

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

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SPACE MINING, INTERNATIONAL LAW, AND THE RISK OF CONFLICT IN SPACE

**Abstract**

Any student of history knows the regrettable experience of states when they have explored new areas on earth and discovered valuable resources. The ensuing efforts at colonization, competition over resources, and subsequent armed conflicts have been a sad fixture in world history. Outer space appears to offer a more peaceful model, particularly since States are prohibited from subjecting celestial bodies to national appropriation under Article II of the Outer Space Treaty (OST).

Some States, however, have expressed their intention to engage in the free exploration and use of space by asserting the right of their nationals to exploit resources in space that are not “in place.” Beyond this debated assertion, other more understudied legal issues seem likely to also invite controversy and conflict if States proceed to conduct mining operations under the existing legal framework.

Even if a State’s jurisdiction over its nationals (both natural and juridical) can be lawfully extended under its domestic law to convey certain rights over space resources, other States are not governed by those laws. In the midst of potentially conflicting States’ laws extended to nationals in space, States will continue to be responsible for national activities that include non-governmental entities under Article VI of the OST. They will also be required under Article VI to assure that national activities are carried out in conformity with the OST and must exercise authorization and continuing supervision over these entities. Allegations between different entities regarding interference with, or a failure to show due regard for, respective mining activities will thus necessarily implicate States and may raise the prospect of conflict.

Perhaps the greatest potential point of conflict will focus on the locations where mining operations will take place. Any type of “zone” in which a State attempts to exclude other States or non-governmental entities from resource extraction activities seems likely to raise objections under the non-appropriation principle. Other legal provisions raise additional issues. Even proposals to create “safety zones” may risk misuse, misunderstanding, or conflict.

This paper assesses the risks of conflict associated with space mining under the existing legal framework, identifies the most dangerous points of legal ambiguity or contention, and highlights the inescapable legal tensions associated with zones or areas dedicated by States or non-governmental entities to resource exploitation in space. The paper presents interim conclusions on legal approaches for reducing the possibility of conflict over space resources.