The Hague Building Blocks

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Structure

I. Space resources in international law: open issues
II. Space resources in national law: open issues
III. Space resources and the recommendations of The Hague Group
IV. Conclusion
I. International Law: Open Issues

Space resources under the perspective of:

Article I OST: Freedom of use and exploration
**Article II OST: Prohibition of appropriation of celestial bodies: interpretation?**
Article VI OST: Responsibility: Authorization and supervision
Article 6 MA: Samples and minerals for the **support of space missions?**
Article 11 MA: Neither surface, nor natural resources in place may be appropriated; international regime?
II. National Law: II.1 USA

**US Legislation** – evolving dynamically, originally scattered
1984 *Commercial Space Launch Act*: licensing, Federal Aviation Administration (FAA) – US Department of Transportation, insurance!

2010 Bill H.R.3237 **Title 51**: National and Commercial Space Programs replaced the original acts

2015 Bill H.R. 2262 *Space Act of 2015* amended the Title 51 of 2010
Title I: Commercial Space Launch: authorization, liability capped by 500,000 USD; Indemnification of victims up to 1,500,000 USD
Title II: *Space Resources Exploration and Utilization* (§ 51303), appropriation allowed for US citizens (51%)
Title III: Commercial Remote Sensing
Title IV: Office of Space Commerce
II.2 Luxembourg: 2017 Law on Space Resources Activities

2016: Announcement of the Spaceresources.lu program
- How to authorize and supervise the missions?

- Law on the Exploration and Use of Space Resources entered into force on 2 August 2017
- Scope: missions of exploration and use of resources for commercial purposes
- Art. 1: Resources are capable of being appropriated
- Obligatory authorization
- Registered office in Luxembourg
- Risks covered by personal financial means or insurance policy
- Full responsibility of the operators for any damage

Enforcement:
- Supervision of the mission by the Minister (Art. 15)
- Non fulfillment of the conditions of authorization: withdrawal of the authorization by the Minister (Art. 14)
- Violation of authorization: fine or imprisonment up to five years (Art. 18)
- Violation of the Law: a discontinuation of the operation can be ordered by the court (Art. 18).
2019 Federal Law on the Space Sector

Space resources: Any non-living resource existing in Outer Space, including minerals and water
Space resources activities covered by the Law
Authorization from the Space Agency necessary

Article 18: Conditions for authorization, ownership and transfer to be determined by the Cabinet
II.4 Japan

2021 Space Resources Mining Act

- Enlarges the 2016 Space Activities Act
- Explicitly permits space mining
- Space resources: water, minerals and other natural resources (bio?)
- Necessity of a governmental permission on the basis of an activity plan
- Activity plan must not breach the space treaties, national security,
- Operator has to have the technical and material capacity
- Resources belong to the person having an intention to own them
- Transfer of ownership govern by the Civil Code.
III. The Hague Building Blocks

The Hague WG: non-governmental international interdisciplinary group, met in 2016-20
Building Blocks: Text 2019
https://www.universiteitleiden.nl/binaries/content/assets/rechtsgeleerdheid/instituut-voor-publiekrecht/lucht--en-ruimterecht/space-resources/bb-thissrwg--cover.pdf
A Commentary (O. Bittencourt et al, Eleven, 2020)
Outcome: Recommendations, delivered to the UNOOSA:

1. Aim: to create enabling environment, international framework (IF)
2. IF should enable the attribution of priority rights to operators – see ITU regime
3. “Resource rights" over materials and product recognized
4. States guarantee that environmental measures are taken (???)
5. Right to establish safety zones, consultations in case of conflicts
6. No compulsory benefit-sharing, but cooperative measures (international fund)
7. National and international register of activities and priority rights
8. Applicability of ARRA.
IV. Conclusion

- Potential legal (binding, non-binding?) models discussed in the UN COPUOS
- From the prohibition of space mining to a more flexible approach
- 2020 Artemis Accords are based on the right to appropriate space resources
- Article II OST is prohibiting the appropriation of celestial bodies, not the resources
- MA is binding only 18 States, for others it is not a binding law
- The Hague Building Blocks: a realistic approach taking into account the interests of operators.