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## The peculiarities of Space State Information Policy

### Specyfika polityki informacyjnej państwa kosmicznego

### Abstract

The purpose of the article is to establish and research the features of space state information policy, which requires the following research tasks to be revealed: to determine the place and role of information policy in the structure of state policy and to establish the dependence of the state's information policy on the development of the space industry and to determine the features of the information policy of the USA as a space state.

The USA forms its information policy based on knowledge of the use of advanced technologies, including information technologies, in the space industry. Knowing about the threats of their use, the state warns the population by regulating information activities. Therefore, the information policy of a space state is more developed than that of non-space states. An analysis of the relationship between the state of information policy and the state of the US space industry indicates that the development of one area affects the other. Therefore, in order to implement an effective information policy, both areas should be developed. When creating an information policy, it is expedient to create a project for financing the technological base of the state and forming skills among the population regarding the correct use of information. At the same time, it is possible to form laws that will regulate such activities. Thus, planned development will take place. It is important to pay attention to the creation of legislations that will contribute to the protection of the internal and foreign political interests of the population and the state as a whole. Control over mass media must comply with the principles of democracy and freedom of speech.

**Key words:** information policy, space state, space industry, information society, national information policy, information infrastructure, information resources.

#### Abstrakt

Celem artykułu jest ustalenie i zbadanie cech polityki informacyjnej państwa kosmicznego, co wymaga ujawnienia następujących zadań badawczych: określenie miejsca i roli polityki informacyjnej w strukturze polityki państwa oraz ustalenie zależności polityki informacyjnej państwa w sprawie rozwoju przemysłu kosmicznego oraz określenia cech polityki informacyjnej USA jako państwa kosmicznego.

USA kształtują swoją politykę informacyjną w oparciu o wiedzę o wykorzystaniu zaawansowanych technologii, w tym informatycznych, w przemyśle kosmicznym. Wiedząc o zagrożeniach związanych z ich użyciem, państwo ostrzega ludność regulując działalność informacyjną. Dlatego polityka informacyjna państwa kosmicznego jest bardziej rozwinięta niż państw niekosmicznych. Analiza relacji między stanem polityki informacyjnej a stanem przemysłu kosmicznego USA wskazuje, że rozwój jednego obszaru wpływa na drugi. Dlatego w celu realizacji skutecznej polityki informacyjnej należy rozwijać oba obszary.

Przy tworzeniu polityki informacyjnej celowe jest stworzenie projektu finansowania bazy technologicznej państwa i kształtowania wśród ludności umiejętności prawidłowego korzystania z informacji. Jednocześnie możliwe jest tworzenie ustaw, które będą regulować takie działania. W ten sposób nastąpi planowany rozwój. Ważne jest zwrócenie uwagi na tworzenie ustawodawstwa, które przyczyni się do ochrony wewnętrznych i zagranicznych interesów politycznych ludności i państwa jako całości. Kontrola nad środkami masowego przekazu musi być zgodna z zasadami demokracji i wolności słowa.

Słowa kluczowe: polityka informacyjna, państwo kosmiczne, przemysł kosmiczny, społeczeństwo informacyjne, polityka informacyjna państwa, infrastruktura informacyjna, zasoby informacyjne.

### Introduction

In the life of the modern international community, information, which has become the main product of industrial relations, continues to play a special role. The information society, or the society based on knowledge (Knowledge Society), currently functions and develops on the basis of the development of information and communication technologies, which satisfies the interests of not only individual people, but is very important for the whole society.

States, responding to such challenges, adopt norms and laws that control activities related to the use of information. They form an information policy, but not always effective, because it depends both on the level of development of the state institution itself and the development of information technologies.

Based on the essence of the investigated problem, it should be noted that traditionally, it is the space states that are the most developed in this regard. Modern scientific research is mainly focused on the studied indicators of the impact of the development of information technologies in relation to the development of the state. Thus, the rate of the state's development is the evidence of its influence on the international arena. The problem of the relationship of information policy with the indicators of the development of the space industry in the state, and the features of the information policy of the space state itself, in our opinion, has largely remained outside the scope of the attention of the world research community. Considering this, the study of this problem becomes truly relevant.

## Methods and materials

As the main method, a systems analysis was used to determine the relationship between information policy and the development of the US space industry.

Information policy emerged in the last decades of the 20<sup>th</sup> century, creating a separate industry. It became one of the manifestations of the transition from an industrial society to an information society. (Braman, 2011) Nowadays, people are constantly surrounded by information that has become a product of industrial relations. For the safety of the world population, it is important to control such activities. For this purpose, information policy is introduced in the structure of state policy.

The classic definition of information policy covers issues such as access to government information, although the earliest use of the phrase "information

policy" by governments was actually based on propaganda efforts during World War I.

During the 1970s and 1980s, national governments around the world appealed to the idea of developing a comprehensive "national information policy". Such discussions created the turning point in the assessment of the importance of information policy, because it creates the conditions under which decision-making, public discourse, and political activity take place.

However, for a long time, it was considered a significant policy. The concept of a national information policy became possible only because political leaders around the world recognized that the laws and regulations affecting information were in fact policy matters of strategic importance. However, ultimately, few governments have implemented a single set of information policies. But, despite this, the intensity of information policy formation continued to grow throughout the world. (Braman, 2011)

Determining the reasons for the emergence and development of information policy, it is worth noting that until the 1980s of the 20<sup>th</sup> century, policy has usually driven the development of technology to the point that state and federal government agencies have promoted research and development in the field. Since the development and dissemination of innovations in the information sphere increased, the information policy was conditioned by the development of technologies. These processes forced those who study information policy to depart from traditional views. (Jaeger, Gorham, Taylor, Bertot, 2015)

The term information policy was used to denote political initiatives promoting the use of tools and concepts related to the global information society in order to realize their potential in achieving the goals of national, social, and economic development. (Mutongi, Marume, 2016)

The information policy has the following levels:

- 1. Infrastructural policy related to the development of the national infrastructure necessary to support the information society. The absence of infrastructure policies and implementation strategies will make it impossible to implement any other vertical or horizontal policies related to ICT and is a necessary condition for progress in other areas.
- 2. Vertical information policy, including sectoral policies such as education, tourism, production, health care.
- 3. Horizontal information policy refers to those policies that affect aspects of society, such as policies related to freedom of information, tariffs and pricing, as well as the use of ICT by the government within the country and in its relations with, for example, citizens, businesses, the workforce, academic circles. (Mutongi, Marume, 2016)

Information policy can act as a means of solving global problems, and it has such advantages as:

- 1. Information policy can provide a consistent, coordinated, long-term strategic approach to issues of technological access for all, creation and maintenance of freely available information resources, training on how to effectively find, use and transfer information.
- 2. Information policies can be developed through consensus involving all stakeholders, which will increase the likelihood of implementation and sustainability. (Weiner, 2013)

Along with the advantages, the information policy has a number of disadvantages:

- 1. Information policy is usually not a goal itself, but supports other initiatives.
- 2. Some governments are not in favor of unlimited global access to information and its dissemination.
- 3. Governments can use information policy for political purposes, for example, to prevent communication and discussion of administrative actions, to protect private interests, and to increase public fear. (Weiner, 2013)

The spheres of information policy influence are as follows:

# (A): Information infrastructure (technologies that allow access to information)

Nations with networked information capabilities have the basis for new opportunities for economic development, exchange of scientific, technical and business knowledge, and cooperation. The World Bank found that increasing network coverage in low- and middle-income countries accelerated economic growth. (Weiner, 2013) There are connections between the process of creation, processing, access and use of information, and the process of social and economic development. These include correlations between progress in overall state development and the ICT progress and assessments of the causal effects of ICT on economic and social outcomes.

Of course, there is a difference between countries with high, medium, and low economies, between rural and urban communities, between wealthy people and poor people. In many countries, women have less access to ICT and less technology skills than men. (Weiner, 2013) Inequality in access to information and insufficient training in the use of information hinders collective problem solving that can lead to dynamic, innovative results that can improve the situation in the state.

In many education systems, there is no policy on the use of information that ensures that educators are trained according to the needs and challenges of the  $21^{st}$  century. There are no monitoring systems that can provide evidence of the positive or negative impact of ICT on education.

# (B): Information resources (content of knowledge; their availability through open access; their legal and ethical use)

States are creating strategies for developing open access policies. Open access leads to opportunities for equitable economic and social development, intercultural dialogue and has the potential for innovation. Open information and formal training in the educational system of finding and using information provide the maximum potential for effective solutions to global problems in the world community.

States need resources for timely monitoring of the situation in the world. After all, there are certain restrictions on access. It is common knowledge that people who speak English have greater access to information. After all, English is an international language, so many works are written or translated into English or from it. People with greater access to education, including languages, and with more economic resources to access information, may use English-language resources as well as have access to regional resources available in their native language.

Access to global information is limited if English is not widely accepted in the community, and this limits the country's international competitiveness. (Weiner, 2013) Societies that rely heavily or exclusively on oral communication, have high levels of illiteracy, or do not have the financial means to pay for resources that are available online. Hence, such communities do not benefit from this source of knowledge.

# (C): Information literacy (skills and competencies of people to effectively find, use, manage and transfer information to fulfill specific goals)

The cost of information dissemination is relatively low if there is the ICT infrastructure. But access to information alone does not guarantee that people will be able to find and use information effectively. (Weiner, 2013) People need information literacy.

In the information society, it is important to provide the population with information literacy. Its understanding at the policy level varies greatly. For example, Australia provides students with basic knowledge in this field. The Bologna Process also includes classes in information literacy, and Belgian students and teachers must take a course in information retrieval. In France, there is financial, institutional and government support, and a 1996 law helped integrate information literacy into the school curriculum. Nordic countries work together to encourage development, find common solutions and document projects in this area. Denmark and Norway are starting to introduce information literacy in educational institutions. The Swedish legal system requires higher education to develop information skills. ICT is not well developed in French-speaking Africa, so information literacy training covers the use of printed resources. In Latin America, such knowledge is also acquired in higher education institutions, although it is usually not part of the curriculum. (Weiner, 2013) Of course, information literacy in each state depends on many factors, but regional unevenness can lead to negative consequences for many countries.

The success of different approaches to information policy is rather ambiguous. Most countries do not have a coordinated, well-planned multi-stakeholder strategy, prioritization and sufficient funding to address ICT challenges, create appropriate information resources, or train on the use of technologies and resources. As a result, local communities cannot fully participate in the development and implementation of solutions to their social problems.

The form of the political regime and economic indicators also have some influence. High-income countries tend to have full democracy, while lowincome countries tend to have authoritarian regimes. None of the low-income countries has full democracy, and only 2.5% of authoritarian regimes have high-income economies. Thus, the type of government is an important factor to consider in determining whether countries will have the economic means to support information policies. (Weiner, 2013) After all, the financial factor affects the provision of appropriate infrastructure and information resources to which citizens will have access. Under such conditions, it is possible to teach information literacy and establish an information policy.

So, the information policy regulates the information activity of the population. However, it is important not only to create laws, but also to provide people with infrastructure, resources, and literacy. As information technology develops and the number of users increases, it is also important to develop appropriate policies. In a modern society, information policy shapes individual security and the entire state.

In the information society, it is important to implement information policy at the state level. After all, it is necessary to plan and think over the main areas and laws of such a policy in order to form a certain information awareness of a given country's population. The information policy introduced by the state usually becomes an important factor in the functioning of the information society. It promotes the involvement of various social groups in political life, free access to power and priority areas of domestic and foreign policy. The democratization of the state also occurs at the expense of the state information policy, which, in turn, contributes to the strengthening of civil society, the satisfaction of the interests of its subjects, and the protection of their rights and freedoms. (Сірий, Турченко, 2012)

Information policy is unique for several reasons.

**Firstly**, it is meta-politics because it affects almost everything else in the world dominated by information and communication technologies.

**Secondly**, many other policy areas depend on information policy. Economic growth, political debate, technological innovation, citizen activism, development and urban planning are largely determined by information policy decisions.

**Thirdly**, information policy governs a vast array of institutions, including not only those in which information is central to their existence, such as libraries, schools, archives, and museums, but also government agencies, corporations, and nonprofit organizations, dictating rules for managing, collecting, sharing and other aspects of their use of information.

**Fourthly**, information policy decisions create obvious advantages and disadvantages throughout society, with each information policy decision directly affecting a vast number of groups and organizations. After all, information, unlike other resources that are key policy areas, is not finite. Unlike other resources, information cannot be used exhaustively, it can always be created in excess, creating a unique dynamic.

**Fifthly**, although information is theoretically unlimited, its availability in the long term may change due to a number of problems, such as information storage and retrieval, media on which information is recorded, and other factors.

Such policies are created primarily by local, state, and national governments through laws, executive orders, regulations, signing statements, rulemaking, memos, and other governance processes. (Jaeger, Gorham, Taylor, Bertot, 2015)

All political work in the field of information policy must begin with a careful study of both individual and public information needs, so that the developed policy takes into account the needs and concerns of the citizens and society that the policy is meant to govern. Of course, there are many different needs, and these needs often conflict with each other. Certain public institutions may pull in one direction and individuals and other institutions in the other, leading to conflicts between the desire of some to provide unrestricted access to most information and the desire of others to limit access to protect security or private property interests. Policy-making is best described as a matter of balancing concerns and interests. Understanding these issues, needs and interests is critical to developing the right policies.

The use of information policy reflects the state's modernity, as issues of privacy and e-government are particularly familiar. The availability of such technologies and laws greatly facilitates the life of the population of the state. Therefore, information policy promotes the involvement of various social groups in political life, free access to power and priority areas of domestic and foreign policy.

The USA has significant financial, technological, scientific and technical and military potential, and also pays great attention to strengthening national security, protecting civil rights, and business interests. The experience of this state in the field of information security management is the most important to study. The importance of information security management in the USA at the state level is also determined by the fact that the largest financial companies, research centers and corporations are concentrated in this state, which significantly influences the development of technologies, financial stability and economic development of the entire world community. (Голод, 2017)

The information industry is considered as the main strategic factor of competition and the leading sector of the country's economy. Information policy covers a wide range of government measures: aimed at the creation of information technologies and their management; related to information flows; related to the impact of information technologies and information flows on specific institutions or the sphere of public activity. One of the key areas of development of information security, as in other states, is ensuring national security, namely the security of information systems of "power" agencies such as military forces and foreign intelligence. ( $\Gamma O \pi O \pi, 2017$ )

Principles of the US information policy:

- 1. Protection of personal life, security and reliability of networks.
- 2. Assistance in technological innovations.
- 3. Coordination of state efforts.
- 4. Attracting private investments.
- 5. Providing access to state information.
- 6. Provision of interactive access.
- 7. The concept of universal access.
- 8. Improvement of radio frequency spectrum management.

The general basis of information policy in the USA is the "State Information Policy" of 1997. In the document, information policy has three areas. The main principles related to the state information policy should be the same as the principles of the general state policy. As a general rule, the government should not be involved in the creation of information if:

- 1. Information does not create positive external effects.
- 2. Private production of information will take place under conditions of monopolization.
- 3. The government is particularly effective in creating relevant information.

The unique nature of information as an economic good has been recognized by many observers. A key aspect of information for analysis purposes is that information is expensive to produce but very cheap to reproduce, especially in the digital form. This property suggests that efficiency is ensured by providing information in free access. But the question arises as to who will pay for information in the first place and what information should be provided to begin with.

In the USA, an information policy has been established to provide citizens with information on government activities and a policy for the protection of confidential information has been created. Moreover, the government introduced the law which is regularly supplemented in accordance with modern requirements.

The American privacy law is a complex collection of national, state, and local privacy laws and regulations. (*Federal and State...*) There is no comprehensive national privacy law in the United States. However, in the US, there are a number of privacy and data security laws at the federal level, as well as many other privacy laws at the state (and local) level.

Federal laws and regulations include laws affecting financial institutions, telecommunications companies, credit reporting agencies, and health care providers, as well as driver's license privacy, child privacy, telemarketing, email marketing, and communications laws.

There are also a number of state data privacy and security laws that overlap with federal law – some of these state laws partially preempt the federal laws, but others do not. The US states have also enacted data privacy and security laws and regulations that apply to various sectors and go beyond federal law, such as data security laws, secure destruction, social security number privacy, online privacy, biometric privacy, and privacy laws. data breach notification.

Generally, the laws of each state apply to personal information about residents of that state or activities that occur in that state. As such, many businesses operating in the United States must comply not only with applicable federal laws, but also with a number of state privacy and security laws and regulations.

For example, California alone has more than 25 state data privacy and security laws, including the enacted California Consumer Privacy Act (CCPA), which imposes certain definitions and individual rights, and imposes significant requirements and restrictions on the collection, use and dissemination of information. Although the CCPA was the first cross-industry, comprehensive privacy law in the United States, several others have since been enacted, including the California Consumer Privacy Act (CPRA), which takes effect on January 1, 2023, and substantially amends the CCPA, expanding consumer rights and imposing additional compliance obligations and restrictions related to the personal information of California residents. The CPRA also created a new California agency that is expected to lead to increased enforcement efforts.

In addition to California, Virginia and Colorado have enacted comprehensive new state privacy laws that will take effect in 2023 – the Virginia Consumer Data Protection Act (effective January 1, 2023) and the Colorado Privacy Act (effective July 1, 2023). However, other states advocate the creation of a state privacy policy.

The USA is engaged in the creation and development of electronic government. The official White House website states that advances in information technology (IT) have been at the center of transforming how the private sector operates, revolutionizing the efficiency, convenience, and effectiveness with which it serves its customers. (Reports and Documents Resources. The White House) The federal government has largely missed this transformation due to poor management of technology investments, as IT projects too often require more money and time, often becoming obsolete at the end of the implementation period. The government's goal is to close the gap between the best private sector organizations and the federal government.

The Office of Electronic Government and Information Technology, headed by the Federal Government's Chief Information Officer, develops and provides guidelines for the use of Internet technologies to facilitate the interaction of citizens and businesses with the Federal Government, save taxpayers money, and simplify the interaction of citizens with the Government.

So, in the USA, the issue of information policy is regulated by the state and federal governments. After all, it is important to ensure the safety of every person and the state, to establish a connection between the population and the government in accordance with the requirements of modern information technologies that are developing in every state. We set ourselves a separate task – to establish the dependence of the development of the information policy of the state on the development of the space industry. To determine the interdependence of the development of the state, its information technologies and the space industry, it is necessary to outline the following indicators:

- 1. The number of inhabitants of the state. In the USA, the population is 329.1 million people. The indicator is growing, that is, the population is increasing every year. (*Total population...*, 2020)
- 2. Human Development Index is a summary indicator of average achievements in the key dimensions of human development: a long and healthy life, knowledge and a decent standard of living. According to the data of the Human Development Report of the United Nations Development Program for 2019, the United States ranks 17<sup>th</sup> in the ranking with an index of 0.926. (Human Development..., 2020)
- 3. Life expectancy. In the USA, life expectancy has been stable for 8 years and reaches 78.9 years. (Life expectancy at birth. Human Development Reports, 2020) For example, in Great Britain – 81.3, and in Ukraine – 72.1. That is, for developed countries, the US has an average expected number of years.
- 4. The education index is the average value when calculating the average number of years of schooling for adults and the expected number of years of schooling for children, both expressed as an index obtained by scaling with the corresponding maxima. (Education index. Human Development Reports, 2020 United) In the USA, this indicator reaches 0.900. That is, 90% of the population studied at school.
- 5. Level of education. It shows the percentage of the population aged 15 and over who can understand both read and write a short simple statement about everyday life [59]. According to the data, the literacy rate in the USA reaches 100%. But among 100%, according to the National Center for Education Statistics, 79% of Americans possess English language skills at an average and high level, sufficient to compare and contrast information, paraphrase and form conclusions at a low level. (U.S. Literacy Rates by State, 2022) This means that approximately 21% of the population has low literacy skills, which is approximately 43.0 million people.
- 6. GDP per capita. In the USA, an average GDP per capita is \$60,000 per person per year. (*GDP per Capita...*, 2022) The indicator is growing, and such a change reflects that with the increase in the population, the standard of living is also increasing. That is, the indicators change equally.

- 7. Percentage of GDP on research and development costs. This is current and capital expenditure (both public and private) on creative work which is systematically undertaken to advance knowledge, including knowledge of humanity, culture and society, and the use of knowledge for new applications. Research and development covers basic studies, applied research and experimental development. The USA has been steadily spending 2.8% of GDP on research for several years. (*Research and development...*, 2020)
- 8. Population employment ratio, percentage of the employed population aged 15 and older. (*Employment to population ratio. Human Development Reports*, 2020) It shows that 59.8% of the US working population has a job. However, the indicator is not stable and fluctuates from 57.4% to 63.8% for almost 30 years.
- 9. Percentage of skilled workforce among the entire workforce. The percentage of the labor force over the age of 15 with secondary or higher education, according to the International Standard Classification of Education, reaches 96.5% in the USA. (*Skilled labour force...*, 2020)
- 10. The percentage of unemployment among the working population over the age of 15 in the USA is 3.7%. The indicator decreases over the years, which indicates the employment of the population. (Unemployment. Human Development Reports, 2020)
- 11. The percentage of the population in rural areas, that has electricity, indicates people living in rural areas who have access to electricity. The indicators are expressed as a percentage of the total number of the rural population and reach 100%. (*Rural population with...*, 2020) That is, Americans, even living in villages, have access to electricity, which simplifies the use of the Internet.
- 12. The percentage of the population in cities is 82.5%. The percentage increases by about 0.2% every year. (Urban population..., 2020).
- 13. The percentage of Internet users is 87.3%. The indicator increased significantly during the time of invention and implementation of technologies, but has been stable for several years now. (*Internet users...*, 2020)
- 14. The number of prepaid mobile tariffs per 100 people reaches 123.7. That is, Americans have several mobile subscriptions, so they use mobile data, which is considered to be an element of information technology. (Mobile phone subscriptions..., 2020)
- 15. Use of the Internet. When the Pew Research Center began systematically tracking Americans' Internet use in early 2000, about half of all adults were already online. Today, 93% of American adults use the Internet. (*Internet/Broadband Fact Sheet*, 2021)

So, we can conclude that the population in the USA is growing, as well as the percentage of GDP per capita is growing, too, which is considered a good indicator, because the standard of living of the population does not deteriorate, which, in turn, is confirmed by a constant indicator of the human development index. Of course, life expectancy, education and literacy levels are average for a highly developed country. The percentage of employment of the working-age population is relatively low. However, almost all workers have qualifications, and the unemployment rate is decreasing, that is, the problem is being solved. The constant percentage of the population in rural areas that has electricity is also indicative.

Despite everything, the process of urbanization is growing even in the USA as people are moving to the city. However, the percentage of migrating people is low, that is, the population can live normally even in villages or suburban areas, which indicates the uniform development of the entire country, and the availability of electricity in rural areas makes it possible to use information technologies necessary for education, work and everyday life in the period of the information age society.

The mobile prepaid rate also provides an indication of the population's access to mobile communications, life essentials, and active use of modern facilities by Americans due to their access to modern technology.

Referring to Internet use, it should be noted that at the beginning of 2000, the Pew Research Center began to systematically monitor the use of the Internet by Americans (about half of all adults were already online).

In 2021, 93% of American adults used the Internet. It is important that in rural areas 90% of the population use the Internet, and in cities -95%. (*Internet/Broadband Fact Sheet*, 2021) So, it can be argued that the USA belongs to the highly developed countries with a high standard of living of the population, and developed information technologies.

Another factor determining interdependence is the space industry. When analyzing the US space industry, it is necessary to review the funding and the total percentage of funds that the state spends on space research. These indicators determine the development of the US industry.

Space exploration is expensive, but it is a relatively small part of the US budget. In 1966, the NASA's spending peaked at about 4.5% of the federal budget. And, it decreased to 1% in 1975, and then gradually fell, close to half a percent in recent years.

For comparison, defense spending in recent years accounted for about 20% of the budget. The Congress appropriated about \$23 billion for NASA in

2021, which is about 3% more than the previous year. (Chatzky, Siripurapu, Markovich, 2021)

With the Space Shuttle decommissioning in 2011, NASA has been without the means to send astronauts into space on its own for nearly a decade. Initially, Americans used the Russian Soyuz capsule to go to the ISS (the price is up to 82 million dollars for one seat). In 2010, two former Apollo astronauts – Neil Armstrong and Eugene Cernan – warned that the US leadership in space exploration could suffer. Such criticism, along with Trump's stated desire to land astronauts on the moon during his tenure, prompted the president to increase budget requests for the agency.

Historically, 85 to 90 percent of the NASA's budget has gone to private contractors, mostly for the design and manufacture of rockets and spacecraft, while NASA carefully monitors and adjusts the equipment.

But now, NASA also privatizes operations. Proponents of space commercialization believe that private firms such as SpaceX and Orbital Sciences, both of which won contracts to transport cargo to the ISS, could provide routine access to LEO at a much lower cost. (Chatzky, Siripurapu, Markovich, 2021) They say NASA can focus more on missions that push the boundaries of science and research. But the NASA's funding is not reduced, it is simply replaced by public funding. Also, certain functions are performed by private companies, and NASA's activities are transformed into research activities.

Taking into account the indicators of general development, the state of development of the space industry and the level of information policy, it can be concluded that the USA is a high-tech and advanced state in the field of space research. Government regulation is present, but diminishing as private companies enter the market to outsource certain tasks. Now, NASA is supposed to handle innovation and research functions. That is, some cosmic and therefore, often unattainable tasks are to be transferred to ordinary companies. Space is losing its status as a mysterious sphere.

In general, most of the technologies used for space exploration are based on information technology. Therefore, the more developed is one element, the more developed is the other. Formation of information policy and the level of its development indicates the position of information in society.

The implementation of the information policy requires a territory provided with Internet coverage, where the population has access and the skills to use it. Therefore, the greater is the number of users, the more effective the information policy should be, which determines the involvement of the population in the usage of objective information. So, it can be argued that the USA, having a highly developed space industry, has an appropriate information environment, and that is why the state has a developed information policy that affects the security of citizens and the entire state.

## Conclusion

The US is considered a space power, because it not only uses advanced space technology, but also implements such knowledge into everyday life, encourages private companies to finance and change their status to be publicly attainable and understandable.

The USA skillfully combines space technologies with information technologies. The state understands the importance of ensuring the safety of citizens in the information space that they often use. In general, the information policy of the USA consists not only in the security of an individual citizen, but also in the security of the entire country. Moreover, the state has documents that regulate information activities. The establishment of information policy and the level of its development indicates that the American people are viewed as information society. Since the state implements information policy, the territory has Internet coverage, so the people have access to the Internet and skills to use it. According to the Human Development Report of the United Nations Development Program, the United States fits these requirements. Therefore, the greater is the number of Internet users, the information policy becomes more significant, because it is possible to fully furnish people with information. So, it can be argued that the USA, having a highly developed space industry, has a highly developed information policy, which indicates a high probability of ensuring the free flow of information and national security of the state.

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