CORRUPTION AS A GLOBAL PHENOMENON AND ITS IMPACT ON THE SPACE INDUSTRY DEVELOPMENT

Abstract. The purpose of the article is to reveal the issues of combating corruption in the space industry.

Results. This study analyses corruption, its impact on the space industry development, because in the context of the rapid development of new space technologies, building a new model of the space economy and the world rethinking of the prospects of the space industry, the development of its unknown spaces is an extremely relevant issue. In the international arena, the active condemnation of all forms of corruption, including bribery, began in the second half of the twentieth century, what is more at the advent of international legal anticorruption mechanisms its existence was recognized exclusively in the field of transnational business, and over time, discussions of corruption in public administration began in the world. Corruption is, first and foremost, a conscious choice of everyone, whether active or passive. In general, corruption is a pervasive phenomenon, which includes, on the one hand, manifestations of any abuse of a special status and, on the other hand, the motivation and active action to implement them by other persons concerned. In other words, it is a two-way relationship, a symbiosis of needs and benefits.

Conclusions. It is proved that corruption in the space industry is a cumulative indicator of its existence in the state, in its main sectors. Public-private partnership in the field of space activities implies both positive and negative aspects. In this case, corruption exists in the public sector in general and in the space industry, in particular. The space industry is slowing down in development because the funds that should potentially be spent on research and development of outer space are not used for their intended purpose. Accordingly, there is no innovation activity, technological progress is minimal. Therefore, the priority is to eradicate corruption both in the world and in individual countries, because it, like a viral infection, tends to migrate, threatening all of humanity.

Key words: corruption, anti-corruption, space industry, space activities, outer space, world cooperation, transnational business.

1. Introduction
It is evident that corruption is a negative phenomenon that permeates all sectors of both public and state sectors, not just in two, but in many countries around the world.

The current existence of this phenomenon is historically determined and quite natural. For thousands of years, corruption has either been encouraged or banned. It is clear that this was done in different ways, by different authorized entities and with the use of tools that met the needs of the time. However, it should be understood that corruption is, first and foremost, a conscious choice of everyone, whether active or passive.

The international community has long identified corruption as a mass phenomenon, a global disease that is gradually poisoning key areas of national and global economic development. The space industry is no exception, as space has always been a source of inspiration for researchers and scientists, who, by the way, have greatly expanded human knowledge about it, which has greatly improved our daily lives (Concini, Toth, 2019).

The commercial interest of private businesses in space technology encourages them to seek forms of cooperation with government institutions that have a powerful administrative resource and technological heritage of the era of “military space race”. At the same time, the state is interested in attracting material, financial, intellectual and other types of private investment for the qualitative renewal of its production and service facilities (Maly sheva, Hurova, 2019, p. 73). Currently, this situation is the starting point for the exploration and use of outer space within the framework...
of public-private partnership, the development of which depends significantly on national policy, legal regulators and the economic basis created by the state. However, public-private partnership in the field of space activities implies both positive and negative aspects. In this case, corruption exists in the public sector in general, and in the space industry in particular. The space industry is slowing down in development precisely because the funds that should potentially be spent on research and development of outer space are not used for their intended purpose.

Therefore, in the context of the rapid development of new space technologies, construction of a new model of space economy and the world rethinking the prospects of the space industry, it is extremely important to study whether corruption affects the development of space industry.

Some features of understanding the essence of the category of “corruption” are highlighted in the works by scientists such as: D. Zabroda, V. Zavhorodnii, Y. Kovalenko, O. Tkachenko, and others. The issues of the development of space activities were considered in the works by scientists such as: L. Soroka, N. Malyshova, H. Hurova, and others. However, in the proposed way, their scientific research has not addressed this topic.

The purpose of the article is to reveal the issues of combating corruption in the space industry.

2. Development trends in the space industry

As soon as people shifted from abstract thinking to the practical use of outer space for peaceful purposes, space law emerged. This happened on October 4, 1957, when the first satellite flew around the planet to an altitude of more than 200 kilometres above the state borders of sovereign states. None of them protested to the state, an owner of the first satellite, which led to the first rule of space law “instant principle”, that is, any country has the right to launch into orbit civilian artificial satellites without asking permission from other states (Kobzar, Danylenko, 2019).

Since then, a rapid development of the space industry has begun, initially under the monopoly of governments, the only entities that could afford complex and risky projects (Christensen, Magnus, 2019), associated with space exploration and development. Today, a review of the space environment shows the dynamics of change, that is, space activities are not exclusively the prerogative of government institutions, but of new companies, from small businesses with two people to large corporations that have many different business concepts. In addition, companies that have been involved in space for decades are rethinking and adjusting their approaches in the context of the changes that are taking place (Christensen, Magnus, 2019).

Nowadays, the rocket and space industry of Ukraine has two priority state tasks: creation and implementation of space, as well as rocket and space, projects in accordance with the “National target scientific and technical space program of Ukraine” (Order of the Cabinet of Ministers of Ukraine “On approval of the Concept of the National target scientific and technical space program of Ukraine for 2021–2025”, 2021), focused on solving economic problems and increasing the economic return from the use of space products (satellite information received from national Earth observation devices, satellite communications, telecommunication broadcasting, navigation services, research and experiments); creation of modern missile weapons for the needs of the Armed Forces of Ukraine with a focus on ensuring the return on public investment through possible subsequent exports (Soroka, 2021).

In view of the persistent lack of budget funds and forecast data on the economic development of the state for the near and future, it is quite problematic to solve these problems with the traditional approach. Given that the vast majority of enterprises in the space industry are state-owned, and private companies have only just begun to participate in commercial space activities, a possible way out of this situation is to expand public-private partnerships.

According to Art. 1 of the Law of Ukraine “On Public-Private Partnership”, public partners can be: the State of Ukraine, the Autonomous Republic of Crimea, territorial communities represented by relevant state bodies and local self-governments (Law of Ukraine “On Public-Private Partnership”, 2010). In the field of space activities, the state acts as a partner in the person of the State Space Agency of Ukraine.

3. Corruption manifestations in the space industry

In the author’s opinion, corruption in the space industry should be considered broadly. Corruption of officials, who are public figures directly involved in the development of the space industry, is only one side of the phenomenon under study. In addition, the issues of combating corruption in the field of budgeting, administrative services, education, aerospace and defence industry, the interaction of government and business are important. Accordingly, corruption in the space industry is a cumulative indicator of its existence in the state, in its main sectors.

Given the urgent need for the fastest adaptation of the space industry to the conditions of a market economy, taking into account all the above, it is necessary to amend the Law
of Ukraine “On Public-Private Partnership” and provide for:
- the status of public policy granted to relations between the state and its private partners in the space industry;
- a clear transparent mechanism for interaction of organizations and enterprises of the industry with private partners (to minimize corruption risks), providing maximum motivation for their involvement in practical activities (public-private partnership in space should be attractive to business);
- the right to establish legal structures in the space industry of Ukraine with the participation of public and private partners, a share of public property thereof can be used to implement business ideas that will expand Ukraine’s international activities in this field;
- when creating public-private partnership structures, safeguards for private partners on mandatory retention in the production of space technology and their support, despite changes in management, the need to consolidate assets with their further division into segments according to new business strategies with shifting emphasis towards more profitable products, etc. (Law of Ukraine “On Public-Private Partnership”, 2010).

According to the Bank of America Merrill Lynch, the main driving force of the new space race will be the interests of the defence industry, but Space Age 2.0 will be characterized by other factors: innovation of private companies, business, attracting new countries, reducing the cost of space launches (Bank of America Merrill Lynch, 2017). This, in turn, will stimulate all actors in space activities to find optimal forms of cooperation (public-private cooperation, international cooperation, etc.). Therefore, minimizing corruption factors is a priority for the Ukrainian political elite. And although Ukraine, according to the Corruption Perceptions Index (CPI)\(^1\), is not one of the ten least corrupt countries, but it is hoped that the space industry will set an example for other sectors in preventing corruption and bring the country to the top of the rankings. After all, in countries where society is free from corruption, transparent, decision-making on anti-corruption policy is responsible and conscious and, accordingly, its implementation is fair. Citizens, first of all, respect themselves and others, violation of their rights is considered unacceptable. There are mostly no discriminatory manifestations, as it is not expedient to talk about the absolute in this case, but it is quite possible to assert the ideal. Society is really endowed with the opportunity to influence the government by exercising its constitutional right to participate in various political and economic decisions. Citizens and the authorities are subject to the rule of law, but have the right to freely express their views, honest and open media and their own moral and ethical right to oppose corrupt officials and businessmen.

4. Conclusions

All countries are different, and in all aspects. There are no identical ones. Some have the rule of law, the state apparatus functions harmoniously, the economy is constantly developing, citizens are socially protected, and young people develop their talents and skills. And others are in chaos – citizens complain about the government, retirees and young people are vulnerable, almost unprotected, and the ruling elite has all the possibilities beyond comprehension – unprecedented wealth: offshore accounts, own aircraft and ships, foreign villas or even palaces.

It is clear that in such conditions, the space industry of a particular country is somewhere better and somewhere less developed. However, in conclusion, the main question posed in this study should be answered: does corruption affect the development of the space industry? Yes, of course, it affects. If this phenomenon did not have global consequences, would the international community take its eradication so seriously? The answer is obvious.

Global cooperation in the fight against corruption is the main mechanism for reducing its manifestations. Sharing experiences, holding joint discussions, including seminars and symposiums, as well as providing material, informational or other resources to "outsider" countries in the process of eradicating corruption in their territory are the key to protecting the world from its mass spread. These are tools for its containment, which in modern conditions are complemented by low innovation, which, by the way, prove its effectiveness.

The space industry is slowing down in development precisely because the funds that should be spent on research and development of outer space are not used for their intended purpose. Accordingly, there is no innovation activity, technological progress is minimal.

Therefore, the priority is to eradicate corruption both in the world and in individual countries, because it, like a viral infection, tends to migrate, threatening all of humanity.

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\(^1\) For example, Denmark is rightly considered one of the least corrupt in the world. This is confirmed by the annual analytical results of the Corruption Perceptions Index (CPI), an indicator calculated since 1995 by Transparency International (the organization itself does not conduct its own surveys, but calculates the Index based on 13 studies of reputable international institutions and research centres) (Transparency International, 2019). Thus, in recent years, Denmark is the undisputed leader in the world, which with small fluctuations, but retains its position in the top ranking – the least corrupt countries.
References:


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КОРУПЦІЯ ЯК ГЛОБАЛЬНЕ ЯВИЩЕ ТА ЇЇ ВПЛИВ НА РОЗВИТОК КОСМІЧНОЇ ГАЛУЗІ

Анотація. Метою статті є з’ясування питань протидії корупції в космічній галузі.

Результати. Роботу присвячено аналізу явища корупції, його впливу на розвиток космічної галузі, а також вивчити роль корупції в державному управлінні. Корупція – це насамперед свідомий вибір кожного незалежно від того, який характер вона має – активний чи пасивний. В узагальненому значенні корупція – це відхилення від норм і законів, сприяючи їх втіленню іншими зацікавленими особами. Тобто це двосторонній зв’язок, симбіоз потреб і вигод.

Висновки. Доведено, що корупція в космічній галузі проявляється у сукупній показник її існування в державі, у головних її секторах. Державно-приватне партнерство у сфері космічної діяльності несе в собі відповідальність за свої дії. У сфері космічних проектів може виникати корупція, яка може мати негативні наслідки для вітчизняної космічної галузі. Тому вмістної забезпечення інформаційної безпеки, адаптації до змін, а також формування інноваційних ринків, які сприяють розвитку космічної галузі.

Ключові слова: корупція, протидія корупції, космічна галузь, космічна діяльність, космічний простір, світова кооперація, транснаціональний бізнес.

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