

IAC-19-D4.5.9

LEGAL AND POLITICAL EXAMINATION OF BENEFIT-SHARING: BETWEEN INTEREST OF ALL COUNTRIES AND PROVINCE OF ALL MANKIND

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Despite rapid technological development, adequately large financial capacities of private investors and ambitious plans of national or international space agencies in space resources, legal unclarity and obstacles represent a significant barrier. Even though space mining is not prohibited per se, outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means, and the Outer Space Treaty (OST) declares that exploration and use of outer space shall be carried out for the benefit and in the interest of all countries and shall be the province of all mankind. The long-standing absence of consensus at the UN COPUOS and reluctance to adopt the Moon Agreement, eyeing an international regime, resulted in several national initiatives. Much of the focus on the two pioneering national legislatures, the 2015 US Commercial Space Launch Competitiveness Act and the 2017 Luxemburg Law on exploration and use of space resources, has been given to the issue of appropriation, whether by U.S. citizens or any locally registered entities. Yet, the principle of non-appropriation is not the only requirement to be met. It is important to mention that national space legislation of the US and Luxembourg do not address the benefits and interests of all countries and do not reflect that the exploration and use of outer space shall be the province of all mankind. We consider this a critical point worthy an examination in order to respect the Outer Space Treaty dichotomy. According to the authors, any conceptualization of the common benefit clause enshrined in the Outer Space Treaty ought to be firstly, consensual to prevent any potential conflict over such resources, secondly globally beneficial, to ensure benefits to all mankind, and thirdly, to offer a stable and predictable legal framework to attract investors and allow for the development of necessary technology and activities. Based on these assumptions the paper seeks to evaluate the OST dichotomy between “benefits and interests of all countries” and “the province of all mankind” from legal and political perspectives. The wealth of academic literature covering international consensus-building, international norm dynamics, global governance and legitimacy will offer a perspective for the political examination, while terrestrial mining experiences and adequate legal frameworks such as the United Nations Convention on the Law of the Sea (UNCLOS) or Social License to Operate (SLO) will provide a base for the legal investigation.

I. INTERNATIONAL LAW PERSPECTIVE

Outer space, an area beyond national jurisdictions, is governed by international public law. A current legal framework is composed of five international treaties (namely the Outer Space Treaty of 1967, the Rescue Agreement of 1968, the Liability Convention of 1971, the Registration Convention of 1976 and the Moon Agreement of 1979) and five sets of principles governing outer space.¹

The Outer Space Treaty established basic principles applicable to activities to be carried out in outer space and is often referred to also as the “Principle Treaty”, or the “Constitution of Space Law”.

When OST was drafted, exploitation of space resources was not considered feasible and thus, the treaty

does not contain any specific reference to the space resource activities. Consequent treaties were intended to be concluded once new problems emerge and a more detailed regulation is needed. Such was the process for the conclusion of the first three specific treaties – the Rescue Agreement of 1968, the Liability Convention of 1971, the Registration Convention of 1976.

The utilization of space resources was for the first time addressed by the Moon Agreement. However, it has been ratified by 18 states and its widespread acceptance remains elusive. Thus, potential space resource activities would be governed only by general principles of international space law enshrined in the Outer Space Treaty.

¹ Five sets of principles governing outer space include the declaration of legal principles of 1963, the principles governing television broadcasting of 1982, remote

sensing of 1986, nuclear power sources of 1992, and international cooperation in outer space of 1996.

II. LEGAL CONTROVERSIES SURROUNDING LEGALITY AND CONDITIONS UNDER WHICH SPACE RESOURCES CAN BE UTILIZED

Silence of the OST does not necessarily imply unlawfulness of these activities. On the contrary, the freedom of exploration, use and access is one of the most fundamental principles of international space law. Article I of the OST reads: “*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 and in accordance with international law, and there shall be free access to all areas of celestial bodies.*” It is worth mentioning that France already in 1966, during the negotiations of the OST, emphasised that it is important to know exactly what is meant by the term “use”, and whether it is an equivalent to the term “exploitation”. While there is a general consensus on the interpretation of the term “exploration” as referring to discovery activities of the space environment for scientific reasons, a large disagreement exists concerning the term “use”.

Article I of the OST reads as follows: “*The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interest of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.*” The so-called common benefit clause has been proved to be by far the most controversial principle of OST relevant for the utilization of space resources. The clause is understood as a limitation to the rights granted by the same Article (freedom of exploration, use and access). However, the precise content of the clause remains unclear, especially whether it amounts to an obligation of sharing of the benefits of outer space activities. Even more doubtful is the meaning of the OST’s declaration that the use of outer space shall be the province of all mankind.

III. CONCEPTUALIZATION OF THE COMMON BENEFIT CLAUSE

Any conceptualization of the common benefit clause ought to be firstly, consensual to prevent any potential conflict over such resources, secondly globally beneficial, to ensure benefits to all mankind, and thirdly, to offer a stable and predictable legal framework to attract investors and allow for the development of necessary technology and activities.

Potential conflict over natural resources.

Globally beneficial utilization of space resources.

Stable and predictable environment being attractive for private investors.

III. INTERPRETATION OF THE PROVISION OF ALL MANKIND

IV. TERRESTRIAL EXAMPLES OF REGIMES GOVERNING UTILIZATION OF NATURAL RESOURCES BEYOND NATIONAL JURISDICTIONS

Antarctica

UNCLOS

ITU

IV. BETWEEN RES COMMUNITIS OMNIUM AND COMMON HERITAGE OF MANKIND

Complete freedom of exploration, first come, first served principle would effectively distribute the benefits of outer space among those who have the necessary technologies. The other extreme option entailing exploration on a completely communal basis would hardly accelerate necessary technological development for the utilization of space resources. These extreme examples reveal how fundamental is an adequate conceptualization of the common benefits clause.

Prevention of dominance by a single actor.

Stable framework

V. EMERGENCE OF NEW INTERNATIONAL NORMS FOR SPACE MINING

In international relations theory, a major contribution on international norms came from Finnemore and Sikkink (1998), who reject the separation of *what is* and *what ought to be* in political theory by linking rationality and normativity. To them, norms are an explicit manifestation of how normative ideas become practical rules and how rationality and normativity are inseparable. Rationality is linked to normative change while normative context affects rational choice (pg. 888).

The emergence of new norms

VI. SOCIAL LICENSE TO OPERATE AS A LEGAL FRAMEWORK

The absence of adequate governance tools, regulatory and legal, the advancing technology and plans are resulting in a void. However, supranational governance has many sources of legitimacy and does not necessarily have to rely only on international regulatory and political frameworks. Supranational actors use different devices to gain legitimacy, public reason being one of them. Here rhetorical or argumentative tools are used to increase legitimacy for the decisions taken, especially since the traditional sources of legitimacy – electoral democracy and accepted shared principles – are

not present on the global level. This can include supranational institutions like the World Trade Organization² but such narrative and discursive tools are also well-described in the mining industry.³

To deal with a legitimacy gap, the academic debate about terrestrial mining and extraction industry turned to the SAP Model, developed as an analytical tool by Sara Bice et al.⁴ The SAP Model consists of social, actuarial (regulatory) and political license that actors need to gain in order to address the risks associated with their operations. Specifically, for liberal democracies, the social license to operate fixes the legitimacy gap left by the absence of adequate and necessary regulatory and political license for actors to carry out their operations.⁵ The absence of regulatory and political license as sources of legitimacy in the field of space mining makes this a useful model for our debate. The social license to operate offers itself as a fix for the lack of regulatory and political governance and its link to legitimacy is considered a well-established.⁶

Its origins are linked with vertical and horizontal dispersion of power and governance from nation-states.

Horizontally we can see this as power moves to new stakeholders, global M&E conglomerates, who become to substitute traditional governmental roles in welfare, infrastructure or health. This so-called role creep is also identifiable with space companies, be it SpaceX plans to provide global free internet coverage with its mega constellation or Luxembourg's fast-deployable mobile satellite communication system available for emergency situations globally. Further, these NewSpace companies are developing strategically game-changing capabilities, such as unrivaled launch systems, payload capacities, human space flight and even concrete plans of colonization that surpass those of nation-states.

Vertically, we can see the power shift away from the state in the empowerment of local communities and supranational institutions and regimes. The SLO emergences is linked to the invoking of the permanent sovereignty of nations over natural resources located

within their territory, further reflected, inter alia, by the UN Declaration of the Rights of Indigenous, as a tool for the empowerment of local communities and their needs. Regarding the utilization of space resources, the OST represents a legal basis defining space as the province of mankind and its use to the benefit of all countries. Such a supranational normative regime sets a clear base for demands of not only all countries in regard to space resources utilization.

Another reason for the emergence of SLO is the growing distrust in the old governance regimes, identified in the Australian mining SLOs. Given the nature of international law and the antique state of international space law in relation to technical developments, the current governance regime is a barrier for financial, technological, research and legal aspects of space activities. While the space mining supply and consumption chain is not completed without proper demand and supply sides, the absence of a clear regulatory and political framework are preventing large investments into the development of cis-lunar economy. Such infectivity is making the international space governance regime seem irrelevant. Further, the relevance and trust of the international space law is eroded by quiet non-observance of some of its aspects due to geopolitical reasons as portrayed by the gradual weaponization of the outer space. These are just some aspects making the international space governance regime, similar to the governance regime of the mining and extracting industry, distrustful.

The biggest obstacle conceptually surrounding the SLO are its normative dimensions. SLO has been used by both civil society and industry to reach their own differing goals, which has effectively prevented its deeper conceptualization. While there is a widely accepted definition that the concept concerns the relationship between the industry and communities, there are different understandings what SLO is between the industry and the communities as well as who are the communities. From the industry perspective, the growing

² Wojciech Sadurski, 'Supranational Public Reason: On Legitimacy of Supranational Norm-Producing Authorities', *Global Constitutionalism*, 4.3 (2015), 396–427 <<https://doi.org/10.1017/s204538171500012x>>.

³ Gavin Bridge and Phil McManus, 'Sticks and Stones: Environmental Narratives and Discursive Regulation in the Forestry and Mining Sectors', *Antipode*, 32.1 (2000), 10–47 <<https://doi.org/10.1111/1467-8330.00118>>.

⁴ 'Putting Social License to Operate on the Map: A Social, Actuarial and Political Risk and Licensing Model (SAP Model)', *Resources Policy*, 53.March (2017), 46–55 <<https://doi.org/10.1016/j.resourpol.2017.05.011>>.

⁵ Bice, Brueckner, and Pforr; John Morrison, *The Social License: How to Keep Your Organization*

Legitimate (London: Palgrave Macmillan UK, 2014) <<https://doi.org/10.1057/9781137370723>>.

⁶ Bruce Harvey and Sara Bice, 'Social Impact Assessment, Social Development Programmes and Social Licence to Operate: Tensions and Contradictions in Intent and Practice in the Extractive Sector', *Impact Assessment and Project Appraisal*, 32.4 (2014), 327–35 <<https://doi.org/10.1080/14615517.2014.950123>>; Martin Brueckner and Marian Eabrasu, 'Pinning down the Social License to Operate (SLO): The Problem of Normative Complexity', *Resources Policy*, 59.July (2018), 217–26 <<https://doi.org/10.1016/j.resourpol.2018.07.004>>; Morrison.

desire for social accountability in the extractives industry has been described as one of the factors triggering the emergence of SLO. Yet, the Brueckner and Eabrasu in their review of industry's motivation to embrace SLO cite the need of the industry to safeguard against unwanted social risks, minimize resource project disruptions, various associated costs that could lower the viability of the project or to generally deflect the criticism. To reach these ends, companies have aimed to build positive corporate reputation, local culture-history-language understanding, education, open communication but attempts to legitimized practices. Some authors even coin SLO as a term "invented by business, for business". The community perspectives unsurprisingly differ. Thomson and Boutilier describe the SLO as an ongoing process of acceptance and approval based on a relationship between the company and the industry. This relationship is built on legitimacy, credibility and trust of the community through structural, relational and cognitive devices, or in other words, the degree of practical, psychological and communicative interconnectedness there is between the community and industry. However, all these questions are dependent on the definition of the community. This also varies and SLO can include the community or people directly affected due to their location, a broader civil society or even extend beyond mere local dimensions and include a variety of social licenses from different communities. As an example of a multinational SLO community is cited the Shell Brent Spar incident.