МІЖНАРОДНЕ ПРАВО

UDC 34.01

Marinich Volodymyr
PhD Candidate in Law of the
National University of Life and Environmental Sciences of Ukraine;
Member of the Scientific Lab NGO "Cosmic Law Portal"
Марініч Володимир Костянтинович
здобувач вищої освіти ступеня доктора філософії
за спеціальністю «Право»
Національного університету біоресурсів і природокористування України;
учасник Наукової лабораторії ГО «Портал Космічного права»
ORCID: 0000-0002-3206-1436

Myklush Maryna
CEO
Law Group "FOX";
Member of the Scientific Lab NGO "Cosmic Law Portal"
Миклуш Марина Ігорівна
керівник
Юридичної Групи «ФОКС»;
учасник Наукової лабораторії ГО «Портал Космічного права»
ORCID: 0009-0005-2202-9482

Holub Svitlana
Senior Lecturer of the Department of Criminal Law, process and Criminology
Academy of Labour, Social Relations and Tourism;
Member of the Scientific Lab NGO "Cosmic Law Portal"
Голуб Світлана Миколаївна
старший викладач кафедра кримінального права, процесу та криміналістики
Академія праці, соціальних відносин і туризму;
учасник Наукової лабораторії ГО «Портал Космічного права»
ORCID: 0000-0003-2365-064X

DOI: 10.25313/2520-2308-2024-1-9540

THE OUTER SPACE (COSMIC) LAW PORTAL

ПОРТАЛ КОСМІЧНОГО ПРАВА

Summary. *This article presents the research results related to creating the Unified World Analytical Legal Platform of Outer Space Law (Cosmic Law Portal).*

The study's results show the uniqueness of Outer Space Law and its distinctive features, without which it is impossible to create an effective mechanism for regulating space activities.

The basis of its uniqueness is the environment of application of Outer Space Law ("Cosmos"), which is not the natural habitat of a human and that nobody owns.

During the study of Outer Space Law, the processes of gradual formation of terms, theses, and antitheses as well as the emergence of legal conflicts have been identified.

At the same time, it is revealed that the processes of the evolution of theses and antitheses, the formation of terminology, and the creation of interpretation of terms have not occurred naturally and experimentally but through diplomatic proposals and political agreements. In turn, this led to heterogeneity, inconsistency, incompatibility, non-conformities, and ambiguity of most provisions of Outer Space Law and as a consequence the ineffectiveness of the process of regulating space activities.

Thus, the study shows the urgent need for the creation of the Unified World Analytical Legal Platform of Outer Space Law (Cosmic Law Portal) and the universal cosmic language of terms.

During the research process, the following elements and characteristics of the Cosmic Law Portal have been identified, the presence of which is necessary for the formation of effective Outer Space Law: 1) a database of international and national acts and documents regulating space activities; 2) mechanisms that monitor and control the evolution of legal theses and the emergence of antitheses and legal conflicts; 3) mechanisms to provide open and interactive access to professionals and scientists around the world; 4) mechanisms of legal analysis; 5) open access mechanisms for the entire world community with the possibility of voting.

At the same time, the author has identified 7 main stages necessary to create the Cosmic Law Portal: 1) the comprehensive study of international and national legal regulation of space activities from the beginning to the present day; 2) the comprehensive study of the terminology of space activities and Outer Space Law; 3) the study of the principles of construction of Outer Space Law; 4) the creation of the Cosmic Law Portal; 5) involving specialists and scientists from all over the world in the discussion and analysis of legal documents in the field of Outer Space Law; 6) presenting the platform to the world community; 7) the research and application of public opinion and public position related to Outer Space Law.

Key words: *space, space law, outer space law portal, cosmic law portal, the unified world analytical legal platform of outer space law.*

Анотація. *У цій статті висвітлено результати дослідження, пов'язані зі створенням Єдиної Світової Аналітичної Правової Платформи Космічного права (Порталу Космічного права).*

Результати дослідження підтвердили унікальність Космічного права та його відмінні риси, без урахування яких неможливо створити ефективні механізми регулювання космічної діяльності.

Основою унікальності є середовище застосування Космічного права ("Cosmos"), яке не є природним місцем існування людини і нікому не належить.

У процесі дослідження Космічного права виявлено процеси поступового формування термінів, утворення тез та антитез, а також виникнення правових колізій.

При цьому встановлено те, що процеси еволюції тез та антитез, формування термінології та створення інтерпретації термінів відбувалися не природним і дослідницьким шляхом, а через дипломатичні пропозиції та політичні узгодження. У свою чергу, це призвело до різнорідності, непослідовності, несумісності, невідповідності та неясності більшості положень Космічного права, і як наслідок – неефективності процесу регулювання космічної діяльності.

Таким чином, дослідження виявило нагальну необхідність у створенні Єдиної Світової Аналітичної Правової Платформи Космічного права (Порталу Космічного права) і універсальної космічної мови термінів.

У процесі дослідження було виділено такі елементи та характеристики Порталу Космічного права, наявність яких необхідна для формування ефективного Космічного права: 1) база даних міжнародних та національних актів та документів, що регулюють космічну діяльність; 2) механізми, що відстежують та контролюють еволюцію правових тез та появу антитез та правових колізій; 3) механізми, що забезпечують відкритий та інтерактивний доступ для фахівців та науковців усього світу; 4) механізми правового аналізу; 5) механізми відкритого доступу для всієї світової спільноти, з можливістю голосування.

Водночас автором статті виділено 7 основних етапів, необхідних для створення Порталу Космічного права: 1) комплексне дослідження міжнародного та національного правового регулювання космічної діяльності від початку її розвитку і до сьогодні; 2) комплексне дослідження термінології космічної діяльності та Космічного права; 3) вивчення принципів побудови Космічного права; 4) створення Порталу Космічного права; 5) залучення фахівців та науковців усього світу до обговорення та аналізу правових документів у галузі Космічного права; 6) представлення цієї платформи світовій спільноті; 7) дослідження та застосування громадської думки та суспільної позиції з Космічного права.

Ключові слова: *космос, космічне право, портал космічного права, єдина світова аналітична правова платформа космічного права.*

Introduction

Problem Statement. When exploring Outer Space Law, it is necessary to understand that its main creators are diplomats and politicians who have not participated in space activities and/or lack the necessary experience in legal scientific, and/or practical activities in this area. Accordingly, all legal acts developed with their participation are full of pathos and demagoguery but have little practical effect.

In this regard, as of today Outer Space Law can hardly be called a system of legal norms or even a complex of legal provisions and theses, and even more so it cannot be called a well-functioning and effective legal mechanism.

It's more than likely that Outer Space Law can be compared to a web consisting of hundreds of international and national legal acts and thousands of legal norms and theses, often contradictory to each other or existing in parallel and independently of each other.

In some ways, current Outer Space Law is somewhat reminiscent of the pirate laws of the Middle Ages, which consisted of general pirate non-binding regulations (on the similarity of the Resolutions and Declarations of the United Nations General Assembly) and strict pirate ship-specific rules (similar to national legislation).

In this regard, it is difficult not only for an average person but even for a professional lawyer to

understand which legal provisions are common and binding for everyone, and which ones contradict each other in the context of international and national legislation.

There are several possible reasons for this state of affairs.

The first reason is the complete absence of an analytical legal database containing all legal acts in the field of regulation of space activities and publicly available legal analysis of specific legal provisions and theses of these acts. Furthermore, such a database shall contain legal acts issued by both the United Nations and national legislative bodies. In turn, all lawyers and other specialists in the regulation and implementation of space activities from all over the world shall have access to legal analysis and discussion of specific legal provisions and theses of these acts.

The second reason is the inability to track the evolution of the norms and legal theses of Outer Space Law and their changes, additions, or repeals over time.

The third reason is the lack of access for all humanity to discuss and vote on the legal provisions of Outer Space Law that make Cosmos the property of a small group of States and space activities inaccessible to all humanity.

The above reasons have led to Outer Space Law's imperfection, ineffectiveness, and confusion. In turn, the current situation requires immediate scientific research in the field of Outer Space Law to find positive solutions that will eliminate the above reasons and, as a result, avoid national rivalry and military conflicts in space activities.

According to the author, one solution may lie in the development of the unified worldwide analytical legal platform of Outer Space Law (Outer Space Law Portal or Cosmic Law Portal), which shall allow for solving the following tasks:

- development of a database of Outer Space Law that shall contain legal acts of the United Nations and national legal acts of all countries as well as a legal analysis of their provisions;
- enabling tracking of the evolution of legal theses, provisions, and principles that were formed in the process of adopting the above acts;
- providing access to everyone who wants to take part in the regulation and implementation of space activities.

At the same time, to determine the format of the portal it is necessary to analyze the features of Outer Space Law related to its evolution and terminology and to conduct a study of official databases that contain legal acts of Outer Space Law.

The status of the issue. Conducting this research, the author has analyzed many works of notable legal scholars in the field of space law, in particular: "Fundamentals of Space Law and Policy" Fabio Tronchetti [21], "Essays on space law" Natalia Malysheva [2], "International space law" Grigorov O. M. [1], "The first quarter-century of spaceflight" Marcia S. Smith [18], "Studies in International Space Law" Bin Cheng [4], "The concept of state jurisdiction in international space law" Imre Anthony Csabafi [5], "International Law and Outer Space Activities" Ogunbanwo O. Ogunsola [16], "Pioneers of space law" Stephan Hobe [7], "Soft law in outer space: the function of non-binding norms in international space law" Irmgard Marboe [10], "War and peace in outer space: law, policy, and ethics" Cassandra Steer and Matthew H. Hersch [19], "An introduction to space law" Diederiks-Verschoor I. H. P. [6], "International law" Malcolm N. Shaw [17], "The Law of Outer Space" Albert K.Lai [8], "Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space" Asamoah O. Y. [3], and others.

These and many other scientists have studied in their works the process of creating Outer Space Law and have repeatedly analyzed specific provisions of certain legal acts in this area.

However, to date, none of them have raised the Is. of creating a unified worldwide analytical legal platform of Outer Space Law to solve the above problems.

The article aims at determining the format of the unified worldwide analytical legal platform of Outer Space Law.

In turn, for this it is necessary to study the most important features of Outer Space Law that shall be taken into account when forming the structure of the analytical legal platform, namely, issues of terminology and the evolution of legal provisions and theses, using examples of specific legal acts adopted in the period 1958–1963:

- the UN General Assembly Resolution No. 1148 (XII) "Regulation, limitation and balanced reduction of all armed forces and all armaments; conclusion of an international convention (treaty) on the reduction of armaments and the prohibition of atomic, hydrogen and other weapons of mass destruction", adopted by the UN GA during its 12th session at the 716th plenary meeting, 14 Nov. 1957 (the UN GA Resolution 1148) [22];
- the UN General Assembly Resolution No. 1348 (XIII) "Question of the peaceful use of outer space", adopted by the UN GA during its 13th session at the 792nd plenary meeting, 13 Dec. 1958 (the UN GA Resolution 1348) [23];
- the UN General Assembly Resolution No. 1472 (XIV) "International co-operation in the peaceful uses of outer space", adopted by the UN GA during its 14th session at the 856th plenary meeting, 12 Dec. 1959 (the UN GA Resolution 1472) [24];
- the UN General Assembly Resolution No. 1721 (XVI) "International co-operation in the peace-

ful uses of outer space", adopted by the UN GA during its 16th session, 20 Dec. 1961 (the UN GA Resolution 1721) [25];
- the UN General Assembly Resolution No. 1802 (XVII) "International co-operation in the peaceful uses of outer space", adopted by the UN GA during its 17th session at the 1192nd plenary meeting, 14 Dec. 1962 (the UN GA Resolution 1802) [26];
- Treaty banning nuclear weapon tests in the atmosphere, in outer space, and under water (No. 6964), signed in Moscow (the Union of Soviet Socialist Republics, the United States of America, and the United Kingdom of Great Britain and Northern Ireland), on 5 August 1963 (the Treaty No. 6964) [20];
- the UN General Assembly Resolution No. 1884 (XVIII) "Question of general and complete disarmament", adopted by the UN GA during its 18th session at the 1244th plenary meeting, 17 Oct. 1963 (the UN GA Resolution 1884) [27];
- the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, adopted by the UN GA during its 18th session at the 1280th plenary meeting, 13 Dec. 1963, No. 1962 (XVIII) (the Declaration of Legal Principles) [28];
- the UN General Assembly Resolution No. 1963 (XVIII) "International Co-operation in the peaceful uses of outer space", adopted by the UN GA during its 18th session at the 1280th plenary meeting, 13 Dec. 1963 (the UN GA Resolution 1963) [29].

It is also necessary to analyze national and international Internet platforms containing legal acts in the field of regulation of space activities, using the example of some European countries and the United Nations.

Based on the above results, it is essential to determine the possible format, technical parameters, and other characteristics that the unified worldwide analytical legal platform of Outer Space Law shall have. At the same time, special emphasis is placed on the completeness of the database of legal acts of Outer Space Law, the possibility of analyzing the evolution of Outer Space Law and the entire process of regulating space activities by scientists around the world as well as the availability of the results of such analysis for the legal and moral reflection of all humanity.

The basic material

The evolution of legal theses

In attempts to regulate space activities, the United Nations General Assembly adopted various Resolutions, Declarations, and Conventions, and at the same time, States entered into Treaties to regulate cooperation in outer space. In most cases, all these documents did not contain a mechanism for enforcing their execution or any liability for non-fulfillment, that is, they were drawn up in the *Conventionalis stipulatio* [15].

Thus, since the provisions of these documents can hardly be called rules of law, in this study, the author conditionally describes them as Theses, and the provisions that are essentially opposite of the Theses — Antitheses.

In other words, in this case, legal Theses and Antitheses mean provisions of legal acts that form certain conditions, rules, and principles as well as obligations and agreements of States and similar legal provisions.

To show the evolution of legal Theses and Antitheses in the regulation of space activities, it is necessary to analyze the changes that took place in Outer Space Law using the example of specific legal acts.

This study analyzes the legal acts of the United Nations adopted during 1958–1963, which, according to the author's previous research, formed three General Principles of Space Activity: "The Principle of Free Cosmos" [11], "The Principle of Peaceful Cosmos" [11], and "The Principle of Useful Cosmos" [13].

That is this part of the study shows the evolution of the legal Theses that formed these three principles, and their Antitheses (if any appeared).

The evolution of "The Principle of Free Cosmos"

The first initiative about the Free Cosmos was set out in the provisions of the UN GA Resolution 1721 (item "b" of paragraph 1 of article "A"): "*Outer space and celestial bodies are free for exploration and use by all States in conformity with international law and are not subject to national appropriation*" [25].

At the same time, the United Nations General Assembly has never repealed previous Resolutions and/or their provisions but issued new legal acts, supplementing preceding provisions or restating them in a new way.

So, already in the UN GA Resolution 1802 (paragraph 4 of article "II"), when setting the task of building a network of "rocket launching facilities", the UN General Assembly declared it "*by providing an opportunity for valuable practical training for interested users*" [26]. That is the UN General Assembly offered free participation in space activities to all interested actors (without reference to existing States). In turn, the fact that researchers have free access to the Cosmos also means that not a single element of the Cosmos can belong to anyone.

Later, this initiative was supported in the Declaration of Legal Principles as follows (paragraph 2): "*Outer space and celestial bodies are free for exploration … by all States based on equality and by international law*" [28].

In addition, this initiative was announced as one of the legal principles in the Declaration of Legal Principles, namely: "*Outer space and celestial bodies are not subject to national appropriation by claim of*

sovereignty, by means of use or occupation, or by any other means" [28].

Thus, as a result of the compilation of the above legal theses about the Free Cosmos and taking into account their evolution, at the end of 1963 "The Principle of Free Cosmos" could be formulated as follows:

"*Outer space and celestial bodies are free for exploration by all States (on a basis of equality and by international law) as well as by all people, private companies, non-governmental organizations, and other interested parties.*

Outer space and celestial bodies are not subject to national appropriation by claim of sovereignty, use or occupation, or by any other means" [11, p. 351].

The evolution of "The Principle of Peaceful Cosmos"

The Peaceful Cosmos Initiative dates back to the UN GA Resolution 1148 (item "f" of paragraph 1), in which the UN General Assembly proposed "*that the sending of objects through outer space should be exclusively for peaceful and scientific purposes*" [22].

Further, in the UN GA Resolution 1348 (preamble, items "a" and "b" of paragraph 1 and paragraph 2), the UN General Assembly has already stated that "*outer space should be used for peaceful purposes only*" [23].

In other Resolutions and the Declaration of Legal Principles much has been said about the mentioned aspect as well as about "*the exploration and use of outer space for peaceful purposes*" and the prohibition of propaganda of war in space activities. In addition, the Declaration of Legal Principles also stated the need for "*the exploration and use of outer space in the interest of maintaining international peace and security and promoting international co-operation and understanding*" [28].

Thus, it can be noted that as of the end of 1963, peaceful initiatives in space activities were discussed repeatedly.

However, at the same time, it should be noted that the UN General Assembly failed to extend peace initiatives to "celestial bodies". Consequently, at this stage, the conduct of military operations by States on "celestial bodies" was theoretically allowed.

Later on, these initiatives were supplemented by the provisions of the Treaty No. 6964:

"*... to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: (a) in the atmosphere; beyond its limits, including outer space; (b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted*" [20].

"*... furthermore to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described*" [20].

Further, to support this initiative, the UN General Assembly adopted the UN GA Resolution 1884 (items "a" and "b" of paragraph 2), which proposed: "*a) To refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, installing such weapons on celestial bodies, or stationing such weapons in outer space in any other manner; b)To refrain from causing, encouraging or in any way participating in the conduct of the pending activities*" [27].

Thus, as a result of the compilation of the above legal theses about the Peaceful Cosmos and taking into account their evolution, at the end of 1963 "The Principle of Free Cosmos" could be formulated as follows:

"*All subjects of space activities can explore and use outer space exclusively for peaceful purposes, act only in the interests of maintaining international peace and security as well as for the development of international cooperation and mutual understanding, and have no right to carry out propaganda of war in space activities.*

All subjects of space activities shall refrain from placing, installing, and stationing in any other manner (and to refrain from causing, encouraging, or in any way participating in the conduct of the foregoing activities) in orbit around the earth and in outer space and on celestial bodies any objects carrying nuclear weapons or any other kind of weapons of mass destruction.

At the same time, States undertake not to carry out or take part in carrying out any nuclear weapon test explosion in places that are located in outer space and on celestial bodies, and which are under the jurisdiction or control of these States" [11, p. 353].

The evolution of "The Principle of Useful Cosmos"

Certainly, everyone realizes that all the dreams and fantasies of mankind about conquering the Cosmos have always contained a mercantile element about its use.

Already in the UN GA Resolution 1348 (preamble), it was proposed to perform "*the exploitation of outer space for the benefit of mankind*" [23]. At the same time, the preamble of this Resolution also underlined the need "*to avoid the extension of present national rivalries into this new field*" [23].

In the UN GA Resolution 1884 (preamble) the UN General Assembly again emphasized: "*that the exploration and use of outer space should be only for the betterment of mankind*" [27].

Further, in 1963 the Declaration of Legal Principles highlighted the existence of "*the common interest of all mankind in the progress of the exploration*

and use of outer space" [28], and also that "*the exploration and use of outer space shall be carried on for the benefit and in the interests of all mankind*" [28].

Thus, as a result of the compilation of the above legal theses about the Useful Cosmos and taking into account their evolution, as of the end of 1963 "The Principle of Useful Cosmos" could be formulated as follows:

"*All States can explore and use outer space exclusively for the benefit and interests of humanity, avoiding national rivalries into this field*" [13, p. 643].

However, as often happens in stories of obtaining material wealth, this Thesis almost immediately had an Antithesis.

So, in the UN GA Resolution 1472 (preamble) the UN General Assembly stated that "*the exploration and use of outer space should be only for the betterment of mankind and to the benefit of States*" [24].

Accordingly, the UN General Assembly for the first time officially mentioned the aim of "the benefit of States" concerning space activities.

Subsequently, the UN General Assembly continued to tip the scales of space activities in favor of States. Thus, in the UN GA Resolution 1721 (item "b" of paragraph 1 of article "A") was stated that "*Outer space and celestial bodies are free for use by all States in conformity with international law*" [25].

Additionally, in the UN GA Resolution 1802 (paragraph 1 of the article "I"), the main tasks related to space activities and subject to priority solutions were identified (paragraph 1 of the article "I"), namely: "*improvement of basic legal principles governing the activities of States in the exploration and use of outer space*" [26].

From the above tasks, it becomes clear that the UN General Assembly continued to promote its idea of allowing States to freely use Outer space.

In the UN GA Resolution 1963, the UN General Assembly announced that in space activities it is necessary "*to continue and to extend co-operative arrangements so that all Member States can benefit from the peaceful exploration and use of outer space*" [29].

That is purposeful lobbying of the interests of States has begun to the detriment of "*the betterment of mankind*".

Moreover, the UN GA Resolution 1963 (preamble) only underlines Member States as follows "*benefit which all Member States would enjoy by participation in international programmes of co-operation in this field*" [29].

Further, in the Declaration of Legal Principles, it was again underlined that "*the exploration and use of outer space should be carried on for … the benefit of States regardless of their degree of economic or scientific development*" [28] and subsequently this position was enshrined as one of the legal principles, namely: "*Outer space and celestial bodies are free for … use by all States on the basis of equality and in accordance with international law*" [28].

Thus, as a result of the compilation of the above legal provisions about the Useful Cosmos and taking into account their evolution, as of the end of 1963 the Antithesis for "The Principle of Useful Cosmos" could be formulated as follows:

"*All States can explore and use outer space exclusively for the benefit of States*".

Whereas, the fact that "actions for the benefit of certain States" very rarely coincide with "actions for the benefit of all mankind" does not require scientific justification.

In turn, the presence of Thesis and Antithesis indicates the emergence of the following essentially opposite legal provisions (legal conflicts):

1. "*not subject to national appropriation … by means of use*" and "*free for use by all States*",
2. "*for the benefit and in the interests of all mankind*" and "*for the benefit of States*".

That is, one can conditionally say that "The Principle of Useful Cosmos" consists of the Thesis and Antithesis.

Conclusion. Based on the analysis of the above legal acts, examples of the evolution of legal provisions are shown as well as examples of the emergence of legal conflicts and cases of formation of both Theses and Antitheses in Outer Space Law.

At the same time, these examples have not implied the legal elements of the national legislation of different countries, which in turn could further complicate the analysis.

However, even these examples are enough to understand that for the transparency of Outer Space Law and effective regulation of space activities, the state of legal Theses and Antitheses at a particular point in time is of great importance, taking into account their evolution, the presence of legal conflicts and the results of legal analysis. This shall be taken into consideration when forming the structure of the Outer Space (Cosmic) Law Portal.

Issues of terminology (the framework of categories)

In addition, one of the most important features of the process of regulating space activities is its unique terminology, in most cases not previously used.

It is necessary to understand that the formation of terminology in Outer Space Law basically occurred under diplomatic or political influence and often lacked a scientific legal basis. At the same time, the official languages that are applied to present terms and texts on the regulation of space activities (for example, UN Resolutions) are mainly English, Russian, French, Spanish, Arabic, and Chinese.

In turn, even when translating the same texts and terms into different official languages, significant

inconsistencies appeared in the correct definition of the object of translation and its interpretation. Provided the text is translated into other languages that are not official UN languages, such inconsistencies may be even more considerable.

The reason for this is that translations of the texts of legal acts were performed by each space State at its discretion (without coordination with other States), which often led to the use of different terms to describe the same action or subject. In some cases, this changed the meaning and true understanding of the essence of the text, which was laid down by its creators.

Nevertheless, not a single decision was made at the official level regarding the development of a classification of at least basic terms and their analogs in different languages that can be applied for translation and their correct interpretation.

Therefore, the problems of using terms and their interpretation emerged at the beginning of the formation of Outer Space Law, namely, directly when describing space beyond the Earth.

For a long time, most peoples described this space with the ancient Greek word "Cosmos" (in Ancient Greek κόσμος). However, this word literally means "order," that is the ordered state of an object (this object in the ancient world was often perceived as the entire Universe). Nonetheless, the term has been used for thousands of years to refer to space beyond Earth.

Over time, to denote space outside the Earth the set expressions "Space" or "Outer Space" were established in English, and in French "Espace" or "L'Espace extra-atmosphйrique". At the same time, the ancient Greek term "Cosmos" continued to be used mainly in Slavic languages to identify space beyond the Earth.

Therefore, in international documents, the description of space beyond the Earth was somewhat different.

Thus, in the English versions of the Resolutions of the UN General Assembly, when describing space activities, the space outside the Earth is often defined with the words "*outer space and celestial bodies*" [25]. That is, in the English versions of the texts of the Resolutions, "celestial bodies" are not part of "outer space". However, the formulation of "outer space and celestial bodies" does not include stars (such as the Sun), various particles, and "invisible" waves (such as electromagnetic waves), — the author expects lawyers to remember the "particle-wave theory". In this regard, it remains unclear whether stars belong to "celestial bodies" or not, and also whether the light they emit belongs to "outer space" or not.

Also, since the term "Space law" (or "Outer Space law") does not contain the phrase "celestial bodies" ("celestial bodies" is not part of "Outer Space" that is evident from international documents), it remains incomprehensible whether "Outer Space Law" extends to the process of legal regulation of activities on celestial bodies or not (or for correctness it should be called "Law of outer space and celestial bodies").

At the same time, this example shows only those problems that need to be resolved within the English texts of documents.

In turn, with the literal translation of English texts into other languages (and the translation shall be literal since we are talking about scientific terms) the dissonance becomes even more significant.

As for a literal translation of the word "Space" into Slavic languages one will not get a description of "Space" outside the Earth but a description of the ordinary "expanse".

In this regard, in international legal acts regulating space activities, drawn up in Slavic languages (for example, in Russian), an indication that an object belongs to "outer space and celestial bodies" is performed through the use of the word "Cosmos". For example, in Slavic languages, descriptions of space beyond the Earth are usually carried out with words that can literally be translated into English as "Cosmos" or "Cosmic space". Moreover, in contrast to the English interpretation of the term "space" (or "outer space"), in Slavic languages, the concept of "cosmos" (or "cosmic space") most often includes "celestial bodies".

Moreover, in Slavic languages, the phrase "celestial bodies" is very rarely used since when translated into Slavic languages it literally means "gods bodies" or "magnificent bodies" depending on the context. In turn, in Slavic languages, an expression is sometimes used to denote "celestial bodies", which can literally be translated into English as "sky bodies". However, since among the Slavic peoples the word "sky" literally means only what they see above, to indicate "celestial bodies" despite a general definition it is often used specific names: "planets", "asteroids", "stars", "particles, and so on.

And there are a huge number of such differences in the definition and application of scientific terms of Outer Space Law.

Only based on the above examples one can notice a fundamental difference in the description of specific objects of space activity and different understandings of the same words in the languages of the Romano-Germanic group and the Slavic group. The same difference in the perception of words exists in Arabic, Chinese, Hindi, and other languages.

In this regard, we can state the fact that the process of developing international acts of Outer Space Law in different languages or translating them from one official language to another has not implied a legal scientific basis but is of an artistic and publicistic (diplomatic or political) nature. That is, the translations of such documents and their terminology were not performed literally, accurately, and sci-

entifically. This is mainly because the presentation of the texts of such documents was carried out by a translator who had no experience in philological research in the field of space activities (or who had nothing to do with space activities at all).

This situation has often led to unnecessary discussions, incorrect research, and misunderstanding in the international community, that is, to confusion and ineffectiveness of Outer Space Law.

For example, the English version of the UN General Assembly Resolution 1802 (paragraph 3) describes liability for damage caused by the operation of an object called a "*space vehicle*" [26]. At the same time, a literal translation of the term "space vehicle" into any Slavic language would indicate "means of transportation in expanse" — that is, a vehicle that is used to transport of what is contained therein (in other words, a general description of a passive object not related to "Cosmos" is provided).

In turn, in the Russian version of this Resolution, only one phrase is used for the same object, which can be literally translated into English as "cosmic ship" — that is, a controlled military object that its commanding officer uses to get to a specific point "Cosmos" (an active object directly related to "Cosmos"). At the same time, in the Slavic versions of the UN Resolutions, the terms "space vehicle" and "spacecraft" were never used at all.

From here it becomes clear why citizens of the States of the Eastern Coalition in the second half of the 20th century perceived all activities in space of the States of the Western Coalition as military activity (even where there was none.).

In this connection, the author considers it to be very important to develop terminology for this area of law and approve the name of each term in all existing languages of the world.

For example, in his earlier studies, the author proposed using the term "Cosmos" to refer to all space outside the Earth's atmosphere and everything that is in it [11].

Perhaps, to create a reference name for each term, it is necessary to develop a separate cosmic language or use universal languages similar to Latin, Ancient Greek, or Esperanto.

Either way, immediate decisions need to be made on this matter.

Issues of interpretation

Unfortunately, we have to admit the fact that as of today there is practically no official interpretation of the terms of Outer Space Law (even such controversial terms as "Outer space law", "objects launched into space", "spacecraft", "peaceful purposes" and similar).

In the scientific literature many researchers also often do not provide any interpretation of the terms of Outer Space Law but use them by default.

All in all, existing scientific interpretations of a limited number of terms in some scientific works often have significant differences.

Take for instance the term "Space law" (or "Outer space law").

Francis Lyall underlines in his book "Space Law" that "*At its broadest space law comprises all the law that may govern or apply to outer space and activities in and relating to outer space*" [9, p. 2].

At the same time, Francis Lyall compares "Space law" with "family law" or "environmental law" and explains his interpretation by the fact that "Space law" is determined by the object to which it is applied and not by its classical rational development [9, p. 2].

In turn, Fabio Tronchetti in his book "Fundamentals of Space Law and Policy" gives a more specific interpretation of "Space law" (which most scientists adhere to): "*The term ''space law'' is used concerning the set of international and national rules and regulations governing human activities in and relating to outer space*" [21, p. viii].

That is, both researchers provide different interpretations of the same term. And if Francis Lyall's interpretation presupposes the existence of private regulation of space activities, then Fabio Tronchetti's interpretation has a purely state character.

Under these circumstances, the mentioned interpretations do not take into account that Cosmos is an "alien room" for states and for people [15] in which they cannot establish their own rules. Therefore, the legal acts of the United Nations and other international organizations, which form the basis of Public Space Law mainly take the form of "*Conventionalis stipulatio*" [15] and accordingly cannot establish binding rules for everyone.

Moreover, existing interpretations of "Space law" do not imply the possibility of the emergence of multiple legal systems regulating space activities built on different ideologies and principles, including those created by both people and extraterrestrial intelligent beings.

At the same time, it is worth noting that Francis Lyall suggested that "Space law" can consist not only of official legal acts but also of contracts and similar documents created by private individuals [9, p. 2], with which the author fully agrees. Furthermore, the author believes that private agreements would form a new legal system of "Space Law", — the so-called Outer Space Private Law (or Cosmic Private Law).

In turn, Fabio Tronchetti indicated that one of the main goals of "Space law" concerning States is "*preventing the emergence of tensions and conflicts among the subjects involved in outer space activities*" [21, p. viii], with which the author also agrees. Moreover, the author believes that any agreements between or among States (including international

treaties, Resolutions, Declarations, and UN Conventions) would form a separate legal system of "Space Law", — the so-called Outer Space Public Law (or Cosmic Public Law).

In this regard, the author in his previous studies provided an interpretation of the term "Space Law", which, in his opinion, should take into account the entire diversity of intelligent beings, legal systems, ideologies, and principles that can exist in "Cosmos":

Outer Space Law *is a set of legal systems regulating space activities, implying different legal ideologies and various subject composition, and also an environment of application that extends to outer space and celestial bodies beyond Earth* [15, c. 576].

At the same time, the author substantiated the formation over time of at least three legal systems of Outer Space Law: Outer Space Law of Principles (or *Animal rationale jus*), Outer Space Private Law (or Cosmic Private Law), Outer Space Public Law (or Cosmic Public Law) [15, p. 576].

In addition, it shall be noted that the problem of interpretation of terms significantly slows down the development of "Outer Space law" and makes it ineffective, and therefore, in other studies, which at the same time are being conducted by the author along with other researchers, scientific interpretations of many terms will be presented as well as legal conditions of space activities, including those related to the delimitation of outer space and the spatial-territorial domain of the State (that is, delimitation of jurisdiction) and many others.

However, it shall be recognized that all these interpretations have a scientific basis but are not official interpretations recognized by States at least at the level of the United Nations.

Pursuant thereto, the author insists on the need for the most rapid official approval of the terminology and interpretations of all terms of the "Outer Space law", which would make it possible to clearly understand the provisions of the "Outer Space law" and avoid "*Fraus legi fit*" as well as effectively use it for cooperation and prevention of conflicts in "Cosmos".

Analysis of official Internet platforms containing legal acts in the regulation of space activities

Taking into account the above research results, the author considers it necessary to analyze the existing official legal Internet platforms to indicate whether they take into account the features of Outer Space Law and provide for effective solving the tasks assigned to them.

As an example this analysis is carried out based on the Internet platform "Legislation of Ukraine" (https://zakon.rada.gov.ua/laws), which contains international and national legal acts of Ukraine (a country not a member of any unions), and the Internet platform "Lйgifrance" (https://www.legifrance.gouv.fr/), which contains international and national legal acts of the French Republic (a European Union country).

As a result of testing these platforms and generating various queries to search for documents regulating space activities, mostly only the national legal acts of these states have been found.

In turn, the number of texts of the UN Resolutions (or references to them) that relate to the regulation of space activities is critically low (no more than ten). At the same time, the databases of these platforms contain only those international treaties regarding space in which the States that are administrators of these platforms were directly involved. Therefore, these platforms do not contain any national legal acts of other States on the regulation of space activities.

Thus, we can conclude that these Internet platforms do not contain a complete set of legal acts to regulate space activities (at a minimum, all international legal acts of the UN and national acts of other UN member States).

Moreover, these platforms do not provide for any analytical and legal mechanisms to control the evolution of legal theses and antitheses, the formation of terminology, and interpretation in Outer Space Law.

At the same time, legal Internet platforms of other States in most cases have the same or even more shortcomings.

Additionally, the main official international platform for Outer Space Law https://www.unoosa.org/oosa/index.html, which administrators are the United Nations Office for Outer Space Affairs (UNOOSA) and the Committee on the Peaceful Uses of Outer Space (COPUOS), has been also examined.

As a result of testing its "Documents and resolutions database" section (https://www.unoosa.org/oosa/documents-and-resolutions/search.jspx?lf_id=) and generating various queries to search for the UN documents regulating space activities, as of December 31, 2023, "3854 items" have been found.

However, this database not only contains no complete set of all international legal acts regulating space activities but even all the Resolutions of the UN General Assembly that relate to space activities. For example, the UN GA Resolution 1148 (which for the first time underlines the control over the launch of objects into outer space) and the UN GA Resolution 1884 (which sets a prohibition on nuclear testing in space) are missing from this database. In addition, this database does not contain the Treaty No. 6964. These are just examples of shortcomings identified for the period from 1957 until 1963.

At the same time, this platform does not provide any distinct possibility for familiarization with the national legal acts of the UN member States regulating space activities. The section of this UNOOSA platform called "National Space Law" (https://www.

unoosa.org/oosa/en/ourwork/spacelaw/national-spacelaw/index.html), intended to display national legal acts on the regulation of space activities, does not contain a complete set of such acts. For example, the subsection "Ukraine" includes only 4 legal acts of Ukraine on the regulation of space activities, while as of today there are already more than 35. Moreover, the names of Ukrainian legal acts on the UN platform are translated into English incorrectly, and their texts have long become obsolete and do not correspond to reality.

Thus, it can be concluded that this Internet platform also does not contain a complete set of legal acts regulating space activities (at least all international legal acts of the UN and all national acts of the UN member States), and the legal connection of these acts.

The private organization "The Sirius Chair" has advanced the furthest in solving this problem, creating the legal Internet platform "Space Legal Tech" (https://www.spacelegaltech.com/). However, although this platform contains a larger number of legal acts, it has the same shortcomings as the UN platform (incorrect translation into English and outdated versions of legal acts). It may therefore be concluded that even this private platform does not contain a complete set of legal acts.

Moreover, none of these platforms contain any analytical and legal mechanisms to control the evolution of legal theses and antitheses, the formation of terminology and interpretation in Outer Space Law.

Conclusions and prospects for further research. This study shows the uniqueness of Outer Space Law and its distinctive features, without which it is impossible to create an effective mechanism for regulating space activities.

First of all, this is the environment of application of Outer Space Law ("Cosmos"), which is not the natural habitat of a human and that nobody owns. Accordingly, Outer Space Law cannot be created by analogy with other types of law, such as maritime or air law. Generally, it cannot be developed based on classical law, which has long turned into an artificially intricate labyrinth.

In this regard, the processes of evolution of theses and antitheses, the processes of forming terminology and creating an interpretation of terms do not occur naturally and experimentally but through diplomatic proposals and political agreements. In turn, this leads to heterogeneity, inconsistency, incompatibility, non-conformities, and ambiguity of most provisions of Outer Space Law (both international and national) and as a consequence the ineffectiveness of the process of regulating space activities.

All this reveals the urgent need for the creation of the Unified World Analytical Legal Platform of Outer Space Law (Cosmic Law Portal) and universal cosmic language.

For maximum effectiveness, the format of this platform shall meet the following characteristics:

- the basis of the platform shall be a database containing a compilation of all international and national legal acts as well as private documents in the field of regulation of space activities and relations in Cosmos;
- the platform shall have mechanisms that monitor and control the terminology and interpretation of terms in the universal cosmic language and the languages of different peoples of the world, and the evolution of legal theses and the emergence of antitheses that form the rules or principles of space activities;
- the platform shall be open and interactive with the opportunity for specialists and scientists from all over the world to join in the analysis and discussion of any legal acts in the field of Outer Space Law;
- the platform shall allow posting the results of legal analysis of the provisions of all its documents, performed by specialists and scientists from all over the world;
- in the future, the entire international community shall also have access to this platform with the possibility of voting on specific legal documents in the field of Outer Space Law since space shall become accessible to all humanity.

The development of the Unified World Analytical Legal Platform of Outer Space Law (Cosmic Law Portal) would create a transparent, understandable, and compatible system of legal acts and other documents regulating space activities, enable the elimination of legal conflicts, problems of terminology and interpretation of terms (including in different languages), and contradictions between Theses and Antitheses as well as the relevant collisions between international and national legal acts, which would ultimately make Outer Space Law an effective, understandable, and accessible mechanism for all people on Earth.

According to the author, the process of creating the Cosmic Law Portal would consist of several stages that can be carried out sequentially or simultaneously (in parallel with each other).

The 1st stage. The comprehensive study of international and national legal regulation of space activities from the beginning to the present day.

At this stage, it is crucial to study and develop an array of all legal acts and private documents in the field of regulation of space activities, and their legal format and status as well as anachronism and interchangeability.

In addition, it is necessary to investigate and determine all theses and antitheses (legal provisions that form certain rules or principles) contained in such legal acts and documents, their evolution along with their effectiveness or ineffectiveness.

The estimated duration of research at this stage is 2–5 years.

As of today, a group of researchers from the Laboratory "Cosmic law portal" (Marinich V.K., Myklush M.I., and others) have shown an example of the way to conduct the research at the 1st stage of the study (the study of international documents adopted at the first stage of the development of space activities during 1958–1963 as well as an analysis of the aims and conditions for their adoption have been performed).

The examples of the mentioned study were published in the following articles:

- "Regulation of space activities during the 1958–1963 period" [14];
- "Space Law, Subjects and Jurisdictions: pre-1963 period" [15];
- "Outer space public law: the 1958–1963 period. Part 1" [11];
- "Outer space public law: the 1958–1963 period. Part 2" [13].

Another article under the title "New insights into space activities regulation: *ab origine* to contemporary" was published in December 2023 (it will be available in January-February 2024) in Is. No. 12 of the journal "Advanced Space Law" (http://asljournal.org/).

The examples of the study contain the following elements.

1. Review and analysis of international documents adopted during 1958–1963.

2. List and description of tasks that were formed by the international community at this stage.

3. Definition of the first four most important General Principles for Space Activities: The Principle of Free Cosmos, The Principle of Peaceful Cosmos, The Principle of Useful Cosmos, The Principle of Cosmos Traffic (which consists of the following three specific principles: The Principle of registration of launches, The Principle of mutual assistance, and The Principle of responsibility).

4. Justification of the legal status and format of Resolutions and Declarations of the UN General Assembly as a modern form of "*Conventionalis stipulatio*" (agreed public promise of States to fulfill certain obligations).

5. Conclusions about the possibility of States applying national law in outer space and on celestial bodies, the limits of the competence of States to apply national law regarding their Cosmic artificial objects, the limits of the competence of States to apply national law regarding astronauts in the Cosmic artificial objects of these States, the possibility of States and international bodies applying international law in outer space and on celestial bodies.

The 2nd stage. The comprehensive study of the terminology of space activities and Outer Space Law.

At this stage, it is necessary to explore existing terminology and create a new universal terminology in the field of regulation of space activities (based on ancient Greek and Latin, Esperanto, and, possibly, English).

In addition, for each term, it is necessary to formulate its scientific legal interpretation in the official languages of all countries of the world (with appropriate legal clarifications, if necessary)

In fact, at this stage, a Universal Cosmic Language would be created.

The estimated duration of research at this stage is 2–3 years.

To date, a group of researchers from the Laboratory "Cosmic law portal" (Marinich V.K., Myklush M.I., and others) have shown an example of the way to conduct the research at the 2nd stage of the study.

The examples of the mentioned study were published in the article under the title "New insights into space activities regulation: *ab origine* to contemporary" in December 2023 (it will be available for review in January-February 2024) in Is. No. 12 of the journal "Advanced Space Law" (http://asljournal.org/).

The examples of the study contain the following elements.

1. New interpretation of the concept of "Outer Space Law".

2. The revision of the list of subjects and objects of space activities and Outer Space Law, and proposals for their classification and new interpretations.

3. The introduction of new terms "Cosmic artificial object", "pre-Cosmic artificial object" and others.

The 3rd stage. The study of the principles of construction of Outer Space Law.

At this stage, it is necessary to explore the fundamental principles of the construction of Outer Space Law. The mentioned principles would be taken into account when developing approximate models of existing and potential Legal systems of Outer Space Law.

In addition, it is essential to study and determine the physical boundaries of the application of Outer Space Law in general and its legal systems (the Is. of jurisdictions).

The estimated duration of research at this stage is 3–5 years.

Currently, a group of researchers from the Laboratory "Cosmic law portal" (Marinich V.K., Myklush M.I., and others) have shown an example of the way to conduct the research at the 3rd stage of the study.

The examples of the mentioned study were published in the following articles:

- "Fundamental principles of outer space (cosmic) law development" [12];
- another article under the title "New insights into space activities regulation: ab origine to contemporary" was published in December 2023 (it will

be open for review in January-February 2024) in Is. No. 12 of the journal “Advanced Space Law” (http://asljournal.org/).

The examples of the study contain the following elements.

1. The first three fundamental principles of the construction of Outer Space Law are defined.

2. The suggestion of the development of several new legal systems to regulate space activities, such as Outer Space Law of Principles (or *Animal rationale jus*), Outer Space Private Law (or Cosmic Private Law), and Outer Space Public Law (or Cosmic Public Law).

3. New approach to organizing the legal space of the Universe, taking into account the principles of “domestic room” and “alien room”.

4. New methods to determine the spatial-territorial jurisdiction of States, based on dividing the entire aerospace into several special layers, namely, a layer of spatial safety of States (up to an altitude of 1,000 kilometers or 621 miles above sea level), a layer of spatial security of humanity (up to an altitude of 36,000 kilometers or 22,370 miles above sea level and the Moon), and open space.

5. The introduction of a new theory “*Res Nullius Civitatis*” to determine the legal status of outer space and celestial bodies.

The 4th stage. The study on the creation of the Cosmic Law Portal with elements of a database management system containing all legal documents in this area and the results of their analysis as well as mechanisms for tracking and monitoring terminology, the evolution of theses and antitheses, and other features of Outer Space Law.

The estimated duration of research at this stage is 1–2 years.

The 5th stage. Involving specialists and scientists from all over the world in the discussion and analysis of legal documents in the field of Outer Space Law based on the platform (including holding scientific conferences based on this platform).

The estimated duration of research at this stage is 2–3 years.

The 6th stage. Presenting the platform to the world community and introducing humanity to the legal systems of Outer Space Law and the process of their creation.

The estimated duration of research at this stage is 1–2 years.

The 7th stage. The research and application of public opinion and public position related to Outer Space Law through voting on legal acts adopted in the field of Outer Space Law.

The estimated duration of research at this stage is 2–5 years.

Conclusion. The estimated duration of the entire research for the establishment and implementation of the platform could be 13–25 years. However, the mentioned period can be reduced several times with proper funding for scientific work.

In the future, the platform can become the basis for the development of a new, effective, and equitable Outer Space Law, which would regulate relations not only between or among States but also between or among astronauts, and space colonizers as well as private space companies in Cosmos and on Earth. Ideally, in the future, the international community will be able to become a full participant in the process of creating Outer Space Law.

This is probably the only chance to protect humanity from military conflicts in Space and their spillover into Earth.

Literature

1. Григоров О. М. Міжнародне космічне право. Харків : Право, 2023. 130 с.

2. Малишева Н. Р. Нариси з космічного права. Київ : Алерта, 2010. 296 с.

3. Asamoah O. Y., Asamoah O. Y. Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. *The Legal Significance of the Declarations of the General Assembly of the United Nations*. Dordrecht: Springer Netherlands, 1966. P. 129–160.

4. Cheng B. Studies in International Space Law. Oxford University Press, 1997. DOI: 10.1093/acprof: oso/9780198257301.001.0001.

5. Csabafi I. A. The Concept of State Jurisdiction in International Space Law. Dordrecht: Springer Netherlands, 1971. 197 p.

6. Diederiks-Verschoor I. H. P., Kopal V. An introduction to space law. 3rd rev. ed. Alphen aan den Rijn, The Netherlands: Frederick, MD: Kluwer Law International; Sold and distributed in North, Central and South America by Aspen Publishers, 2008. 249 p.

7. Hobe S. Pioneers of space law. Leiden; Boston: Martinus Nijhoff Publishers, 2013. 212 p.

8. Lai A. K. The cold war, the space race, and the law of outer space: space for peace. Milton Park, Abingdon, Oxon; New York, NY: Routledge, 2021.

9. Lyall F., Larsen P. B. Space law: a treatise. Farnham, Surrey, England; Burlington, VT: Ashgate, 2009. 596 p.

10. Marboe I. Soft law in outer space: the function of non-binding norms in international space law. Wien: Bцhlau Verlag, 2012. 407 p. (“Studien zu Politik und Verwaltung” Series).

11. Marinich V.K., Myklush M.I., Yara O.S. Outer Space Public Law: the 1958–1963 period. Part 1. *The collection of "Uzhhorod National University Herald. Series: Law"*. 2023. Vol. 2, Is. 79. DOI: 10.24144/2307-3322.2023.79.2.54.

12. Marinich V.K., Myklush M.I. Fundamental principles of outer space (cosmic) law development. *International scientific journal "Internauka". Series: "Juridical Sciences"*. 2023. № 12. DOI: https://doi.org/10.25313/2520-2308-2023-12-9510.

13. Marinich V.K., Myklush M.I., Yara O.S. Outer Space Public Law: the 1958–1963 period. Part 2. *Analytical and Comparative Jurisprudence*. 2023. Is. 5. P. 639–647. DOI: 10.24144/2788-6018.2023.05.113.

14. Marinich V.K., Myklush M.I., Yara O.S. Regulation of space activities during 1958–1963. *Analytical and Comparative Jurisprudence*. 2023. Is. 4. P. 582–595. DOI: 10.24144/2788-6018.2023.04.91.

15. Marinich V.K., Myklush M.I. Space Law, Subjects and Jurisdictions: pre-1963 period. *Analytical and Comparative Jurisprudence*. 2023. Is. 4. P. 569–581. DOI: 10.24144/2788-6018.2023.04.90.

16. Ogunbanwo O.O. International Law and Outer Space Activities. Dordrecht: Springer Netherlands, 1975. 272 p.

17. Shaw M.N. International law. 5th ed. Cambridge, U.K.; New York: Cambridge University Press, 2003. 1288 p.

18. Smith M.S. The first quarter-century of spaceflight. *Futures*. 1982. Vol. 14, Is. 5. P. 353–373. DOI: 10.1016/0016-3287(82)90056-8.

19. Steer C., Hersch M.H. War and peace in outer space: law, policy, and ethics. First edition. New York: Oxford University Press, 2021. 313 p.

20. Treaty banning nuclear weapon tests in the Atmosphere, in outer space and under water. Signed at Moscow, on 5 August 1963. No. 6964. *UNTC*.

21. Tronchetti F. Fundamentals of Space Law and Policy. New York: Springer, 2013. ("SpringerBriefs in Space Development" Series).

22. UN General Assembly (12th Sess. 716th plenary meeting). Regulation, limitation and balanced reduction of all armed forces and all armaments; conclusion of an international convention (treaty) on the reduction of armaments and the prohibition of atomic, hydrogen and other weapons of mass destruction. Resolution 1148. 1957.

23. UN General Assembly (13th Sess. 792nd plenary meeting). Question of the peaceful use of outer space. Resolution 1348. 1958.

24. UN General Assembly (14th Sess. 856th plenary meeting). International co-operation in the peaceful uses of outer space. Resolution 1472. 1959.

25. UN General Assembly (16th Sess.). International co-operation in the peaceful uses of outer space. Resolution 1721. 1961.

26. UN General Assembly (17th Sess.1192nd plenary meeting). International co-operation in the peaceful uses of outer space. Resolution 1802. 1962.

27. UN General Assembly (18th Sess. 1244th plenary meeting). Question of general and complete disarmament. Resolution 1884. 1963.

28. UN General Assembly [18th Sess. 1280th plenary meeting]. Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. 1962.

29. UN General Assembly (18th Sess. 1280th plenary meeting). International Co-operation in the peaceful uses of outer space. *Resolution 1963*. 1963.

References

1. Hryhorov O.M. Mizhnarodne kosmichne pravo [International space law]. Kharkiv: Pravo, 2023. 130 p. [in Ukrainian].

2. Malysheva N.R. Narysy z kosmichnoho prava [Essays on space law]. Kyiv: Alerta, 2010. 296 p. [in Ukrainian].

3. Asamoah O.Y., Asamoah O.Y. Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. *The Legal Significance of the Declarations of the General Assembly of the United Nations*. Dordrecht: Springer Netherlands, 1966. P. 129–160.

4. Cheng B.Studies in International Space Law. Oxford University Press, 1997. DOI: 10.1093/acprof: oso/9780198257301.001.0001.

5. Csabafi I.A. The Concept of State Jurisdiction in International Space Law. Dordrecht: Springer Netherlands, 1971. 197 p.

6. Diederiks-Verschoor I.H.P., Kopal V. An introduction to space law. 3rd rev. ed. Alphen aan den Rijn, The Netherlands: Frederick, MD: Kluwer Law International; Sold and distributed in North, Central and South America by Aspen Publishers, 2008. 249 p.

7. Hobe S. Pioneers of space law. Leiden; Boston: Martinus Nijhoff Publishers, 2013. 212 p.

8. Lai A.K. The cold war, the space race, and the law of outer space: space for peace. Milton Park, Abingdon, Oxon; New York, NY: Routledge, 2021.

9. Lyall F., Larsen P.B. Space law: a treatise. Farnham, Surrey, England; Burlington, VT: Ashgate, 2009. 596 p.

10. Marboe I.Soft law in outer space: the function of non-binding norms in international space law. Wien: Bцhlau Verlag, 2012. 407 p. ("Studien zu Politik und Verwaltung" Series).

11. Marinich V.K., Myklush M.I., Yara O.S. Outer Space Public Law: the 1958–1963 period. Part 1. The collection of "Uzhhorod National University Herald. Series: Law". Vol. 2, Is. 79. DOI:10.24144/2307-3322.2023.79.2.54.

12. Marinich V.K., Myklush M.I. Fundamental principles of outer space (cosmic) law development. International scientific journal "Internauka". Series: "Juridical Sciences". Is. 12. DOI: https://doi.org/10.25313/2520-2308-2023-12-9510.

13. Marinich V.K., Myklush M.I., Yara O.S. Outer Space Public Law: the 1958–1963 period. Part 2. Analytical and Comparative Jurisprudence. Is. 5. P. 639–647. DOI: 10.24144/2788-6018.2023.05.113.

14. Marinich V.K., Myklush M.I., Yara O.S. Regulation of space activities during 1958–1963. Analytical and Comparative Jurisprudence. Is. 4. P. 582–595. DOI: 10.24144/2788-6018.2023.04.91.

15. Marinich V.K., Myklush M.I. Space Law, Subjects and Jurisdictions: pre-1963 period. Analytical and Comparative Jurisprudence. Is. 4. P. 569–581. DOI: 10.24144/2788-6018.2023.04.90.

16. Ogunbanwo O.O. International Law and Outer Space Activities. Dordrecht: Springer Netherlands, 1975. 272 p.

17. Shaw M.N. International law. 5th ed. Cambridge, U.K.; New York: Cambridge University Press, 2003. 1288 p.

18. Smith M.S. The first quarter-century of spaceflight. Futures. Vol. 14, Is. 5. P. 353–373. DOI: 10.1016/0016-3287(82)90056-8.

19. Steer C., Hersch M.H. War and peace in outer space: law, policy, and ethics. First edition. New York: Oxford University Press, 2021. 313 p.

20. Treaty banning nuclear weapon tests in the Atmosphere, in outer space and under water. Signed at Moscow, on 5 August 1963. No. 6964. *UNTC*.

21. Tronchetti F. Fundamentals of Space Law and Policy. New York: Springer, 2013. ("SpringerBriefs in Space Development" Series).

22. UN General Assembly (12th Sess. 716th plenary meeting). Regulation, limitation and balanced reduction of all armed forces and all armaments; conclusion of an international convention (treaty) on the reduction of armaments and the prohibition of atomic, hydrogen and other weapons of mass destruction. *Resolution 1148*. 1957.

23. UN General Assembly (13th Sess. 792nd plenary meeting). Question of the peaceful use of outer space. *Resolution 1348*. 1958.

24. UN General Assembly (14th Sess. 856th plenary meeting). International co-operation in the peaceful uses of outer space. *Resolution 1472*. 1959.

25. UN General Assembly (16th Sess.). International co-operation in the peaceful uses of outer space. *Resolution 1721*. 1961.

26. UN General Assembly (17th Sess.1192nd plenary meeting). International co-operation in the peaceful uses of outer space. *Resolution 1802*. 1962.

27. UN General Assembly (18th Sess. 1244th plenary meeting). Question of general and complete disarmament. *Resolution 1884*. 1963.

28. UN General Assembly [18th Sess. 1280th plenary meeting]. Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space. 1962.

29. UN General Assembly (18th Sess. 1280th plenary meeting). International Co-operation in the peaceful uses of outer space. *Resolution 1963*. 1963.