REGULATION OF SPACE ACTIVITIES IN THE RUSSIAN FEDERATION

By
Sergey P. Malkov[*] *and Catherine Doldirina*[**]

1. HISTORY AND GENERAL OVERVIEW

A. Space legislation history

Although the Union of the Soviet Socialist Republics (Soviet Union) was the first country in the world to launch an artificial earth satellite on October 4, 1957, as well as the first spacecraft with a man on board on April 12, 1961, there were no laws regulating space activities in the Soviet Union for a long time. Up to the time when the Soviet Union collapsed, legal regulations governing space activities were embodied in special resolutions and decisions of such state and political bodies as the Politburo of the Central Committee of the Communist Party of the Soviet Union, the Council of Ministers of the Soviet Union, the Military and Industrial Committee of the Presidium of the Council of Ministers of the USSR and others. The most important issues of space activities in the Soviet Union were regulated by the joint resolutions of the Central Committee of the Communist Party of the Soviet Union and the Council of Ministers of the Soviet Union.

The following resolutions on space activities of the soviet period may serve as an example of the regulations that existed during that time:

1) the Council of Ministers Resolution *on Preparation of a Man for Space Flight*; [1]
2) the Central Committee of the Communist Party and the Council of Ministers' Resolution *on Creation of Automatic Interplanetary Space Stations for Landing on the Moon and Flights to Venus and Mars*; [2]
3) the Central Committee of the Communist Party and the Council of Ministers' Resolution *on the Further Exploration of the Moon*; [3]
4) the Central Committee of the Communist Party and the Council of Ministers' Resolution *on the Work Regarding the Exploration of the Moon and Outer Space*. [4]

B. Current legislation

After the collapse of the Soviet Union in 1991, the Commonwealth of Independent States (CIS), comprised of almost all the former soviet republics, was formed. As a result of the disintegration of the Soviet Union, significant transformations started to shape the political and economic life of Russia. One of the new realities was the necessity to establish Russian national legislation establishing an appropriate framework for conducting space activities.

On February 25, 1992, the President of Russian Federation adopted Decree № 185 *on Space Activities Administration Structure in the Russian Federation*. Corresponding to this presidential decree, the Federal executive body responsible for space activities – the Russian Space Agency (Roscosmos) – was formed. On August 20,

[*] Vice-head of the International Law Department, the Saint-Petersburg State University of Aerospace Instrumentation, Saint-Petersburg, the Russian Federation.
[**] Doctoral candidate, Institute of Air and Space Law, McGill University, Montreal, Canada.

1993 the Supreme Council of the Russian Federation passed the *Law on Space Activities*. It was the first law to govern space activities in the history of Russia since the space endeavour started back in the 1960s. The Law has been amended several times since its adoption, the latest being in December 2006.

At present, a new branch of the national legal system – Russian Federation space legislation – has already passed through its first stages of formation and development. The Russian Federation space legislation consists of the *Law on Space Activities*, other federal laws containing legal norms connected with space activities (the Civil Code, the Air Code, the Land Code of the Russian Federation etc.), presidential decrees, governmental regulations and other normative acts governing space activities conducted under the jurisdiction of the Russian Federation. [5]

C. Hierarchy of norms governing space activities in Russia

Russian space activities are governed by the Constitution of the Russian Federation, general principles and norms of international law, international treaties concluded by the Russian Federation, the Law on Space Activities, as well as by other federal laws and normative acts of the Russian Federation. [6] In the case of an inconsistency between the norms of Russian legislation and those of foreign countries, the former has priority if it has not been overridden by a relevant international treaty. [7] Interestingly enough, the list of legal sources governing the activities of Roscosmos does not mention general principles of international law at all, [8] but since the *Law on Space Activities* does mention general principles of international law as a binding source of law governing space activities of and in the Russian Federation, and inferior legislative enactments cannot overrule provisions laid down by laws, this particular provision overrides the priority of the general principles of international law in governing the activities of Roscosmos.

2. PRINCIPLES AND OVERVIEW OF THE CURRENT PROGRAMMES

The status of the federal space programme is laid down in Article 7 of the *Law on Space Activities*. It is a long-term plan document drafted by Roscosmos and approved by the President, and it serves as a basis for the formation of the state order for the development, manufacture and use of space equipment for scientific and national economy purposes. [9] The programme is based on the proposals of the interested Federal executive bodies reflecting the results of space project competitions. [10] General information about the programme and its implementation reports are regularly published in the media. Each Federal space programme must take into account the following: the goals, tasks and principles of space activities; State interests; the economic situation of the country; the state of space science and industry; the need for a complex development of the space and the ground segment of space infrastructure; the interests of users and producers of space equipment and technology; the state of and trends in the development of cosmonautics; the state of the world space market; and, international obligations of the Russian Federation including the task of expanding international cooperation.

The current Federal space programme was adopted in 2006 and covers the period from 2006 till 2015. [11] The aim of the programme is to meet the growing needs of state structures, regions and citizens regarding space goods and services by virtue of expansion of the application of space technologies to resolve issues in economic, social, scientific, education and other fields, through expanding international cooperation, as

well as building upon existing Russian space potential. Its main objectives are the development, expansion and maintenance of orbital grouping of space objects in the interests of socio-economic development, science and state security; development, manufacture and exploitation of the Russian segment of the International Space Station for various research purposes; maintenance of the Russian segment of the KOSPAS-SARSAT search and rescue system; development of effective launchers; maintenance and development of the Baikonur spaceport; and, manufacture of rocket and space equipment of the highest world standards. Furthermore, the programme contains detailed provisions of scheduled measures that will lead to the achievement of the objectives. It also allocates funds to fulfil the programme, enumerates priority directions of space industry development, and, as well as analyses anticipated results of the implementation of the programme.

3. AUTHORITIES IN CHARGE OF THE REGULATION OF SPACE ACTIVITIES IN RUSSIA

According to Article 71 of the Constitution of the Russian Federation, **[12]** outer space activities fall under the exclusive jurisdiction of the Russian Federation. This is explained by the fact that space activities constitute an economic branch that is important for the whole country and contributes to the development of other fields of the national economy. As the national space activities can only be financed by the Federation, they are to be administered by central governmental bodies. **[13]** Article 5(1) of the *Law on Space Activities* reaffirms the constitutional provision by assigning the conduct of space activities to the authority of the Russian Federation. It is, therefore, within the competence of the President of the Russian Federation, the Federal Government, as well as of Roscosmos and the Ministry of Defence. The respective rights and obligations of each of those actors are laid down in Articles 5-7 of the *Law on Space Activities*. Although the competencies of each of these governmental agencies are quite clearly defined in the Law, especially regarding the governance of space activities in military and civilian spheres, there are some areas that require joint, or permit overlapping governance by the Ministry of Defence and Roscosmos. The most important of such overlapping competences is the deployment of dual-use technologies.

A. The President

In accordance with Article 5(2) of the *Law on Space Activities*, the President of the Russian Federation has overall responsibility for space activities. For the purpose of fulfilling this responsibility, the President examines and approves the main provisions of state policy documents regarding space activities and resolves the most important issues concerning the space policy of the Russian Federation. Furthermore, the President assigns presidential status to space projects and programs of particular significance.

B. The Government

Article 5(3) of the *Law on Space Activities* sets out the competences of the Federal Government. Its first responsibility is to implement national space policy in the interests of science, technology, different sectors of the economy and international cooperation activities of the Russian Federation. This is the reason why the Federal Government puts forward proposals, in accordance with established procedure, for the funding of the Federal Space Programme and, ensures favourable conditions for the long-term development of space technology and techniques and implements a policy of state support for the rocket-engineering and space sector. Furthermore, the Federal

Government coordinates the work of federal executive bodies and organizations involved in space activities and international cooperation activities undertaken by the Russian Federation in the field of space. It also exercises supervisory responsibility for the development and conduct of international space projects undertaken by the Russian Federation.

The Federal Government examines and approves Federal Space Programmes, long-term space programmes, the state order for the development, manufacture and delivery of space equipment and space infrastructure facilities, and the state defence order for the development, manufacture and delivery of space arms and military equipment. Finally, the Government, within the limits of its competence, approves legislative acts regulating the procedure for the development, design, testing and use (exploitation) of space technology, and appoints government committees on the testing of space technology.

C. The Federal Space Agency

Article 6 of the *Law on Space Activities* outlines the competence of the Federal executive body responsible for the execution of space activities in Russia. The competent body was established as early as 1992 and was called the Russian Space Agency. [14] Throughout the decade, the body took several steps aimed at advancing the development of space activities in Russia. In 1999, it was transformed into the Russian Aero-Space Agency. [15] However, on March 9, 2004, presidential decree № 314 transformed the Russian Aero-Space Agency into the Space Agency of the Russian Federation, which is now responsible for the overall conduct of space activities. It exercises this responsibility in the interests of science, technology and the different sectors of the economy by organizing activities for the development of space technology with scientific and socio-economic applications.

Roscosmos is responsible for drafting the Federal Space Policy as well as its implementation through the use of space equipment. It places state orders for the development, manufacture and delivery of space equipment and space infrastructure facilities with scientific and socio-economic applications. Furthermore, it has a number of responsibilities regarding the development and approval of programmes on the development of space equipment, infrastructure and technology, some of which are performed in cooperation with other governmental bodies. Another important function of Roscosmos is the organisation, coordination and implementation of commercial space projects. Part of this function is the responsibility to issue licenses for various types of space activities. Furthermore, Roscosmos is in charge of space equipment and technology certification as part of its overall responsibility to ensure the safety of space activities. It also has the mandate and authority to sign international agreements on space related issues. In addition, the Government may assign Roscosmos with such other functions as it deems appropriate.

The principles that govern the fulfilment of these functions and the organisation of the Roscosmos' activities are laid down in the Federal Government Resolution on *Regulation on the Federal Space Agency*. [16] The Regulation divides Roscosmos' space related functions into 6 groups, namely: realisation of the national policy; normative regulation of space activities; delivery of state services and governance of state property; international cooperation in the field of realisation of joint projects and programmes; governance of the work in the field of rocket and space industry; and, general coordination of the activities conducted at Baikonur kosmodrome (launch site). The

document further gives detailed explanations of the functions listed in the *Law on Space Activities*.

D. The Ministry of Defence

According to Article 7 of the *Law on Space Activities*, governance of space activities in the interests of defence and security of the Russian Federation as well as the organisation of the activities regarding the development of space equipment for military purposes are under the jurisdiction of the Ministry of Defence. Within its competence, the Ministry of Defence drafts projects on the space segment of Federal programmes on development and manufacture of arms and military equipment, and is in charge of state orders for manufacture of such military equipment. Furthermore, the Ministry of Defence plans the use of space equipment for the purposes of defence and security of the Russian Federation, certifies space military equipment and technology, and coordinates activities regarding the future directions of development of space equipment and technology for military purposes. The Ministry may also perform functions not mentioned in the *Law on Space Activities* if it is so mandated under and by virtue of a decision of the Federal Government. The Ministry of Defence of the Russian Federation is entitled to temporarily transfer specifically suitable space infrastructure objects under its jurisdiction to Roscosmos on a contractual basis to be used for carrying out the space activities of the latter in aid of scientific and national economy purposes.

4. LAW ON SPACE ACTIVITIES: AN OVERVIEW OF THE PROVISIONS

The *Law on Space Activities* is the main *lex specialis* that governs space activities, determines rights and obligations of the regulatory bodies and of space industry actors regarding exploration and use of outer space, sets main principles governing the conduct of space activities, as well as provides the basis for adopting future detailed normative acts and regulations. It is comprised of 7 parts, namely: General Provisions, Organisation of Space Activities, Economic Conditions of Space Activities, Space Objects and Space Infrastructure, Safety of Space Activities, International Cooperation and Responsibility. Although the following analysis will not exactly follow the structure of the Law, most of the provisions will be addressed in the same order as they appear in the document.

A. Space Activities: Notion, Goals and Principles

The content of the legal notion of "space activities" is determined clearly and definitely in the *Law on Space Activities*. Article 2 provides that: "for the purposes of this Law, space activities shall be defined as any activities directly connected with operations to explore and use outer space, including the Moon and other celestial bodies". The open list of the Article establishes that the main areas of space activities include: scientific space research; use of space technology for communications, including television and radio broadcasting; remote sensing of the Earth from outer space, including environmental monitoring and meteorology; use of navigational, topographical and satellite systems; manned space flights; use of space equipment, materials and technology for the purposes of defence and security; observation of objects and phenomena in outer space; testing of technology in outer space conditions; manufacturing of materials and other products in outer space; and, other types of activities performed with the aid of space technology.

All of these activities may involve the manufacture, use of space equipment, space materials and space technologies, and delivery of other services related to space activities, as well as international cooperation between the Russian Federation and other countries in the field of exploration and use of outer space. [17] Such an approach allows the qualification of space activities as a complex, which means that these activities involve a lot of different steps and can be regulated by norms from different fields of law. The exploration and use of outer space encompasses all kinds of space activities. It has the utmost priority among the state interests of the Russian Federation, [18] and it is conducted in order to reach five aims. [19] The first aim is to foster economic development in the Russian Federation, to promote the welfare of its citizens through rational and effective use of space equipment, materials and technology, and to increase the extent to which these are used. The second is to strengthen and develop the scientific, technical and intellectual potential of the space industry and infrastructure. The third aim is to promote the defence and to ensure the national security of the Russian Federation. The fourth is to facilitate the upgrading and accumulation of scientific knowledge about the Earth, outer space and celestial bodies. Finally, the fifth aim is to develop and expand international cooperation undertaken by the Russian Federation to further integrate it into the global economy and to promote international peace and security.

In accordance with Article 4 the *Law on Space Activities*, and provided that they are not prohibited by international agreements to which the Russian federation is a party, space activities carried out in the Russian Federation , shall be conducted in accordance with the following legal principles:

1) use of advancements in space science and technology to foster peace and international security;
2) mobilisation of extra-budgetary resources for space activities with the maintenance of state control over their use and guarantee that such use shall be in furtherance of the State interests of the Russian Federation; [20]
3) guarantee of the safety of space activities and protection of the environment;
4) equal and mutually beneficial participation of the Russian Federation in international cooperation in the field of space;
5) international responsibility of the Russian Federation for space activities undertaken in or by the Russian Federation; [21]
6) rational combination and balanced development of space equipment and technology used for scientific and socio-economic purposes, as well as in the interests of the defence and security of the Russian Federation ("dual-use space technology").

E. *Economic conditions of space activities*

Article 12 lays down the financing scheme applied to space activities, the basic principle of which is that the amount of money invested in space activities is determined annually by the federal budget. The budget also determines the financial framework for the fulfilment of state orders, [22] as well as surety provisions that secure foreign investments in space activities designed to fulfil the Federal Space Programme and space activities of Russian organisations.

Article 15 regulates the use (exploitation) of space equipment and names two categories of entities who are entitled to pursue such an activity: owners of space equipment and/or person(s) who have acquired relevant rights in accordance with the laws of the Russian Federation. The Article allows joint exploitation of space equipment

by several entities, if such use does not affect the technical functioning of the equipment.

Article 16 determines the legal protection afforded to the results of intellectual activity gained from the development of space equipment and technologies, and it contains a *renvoi* to the Civil Code and the regime established therein with regard to intellectual property. [23]

Space activities in the Russian Federation, as well as the dissemination of information about such activities shall be conducted in conformity with legal requirements for the protection of state, official and commercial secrets and exclusive intellectual property rights.

F. *Space object: notion, rules regarding jurisdiction and flight*

Article 130(1) of the Russian Federation Civil Code [24] provides that a space object is an immovable property, and, as such, is subject to state registration. [25] A more precise definition is laid down in Article 40(3) of the *Law on Pledges*: "an object designed for exploration and use of outer space, the Moon and other celestial bodies for civil purposes." [26] The *Law on Space Activities* does not contain a definition of a space object, but states that a space object of the Russian Federation shall be subject to registration and shall bear markings certifying its ownership by the Russian Federation. [27] Roscosmos' Draft Administrative Order regarding Fulfilment of the State Function of Maintaining the Registry of Space Objects offers the following definition of a space object: "a space mechanical device, which is designed to conduct specified tasks and is capable of independent long-term functioning in outer space".

Article 17 of the *Law on Space Activities* lays down jurisdiction principles regarding space objects. Under those principles, the Russian Federation shall retain jurisdiction and control over space objects registered therein during the time spent by such objects on the ground and at any stage of their flight in outer space or on celestial bodies, and also upon their return to the Earth. [28] The rights of ownership of space objects shall remain unaffected both during the time spent in outer space or on celestial bodies and upon their return to the Earth. [29] In cases where space objects are manufactured by Russian organizations and citizens jointly with foreign states, organisations, citizens or international organisations, the *Law on Space Activities* contains a double *renvoi* to international law, which will be applicable to determine issues of ownership, registration, jurisdiction and control over a particular object. [30]

Article 17(5) reaffirms the fundamental space law principle of non-appropriation of outer space and celestial bodies by declaring that rights of jurisdiction and control over space objects and of their ownership do not affect the legal status of the area of outer space or the surface or interior of the celestial body occupied by such objects. It also states that rules may be established in the direct vicinity of a space object of the Russian Federation within the minimum zone necessary to ensure safety of space activities, and that such rules shall be binding upon Russian and foreign organisations and citizens.

Article 19 of the *Law on Space Activities* regulates special aspects of space flight control. It states that control over flight of space objects of the Russian Federation at all stages – from launch to completion of the flight – shall be retained by the organisations responsible for their use (exploitation). Landing of space objects of the Russian Federation shall take place at designated special landing sites for space objects. [31] In

the event of incidents in the course of space activities, including accidents and disasters, space objects of the Russian Federation may land in other regions upon due notification of competent state governmental authorities. Manoeuvring of space objects in the airspace of the Russian Federation is subject to legal provisions governing the use of airspace. A space object of a foreign state may execute a single innocent flight through the airspace of the Russian Federation for the purpose of returning to the Earth, provided that the competent authorities of the Russian Federation are duly notified about the time, place, trajectory and other conditions of such a flight. [32]

It is the responsibility of both Roscosmos and the Ministry of Defence to notify the competent state authorities of the Russian Federation, and, where necessary interested foreign states and international organisations about the launching or landing of space objects of the Russian Federation. In the case of launching, landing or terminated existence of space objects of the Russian Federation outside its territory, the competent agencies of the Russian Federation shall perform their functions in agreement with the competent authorities of the interested foreign states. [33]

G. *Space infrastructure*

Article 18 of the *Law on Space Activities* lists objects which together constitute the space infrastructure of the Russian Federation. These include cosmodromes, launching complexes and installations, command and instrumentation complexes, space object flight control centres and points, data acquisition, storage and processing terminals, space equipment storage bases, fall-out areas for separating components of space objects, space object landing sites and take-off landing strips, experimental base facilities for the development of space technologies, cosmonaut training centres and equipment, as well as other ground facilities and equipment used for space activities. Objects may be included as part of space infrastructure only if they are actually used for the conduct of space activities. Space infrastructure facilities, which are federal property, are under the operating control of state organisations in charge of their operation, but may be transferred to other persons according to procedures laid down in the Russian Federation legislation. [34]

H. *Cosmonauts*

Citizens of the Russian Federation who express the desire to take part in space flights and who meet the stipulated professional and medical requirements may be selected for training and for the conduct of space flights on a competitive basis according to criteria established by the Russian Federation legislation, which also governs the training process and professional activities of cosmonauts. [35]

A cosmonaut who is a citizen of the Russian Federation may be appointed as commander of the crew of a manned space object of the Russian Federation. The commander is vested with the full authority necessary for the conduct of the space flight and with the control of the crew and other persons participating in the flight. Within the scope of his/her competence, the commander has responsibility for the execution of the flight programme, safety of the crew and other persons participating in the flight, and the preservation of the space object and any property contained within it. [36] The Russian Federation retains jurisdiction and control over any crew of its manned space object on the ground, in space flight or during their stay in outer space or on celestial bodies, including extravehicular activity, and upon the return of the space object to the Earth. This regime is subject to the provisions of the relevant international treaties to which the Russian Federation is a party.

Article 20(5) of the *Law on Outer Space* obligates citizens of foreign states who undergo training for a space flight in the Russian Federation or participate in a flight on board its manned space objects to abide by the laws of the Russian Federation, provided that an international treaty to which the Russian Federation is a party does not stipulate otherwise. It is not clear whether this provision encompasses space tourists. If it does, then it appears from the wording of the Article that citizens of the Russian Federation cannot be space tourists.

The Civil International Space Station is the only manned space programme in which the Russian Federation participates. This important international space project is realized on the basis of the intergovernmental Agreement Concerning Cooperation on the Civil International Space Station of 29th of January 1998 as well as of the Code of Conduct for the International Space Station Crew that was approved by a Resolution of the Government of the Russian Federation. [37]

I. *Licensing of space activities*

Article 9 of the *Law on Space Activitie*s contains a very important legal provision by virtue of which the Law establishes an authorization (licensing) procedure for the pursuit of all space activities in the Russian Federation both for scientific and socio-economic purposes. Licensing requirements apply to space activities pursued by organizations and citizens of the Russian Federation or to the space activities pursued by foreign organizations and citizens under the jurisdiction of the Russian Federation where such activity includes the testing, manufacture, storage, preparation for launch or launch of space objects, or control of space flights. The provisions of the Article are further elaborated in the *Resolution on Adoption of Regulations regarding Licensing Space Activities* [38] that defines types, forms and periods of validity of licenses, conditions and procedures for their issue, withholding, suspension or termination, and other aspects of licensing. [39]

J. *Safety of space activities*

Safety standards applicable to space activities are established by the Russian Federation and cover all types of space activities. The Ministry of Defence and Roscosmos are the main controlling bodies in this regard. It is important to point out that Article 22(1) of the *Law on Space Activities* lays down the sustainability principle as it stipulates that space activities shall only be pursued if the anthropogenic influence on the environment and near-earth space does not go beyond prescribed levels. The Law does not determine concrete standards although it imposes an obligation on both Roscosmos and the Ministry of Defence to inform relevant governing institutions as well as citizens about any threats to security caused by space activities.

Article 23 lays down the principles governing investigations of accidents, and Article 24 addresses the issue of search and rescue operations. Article 25 concerns the insurance of space activities, establishing a two-tier system of compulsory and voluntary insurance. The compulsory insurance regime covers organisations and citizens who use space equipment or order its manufacture and use: they must insure the health and life of cosmonauts, space infrastructure personnel, as well as against liability for damage caused to the life, health or property of third parties. Voluntary insurance refers to any organisation or person engaged in space activities and covers space equipment and the risk of loss or damage to it.

K. *International cooperation*

The main provision of this section is the determination of the legal status of foreign organisations and citizens who conduct space activities under the jurisdiction of the Russian Federation. Article 27 states that foreign organisations and citizens are subject to the legal regime of space activities applicable to Russian organisations and citizens to the extent that the domestic regime of the relevant foreign state is applied to nationals of the Russian Federation. The Russian Federation ensures that it will guarantee legal protection of the technology and trade secrets of foreign nationals engaged in space activities under its jurisdiction.

Regarding international cooperation, the Law establishes the freedom to make contracts or treaties with foreign organisations and citizens in accordance with the legislation of the Russian Federation. Furthermore, it states that in case of an inconsistency between the legal norms of a foreign state applicable to space activities, in which Russian organisations and citizens participate, and those of the Russian Federation, the latter shall prevail provided that this regime is not altered by a valid international treaty.

L. *Liability*

The provisions on liability that round up the *Law on Space Activities* are almost a verbatim implementation of Articles II and III of the Liability Convention. Compensation for personal or material damage caused by Russian space objects shall be paid by the organisations or citizens who have insured their liability according to the laws of the Russian Federation.

II. Other laws and regulations

A. *Regulations regarding licensing: procedure and requirements*

Article 17(95) of the *Law on Licensing of Certain Activities* [40] establishes, and Article 9 the *Law on Space Activities* reaffirms that space activities require licensing. The main normative acts that govern licensing the activity of Roscosmos are the *Resolution on Adoption of Regulations regarding Licensing Space Activities* [41] and the Roscosmos *Administrative Order regarding the fulfilment of the state function of licensing space activities*. [42]

Paragraph 1 of the *Licensing Regulations* stipulates that the licensing regime created by the Regulations covers juridical persons conducting space activities without any reference to their nationality. In contrast, paragraph 1.1.4. of the *Licensing Order* states that juridical persons of Russian Federation are the recipients of licences. Paragraph 3 of the *Licensing Regulations* enumerates the works and services (8 in total) that may be done or delivered in the course of space activities and therefore require licences; the list corresponds to the list of areas of space activities contained Article 2 of the *Law on Space Activities*. Paragraph 4 sets out a separate list of requirements to be met in order to obtain a licence for each category of activities. Almost all of them are identical, except a few (not more than 2 per activity) that are unique for each category. These conditions include *inter alia* availability: of the necessary infrastructure that meets the required standards; of qualified specialists; of quality control systems; organisation of storage of normative-technical documentation; compliance of technical documentation with the set requirements; permit to conduct activities that involve use of information that is classified as a state secret.

Documents that have to be submitted to Roscosmos when filing the application to acquire a licence are listed in paragraph 5 of the *Licensing Regulations* and duplicated in paragraph 2.4.2. of the *Licensing Order*. The list is closed and this means that Roscosmos is not entitled to request for documents other than those listed. The list is only complemented by the requirement to submit documents identifying juridical persons as enumerated in Article 9(1) of the *Law on Licensing of Certain Activities*. The licence has to be issued or a decision on refusal has to be made within 45 days from the date of filing of the application. [43] If granted, the term of licence is 5 years, and is renewable.

Gross violations of the licensing conditions listed in paragraph 12 of the *Licensing Regulations* and of the requirements to be met in order for a licence to be issued may lead to suspension and eventually termination of the license. [44] Roscosmos may only suspend or terminate a license after a judicial decision has been pronounced thereby terminating the activities of a licensee for a certain period of time in order to remove gross violations of the licence. In such cases, Roscosmos enforces the court order by suspending the licence and terminating the activities of a licensee for the period ordered by the court. If the licensee fails to rectify the grounds for the suspension of its activities within the time period granted by the court, Roscosmos is obligated to file a suit demanding termination of the licence conditions.

The *Licensing Order* grants Roscosmos authority to control and check the activities of licensees in order to track compliance of their activities with the licence requirements. The control powers come into effect at the very moment when the licence is issued and accompany licensed space activities till the moment the licence is terminated. The last part of the *Licensing Order* lays down the procedure for filing complaints regarding activities of Roscosmos in the sphere of licensing. The complainant has two major alternatives: the licensee can either file a complaint to the Head of Roscosmos or file a suit in court, or may rely upon any other means allowed by the legislation.

B. *Regulation regarding acquisition, use and provision of remote sensing data*

Apart from *The Federal Law on Information Technologies and Information Protection*, [45] acquisition, distribution and protection of remote sensing data is governed by the Government of the Russian Federation *Resolution on the Order of Acquisition, Use and Provision of Geo-Spatial Information*. [46] Apparently, this Resolution is the first piece of legislation that directly governs remote sensing issues in the Russian Federation. As commentators have suggested, the document is a big step forward in the dissemination of remote sensing data, as it allows to make available high resolution remote sensing data regarding any part of Russian Federation, except for specified restricted areas, and also makes remote sensing data acquired by foreign remote sensing companies freely accessible. [47]

The *Remote Sensing Resolution* lays down the regime that governs the acquisition, use and provision of geo-spatial information by means of earth remote sensing satellites that produce images with a resolution better than 2 metres. Paragraph 2 of the *Remote Sensing Resolution* contains a list of definitions of concepts used in the document. The definition of remote sensing is wider than that contained in the UN Principles Relating to Remote Sensing of the Earth from Outer Space, [48] as the purposes of remote sensing include determination of location, description of character

and time-conditioned variability of natural parameters and effects, of natural resources, environment, as well as of anthropogenic factors and formations. The *Remote Sensing Resolution* explicitly incorporates remote sensing data into the broader category of geo-spatial information, but does not operate with such concepts as processed data and analysed information. [49] Its Section II establishes the procedure for the formation of the list of areas regarding which there are restrictions on acquisition and use of geo-spatial information. The list is put together by interested Federal government bodies and is approved by the Federal Government on a yearly basis.

Section IV regulates the acquisition, use and provision of remote sensing data, stating that the planning is to be undertaken by Roscosmos, and the implementation by a remote sensing facilities operator, [50] with the participation of the Ministry of Defence. Federal executive bodies submit special requests to carry out remote sensing to Roscosmos, and other Russian and foreign [51] users submit their requests directly to remote sensing facilities operators. [52] Paragraph 20 of the *Remote Sensing Resolution* provides that the acquisition of remote sensing data of foreign states' territories may be conducted by a remote sensing facilities operator and directly through the receiving stations that belong to foreign users. Together with remote sensing facilities owners and operators, Roscosmos controls the use of remote sensing data. [53] All remote sensing facilities operators are required to maintain a registry of their activities, as well as of all remote sensing data provided to Russian and foreign users. Copyright regarding remote sensing data is granted in accordance with the relevant Russian Federation legislation. [54]

C. *Regulation regarding the registration of space objects*

For the time being, the Russian Federation has no space objects registration procedure. Recently, [55] however, the *Draft Administrative Order of Roscosmos regarding the fulfilment of the state function of keeping the registry of space objects* was developed within Roscosmos.

The *Draft Registry Order* serves the purposes of the Convention on Registration of Objects Launched into Outer Space. [56] The registration of space objects by Roscosmos that it provides for is not part of the state system of registration of rights in immovable property and transactions affecting it. According to the procedure established, one month before the actual launch, Roscosmos must be provided with information from a Russian organisation that is exploiting a space object or is conducting or procuring its launch. Three days after the launch, the same organisation must file a written notification about the necessity of registration of the launched space object. Information about launched space objects must be communicated to Roscosmos within seven days from the date of launch and must include the following: name of the space object; time and date of the launch; territory or place of the launch; name of the launcher; main parameters of the orbit; general purpose of the space object; and, position in the geostationary orbit, if appropriate.

The *Draft Registry Order* states that furnishing registration information is a juridical act of acknowledgement that a space object is actually in orbit or in outer space. This registration is the basis for the state to register the rights of owners or operators in space objects. The *Draft Registry Order* further states which objects should be included into the registry [57] and which should not. [58] Within a period of one month after having registered a launched space object, Roscosmos, in turn, has to furnish the information to the Ministry of Foreign Affairs for subsequent communication to the UN Secretary-General.

III. Conclusion

The survey of existing legislation adopted in the Russian Federation regarding space activities shows that, although the regulatory activity began relatively recently – after the collapse of the Soviet Union – its scope is gradually expanding to cover not only general governance issues relating to space activities, but also to lay down licensing procedures for space activities and to adopt norms regulating the conduct of certain space activities. In addition to specific laws and regulations, norms of general laws (for instance relevant provisions of the Civil Code) as well as legislation on licensing of certain space activities, and intellectual property regulations, are also applicable to space activities. The Russian Federation regulations still lack some critical provisions that would foster private sector participation in space activities (for example provisions concerning the registration of rights of private organisations regarding ownership of space objects). But, taking into account the developing nature of the Russian Federation space regulations these issues might be resolved in the near future, especially considering that one of the basic principles driving the conduct of space activities is the promotion of private investments in space activities.

IV. Annex

The list of normative legal acts of the Russian Federation on space activities:

1. Constitution of Russian Federation
2. Law of Russian Federation on Space Activities, 20 August, 1993, № 5663-1, as amended 18.12.2006.
3. Federal Law of the Russian Federation On Licensing for Certain Types of Activities, 8 August, 2001, № 128-FZ.
4. Declaration of the Supreme Council of the Russian Federation On Space Policy Priorities of the Russian Federation, 27 April, 1993, № 4879-1.
5. Decree of the President of the Russian Federation On Space Activities Administration Structure in the Russian Federation, 25 February, 1992, № 185.
6. New policy 2007.
7. Decree of the President of the Russian Federation on Realization of State Policy in Rocket and Space Industry Area, 20 January, 1998, № 54.
8. Decree of the President of the Russian Federation on Federal Executive Power Bodies Structure, 25 May, 1999, № 651.
9. Resolution of the Government of the Russian Federation on Space Activities State Support and Provision in the Russian Federation, 11 December, 1993, № 1282.
10. Resolution of the Government of the Russian Federation on Arrangements For Improving Efficiency of and Structure Rearrangement in Rocket and Space Industry Sector, 25 June, 1994, № 866.
11. Resolution of the Government of the Russian Federation on Licensing for Certain Types of Activities, 24 December, 1994, № 1418.
12. Resolution of the Government of the Russian Federation on Space Activities Implementation for Benefit of Economy, Science and Security of the Russian Federation, 7 August 1995, № 791.
13. Resolution of the Government of the Russian Federation on Adoption of Regulations of Space Activities Licensing, 2 February, 1996, № 104.
14. Resolution of the Government of the Russian Federation on Approval of National Space Policy Conception of the Russian Federation, 1 May, 1996, № 533.
15. Resolution of the Government of the Russian Federation on Arrangements for Implementing the Decree of the President of the Russian Federation of 20 January,

1998, № 54 On Realization Of State Policy in Rocket and Space Industry Area, 12 May, 1998, № 440.

16. Resolution of the Government of the Russian Federation on Use of Military Space Systems and Complexes for Services in Space Activities Area, 8 April, 1999, № 394.

17. Resolution of the Government of the Russian Federation on Issues of Russian Aeronautics and Space Agency, 15 July, 1999, № 827.

18. Resolution of the Government of the Russian Federation on Adoption of Regulations for Russian Aeronautics and Space Agency, 25 October, 1999, № 1186.

19. Resolution of the Government of the Russian Federation on Licensing for Certain Types of Activities, 11 April, 2000, № 326.

20. Resolution of the Government of the Russian Federation on Approval of the Code of Conduct for the International Space Station Crew, 27 October, 2000, № 155-r.

21. Resolution of the Government of the Russian Federation on Adoption of Regulations on State Commission for Space Systems and Complexes Flight Tests, 30 December, 2000, № 1036.

22. Resolution of the Government of the Russian Federation on Organization of Licensing for Certain Types of Activities, 26 January, 2006, № 45.

23. Resolution of the Government of the Russian Federation on Adoption of Regulations for Federal Space Agency of the Russian Federation, 26 June, 2004, № 314, as amended (2006)

24. Resolution of the Government of the Russian Federation on Adoption of the Federal Space Program of the Russian Federation, 22 October, 2005, № 635.

25. Resolution of the Government of the Russian Federation on Adoption of Regulations of Space Activities Licensing, 30 June, 2006, № 403.

26. Russian Federation Space Agency Order on Adoption of Administrative Statute of Russian Space Agency Regarding Fulfilment of the State Function of Licensing Space Activities, 2007.

27. Resolution of the Government of the Russian federation on the Order of Acquisition, Use and Provision of Geo-Spatial Information, 2007.

28. Russian Space Agency Administrative Statute regarding Fulfilment of the State Function of Maintaining the Registry of Space Objects, 2007 [draft].

Literature:

[1]. 569-264 from 02.09.1958.

[2]. 1386-618 from 10.12.1959.

[3]. 24.09.1962. It settled the decision of the organs mentioned to conduct the landing of the piloted space vehicle on the surface of the Moon.

[4]. 655-268 from 03.08.1964. The Resolution for the first time to regulated the soviet-piloted space programme for the exploration of the Moon and pointed out that landing of the Soviet cosmonaut on the surface of the Moon is a priority goal of the Soviet cosmonautics.

[5]. See the list of the legislation related to space activities in the Annex to this Chapter.

[6]. Article 1 of the Law on Space Activities.

[7]. Article 28 of the Law on Space Activities. This norm is applicable in cases where foreign legislation is applicable to space activities undertaken by subjects of the Russian Federation, both juridical and natural persons.

[8]. Paragraph 3 of Regulation No. 314 of 26.06.2004 on Federal Space Agency.

[9]. It follows from the wording of the Article that military aspects of space exploration and use are not included in the scope of the programme.

[10]. Art. 7(3) of the Law on Space Activities.

[11]. Adopted by the Federal Government Resolution No. 635 of 22.10.2005.

[12]. 12.12.1993.

[13]. Kutafin O. (ed.) *Clause-by-clause Scientific-practical Commentary to the Constitution of Russian Federation* (Moscow, 2003) online: <http://constitution.garant.ru/DOC_3866952.htm> (in Russian).

[14]. Presidential Decree № 185 of 25.02.1992 on Space Activities Administration Structure in the Russian Federation.

[15]. Presidential Decree № 651 of 25.05.1999 on Federal Executive Power Bodies Structure.

[16]. No. 314 of 26.06.2004 as amended on 14.12.2006.

[17]. Article 2(2).

[18]. Preamble.

[19]. Article 3. The list expands the goals of space activities enumerated in the Preamble: development of economy, science and technology, consolidation of defence and security, and furtherance of the international cooperation of the Russian Federation.

[20]. Note that this principle is listed on the second place, and thus is one of the most important principles governing space activities in Russian Federation, which combines private initiative with state control.

[21]. In the Russian text of the Law the two prepositions refer to two different types of jurisdictions "in" refers to the territorial, and "by" to personal jurisdiction.

[22]. The procedure regarding formation and submission of state order is laid down in Art. 14.

[23]. This wording (excluding the *renvoi* to intellectual property provisions contained in laws other than the Civil Code) was introduced by the last amendment made in December 2006 and came into force on 01.01.2008.

[24]. Adopted by the Parliament on 21.10.1994.

[25]. Note, that till now there is no special mechanism of ownership registration regarding space objects, which signifies that there is no way there can be private ownership, or better to say its recognition, of space objects in the Russian Federation. See Chekanov, D. Civil law Relationships Involving Artificial Space Objects (PhD Dissertation) (Moscow, 2003) summary online: <http://planetadisser.com/see/dis_20185.html> (in Russian).

[26]. Whether "civil purposes" condition significantly narrows the definition of the space objects is not clear, as the definition serves the purposes of the Law, and is not intended to lay down a general notion of space object.

[27]. Art. 17(1). The Law does not contain any provisions determining registration procedure.

[28]. Art. 17(2).

[29]. Art. 17(3), regime that can be altered by international treaties.

[30]. Art. 17(4).

[31]. Art. 19(2).

[32]. No conditions are determined within the body of the Law.

[33]. Art. 19(5).

[34]. Art. 18(2).

[35]. Art. 20(1) (2).

[36]. Art. 20(3).

[37]. No 155-r of 27.10.2000.

[38]. No. 403 of 30.06.2006.

[39]. Provisions of the Regulations will be addressed below in a separate section.

[40]. No 128-FZ (in Cyrillic letters) of 08.08.2001, as amended (last amendment on 05.02.2007).

[41]. No. 403 of 30.06.2006 (hereinafter *Licensing Regulations*).

[42]. Order No. 51 of 25.05.2007 (hereinafter *Licensing Order*).

[43]. Paragraph 2.6. of the *Licensing Order*.

[44]. Paragraph 3.7. of the *Licensing Order*.

[45]. No. 149-FZ (Cyrillic letters) of 29.07.2006.

[46]. Order No. 51 of 25.05.2007 (hereinafter *Licensing Order*).

[47]. *See* comments by Mr. V Shalamov from the Russian Agency on Geodesy and Cartography on the regulation online: <http://www.gisa.ru/38431.html>; and The First Explanatory Comments Made with Regard to the Remote Sensing Resolution on the Russian GIS Forum <http://www.gisa.ru/38432.html>.

[48]. GA Resolution, U.N. Doc A/RES/41/65 (1986) (hereinafter UN Principles).

[49]. Cf. UN Principles.

[50]. Operator is defined as an organisation, which carries out planning of remote sensing, reception, processing, storage and provision of remote sensing data. *Remote Sensing Resolution* does not mention whether the notion of operator includes foreign operators or not.

[51]. Foreign users have to declare that remote sensing data will be used for peaceful purposes and will adversely affect security of Russian Federation.

[52]. Requirements to the requests are laid down in paragraph 14 of the *Remote Sensing Resolution*.

[53]. Paragraph 22 of the *Remote Sensing Resolution*.

[54]. Paragraph 12 of the *Remote Sensing Resolution*.

[55]. October 2007 (hereinafter *Draft Registry Order*).

[56]. UNGA Res. 3235 (XXIX) Annex, Nov. 12, 1974; ILM Vol. XV, 43.

[57]. Paragraph 15.

[58]. Paragraph 16.