

IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)
Space Mining: National Authority? International Authority? Both? (5)

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REGULATION OF COMMERCIAL MINING OF SPACE RESOURCES ON CELESTIAL BODIES AT
NATIONAL AND INTERNATIONAL LEVEL: AN ANALYSIS OF THE 1979 MOON AGREEMENT
AND THE NATIONAL LAW APPROACH

Abstract

The celestial bodies within the Solar System contain an enormous supply of mineral resources used on Earth, e.g., phosphorus, somewhat rare on Earth and essential in agriculture. In recent years, a growing interest by private companies in the possibility to mine and utilise extraterrestrial resources has emerged. Two companies, Deep Space Industries and Planetary Resources, have announced ambitious plans to mine asteroids by 2025. While the advantage to extract space resources is economically indisputable, the biggest obstacle to mine space resources commercially seems to be the lack of clear international rules. Private companies and investors need the security of an adequate legal framework, that is compatible with existing principles of space and international law, to undertake risky and costly projects like mining asteroids. The Outer Space Treaty provides the current legal framework for the use and exploration of the Moon and other celestial bodies, in spite of the absence of serious consideration of commercial exploitation of celestial bodies resources. In its turn, the Moon Agreement reaffirms and/or extends on the provisions of the OST. Nevertheless, it is clear that the existing rules are written at a time when practical use of space resources was not a pressing problem.

Unlike the other space law treaties, the Moon Agreement imposes specific obligations on parties undertaking the exploration of celestial body resources. It does not, however, solve some gaps which remain open to interpretation left by the OST. Despite its limited number of ratifications, notably due to the vagueness of its provisions, the Moon Agreement seems to provide the best available option to establish the rules to govern the exploration, use and exploitation of space resources in a harmonious way. A national approach can promote national interests but also creates instability. Therefore, this paper analyses the controversial nature of the Agreement and summarises concrete proposals regarding possible amendments in view of commercial space mining, drawing a renewed interest in the international community. Particular attention is dedicated to Article 11, including the CHM concept, and the establishment of more realistic rules on the international regime to be set up once the exploitation of Moon resources becomes feasible, perhaps including an 'international license' necessary to regulate commercial exploitation. Also, adjusting the 'equitable sharing of benefits' concept is also examined, considering the 1982 Convention on the Law of the Sea regime for exploitation of deep seabed, fundamentally re-interpreted by 1994 New York Agreement.