/legal-principles.html) in 1963, but added a few new provisions. The Treaty was opened for signature by the three depository Governments (the Russian Federation, the United Kingdom and the United States of America) in January 1967, and it entered into force in October 1967. The Outer Space Treaty provides the basic framework on international space law, including the following principles:

* 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; and
* States shall avoid harmful contamination of space and celestial bodies.