

UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS
(UNOOSA)
Topic Summaries

Topic 1: Commercialisation of space: regulating the exploration, exploitation and utilization of space resources

In 2017, analysts at Goldman Sachs wrote a report claiming that mining asteroids for precious metal may soon be more profitable than the Earth-bound alternative. Far from being a fantasy confined to the pages of science fiction, the exploitation of space resources for commercial gain is rapidly becoming a reality.

Indeed, the extraction and sale of platinum from celestial bodies is not the only cosmic material in demand. Earth orbits, artificial satellites, space debris and void space all constitute a money-making opportunity for maverick billionaires seeking to turn a profit from the final frontier. Already, space imagery provider DigitalGlobe Inc. has made a multi-million dollar business from its constellation of five satellites.

As a result, despite relative harmony in the realm of space policy over the last fifty years, it is unlikely that those responsible for drafting the very first treaties could have foreseen just how lucrative commercialisation would become. Since 1967, the Outer Space Treaty has codified the fundamental principles of international space law. Ratified by over 100 countries, the document has been instrumental in promoting peaceful uses of outer space, putting the value of cooperation at the heart of future space policy. Article I declares that the “exploration and use of outer space [...] shall be the province of all mankind” and that it should “be free for exploration and use by all States”. Article II of the treaty states that space “is not subject to national appropriation by claim of sovereignty”, protecting further the rights of all countries to explore and use space.

However, it is the inclusion of the word “use” in the treaty which has become the subject of increasing debate in recent years. In 2015, the US Congress passed the Commercial Space Launch Competitiveness Act, a piece of legislation permitting private organisations to “engage in the commercial exploration and exploitation of ‘space resources’”. Put simply, it assigns ownership of space resources to any American citizen who is able to return them to Earth.

The US claims that such a law is not a violation of its international obligations under the 1967 Treaty, as the act does not “assert sovereignty [...] over any celestial body”. Others, however, have questioned whether “the province of mankind” can be legitimately appropriated for private gain.

One solution might be to take another look at the 1979 Moon Treaty. Although it was only ratified by 18 nations (none of which have ever conducted a self-launched space mission), it sought to apply the

“common heritage of mankind” principle to celestial bodies, thereby precluding any commercial activity.

Ultimately, a balance will need to be struck between creating the right incentives for private organisations to advance the progress of space exploration, and the need to protect our cosmos as a territory held in trust for future generations.



Topic 2: Using space to support Sustainable Development Goals

In 2015, the United Nations General Assembly adopted the 2030 Sustainable Development Agenda, a set of 17 Development Goals defined by a wide range of indicators. The agenda was designed to succeed the Millennium Development Goals and included targets relating to poverty, gender equality and climate change. Ending hunger and malnutrition, ensuring that clean water and safe sanitation is available to all and promoting the sustainable use of oceans are also key priorities for the UN.

UNOOSA recognises that space technology, especially Earth observation and geolocation technology, is already instrumental in delivering the Sustainable Development targets. In particular, UNOOSA's 'Space4Water' programme is helping to bring together stakeholders in space and water communities to find ways in which satellite technology can aid the sustainable management of sanitation.

However, there is still much more that space technology could be doing to support the SDGs. So far, the use of observation and geolocation satellites have supported up to 40% of the General Assembly's 169 SDG targets. By making use of telecommunication technology, and sharing capacity with developing nations, the impact of space technology would be much greater. Addressing ways in which this space capacity, or the insight gained from space capacity, can be shared efficiently is an important consideration.

More fundamentally, perhaps, making space activities work effectively for the promotion of Sustainable Development Goals will require us to first ensure that space activities are themselves sustainable. As the 62nd session of the COPUOS noted, "[T]he Earth's orbital space environment constitutes a finite resource". Finding cooperative ways to allocate this resource fairly is crucial.

In sum, how we use space to support the Sustainable Development Goals is as much a question about what the technology can do as it is about how we allocate the capacity available to us. Prioritising effectively and viewing space as a finite resource is imperative in order to solve some of the most pressing challenges facing the world today.