

















INTERNATIONAL SPACERESOURCES GOVERNANCE WORKING GROUP

DRAFT BUILDING BLOCKS

Olavo de O. Bittencourt Neto

The Document

- <u>Title</u>: "Draft Building Blocks for the Development of an International Framework on Space Resources Activities";
- The Hague Working Group agreed, on <u>13 September</u> <u>2017</u>, to circulate the building blocks as the **preliminary result** of its work;
- The Hague Working Group invites comments to its further consideration of the building blocks;



Introductory Provisions

1. Objective

"The international framework should create an **enabling environment** for space resource activities that takes into account all interests and benefits all countries and humankind."

2. Definition of Key Terms

- 2.1. Space resource
- 2.2. Utilization of Space Resources
- 2.3. Space Resource Activities
- 2.4. Space Object
- 2.5. Space Product
- 2.6. Operator

Introductory Provisions (cont'd)

3. Scope

Subjects: States and intergovernmental organizations;

<u>Territory</u>: Space resource activities within the solar system;

4. Principles

Consistence with international law;

How the building blocks should be designed, including application of the principle of adaptive governance;

What the international legal framework should provide, contemplating peaceful purposes, benefits and interests of all countries, avoidance of harmful interference and international cooperation;

Responsibility, Access, Utilization

5. International Responsibility for Space Resources Activities and Jurisdiction over Space Products

Covers authorization and supervision, as well as jurisdiction and control;

6. Access to Space Resources

Attribution of **priority rights** to an operator to search and/or recover space resources *in situ* for a maximum period of time and a maximum area upon registration in an international registry;

7. Utilization of Space Resources

Mutual recognition of space resource rights, in consonance with Article II OST;

Towards an Enabling Environment

- 8. Due Regard for Interests of All Countries and Mankind
- 9. Avoidance of Harmful Impacts Resulting from Space Resource Activities

Taking into account the current state of technology, the international framework shall adopt a precautionary approach;

10. Technical Standards for Prior Review of, and Safety Zones around Space Resource Activities

Regulation of <u>safety zones</u>;

11. Monitoring and Redressing Harmful Impacts Resulting from Space Resource Activities

Including response measures and adaptive management;

Benefit Sharing

12. Sharing of Benefits Arising out of the Utilization of Space Resources

<u>Including</u>, but not limited to:

- a) Development of space science and technology;
- b) Development of relevant and appropriate capabilities;
- c) Cooperation and contribution in education and training;
- d) Access to and exchange of information;
- e) Incentivization of joint ventures;
- f) Exchange of expertise and technology;
- g) Establishment of an international fund.

The international framework should not require compulsory monetary benefit-sharing;

Registration

13. Registration and Sharing of Information

- a) Registration of *priority rights* of operators, with b) advance *notification*, through an international repository;
- c) Registration of space objects at UN;
- d) Notification of *frequency assignments* in the Master International Frequency Register (ITU);
- e) Provide *information and best practices* on the authorization and supervision of authorized space resource activities;
- f) Notify the *termination* of space resource activities, through an international repository;

Assistance, Liability and Visits

14. Provision of Assistance in Case of Distress

In accordance with Article V OST and ARRA;

15. Liability in Case of Damage Resulting from Space Resource Activities

In accordance with Article VI and VII OST and LIAB;

15.2. "The international framework should encourage initiatives of operators to provide, individually or collectively, compensation for damage resulting from their space resource activities."

16. Visits Relating to Space Resource Activities

In accordance with Article XII OST;

Final Provisions

17. Institutional Arrangements

Establishment and maintenance of a public available international registry and, additionally, of an international repository;

Designation or establishment of a responsible international body or bodies;

18. Settlement of Disputes

Encouraging amicable resolution of disputes;

19. Monitoring and Review

Again applying the **principle of adaptive governance**.

Invitation to Submit Comments on the Draft Building Blocks

The preliminary result of the work of The Hague Space Resources

Governance Working Group can be found at:

http://law.leiden.edu/organisation/publiclaw/iiasl/working-group/the-

hague-space-resources-governance-working-group.html.

To facilitate the submission of feedback, a questionnaire on the Draft Building Blocks is available on our website.

The Working Group invites any interested organisation or individual to submit comments and remarks on the text of the Building Blocks by **1 July**

2018 to <u>spaceresources@law.leidenuniv.nl</u>

