



Space mining: legal issues

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Initiatives

- US Commercial Space Launch Competitiveness Act
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- spaceresources.lu

“intention to set out a formal legal framework which ensures that private operators, working in space, can be confident about their rights to the resources they extract, i.e. rare minerals from asteroids”
- Hague Space Resources Governance Working Group

US Commercial Space Launch Competitiveness Act of 2015

- Title IV. Space Resource Commercial Exploration and Utilization Act of 2015
- Definitions
 - Space resource: abiotic resource in situ in outer space, which includes water and minerals
 - Asteroid resource: space resource found on or within a single asteroid
- Asteroid resource and space resource rights

“A United States citizen engaged in commercial recovery of an asteroid resource or a space resource under this chapter shall be entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States”

International legal obligations (I)

- International responsibility, liability, registration
 - OST, LIAB, REG
 - 2015 Act: report by US President to specify “the authorities necessary to meet the international obligations of the United States, including authorization and continuing supervision by the Federal Government; and recommendations for the allocation of responsibilities among Federal agencies for [these activities]”
 - Licensing regime
 - CSL Act: experimental permits
 - 2015 Act: exploration and utilization



International legal obligations (II)

- International principles for space resource exploitation
 - Article I OST: outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality
 - Article II OST: outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means
 - Article IX OST: State should enter into bilateral consultations if it believes that its planned or existing activities in space would cause potentially harmful interference with planned or existing activities of other States



International legal obligations (III)

- Moon Agreement
 - Legal relevance
 - Binding on 16 States, though not on US, Lux
 - Joint statement on benefits of adherence to the MA
 - Principles
 - “Neither the surface nor the subsurface of the Moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or non-governmental organization, national organization or non-governmental entity or of any natural person”
 - Common heritage of mankind, international legal regime
 - Main purposes: orderly and safe development, rational management and equitable sharing of benefits

Issues

- General consensus that freedom to use outer space includes freedom to use natural resources
- Key issue: does removal and consumption of space resources constitute or require national appropriation?
- Different views on how to resolve tension, most widely held view distinguishes between celestial bodies and their resources
- 2015 US Act

“Disclaimer of extraterritorial sovereignty. It is the sense of Congress that by the enactment of this Act, the United States does not thereby assert sovereignty or sovereign or exclusive rights or jurisdiction over, or the ownership of, any celestial body”

Topics for discussion

- Is distinction between celestial bodies and the natural resources of celestial bodies tenable?
- Should we rather distinguish between appropriation and exploitation?
- Does consumption of NR from CB imply property rights?
- Do property rights after extraction really provide certainty to private actors?