ПОВІТРЯНЕ, КОСМІЧНЕ, ЕКОЛОГІЧНЕ ПРАВО

DOI: 10.18372/2307-9061.72.19042 УДК 340.5(045)

Álvaro Andrés Erices Bravo,
Lawyer by the University of Buenos Aires
Space Law Specialist by the National Institute of Air and Space Law
of the Argentine Republic
Member of the International Institute of Space Law (IISL)

ORCID ID: https://orcid.org/0009-0004-6541-827X

SPACE RESOURCES: A NEW BALANCE OF INTERESTS FOR THE 21ST CENTURY

Faculty of Law,
University of Buenos Aires
Av. Pres. Figueroa Alcorta 2263, C1425, Ciudad Autónoma de Buenos Aires
E-mail: aerbrav@gmail.com

Purpose: the Art. II of the 1967 Outer Space Treaty (OST), which prohibits national appropriation by claim of sovereignty, use or occupation, is a jus cogens norm and has become a guarantee of peace in space, as well as the basis of international space law. In opposition, the creation of national legislations that allow the appropriation of space resources to their citizens, the advance of the private sector in space activities all over the world, the initiative to create the International Lunar Research Station (ILRS), and The Artemis Accords, put the interpretation of this fundamental principle under debate. In the 21st century, the proliferation of new space missions of public-private nature has created feasible commercial opportunities, such as space mining. All of this has deepened the debate within the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) on the need (or not) for elaborate new legal definitions and a legal regime for space resources. For this, it's necessary to generate a unified interpretation by the States based on the "balance of interests" principle. Research methods: study of specialized bibliography and national and international legislations, observation methods and analysis of information related to space activities. Results: in this article it will be evaluated whether it's possible to establish a new global legal interpretation of Art. II of the OST of 1967 to allow the harmonization of private and public interests. Discussion: the Artemis Accords, the ILRS and the national legislations of States that currently allow their citizens to appropriate space resources are, in fact and in practice, the spearhead of NewSpace and their main characteristic is that they are initiatives carried out outside UNCOPUOS. What would happen if soon, in a hypothetical case, The Artemis Accords and the ILRS project were to have more than a hundred signatory States in total?

Key words: Art. II OST; ILRS; International Law; National Space Legislation; NewSpace; Outer Space Treaty; The Artemis Accords; UNCOPUOS.

Problem statement and its relevance. Humanity in the 21st century is in the presence of a "New Space Age" characterized by the entry of private

players into a sector of the space industry that since its inception was reserved only for States. Over the last four decades, space activities have evolved based on an interaction between governments, the private sector, society and politics that, according to studies by *Statista* [1], a global data and business intelligence platform, in 2021 had a revenue of 469.3 billion U.S. dollars worldwide and will generate close to 1.75 trillion U.S. dollars by 2040, according to a report by *Morgan Stanley* [2].

The agility of the private sector is a feature that, for example, has allowed in recent years the production of reusable rockets, which has considerably reduced launch costs and opened the door to a serial industrial development that is destined to foster a niche of commercial services related to the transport of payloads to outer space, the launching into orbit of satellite constellations, the construction of private space stations, as is the case of the company *Axiom Space*, among other projects.

For example, in February 2024, the U.S. private space start-up *Intuitive Machines* succeeded in positioning its lander on the Moon more than 50 years after the Apollo 17 mission in 1972.

These space technological advances have among their objectives to achieve in this century the permanent presence of Humankind on the Moon and other celestial bodies and oblige Space Law to establish new legal regimes for the new human and artificial intelligence activities to be carried out in outer space. These include space mining and the appropriation of space resources for commercial purposes.

Analysis of recent research and publications. Art. II of the OST is a fundamental norm regulating the exploration and use of outer space, as it provides for the principle of "non appropriation by claim of sovereignty" in this area and has become a jus cogens or customary international law norm. This means that it also applies to those States that

"This principle confirms that outer space (which includes the Moon and other celestial bodies) is not subject to property rights and prohibits inter alia any sovereign or territorial claims in space and celestial bodies" [3, p. 79].

have not ratified the OST.

At the time when the OST was drafted, it was logically not possible to contemplate several of the issues that concern the international community today, such as the case of the exploitation of space resources [4, p. 3].

In turn, in 2019 "The Hague International Space Resources Governance Working Group" contributed a non-binding document called "Building Blocks for the Development of an International Framework on Space Resource Activities" which was introduced by the Grand Duchy of Luxembourg and the Netherlands at the 59th Session of the UNCOPUOS LSC.

These building blocks provide a definition of "space resource": "an extractable and/or recoverable abiotic resource in situ in outer space". In a footnote, the document states: "According to the understanding of the Working Group, this includes mineral and volatile materials, including water, but excludes (a) satellite orbits; (b) radio spectrum; and (c) energy from the sun except when collected from unique and scarce locations" [5, p. 4].

From January 29th to February 9th, 2024, during the 61st Session of the UNCOPUOS Scientific and Technical Subcommittee, the Romanian delegation submitted a proposal for an "Action Team on Lunar Activities" (ATLAC) to be established in the auspices of UNCOPUOS, to examine the need for consultative mechanism on sustainable lunar activities, given the ongoing and future initiatives on the Moon and other celestial bodies.

Such proposal was also submitted for appreciation of the UNCOPUOS LSC, during its the 63rd Session, and to the 67th Session of the UNCOPUOS Plenary. The discussions initiated by Romania stimulated the "UN Conference on Sustainable Lunar Activities", held on June 18th, 2024. During the debate, experts highlighted the need for coordination on Lunar activities, data and information sharing for the safety of space operations, and transparency.

Additionally, they emphasized the crucial role of UNCOPUS in leading the discussions, the significance of international cooperation, and the maintenance of the peaceful purpose, as advocated by the OST of 1967.

The document gives a new definition of "space resource": "Natural resources on the Moon, such as water ice, will be essential for the support a long-term human presence. As these resources are limited and concentrated in particular areas, sharing

information regarding resource activity will be critical for avoiding conflict or harmful interference" [6, p. 2].

In this regard, the "Updated Summary by the Chair and Vice-Chair of Views and Contributions received on the mandate and purpose of the Working Group on Legal Aspects of Space Resource Activities" of February 27th, 2024, under the heading "Views of States members of the Committee", expresses: "Some delegations were in favour of defining space resources, while some delegations were against such a definition. The desirability, or not, of establishing at the outset an international regime governing space resource activities prior to such activities being undertaken was also discussed" [7, p. 3].

In turn, this summary reports that organizations holding the status of "permanent observers" expressed "the need to clarify certain core concepts in the United Nations treaties on outer space" [8, p. 5].

At the 63rd Session of the UNCOPUOS Legal Subcommittee, held in Vienna, Austria, between April 15 and April 26 of 2024 – an event which the author of this paper attended as a member of the observer delegation of the International Institute of Space Law (IISL) – many dialogues and discussions focused on the absence of clear legal definitions in the international space law treaties and special meetings were held on the future creation of a space resources regime.

The formal and informal meetings were conducted by the "Working Group on Legal Aspects of Space Resources Activities", which works on the topic "General exchange of views on potential legal models for activities in the exploration, exploitation and utilization of space resources".

One of the experts who spoke at the "International Conference on Space Resources", held on April 15th, 2024, at the 63rd Session of UNCOPUOS LSC, expressed: "On the question by the distinguished delegate of Canada about "predictive governance", you're right, maybe it's the first time in history that we discuss of a legal regime for an activity that is going to take place in the future (...) In order to do that even the spacefaring States need investments and no investor will ever put any money in these adventure so risky without what the investors really hate: the existence of risks, and one

of these risks is a legal risk, insecurity, regime, nothing. So, I think this Committee is right in discussing that even before, many years such and activity will take place because we need to provide a regime for investments to be put in place" [9].

The clash of opinions regarding the legal definitions in space matters is a fundamental debate in the doctrine of Space Law. "Some argue that the unilateral exploitation of space resources constitutes a "national appropriation" of outer space prohibited by Art. II of the OST, while others, in a contrary position, argue that such exploitation falls under the principle of "freedom of use" established in Art. I." [10, p. 4].

The purpose of this paper is to study the point, that, in principle, the initiatives of The Artemis Accords and ILRS present similar long-term objectives, although their forms of presentation to the world are different, and how they, together with the national legislations of States that allow their citizens to appropriate space resources, ipso facto establish a reinterpretation of Art. II of the OST of 1967, beyond the clear prohibition of national appropriation by claim of sovereignty that it imposes on States. This paper argues that a unified and general interpretation by States of the legal definitions of space resources is required and their future legal regime should be established based on the principle of "balance of interests" between private and public interests.

Summary of the main research material.

I. A New Space Race

1. National Legislation that Allows the Appropriation of Space Resources

Over the past decade several states around the world have created national legislation enabling the possession of space resources for their citizens.

On November 25th, 2015, the *U.S. Commercial Space Launch Competitiveness Act* provided that: "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" [11, p. 19].

It should be noted that the final clause of this Act states: "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 ownership of, any celestial body" [12, p. 20].

On July 20th, 2017, the Grand Duchy of Luxembourg enacted the *Loi sur l'exploration et l'utilisation des ressources de l'espace*. Its art. 1 provides: "Space resources are capable of being owned". Art. 3 expresses: "The authorisation shall be granted to an operator for a mission of exploration and use of space resources for commercial purposes upon written application to the ministers" [13].

On December 23rd, 2021, Japan have created the Act on the Promotion of Business Activities for the Exploration and Development of Space Resources.

Its art. 5 on "Acquisition of Ownership of Space Resources" provides: "A person who conducts business activities related to the exploration and development of space resources shall acquire the ownership of space resources that have been mined, etc. in accordance with the business activity plan pertaining to the license, etc. for the exploration and development of space resources, by possessing said space resources with the intention to own" [14].

On March 31, 2023, the United Arab Emirates (UAE) published *its Space Resources Regulation.* Regulatory Framework on Space Activities. The regulation provides the following definition of "space resources": "Any non-living resources present in outer space, including minerals and water" [15, p. 3].

It also defines space resource activities as those: "Related to the exploration, exploitation and use of space resources, whether for commercial, scientific or other purposes, including the extraction, recovery, refining, processing, utilization, ownership, purchase, sale, trade, transport or storage of space resources, as well as logistics-related activities carried out in the identified area, such as transporting, storing or supplying space resources" [16, p. 4].

Art. 2 provides that the regulatory framework applies to nationals and companies with a principal place of business in the UAE or foreign companies with a subsidiary in the country. Art. 7 deals with

property rights over space resources and consists of two parts:

- 1) "Without prejudice to the international obligations of the state, Space Resources may be of explored, exploited or used through the conduct of Space Resources Activities. An Operator shall be entitled to exercise ownership rights, under the applicable national laws of the State, over any Space Resources which the Operator has explored, exploited or used through its Space Resources Activities, as authorized by the Agency".
- 2) "Ownership rights include, in particular, the right of ownership, purchase, sale, trade, transportation, storage, use, or dispose any of Space Resources extracted in the course of authorized Space Resources Activities and any Space Activities intended to provide logistics services in this regard in accordance with this Resolution, the Law, all other regulations issued by the Agency and any other applicable laws and regulations within the State" [17, p. 6].

2. The Artemis Accords

On October 13th, 2020, the United States of America (USA) proposed to the world the signing of The Artemis Accords with the political support of seven signatory States (United Kingdom, United Arab Emirates, Luxembourg, Australia, Canada, Italy and Japan). The Argentine Republic was the 28th signatory and to date this initiative has been signed by more than 40 States.

In Section 1 they express its purpose and scope: "To establish a common vision via a practical set of principles, guidelines, and best practices to enhance the governance of the civil exploration and use of outer space with the intention of advancing the Artemis Program" [18, p. 2].

In Section 5 of interoperability, it says: "The Signatories recognize that the development of interoperable and common exploration infrastructure and standards, including but not limited to fuel storage and delivery systems, landing structures, communications systems, and power systems, will enhance space-based exploration, scientific discovery, and commercial utilization. The Signatories commit to use reasonable efforts to utilize current interoperability standards for space-based infrastructure, to establish such standards when current

standards do not exist or are inadequate, and to follow such standards" [19, p. 3].

Although The Artemis Accords state the objective of fulfilling the obligations of the OST of 1967, there is a conspicuous absence in their writing: they do not mention the Moon Agreement of 1979 throughout the document. Moreover, they report in its preamble that they were created in accordance with "relevant" international law, which is an element to note.

This omission is also because the USA is not part of the Moon Agreement of 1979 — as well as China —, which deepens a still unresolved legal controversy: Art. 11.1 of the Moon Agreement states that "the Moon and its natural resources are the Common Heritage of Mankind".

In other words, with the CHM legal status established for signatory States, commercial exchange of space resources becomes impossible, which runs counter to the factual reality expressed through the NewSpace phenomenon today, and this makes it unlikely that spacefaring States will ratify the 1979 Moon Agreement unless there is a future opportunity to modify its founding structures to make space resources commercialization feasible.

Only 18 States are parties to the Moon Agreement of 1979 and although the Argentine space lawyer Dr. Aldo Armando Cocca was the expert who introduced the concept of CHM in its text, the truth is that the Argentine Republic is not a party to this international instrument either.

However, despite this reality, professors of vast and distinguished trajectory affirm in their texts that the legal status of outer space is *res communis omnium* [20, pp. 314-325] as something by its nature is intended for the use of all Humankind and could not be part of the patrimony of a single individual. Other jurists also affirm the legal status of outer space is *res extra commercium* [21, p. 349].

The Artemis Accords refer exclusively to the "exploration", "use" and "utilization" of outer space but do not mention the term "exploitation" as does the art. 11.5 of the Moon Agreement of 1979.

As in the "Wild West", the idea behind all these actions and philosophical conceptions of law are that the in-situ practice itself will generate the norm instead of establishing a prior legal regime.

Section 10 of The Artemis Accords refers to space resources: "The Signatories emphasize that the extraction and utilization of space resources, including any recovery from the surface or subsurface of the Moon, Mars, comets, or asteroids, should be executed in a manner that complies with the Outer Space Treaty and in support of safe and sustainable space activities. The Signatories affirm that the extraction of space resources does not inherently constitute national appropriation under Article II of the Outer Space Treaty, and that contracts and other legal instruments relating to space resources should be consistent with that Treaty" [22, p. 4].

Section 13 states that "the Government of the United States of America will maintain the original text of these Accords and transmit to the Secretary-General of the United Nations a copy of these Accords, which is not eligible for registration under Article 102 of the Charter of the United Nations" [23, p. 7].

In other words, the Artemis Accords are not an international Treaty and therefore are not governed by the 1969 Vienna Convention on the Law of Treaties, nor are they a binding instrument. They are the product of the political will of the States and do not give rise to legal liability for noncompliance. The signatory State adheres but cannot generate any type of reservations [24, p. 7].

3. ILRS

The Deep Space Exploration Laboratory (DSEL) of the CNSA reports that the ILRS is a project proposed by China and built with several countries. It also defines it as a scalable and maintainable comprehensive scientific experiment facility to operate autonomously on the lunar surface and orbit for a long period of time, with short-term manned participation that has the capability to support power supply, central control, communication and navigation, space-to-earth round trip, lunar scientific research and ground support [25, p. 8].

ILRS will conduct large-scale, multi-objective, multi-disciplinary science and technology activities, such as scientific exploration and research, resource development and utilization, and state-of-the-art technology verification.

ILRS will be "open to all interested countries and international partners, to strengthen scientific research exchanges and promote the exploration and use of outer space by humankind for peaceful purposes" [26].

The word "research", in the very title of the ILRS, responds to the principle of freedom of access and openness to scientific research, expressed in the second and third paragraph of Art. I of the 1967 OST, respectively.

The mission of the ILRS is that: "within 10-15 years, gather all human resources of different countries, races and civilizations, walk out of the cradle of the earth jointly build and share and operate the first extraterrestrial home in the solar system, serves the community of human destiny on the surface of the moon, used for long-term exploration and development of the universe, and contributes Chinese wisdom and strength" [27, p. 9].

Among the scientific objectives is the utilization of space resources and between the engineering objectives is to build an international scientific research public platform for moon—based scientific experiments, development and utilization of lunar resources.

It is important to note here the formal submission of the Chinese delegation to the "Working Group on Legal Aspects of Space Resources Activities" of UNCOPUOS LSC for its 63rd session held at the VIC in Vienna, between April 15 and April 26, 2024: "The Chinese Delegation believes that any discussion of the rules governing space resource activities should be within the framework of international space law with the Outer Space Treaty as its basis. The fundamental principles enshrined therein, including but not limited to peaceful use of outer space, for the benefit and in the interests of all humankind, non-appropriation, international cooperation, due regard and compliance with international law including the UN Charter, shall be applicable to space resource activities" [28, p. 2].

China, like the USA, is not a party to the Moon Agreement of 1979, and is also pushing its own ILRS project, open to all states and international organizations willing to join it in a similar vein to The Artemis Accords. This is a feature they share, although their modes of action and their appearance to the world are different.

4. A New "Balance of Interests"

The introduction of private actors to space missions has modified the previous "balance of inter-

ests" of the international treaties where the States were the main actors in outer space activities.

With respect to Art. II of the 1967 OST, "it has been proposed that the prohibition of appropriation is not only a foundational legal principle of conventional international space law but has also become a rule of general international law (indeed, a jus cogens rule), binding on all States" [29, p. 96].

And "no deviation or conduct inconsistent with the provisions of Art. II would be legally valid, unless at some point a contrary provision arose in the form of another jus cogens norm as part of the international order" [30, p. 101].

Art. 53 of the Vienna Convention on the Law of Treaties, provides that a peremptory norm of general international law "can be modified only by a subsequent norm of general international law having the same character" [31, p. 18].

What would happen if the commercialization of space resources becomes a necessity of States for the development and economic benefit of Human-kind? In the light of what has been studied so far, it would not be a stretch to argue that the "balance of interests" generated in the OST of 1967 is no longer the same in the 21st century. Can a new jus cogens norm be generated in space matters?

On April 6, 2020, the U.S. issued the Executive Order 13914 "Encouraging International Support for the Recovery and Use of Space Resources", which reaffirms "The United States is not a party to the Moon Agreement. Further, the United States does not consider the Moon Agreement to be an effective or necessary instrument to guide nation states regarding the promotion of commercial participation in the long-term exploration, scientific discovery, and use of the Moon, Mars, or other celestial bodies. Accordingly, the Secretary of State shall object to any attempt by any other state or international organization to treat the Moon Agreement as reflecting or otherwise expressing customary international law" [32].

It's important to remember that art. 11.3 of the Moon Agreement of 1979 states: "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" [33].

Consequently, The Artemis Accords did not mention the Moon Agreement of 1979 and as cited, Section 10 on Space Resources establishes: "The Signatories affirm that the extraction of space resources does not inherently constitute national appropriation under Article II of the Outer Space Treaty, and that contracts and other legal instruments relating to space resources should be consistent with that Treaty".

As times goes by, the conditions will be conducive to rediscussing the interpretation of rigid principles such as Art. II of the TDE of 1967 and establishing a general conception from the signatory States of The Artemis Accords and the ILRS project to open the game to a new "balance of private and public interests" in relation to space resources.

It is important to keep in mind that the art. 64 of the Vienna Convention on the Law of Treaties provides that "if a new peremptory norm of general international law arises, any existing treaty that is in opposition to that norm shall become null and void" [34, p. 22].

Conclusions. The confrontation of positions regarding legal definitions in space matters, specifically regarding the concept of "national appropriation" is a fundamental debate in the doctrine of Space Law.

As studied in this paper, one position maintains that the unilateral exploitation of space resources does constitute a "national appropriation" of outer space, prohibited by Art. II of the OST of 1967, and the other position expresses that the exploitation of space resources space is protected by the principle of "freedom of use" of Art. I of the OST.

The Artemis Accords and the ILRS are open for signature by all States and share the intention of establishing permanent human and artificial intelligence settlements on the Moon. Although their ways of acting and showing themselves to the world are different, both are international initiatives created outside of UNCOPUOS as spearheads of *NewSpace* phenomenon and have a correlation in national legislations (USA, Grand Duchy of Luxembourg, Japan and United Arab Emirates) that allows their citizens to appropriate space resources.

States of great space capacity as USA and China are unlikely to sign the Moon Agreement of 1979 unless there is a future opportunity to modify its founding structures to make space commercialization viable. The main argument for not being part is the legal status of Common Heritage of Mankind, established in art. 11.1, which makes the commercial exchange of space resources impossible.

The advance of unilateral acts of States and international initiatives such as The Artemis Accords and the ILRS, with national legislations that allows their citizens to appropriate space resources as a correlate, reinterpret the Art. II of the OST of 1967 and they generate a rewriting of the Treaty in practice.

There is evidence that the debate on space resources and lunar activities has gain momentum within the UNCOPUOS LSC and STSC with initiatives such as the cited proposal by the Romanian delegation and forums like the "UN Conference on Sustainable Lunar Activities" and the "International Conference on Space Resources" which reveals the importance of the exchange of ideas and international cooperation.

Space law is encouraged to find legal certainty to harmonize private and public interests to maintain peace in outer space and at the same time develop the economy of all States.

References

- 1. See e.g. Statista Research Department, *Global turnover of the space economy from 2009 to 2021 (in billion U.S. dollars)*. URL: https://www.statista.com/statistics/946341/space-economy-global-turnover/.
- 2. See e.g. Morgan Stanley Space Team, *Space: Investment Implications of the Final Frontier*. URL: http://commercialspace.pbworks.com/w/file/fetch/128577051/2017-11-01%20Morgan%20 Stanley%20Space_%20Investment% 20 Implications%20of%20the%20Final%20Frontier.pdf.
- 3. See for details Freeland /Jakhu, Art. II, in: Hobe/Schmidt Tedd/Schrogl (eds.), Cologne Commentary on Space Law, vol. I, 2021, p. 79. Spanish edition.
- 4. See for details Gaggero, The Artemis Program and the Exploitation of the Natural Resources of the Moon, VIII International Meeting of the In-

- ternational and Caribbean Space Network, 2023, p. 3.
- 5. See e.g. The Hague International Space Resources Governance Working Group, Building Blocks for the Development Framework on Space Resource Activities, 2019, p. 4. URL: https://www.universiteitleiden.nl/binaries/content/assets/rechtsgeleerdheid/instituut-voorpubliekrecht/lucht--en-ruimterecht/spaceresources/bb-thissrwg--cover.pdf.
- 6. See e.g. UNCOPUOS STSC, Doc. A/AC.105/C.1/2024/CRP.30, Proposal on a Consultative Mechanism on Lunar Activities. Paper submitted by the Delegation of Romania, 2024. URL: https://www.unoosa.org/res/oosadoc/data/documents/2024/aac_105c_12024crp/aac_105c_12024crp_30_0_html/AC105_C1_2024_CRP30E.p df.
- **UNCOPUOS** 7. See details LSC. for Doc. A/AC.105/C.2/L.328, Updated summary by the Chair and Vice-Chair of views and contributions received on the mandate and purpose of the Working Group on Legal Aspects of Space Re-Activities, p. 3. URL: https://www. source unoosa.org/res/oosadoc/data/documents/2024/aac_1 05c_2l/aac_105c_2l_328_0_html/AC105_C2_L328 E.pdf.
- 8. See for details UNCOPUOS LSC Doc. A/AC.105/C.2/L.328, Updated summary by the Chair and Vice-Chair of views and contributions received on the mandate and purpose of the Working Group on Legal Aspects of Space Resource Activities, p. 5. URL: https://www.unoosa.org/res/oosadoc/data/documents/2024/aac_1 05c_2l/aac_105c_2l_328_0_html/AC105_C2_L328 E.pdf.
- 9. See for details Kyriakopoulos, International Conference on Space Resources, 63rd Session of UNCOPUOS LSC. URL: https://webtv.un.org/en/asset/k1w/k1wuklzc5x.
- 10. See for details Gaggero, The Artemis Program and the Exploitation of the Natural Resources of the Moon, VIII International Meeting of the International and Caribbean Space Network, 2023, p. 4.
- 11. See e.g. U.S. Congress, U.S. Commercial Space Launch Competitiveness Act, 2015, p. 19.

- URL: https://www.congress.gov/114/plaws/publ90/ PLAW-114publ90.pdf.
- 12. See e.g. U.S. Congress, U.S. Commercial Space Launch Competitiveness Act, 2015, p. 20. URL: https://www.congress.gov/114/plaws/publ90/PLAW-114publ90.pdf.
- 13. See e.g. Journal Officiel du Grand-Duché de Luxembourg, Loi sur l'exploration et l'utilisation des ressources de l'espace, 2017. URL: https://legilux.public.lu/eli/etat/leg/loi/2017/07/20/a 674/jo/en.
- 14. See for details Japanese Law Translation, Act on the Promotion of Business Activities for the Exploration and Development of Space Resources, 2021. URL: https://www.japaneselawtranslation.go.jp/en/laws/view/4332/en.
- 15. See for details Policies and Regulations, Regulatory Framework on Space Activities of the United Arab Emirates, 2023, p. 3. URL: https://space.gov.ae/en/policy-and-regulations.
- 16. See for details Policies and Regulations, Regulatory Framework on Space Activities of the United Arab Emirates, 2023, p. 4. URL: https://space.gov.ae/en/policy-and-regulations.
- 17. See for details Policies and Regulations, Regulatory Framework on Space Activities of the United Arab Emirates, 2023, p. 6. URL: https://space.gov.ae/en/policy-and-regulations.
- 18. See e.g. NASA, The Artemis Accords, p. 2. URL: https://www.nasa.gov/wp-content/uploads/2022/11/Artemis-Accords-signed-13Oct2020.pdf.
- 19. See e.g. details NASA, The Artemis Accords, p. 3. URL: https://www.nasa.gov/wpcontent/uploads/2022/11/Artemis-Accords-signed-13Oct2020.pdf.
- 20. See for details Marchisio, Art. IX, in: Hobe/Schmidt Tedd/Schrogl (eds.), Cologne Commentary on Space Law, vol. I, 2021, pp. 314-325. Spanish edition.
- 21. See for details Sørensen, Manual of Public International Law, Fondo de Cultura Económica, 1973, p. 349. Spanish edition.
- 22. See e.g. NASA, The Artemis Accords, p. 4. URL: https://www.nasa.gov/wp-content/uploads/2022/11/Artemis-Accords-signed-13Oct2020.pdf.
- 23. See e.g. NASA, The Artemis Accords, p. 7. URL: https://www.nasa.gov/wp-content/uploads/2022/11/Artemis-Accords-signed-13Oct2020.pdf.

- 24. See for details Gaggero, The Artemis Program and the Exploitation of the Natural Resources of the Moon, VIII International Meeting of the International and Caribbean Space Network, 2023, p. 7.
- 25. Deep Space Exploration Laboratory of CNSA, ILRS, 2023, p. 8. URL: https://www.unoosa.org/documents/pdf/copuos/2023/TPs/ILRS_presentation20230529_.pdf.
- 26. CNSA, China and Russia sign a Memorandum of Understanding Regarding Cooperation for the Construction of the International Lunar Research Station, 2021. URL: https://www.cnsa.gov.cn/english/n6465652/n6465653/c6811380/ content.html.
- 27. Deep Space Exploration Laboratory of CNSA, ILRS, 2023, p. 9. URL: https://www.unoosa.org/documents/pdf/copuos/202 3/TPs/ILRS_presentation20230529_.pdf.
- 28. UNOOSA, Submission by the Delegation of China to the Working Group on Legal Aspects of Space Resource Activities of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space, 2024, p. 2. URL: https://www.unoosa.org/documents/pdf/copuos/lsc/space-resources/ LSC20

- 24/English_Chinas_submission_to_the_working_group on space resources.pdf.
- 29. See for details Freeland /Jakhu, Art. II, in: Hobe/Schmidt Tedd/Schrogl (eds.), Cologne Commentary on Space Law, vol. I, 2021, p. 96. Spanish edition.
- 30. See for details Freeland /Jakhu, Art. II, in: Hobe/Schmidt Tedd/Schrogl (eds.), Cologne Commentary on Space Law, vol. I, 2021, p. 101. Spanish edition.
- 31. See for details United Nations, Vienna Convention on the Law of Treaties, 2005, p. 18. URL: https://legal.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf.
- 32. See for details Federal Register, Executive Order 13914, 2020. URL: https://www.federalregister.gov/documents/2020/04/10/2020-07800/encouraging-international-support-for-the-recovery-and-use-of-space-resources.
- 33. See or details UNOOSA, Moon Agreement of 1979, p. 31. URL: https://www.unoosa.org/pdf/publications/STSPACE11E.pdf.
- 34. See for details United Nations, Vienna Convention on the Law of Treaties, 2005, p. 22, https://legal.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf.

Альваро Андрес Ерісес Браво

КОСМІЧНІ РЕСУРСИ: НОВИЙ БАЛАНС ІНТЕРЕСІВ У 21 СТОЛІТТІ

Юридичний факультет Університет Буенос-Айреса Av. Pres. Figueroa Alcorta 2263, C1425, Ciudad Autónoma de Buenos Aires E-mail: aerbrav@gmail.com

Mema: ст. II Договору щодо космосу 1967 року, яка забороняє національне привласнення шляхом проголошення суверенітету, використання або окупації, є імперативною нормою і стала гарантією миру в космосі, а також основою міжнародного космічного права. На противагу цьому, створення національних законодавств, які дозволяють привласнювати космічні ресурси своїм громадянам, розвиток приватного сектору в космічній діяльності по всьому світу, ініціатива створення Міжнародної станції дослідження Місяця (ILRS) та Угоди Артеміда поставили інтерпретацію цього фундаментального принципу під сумнів. У 21 столітті поширення нових космічних місій державно-приватного характеру створило реальні комерційні можливості, такі як космічний видобуток корисних копалин. Все це поглибило дебати в Комітеті Організації Об'єднаних Націй з використання космічного простору в мирних цілях (КООНВКМЦ) щодо необхідності (чи ні) розробки нових юридичних визначень і правового режиму для космічних ресурсів. Для цього необхідно виробити єдине тлумачення з боку держав на основі принципу «балансу інтересів». Методи дослідження: вивчення спеціалізованої бібліографії, національного та міжнародного законодавства, методи спостереження та аналіз інформації, пов'язаної з космічною діяльністю. Результати: у цій статті буде оцінено, чи можливо створити нове глобальне правове тлумачення ст. ІІ Конвенції про боротьбу з незаконним обігом наркотиків 1967 року, яке б дозволило гармонізувати приватні та державні інтереси. Ст. ІІ Договору щодо космосу 1967 року, яка б дозволила гармонізувати приватні та публічні інтереси. Обговорення: Угоди Артеміда, ILRS і національні законодавства держав, які наразі дозволяють своїм громадянам привласнювати космічні ресурси, фактично і на практиці ϵ лідери Нового Космосу, і їхньою головною особливістю ϵ те, що вони ϵ ініціативами, які здійснюються поза межами КООНВКМЦ. Що станеться, якщо незабаром, в гіпотетичному випадку, Угоди Артеміда і проект ILRS наберуть більше сотні держав-підписантів?

Ключові слова: ст. ІІ Договору щодо космосу; МКП; міжнародне право; національне космічне законодавство; Новий Космос; Договір щодо космосу; Угоди Артеміда; КООНВКМЦ.

Стаття надійшла до редакції 30.08.2024