Recent Developments in Space-Related Law and Policy within the Post-Soviet Area

Nataliia R. Malysheva* and Olga S. Stelmakh**

Nowadays the regulation of space activities within the post-soviet area gets new impetus. At the current stage when most space-faring countries of this region developed their basic space acts, the major emphasis is on those areas that previously were not appropriately enshrined through legislation. Therefore, such satellite applications as remote sensing, navigation, and telecommunication only now are on the way to acquiring their legislative scope. The national space programmes for the next few years are being elaborated, negotiated, or even approved. The approval according to the existing practice of post-soviet countries is done in the form of law, thus granting those programmes legal status. In certain countries, the regulations of space agencies, as the legal fundamentals governing their activities, have seen some changes. For improvement of administration system in the local space arena, Ukraine considers a possible split of the space agency into two separate authorities - one that designs space policy and another that implements it, whereas the Russian Federation is paying more attention to restructuring the space sector and creating large integrated structures. The major soviet space-power, the Russian Federation, continues playing the key role within this region and indirectly takes under its umbrella most of the small or non-space-faring countries by concluding bilateral agreements on cooperation in specific domains. Thus, the paper will investigate the recent legal trends within the area of space activities in post-soviet countries, will focus on new directions and practices in shaping legal frameworks, and consider actual approaches that guide the countries in whether or not to give their national space legislation a proactive role.

With the exception of Kazakhstan's Law on Space Activities - no space legislation of importance occurred in any of the post-soviet countries until after March, 2012.

At the same time the development of the space legislation continued, foremost, focusing on the deepening of the legal regulation in those countries which have a relatively developed sector of space activities and their legal support.

^{*} Deputy Director, International Space Law Center, Kyiv, Ukraine, nrm52@mail.ru

^{**} Senior Legal Adviser, Parliament of Ukraine, Ukraine, os@c-n-l.eu

Key Political and Legal Program Documents

During this period of time, both the Russian Federation and Ukraine adopted new strategic programme documents that defined the directions for the future development of their space activities.

Thus, by the Order of the Government of the Russian Federation dated 28 December 2012 № 2594-p the new state programme of the Russian Federation "Space activities of Russia for 2013-2020" was adopted.¹

The purpose of the state programme was to ensure the secure access and required presence of Russia in space in the interests of science and socio – economic areas, while maintaining the leading positions of Russia in human space-flight and implementing international obligations in the field of space activities. The program has set the target indicators and indexes of its implementation. In particular it provides for:

- deployment and maintenance of the necessary orbital groups of domestic spacecraft for scientific and socio-economic purposes, including the Russian segment of the International Space Station;
- modernisation of the Plesetsk and Baikonur cosmodromes, establishment on the Russian territory of the new cosmodrome Vostochny;
- development of advanced and modernisation of the existing spacecraft launch vehicles;
- creation of scientific, technical, and technological groundwork for development of the advanced launchers models and space technology;
- ensuring international cooperation in the use of outer space for peaceful purposes;
- creation of the terms for expansion of the provided space services in the interests of development of the Russian Federation and its regions.

The main programme instruments for implementing the State programme of the Russian Federation refer to the following: the Federal space programme of Russia for 2006-2015², the Federal target programmes "Maintenance, development and use of the GLONASS system for 2012 – 2020" and "Development of the Russian cosmodromes for 2006-2015"⁴. The scientific plans of Roscosmos include the creation of three spacecraft "Spektr-UF", "Spektr-M" and "Gamma-400", and also the launch of probes to the Moon within the framework of the "Luna-Globe" and "Luna – Resource" projects.

¹ Order of the Government of the Russian Federation dated 28 December 2012 № 2594-p <www.roscosmos.ru/2922/>

² The Federal Space Programme of Russia for 2006-2015 <www.federalspace.ru/115/>

³ The Federal Target Programme "Maintenance, Development and Use of the GLONASS System for 2012 – 2020 www.federalspace.ru/115/>

⁴ The Federal Target Programme "Development of the Russian cosmodromes for 2006-2015" <www.programs-gov.ru/30_1.php>

Roscosmos plans to develop a transportation system that will ensure human spaceflight to the Moon. The Programme also provides for reorganisation of the space branch by means of establishing 5-7 holdings.

In this context it would be expedient to note the peculiarities of the programme planning in the field of space activities of the Russian Federation. In the Federal Law of the Russian Federation On Space Activities (article 8, item 1) it is stipulated that the "Federal space programme of Russia is the long-term planning document based on which the state order for development, manufacturing and use of space technology for scientific and socio-economic purposes is formed".5 It is worth also mentioning that there are several federal space programmes that overlap one another in time. Thus, despite the approval of the Space programme for 2013-2020⁶ it continues to operate in parallel with the State space program of Russia for 2006-2015⁷, approved by the Russian Government Resolution dated 22 October 2005 № 635 as amended by the Decree of the Government of the Russian Federation dated 31 March 2011 № 235. In addition to that, the elaboration of the draft Federal space programme for 2016-2025⁸ has already been started. It was initiated as a response to the mandate provided by the Government of the Russian Federation dated 5 April 2010 and in accordance with the Action Plan of the Federal Space Agency on the elaboration of the draft Federal Space Programme of Russia for 2016-2025, approved by the Head of the Federal Space Agency on 15 November 2012.

In addition to the targeted programmes of space activities to be approved at the level of the Federal Government, the Russian Federation is also developing the political strategic documents - the so-called Policy Framework - that are approved by the President of the Russian Federation, laying the foundation for the state programmes. Thus the State space programme for 2013 – 2020⁹ is aimed at ensuring the achievement of goals and priorities set out by the Policy Framework of the Russian Federation in the field of space activities for the period until 2020 and beyond. The programme for 2016-2025 that is being drafted should be based on the State policy framework of the Russian Federation in the field of space activities for the period until 2030 and beyond ¹⁰, approved by the President of the Russian Federation dated 19 April 2013.

The new state space programme, the fifth one, was developed in Ukraine, and was approved by the Cabinet of Ministers of Ukraine on 15 February 2013 as

⁵ The Federal Law of the Russian Federation On Space Activities <www.federalspace.ru/2881/>

⁶ The State Space Programme of the Russian Federation for 2013-2020 <www.federal-space.ru/115/>

⁷ The Federal Space Programme of Russia for 2006-2015 <www.federalspace.ru/115/>

⁸ The Draft Federal Space Programme for 2016-2025 <www.federalspace.ru/115/>

⁹ The State Space Programme of the Russian Federation for 2013 – 2020 <www.federalspace.ru/115/>

¹⁰ The State Policy Framework of the Russian Federation in the field of Space Activities for the period until 2030 and beyond www.federalspace.ru/115/>

the All-State Target Scientific and Technical Space Programme for 2013-2017¹¹. The programme was adopted by Verkhovna Rada (Parliament) of Ukraine on 5 September 2013. The main indexes of the Programme are based on the goals set out within the Concept of the state policy implementation in the field of space activities for the period until 2032, approved by the Order of the Cabinet of Ministers of Ukraine dated 30 March 2011¹². The Programme primarily marked the gap between the existing high potential of space science and technology in Ukraine and the insufficient degree of opportunities to use the space branch for socio-economic, environmental, scientific, and technological country development. As a concrete action plan, the Programme in particular foresees the launch of the EO spacecraft "Sich – 2-1" in 2015. Also planned are the launch the LV Cyclone-4 within the Ukraine-Brasil project Alcantara Cyclone Space, and the first Ukrainian telecommunication satellite, Lybid.

The Programme provides for commercial launches of the Ukrainian launch vehicles under the international projects. In addition, the Programme outlines measures for space technologies transfer (primarily those of EO) to the economy. A large-scale space experiment is also scheduled to be performed on ionosphere research (in cooperation with foreign partners). In addition to this the document foresees the development of a wide range of new models of space techniques. Mainly these are the control systems for launch vehicles and spacecraft. The launch of a student satellite developed within the Dniepropetrovsk University (weight up to 10 kg) is scheduled for 2017.

It should also be noted that the drafting of the Space programme of the Republic of Belarus for the period 2013-2017 has been completed¹³. Currently, the draft is subject to approvals and, in case of its adoption, it will become the second space programme of this State, replacing the previous National programme on the exploration and use of outer space for peaceful purposes for 2008 - 2012¹⁴. Overall, the past year in the Republic of Belarus was marked by a significant increase in public attention to the field of space exploration. This is more likely due to the fact that on 22 July 2012 there was a successful launch of the first Belarusian spacecraft. At the 56th session of the Committee On the Peaceful Uses of Outer Space (COPUOS) (Vienna, June 2013) Belarus submitted a request to become a member of COPUOS. This issue will be transmitted for consideration and approval to the UN General Assembly. International cooperation of the Republic of Belarus was also intensified, in particular with neighborhood countries, primarily Russia and Ukraine. The new impetus in this

¹¹ The All-State Target Scientific and Technical Space Programme for 2013-2017 http://zakon4.rada.gov.ua/laws/show/439-18>

¹² The Concept of the state policy implementation in the field of space activities for the period until 2032 http://zakon4.rada.gov.ua/laws/show/238-2011-%D1%80

¹³ The Statement of the Belarusian Delegation during the 56th COPUOS http://mfa.gov.by/press/statements/daa811b583f47580.html

¹⁴ The National programme on the exploration and use of outer space for peaceful purposes for 2008 – 2012 <www.pravo.by/main.aspx?guid=3871&p0=C20801517 &p2={NRPA}>

direction will be given with ratification by the Russian Federation of the Agreement between the Government of the Russian Federation and the Government of the Republic of Belarus on the cooperation in the field of exploration and use of outer space for peaceful purposes (done in Minsk on 15.03.2011, ratified by the Law of the Russian Federation dated 3 December 2012)¹⁵. Among other issues, the Agreement covers the use - in the joint Russian – Belorussian and other space projects and programmes - of the optoelectronic devices, software, and computer technology produced in the Republic of Belarus, as well as of the data processing and information display devices.

Modernisation of the National Systems for the Governance of Space Activities

In addition to the political and legal instruments adopted in the post-soviet countries, the existing space legislation of those countries continues to be developed, primarily focused on the improvement of the functioning of the administrative authorities within the domestic space sector, and clarification of their status, structure, and functions.

Thus, in the development of the Law dated 27.01.2012 of the Republic of Kazakhstan On space activities on the 29.12.2012 by the Decree of the Government №1814 the new version of the Regulation on the National Space Agency of the Republic of Kazakhstan was adopted ¹⁷. The Regulation significantly reinforced the role of the Agency (referred to as Kazcosmos) in terms of planning, regulation, organization, coordination, and control in the field of space activities. The functions of the Agency were expanded and powers strengthened. In item 14 of the Regulation, the main objective of Kazcosmos is defined as the formation for the new country of the full-fledged space industry that meets the needs of the economy and society. Among other things, the leading role of Kazcosmos is defined relative to the formation of the market of space technologies and services, in coordination of works under the lease with the Russian Federation on the Baikonur Cosmodrome. An important task of the Agency is to ensure the functioning of the environmental monitoring system with the use of space-based surveillance and remote sensing (space monitoring) devices. The Agency is developing the procedures for coordination and decision-making on the launches of space objects from the territory of the Republic of Kazakhstan and beyond in case of their execution by Kazakh space actors; is responsible for licensing in the field of space activities; ensures the safety of space activities

¹⁵ Agreement between the Government of the Russian Federation and the Government of the Republic of Belarus on the cooperation in the field of exploration and use of outer space for peaceful purposes www.belarus.mid.ru/old/dog_baza.html

¹⁶ Law of the Republic of Kazakhstan On space activities http://kazcosmos.gov.kz/ru/novosti/zakon-o-kosm-deyat.html

¹⁷ Decree of the Government №1814 dated 29.12.2012 on the new version of the Regulation on the National Space Agency of the Republic of Kazakhstan http://kazcosmos.gov.kz/ru/activities/pravovaya-baza/pravovaya-baza-kontejner/1814.html

within the competence defined by the legislation of the Republic of Kazakhstan; conducts the branch expertise of the projects in the field of space activities; carries out the state registration of space objects and rights on them, and maintains the register of space objects; organises and coordinates the activities on training, advanced training and professional development of cosmonauts, and also of professionals working in the space sector; and performs other functions (in total according to 41 directions).

In 2012, large-scaled administrative reform implemented in various management branches in Ukraine. There have been several options for restructuring the governance within the field of exploration and use of outer space with the purpose of dividing the managerial functions of forming the state space policy on the one hand and its implementation on the other. As a result the Law of Ukraine dated 16 October 2012 has amended the Law on space activities¹⁸, in part, to determine the competence of the governing authorities as to a respective field.

All tasks, functions, and competencies that previously by Law had been conferred to the central body of executive power in charge of space activities (until 2011 - the National Space Agency of Ukraine, subsequently reorganized in the State Space Agency), nowadays are divided between the central body of executive power that ensures the formation of the state policy for space activities, and central body of executive power that implements the state policy for space activities.

To the first authority in particular refer: the development of the conceptual foundations for space activities and all-state programmes for their implementation, governance, and activities coordination of the space industry; the functions of the general customer for research and development works on design, manufacturing, and testing of space technology; coordination and control over the external economic activities; and ensuring international cooperation and other functions.

And on the implementing authority are conferred: the establishment and exploitation of the ground and space segments of the satellite telecommunication, broadcasting, remote sensing, coordinate time and navigation support systems; exploitation, maintenance and upgrading of objects and facilities belonging to the space sector; licensing, certification, and registration of space techniques, including the maintenance of the State registration of the unique objects of space activities; monitoring and maintenance of a geophysical observations data bank; functioning as the national point of contact on the issues of compliance with the provisions of the Hague Code of Conduct Against Ballistic Missile Proliferation; ensuring the integration of space technologies into the manufacture of competitive products for domestic and export markets; and execution of other functions.

As of September 2013, the above reform has not yet been brought to its logical conclusion (although the corresponding changes entered into force from January 2013). Still, all managerial functions within the space sector are performed

^{18 &}lt;a href="http://zakon4.rada.gov.ua/rada/show/5461-17">http://zakon4.rada.gov.ua/rada/show/5461-17

by the State Space Agency, which remains the unique central body of executive power in the field of space activities. This is the result of c the great complexity in splitting in practice the competencies in "forming the state policy" and "implementing it" between different governing bodies. The motivation for such separation is not justified in terms of public administration science. Another thing is the division of functions between the legislative and executive powers, as it originally was: the legislative power forms the policies by means of approving the State programmes, basic directions for space activities, and adoption of the fundamental space acts in those fields. At the same time the executive power implements such policies based on the programmes, strategies, and laws developed through legislation. The reform seems to be more formal and the international experience confirms the absence of a practice in dividing respective competencies between two different governing bodies. This is also evidenced by the functions division, declared by the Law dated 16 October 2012. It is difficult to predict where this reform will lead and how it will end; from the scientific point of view, it will be difficult to justify it and, therefore, even more difficult to support its implementation.

International Cooperation Acts of the Post-Soviet Countries

Among recent significant events is the signature by the Russian Federation on 28 August 2013 of the document on the adherence of Roscosmos to the activities of the International Charter on Space and Major Disasters¹⁹. Roscosmos became the 15th member in the club of States who have agreed to work together to address the vital task of preventing the natural and man-made disasters. The aim of the Charter is to assist countries affected by disasters by donating free of charge the satellite imagery for any disaster area. It should be noted that in the past, Russia has already participated in the activities of the Charter. Roscosmos provided the data acquired from the EU spacecrafts "Resource – DK1", "Kanonus-V", and "Meteor-M". On the other hand, Russia received resources of the Charter in August 2013 to monitor the floods in the Amour region and Khabarovsk. The prompt provision of information from the EO spacecraft, including the foreign ones, enabled the Russian Ministry of Emergencies to receive timely information necessary to eliminate the effects of the emergency situation.

Lawmaking in the Countries of This Region, Perspectives of the Legislation Development

We deem it expedient to say few words about the lawmaking process in the post-soviet countries, primarily in the Russian Federation and Ukraine. It should be noted that the major legislative acts – the laws on space activities

^{19 &}lt;www.federalspace.ru/19506/>

that provided the foundations for the branch of space law, were adopted in the Russian Federation and in Ukraine in the first half of the 90s. They were developed under the aegis of the respective space agencies and were mainly aimed at those areas of space activities that are administered by those agencies (in Ukraine, e.g., this is the development, design, manufacturing, testing, and exploitation of launch vehicles and space technologies). Thus, the majority of space applications remained beyond the scope of regulation of the basic acts of those countries. Currently, an attempt is being made to eliminate those gaps. In this context, several interesting draft laws were elaborated in the Russian Federation and in Ukraine, and are currently in the coordination phase. Thus, in the Russian Federation they chose to make changes and amendments to the basic act on space activities, which are focused in the first turn on remote sensing regulation²⁰. In Ukraine the way of autonomous regulation has been chosen, namely the development of the two self-contained draft laws: 1) On the state regulation of Earth remote sensing²¹; 2) On the state regulation of satellite navigation²².

In accordance with the draft Federal Law on the state registration of the rights on space objects and transactions with them²³, the Russian Federation drafted the Rules for conducting the unique state register of rights on the space objects and transactions with them²⁴. The Rules are subject to approval by the Decree of the Government of the Russian Federation. Whereas the Roscosmos drafted the important procedural document – the Administrative regulation on the execution of the state function of the Federal Space Agency on the selection and training of cosmonauts²⁵, – which, in particular, reflects the procedural issues for selection and training of cosmonauts; for establishment, modernisation, and exploitation of the training center and technical facilities for preparing the cosmonauts; ensuring the safety and security on board the manned space vehicles and orbital complexes; for activities of the Inter-Agency commission on the selection of cosmonauts and assignment of the crew of manned space vehicles and stations; for approval of the cosmonaut candidates recommended for participation in the space flights according to the results of their annual attestation and with due consideration of the conclusions made by the Main medical commission, and also the drafting of recommendations on the exclusion of the

²⁰ The Draft Law of the Russian Federation On amendments to the Law of the Russian Federation On Space Activities <www.federalspace.ru/2515/>

²¹ The Concept of the Draft Law of Ukraine On the state regulation of Earth remote sensing http://zakon4.rada.gov.ua/rada/show/657-2013-%D1%80

²² The Concept of the Draft Law of Ukraine On the state regulation of satellite navigation http://zakon2.rada.gov.ua/rada/show/657-2013-%D1%80

²³ The Draft Federal Law of the Russian Federation On the state registration of the rights on space objects and transactions with them <www.federalspace.ru/2004/>

²⁴ The Draft Rules for conducting the unique state register of rights on the space objects and transactions with them <www.federalspace.ru/2006/>

²⁵ Administrative regulation on the execution of the state function of the Federal Space Agency on the selection and training of cosmonauts <www.federalspace.ru/2444/>

cosmonaut candidates, cosmonauts, cosmonaut-instructors; for approval of the crew members of the manned space vehicles and stations for concrete flights, including representatives of the foreign space agencies; for approval of cosmonauts in terms of candidates for inclusion into the crew of the space shuttles of foreign partners; for organising and coordinating the works on commercial space projects and assistance in their implementation; for ensuring the required support at all stages of selection process and training of cosmonauts, including their medical check, medical support, and rehabilitation after the execution of space flights; for information support of the selection and preparation of cosmonauts; and other issues.

Conclusions

Assessing the overall status and trends of the legislative work in the field of space activities of the post-soviet countries over the last year, the following general conclusions could be made:

- 1. The space legislation of the post-soviet countries continues to be developed, and more successfully, as in previous years, in the Russian Federation, Ukraine, and Kazakhstan. At the same time, the Republic of Belarus became significantly more active with regard to space regulation, logically ending with the submission by the state of application for membership in the UN COPUOS.
- 2. The main achievement of the last year was the adoption of a scope of the policy and legal programme documents on space activities in the Russian Federation and Ukraine, and also the elaboration of such programme documents by the Republic of Belarus. These documents reflect the main trend of the space sector development of these countries, related to the more intensified use of space applications, primarily of EO, satellite navigation, and development and modernisation of cosmodromes.
- 3. The special legal status of the governing bodies in the field of space activities has undergone significant changes, especially in Kazakhstan and in Ukraine. However, the organisational and legal reform in Ukraine is not yet completed and it is difficult to predict the effectiveness of such an optimisation.
- 4. The directions for future development of space legislation could be seen as deriving from the prepared draft laws. Such drafts are primarily elaborated in the Russian Federation and in Ukraine. We are of the view that their adoption will bridge the gaps in the legal regulation of space activities, primarily with regard to the application of space technologies, such as Earth observation and satellite navigation.