Space Resources: Policy & Law Overview

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• Secure World Foundation is a private operating foundation that promotes cooperative solutions for space sustainability

• Why space sustainability? Increasing reliance on space assets coupled with potentially destabilizing trends

• Our mission: SWF works with governments, industry, international organizations and civil society to develop and promote ideas and actions for international collaboration that achieve the secure, sustainable, and peaceful uses of outer space for the socioeconomic and environmental benefits to Earth
Which Way is it Going?

Russia aims to prohibit commercial ownership of asteroids

A false juxtaposition, perhaps. But indicative of ongoing uncertainty.
Why Policy and Law?

• Business plans and economic returns will be affected by policy and legal regimes relating to the commercialization of off-Earth resources

• Both governments and private enterprise are facing a condition of uncertainty – risk – in defining space resources activities

• There is interest in working jointly to reduce that uncertainty to define market conditions and respect international obligations

• Coordination of national and international law will help states establish the conditions under which socio-economic benefit could result from space resources development

• Both national and international bodies are actively considering policy and legal approaches to space resources
Space Resources – Current Status

Technology / Business

• “Mining” of in-space resources is technically feasible
• Fundable business plans have been presented
• Several years (at least) away from commercial-scale operations
• Market focus on in-space applications
• Timeline for return on investment is long: more risk?

Policy / Legal

• Overarching legal context: the Outer Space Treaty (1967)
• Individual countries beginning to implement national regulatory frameworks for space resources development
• Central issue: can commercial entities legally own/use space resources?
• What is the meaning of “appropriation?” Of “use?”

Policy’s role: providing certainty and respecting legal obligations
Outer Space Treaty of 1967
(105 State Parties)

• ARTICLE I: “Outer space, including the Moon and other celestial bodies, shall be free for **exploration** and **use** by all States...”

• ARTICLE II: “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 VI: “The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall **require authorization and continuing supervision** by the appropriate State Party to the Treaty.”

**International law provides a framework under which all space activities are conducted but does not address space resources with any specificity**
UN Committee on the Peaceful Uses of Outer Space
Legal Subcommittee

- April 2017 and April 2018 sessions include an agenda item for the discussion ("exchange of views") of space resources

“The view was expressed that any legal framework considered in connection with the agenda item “General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources” must include three essential points:
1) that all States be able to benefit from the exploitation of space resources and that exploitation should not be reserved for a monopoly;
2) that the exploitation of resources must be rational and sustainable;
3) and that private and public investors should be protected by guarantees of legal certainty.”

UN COPUOUS DOC: A/AC.105/C.2/L.301/Add.5
Key Themes From COPOUS
April 2017 LSC Session

- Wide range of countries made including statements: Australia, Austria, Belgium, Brazil, Canada, Chile, China, Costa Rica, Cuba, France, Germany, India, Indonesia, Italy, Japan, Luxembourg, Morocco, the Netherlands, the Russian Federation and the United States

- For summary of discussions see (at page 3-6):
  http://www.unoosa.org/res/oosadoc/data/documents/2017/aac_105c_2l/aac_105c_2l_301add_1_0_html/AC105_C2_L301Add01E.pdf
The need for regulation – to provide industry certainty.
The role of policy – to provide a context for development.
• The Hague Space Resources Governance Working Group aims to build consensus on regulatory “concepts needed to enable, support and co-ordinate the use of space resources and be acceptable for space-faring nations and other interested states”
• Industry, government, and civil society participation from across the globe
• Secure World Foundation is a sponsor of the Group

Given discussions at international level – and domestic/national legal & regulatory work underway – how can laws be coordinated or complimentary?
Building Blocks

- Has identified 19 topical “building blocks”
- Which might form the basic topics for any domestic and/or international legal instrument pertaining to space resources activities
- Focuses on enabling factors
- Building blocks are open for public comment – deadline July 1 2018

Conclusion: Key Policy/Legal Issues Moving Forward

• Identification and/of description of **global benefits** from space resources development

• **Resource access rights** – balancing “non-appropriation” vs. “freedom of exploration and use”
  – Property rights? Or access rights?
  – International claim and registration system?
  – Priority claims?
  – Historic/heritage sites / sites of scientific interest?

• National **authorization/supervision** regimes

• **Coordination** of various national laws/regulations/policies

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**General need for increased communication and dialogue between space resources development community & the international policy/legal community.**
We’ve been using space resources for a long time...

...accessing them in space is new

Questions and Discussion?

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Dagger from King Tut’s Tomb, analyzed to contain iron from a meteorite

Source: USAToday