

Current Trends and Issues of Legal Regulatory Framework for Making Space Policy in Ukraine

Vasyl Semenyaka

Ph.D. in Law, Senior Researcher, V.M. Koretsky Institute of State and Law of NAS of
Ukraine (Kyiv, Ukraine)

E-mail: v.semenyaka@ukr.net

<https://orcid.org/0000-0002-1621-9694>

Semenyaka, Vasyl (2021). Current Trends and Issues of Legal Regulatory Framework for Making Space Policy in Ukraine. *Advanced Space Law*, Volume 8, 96-103. <https://doi.org/10.29202/asl/8/9>

The article studies current issues of the legal regulatory framework for making public policy on space activities. It has been established that the national rocket and space industry is in the deepest institutional and legal crisis caused by ineffective space policy. The focus is on the urgency of the legal optimization of the system of public administration of the space sector and the need for a clear legislative distribution of powers in the field of making space policy. The study proves that organizational and legal changes are required in the space sector through transforming State ownership, privatizing and developing various forms of ownership and business in the space sector of the economy. An important factor in overcoming the sectoral crisis should be the implementation by the State of an adequate regulatory space policy and the identification of legal mechanisms to stimulate an innovative model for space activities. The study reveals the conceptual basis for the implementation of space law reform in Ukraine and makes proposals and recommendations to improve the efficiency of public administration tools in the national space sector.

Keywords: space activities, space law reform, space legislation, corporatization, space policy, rocket and space industry

Received: 11 November 2021 / Accepted: 28 November 2021 / Published: 28 December 2021

Introduction

Space activities are of particular importance in the processes of globalization and informatization of the world community, in the solution of many social and economic problems and research tasks, as well as in ensuring national security and defence. The State has a special

role and place in forming and developing the national space sector (Shemschuchenko & Semenaka, 2021). While determining the areas and priorities of space policy, the State concentrates administrative and financial resources on them.

Making public policy on space activities in Ukraine was entrusted to the State Space Agency of Ukraine (hereinafter referred to as the SSA), a central executive body, directed and coordinated by the Cabinet of Ministers of Ukraine (On Space, 1996). However, the inefficiency of the SSA in fulfilling legally defined functions and tasks in managing the space sector made the State change its organizational and legal status in December 2019. This implied guidance and coordination of SSA activities by the Cabinet of Ministers of Ukraine through the Minister of Economic Development, Trade and Agriculture of Ukraine (hereinafter referred to as the Ministry of Economy) (On the approval, 2014).

The Ministry of Economy was responsible for making domestic space policy, which established a Space Coordination Office within the Department of Economic Security and Defence of the Ministry of Economy. The Office includes the following units: the Department of Space Economy and the Department of International Space Projects (On approval, 2020).

However, as a result of another turbulence in the system of relevant public administration bodies, since September 2020, the Deputy Prime Minister of Ukraine, the Minister for Strategic Industries, has been responsible for space activities (On defining, 2020). Therefore, the unit of the Ministry of Economy – the Office for the Coordination of Space Activities – was excluded from the structure of the Ministry of Economy (On approval № 1085, 2020; On approval № 819, 2020; On the inclusion, 2020; On the structure, 2021).

The newly established Ministry for Strategic Industries of Ukraine is the principal body within the system of central government bodies, which ensures making public policy on space activities. The activities of the SSA are now guided and coordinated by the Cabinet of Ministers of Ukraine through the Deputy Prime Minister of Ukraine, the Minister for Strategic Industries, who make public policy on space activities (On approval № 819, 2020).

In a short period, as we see, the State has fundamentally changed the corresponding scheme for guiding and coordinating the activities of the SSA, which is in fact has lost its powers in the field of sectoral management of the space sector, while retaining only the function of making space policy (Regulations, 2015). However, the absence of an integrated system approach, the disregard for objective factors and fundamental economic and legal principles in the reform of space public administration and its staffing support have further deepened the crisis processes in making space policy.

As a result of the haphazard development of the space legislation, the powers of the Ministry of Education and the SSA are duplicated, and these State bodies' performance lacks coordination in the implementation of sectoral management. It should be determined that the new legal managerial system in the space sector does not meet the needs of the State to ensure effective space reforms.

Legal issues in space public administration

The sustainable development of the national space sector requires the State to implement a pragmatic space policy in the context of a structural and sectoral space policy, to use legal mechanisms for enhancing public administration of the State property, and to support the commercialization of space activities in order to make practical use of space services and technologies in the real economy. These include a set of organizational, economic, financial

and legal measures initiated by the State, aimed at increasing the investment attractiveness of space enterprises and the quantity of output of competitive space products, the efficiency of the production of rocket and space technology.

Sound areas of reform determine effective addressing the problems of the public administration system in the national space sector. Apparently, chaotic political and legal changes in space public administration counter to elements of the constitutional principle of the rule of law such as legal certainty, legal predictability and legitimate expectations. Economic entities in the space sector cannot be sure of their legitimate expectations of the quality and stability of the space legal regulatory mechanism.

Currently, the Ministry for Strategic Industries lacks the potential in the field of strategic planning and making public space policy to get the national space sector out of the crisis. However, its building usually takes a considerable amount of time, which is not the case at present, to solve the established core tasks and functions.

Nowadays, legal optimization and a coherent system of public administration of the space sector are required to ensure space policy efficiency and productivity. Obviously, the technical distribution of powers between the Ministry for Strategic Industries and the SSA will not solve the problem of ensuring a market model for the operation of the space sector. Their solution must be achieved by changing the conceptual approaches and legal basis for making public policy on space activities.

It seems that the best State solution would not be to improve the institutional efficiency of the SSA, strategic planning and operational management, guidance, and coordination of its activities by the Cabinet of Ministers of Ukraine rather than to change the governing body of the space industry. Moreover, it is important to improve the role of the highest body within the system of executive authorities in guiding, coordinating and monitoring the activities of the central executive body, making public policy on space activities. The implementation of the relevant functions of the Cabinet of Ministers of Ukraine should include the definition of clear criteria for evaluating the efficiency of the SSA – ensuring that maximum results are achieved. In addition, evaluation is required to determine the quality and impact of its activities.

Organizational and legal changes in the space sector

It should be noted that the problems of the rocket and space industry are not comprehended at the State level, as well as the need to ensure the restructuring of the space sector – the creation of an economically viable sector, capable of producing competitive space products in a market economy. In particular, it was planned to conduct corporatization of space enterprises, formation of the State Rocket and Space Corporation “Southern Machine Building Plant” on the basis of SE PA Yuzhmash and Yuzhnoye SDO (On measures, 1998).

The space legal regulations of Ukraine identify the need to develop a draft State innovation programme for the development of the space sector (with the introduction of space technologies in industry and the application of a special investment regime for the implementation of the programme) (On measures, 1999).

The Concept for the restructuring and innovative development of the space industry, adopted for implementation, defined the main goal, principles, objectives and paths for the reform of enterprises and the entire industry (On measures, 2001). The Concept was the basis for making the Programme for the restructuring and innovative development of the space industry.

In addition, the Government of Ukraine has determined the tasks and ways of reforming (restructuring) the space sector in the medium term (to 2008) with a view to implementing the main areas of its development and turning it into a highly effective scientific-technological and production complex (On approval № 1455, 2004). The main areas of the reform (restructuring) are improvement of the sectoral system of the State regulatory and managerial mechanism, market transformation, increase of investment attractiveness of enterprises. The corporatization of State-space enterprises was also considered. The Cabinet of Ministers of Ukraine approved a special State programme for the development of the above-mentioned main Ukrainian enterprises for the development and production of rocket and space technology (State, 2009).

To date, however, attempts to restructure the space sector have not been implemented, and this impedes the solution of the problems of the sustainable economic development of the space sector. An effective national space policy requires effective organizational and legal changes in the space sector by transforming State ownership relations, privatization, development of various forms of ownership and business in the space sector of the economy.

In order to ensure a systematic approach to resolving the issue of introducing a modern form of State management of the corporate rights of enterprises in the space sector, the Cabinet of Ministers of Ukraine has now adopted a decision on the reorganization of the legal entities of the rocket and space industry of strategic importance to the economy and security of the State, as follows: State Enterprise M.K. Yangel Yuzhnoye State Design Office, State Research and Production Enterprise “Kommunar Association,” State Enterprises Production Association Kyivprylad and A.M. Makarov Production Association Yuzhmash (hereinafter referred to as A.M. Makarov SE PA Yuzhmash) by transforming them (by changing their organizational and legal form) into joint-stock companies, 100% shares thereof belong to the State (On coordinating, 2021). At the same time, the SSA is required to take steps to reorganize the above-mentioned State enterprises in the space sector in accordance with the procedure established by law.

Organization and implementation of the corporatization of State-space enterprises of Ukraine (transformation into joint-stock companies), the introduction of a corporate model for the management of space enterprises should be an indispensable prerequisite for the progressive development of national space activities on a market basis.

It is important that modernized space enterprises with a new managerial system should be able to adapt to new economic conditions and ensure the manufacture of competitive space rocket technology that meets the requirements of the world market for space services and technologies. Moreover, the changes in the space sector require individual structural units out of multidisciplinary space enterprises for their further business activities. In particular, the main State enterprise of the rocket and space machine-building industry – A.M. Makarov SE PA Yuzhmash – should exclude non-core, such as the manufacture of universal tillage tractors, single-section trolleybuses, chassis for aircraft (AN-140, AN-148, AN-158), wind energy installations (VEU 56-100, VEU T-600-48), etc. In other words, the activities of this space enterprise should be focused exclusively on space activities – the production of rocket and space products (launch vehicles, spacecraft, etc.).

Following the completion of the above-mentioned organizational and legal procedures for the reorganization (transformation), financial recovery, and investment attractiveness of the rocket and space industry, the establishment of a legal framework for the organization and implementation of privatization in the space sector should be an important part of the sectoral reform of the space industry. Bearing in mind the long-standing inefficiency of

making, coordinating and implementing of space policy on the development of national space activities and the scarcity of State budgetary resources, the corporatization and privatization of space enterprises seem to be effective instruments for attracting factual foreign and domestic investment, which will contribute to the stable functioning of the relevant economic entities. The contribution of the non-State sector to the structure of the national space sector through an effective private owner will accelerate real economic growth.

Main areas for improving the legal regulatory mechanism for space relations

The development of the entrepreneurial basis of space activities and the enhancement of their competitiveness and the use of private funds for investment in space research and development are of great importance in overcoming the internal and external challenges facing the space industry. The main task of the State in building an effective national space sector is to create favourable organizational, legal, and economic conditions for the establishment and development of space entrepreneurship, which is extremely fragmented, is in its infancy.

In the context of globalization challenges, the strategy of public space policy should be an enabling economic and legal environment for mastering new technologies for the high-technology development of the space sector on a market basis, with the application of State regulation, but where the mechanisms of the market economy are not functioning effectively. That is, market-based economic and legal regulatory methods should be combined with the State regulatory mechanism for the space sector.

In 2019, the State abolished the monopoly of State enterprises and organizations in space activities such as the testing, production and operation of launch vehicles, including their space launches. Nevertheless, in practice, the legislator's deregulation hopes of activating economic entities (enterprises, institutions and organizations) in space activities have not yielded the expected results, since they did not give rise to an entrepreneurial interest.

Over-regulation of relations in the field of space activities (e.g., illogical licensing of its types until 2015) and new legal and administrative barriers established by the State in 2019 for its foundation in the form of permit-declaratory procedures (Procedure for issuing, 2020; Procedure for submitting, 2020) have a negative demotivating effect on the decision-making of economic entities to engage in the space business. As a result of ineffective legal regulatory means, entities of economic relations are inert in starting space activities.

Space legislation should be based on an ideology of freedom to conduct space activities. Enterprises in the space sector of the economy develop, manufacture and operate rocket and space technology on a cooperative basis with foreign space entities. Participation in this relationship is not possible without confirmation of the quality and reliability of space products. That is, within a defined space project, the domestic space entities provide a system of quality management, supervision, and control of related risks in space activities.

It is obvious that the complex of legal issues could be resolved by improving the Ukrainian legislation provisions on the system of standardization and certification of rocket and space technology, without resorting to appropriate administrative measures, which lack convincing legal arguments for their implementation. Accordingly, it is important to take into account subjective and objective trends in need to minimize the administrative burden of State regulatory mechanism for space activities. We advocate that legislative reform could stimulate the development of the space industry on a commercial basis (Recent, 2017).

The process of improving national space legislation should also take into account the actual needs of participants in space relations and the need for economic incentives for economic entities to carry out space activities. Especially, it is important to consider the interests of private players (private interest) (Soroka, 2020).

However, in the absence of economic motivation, the space industry sector could not be expected to improve. With this regard, the implementation of an adequate regulatory space policy by the State and the development and introduction of legal instruments to actively encourage actors to invest in and innovate in space activities are important factors in overcoming the sectoral crisis and the emergence of new and improved space relations. This involves the use by the State of classical space policy regulatory tools such as the granting of tax and customs privileges and State guarantees for the development of promising areas of space activity.

The strategy of public space policy should be an enabling environment for adopting new technologies for the high-technology development of the space sector on a market basis, using State regulatory instruments, but only where the mechanisms of the market economy are of low efficiency. That is, market-based economic and legal regulatory methods should be combined with the State regulatory mechanism for the space sector.

An extremely complex issue that needs to be urgently addressed is the establishment of the latest paradigm of national legal space policy to optimize and increase the cost-efficiency of the space industry. A comprehensive approach to improving the legal regulatory mechanism for space relations, updating the legal means, instruments and space legal regime should become an integral part of the State's space policy in order to preserve and progressively develop the national space sector.

The solution of the above-mentioned range of problems in the development of the space sector is based primarily on the development of a unified and pragmatic space-based legal ideology on the areas of codification of Ukraine's national legislation on space activities, that is, a draft Space Code of Ukraine or systematization, improvement and further development of space legislation: adoption of a new version of the Law "On space activities", special laws of Ukraine on remote sensing of the Earth, satellite navigation, extraction and use of natural resources of celestial bodies and other space legislation.

The use of up-to-date basic and scientific and practical legal knowledge in space law and the results of space legal research applications should guarantee the proper trend in law-making in the space sector, as well as the application of space law. Advantages should be taken of legal developments characterized by innovative solutions to space law problems that are adapted to modern business requirements, reflect the real State of space relations and contain scientific forecasts of trends in the further development of legal regulatory mechanism for space activities.

Conclusions

In order to overcome the negative factors in making space policy, which has led to crisis sectoral phenomena, space law reform in Ukraine is objectively necessary with scientifically sound proposals (recommendations) on resolving current legal issues related to the progressive development of national space legislation and improving the efficiency of State regulation and management of the space sector, its organizational restructuring and commercialization of the results of space activities.

Reform measures should provide for specific instruments to address the problems of technological development in the space sector, introduce market-based regulatory frameworks for space relations and create an investment-friendly space environment, ensure an optimal system of public administration in the field of space activities and improve economic and legal relations in the space sector, etc.

The implementation of a legally sound space law reform will ensure a comprehensive modernization of Ukraine's space legislation aimed at establishing an effective market mechanism for regulating space relations, introducing indigenous space technologies in civil and economic applications, which contributes to meeting the modern needs of society and the State, forming and developing the national market for space services and technologies.

References

- On the approval of the Scheme for the leadership and coordination of the activities of central executive bodies by the Cabinet of Ministers of Ukraine through the relevant members of the Cabinet of Ministers of Ukraine (2014) Resolution of the Cabinet of Ministers of Ukraine from 10 September, No 442 (as amended by the Cabinet of Ministers of Ukraine dated 20 October 2019, №879). Available online: <https://zakon.rada.gov.ua/laws/show/879-2019-%D0%BF#Text>
- On approval of Regulations on management of coordination of space activity of department of safety and defence economy (2020) Order of the Ministry of Economic Development Trade and Agriculture of Ukraine from 12 June, № 1085. Available online: <https://zakon.rada.gov.ua/rada/show/v1085915-20#Text>
- On approval of the Regulation on the Ministry of Strategic Industries of Ukraine (2020) Resolution of the Cabinet of Ministers of Ukraine from 7 September, №819. Available online: <https://zakon.rada.gov.ua/laws/show/819-2020-%D0%BF#Text>
- On approval of the Program of reforming (restructuring) and development of the space industry until 2008 (2004) Resolution of the Cabinet of Ministers of Ukraine from 28 October, №1455. Available online: <https://zakon.rada.gov.ua/laws/show/1455-2004-%D0%BF#Text>
- On coordinating the transformation of state-owned enterprises of the space industry into joint-stock companies (2021) Order of the Cabinet of Ministers of Ukraine from 22 September, №1146. Available online: <https://zakon.rada.gov.ua/laws/show/1146-2021-%D1%80#Text>
- On defining issues within the competence of the Vice Prime Ministers of Ukraine (2020) Resolution of the Cabinet of Ministers of Ukraine from 25 March, № 274. Available online: <https://zakon.rada.gov.ua/laws/show/274-2020-%D0%BF#Text>
- On measures to improve the efficiency of space activities (1998) Decree of the President of Ukraine from 27 October, №1190/98. Available online: <https://zakon.rada.gov.ua/laws/show/1190/98#Text>
- On measures to further develop the space industry and ensure its restructuring (1999) Resolution of the Cabinet of Ministers of Ukraine from 8 February, №171. Available online: <https://zakon.rada.gov.ua/laws/show/171-99-%D0%BF#Text>
- On measures to use space technologies for innovative development of the state economy (2001) Decree of the President of Ukraine from 6 February, № 73/2001. Available online: <https://zakon.rada.gov.ua/laws/show/73/2001#Text>

- On the inclusion in the staff of the Ministry of Economy, Trade and Agriculture of Ukraine (2020) Order of the Ministry of Economy, Trade and Agriculture of Ukraine from 15 October, №2053. Available online: <https://zakon.rada.gov.ua/rada/show/v2053915-20#Text>
- On the structure of the staff of the Ministry of Economy of Ukraine (2021) Order of the Ministry of Economy of Ukraine from 30 June, №164. Available online: <https://zakon.rada.gov.ua/rada/show/v0164930-21#n8>
- On Space Activity (1996) Law of Ukraine from 15 November, №502/96-BP. Available online: <https://zakon.rada.gov.ua/laws/show/502/96-%D0%B2%D1%80#Text>
- Procedure for issuing (refusing, cancelling) permits for carrying out certain types of space activity (2020) Resolution of the Cabinet of Ministers of Ukraine from 26 February, №197. Available online: <https://zakon.rada.gov.ua/laws/show/197-2020-%D0%BF#Text>
- Procedure for submitting a declaration on the conduct of economic activities in the field of space activities (2020) Resolution of the Cabinet of Ministers of Ukraine from 26 February, №197. Available online: <https://zakon.rada.gov.ua/laws/show/198-2020%D0%BF#Text>
- Recent Developments in Space Law. Opportunities & Challenges* (2017) Editors R. Venkata Rao, V. Gopalakrishnan, Kumar Abhijeet. Springer. <https://doi.org/10.1007/978-981-10-4926-2>
- Regulations on the State Space Agency of Ukraine (2015) Resolution of the Cabinet of Ministers of Ukraine from 14 May, №281. Available online: <https://zakon.rada.gov.ua/laws/show/281-2015-%D0%BF#Text>
- State Program for the Development of State Enterprises “State Enterprises PO “Yuzhmash”” named after A. M. Makarov and the State Design Bureau “Yuzhnoye” them. M.K. Yangel” (2009) Resolution of the Cabinet of Ministers of Ukraine from 10 April, №491. Available online: <https://www.kmu.gov.ua/npas/217408072>
- Shemshuchenko, Yu., and Semenyaka, V. (2021) Economic and legal problems of implementation of the program-target approach in the space industry of Ukraine. *Journal of Kyiv University of Law*. No 1, 290-295. <https://doi.org/10.36695/2219-5521.1.2021.57>
- Soroka, Larysa (2020) Space Doctrine and Guidelines for Long-Term Sustainability of Outer Space Activities as Basis for Sustainable Earth Development. *Philosophy and Cosmology*, Volume 25, 43-56. <https://doi.org/10.29202/phil-cosm/25/4>