

The Republic of Kazakhstan cooperation with the Russian Federation and other countries of the world in the field of outer space

Yerbol Musinovich Abaideldinov, Mira Zhumagazyevna Kulikpayeva, Aigul Anuarbekovna Shakhmova

L.N. Gumilyov Eurasian National University, Mirzoyan Street 2, Astana, 010000, Kazakhstan

Abstract. Issues and prospects of cooperation between Kazakhstan and foreign countries in the field of space activities are researched in the present article. Since independence Kazakhstan has been developing its own space branch and aims to become one of the leading space powers. For this purpose the necessary conditions are made: the country has the world's largest "Baikonur" cosmodrome, the highly skilled professional staff is forming, the government funding is provided, bilateral cooperation is developing. In this paper the provisions of international treaties and bilateral agreements are analyzed, the problems of enforcement and ways to improve it are discussed. Special attention is paid to the legal aspects of intellectual property in the field of space activities.

[Abaideldinov Y.M., Kulikpayeva M.Z., Shakhmova A.A. **The Republic of Kazakhstan cooperation with the Russian Federation and other countries of the world in the field of outer space.** *Life Sci J* 2014;11(5):491-498] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 72

Keywords: international outer space law, "Baikonur" cosmodrome, the Republic of Kazakhstan, international cooperation, intellectual property.

Introduction

The collapse of the USSR and attainment of independence by the Republic of Kazakhstan put forward a number of important objectives. The country almost from scratch had to establish a new state, develop the economy and hold own politics. The issue of further exploitation of the "Baikonur" cosmodrome with its infrastructure and in parallel development of own outer space industry was one of the objectives. On dividing space property of the former Soviet Union was guided by the Vienna Convention on succession of states in relation to space property, state archives and state debts of December 31, 1983. Taking into account that states-successors of the USSR became independent state movables were carried over to the states on the territory of which the property law objects were located.[1]. The Decree of the President N.A. Nazarbayev of 31 August 1991 declared Kazakhstan's ownership over the "Baikonur" cosmodrome as a system of property located within its territory.

Today, 20 years after, the state successfully implements outer space programmes and establishes ambitious goals and objectives in the outer space activities. The first Kazakhstan's broadcasting satellites "Kazsat-1" and "KazSat-2" were designed and launched. The adopted 2010-2014 State programme of accelerated industrial and innovative development sees the outer space activities as part of the "economics of future" sector.[2].

In his annual address to the nation "Kazakhstan-2050": new political course of the established state" the President clearly outlined the objective: "by 2030 Kazakhstan must expand its niche on the world market for space services and bring to

fruition a number of current projects. These projects include the assembly and testing facility of spacecrafts in Astana, a remote sensing space system, the national space monitoring system and ground infrastructure and our high-precision satellite navigation system".[3].

Currently the "Baikonur" spaceport is leased by the Russian Federation until 2050. However, it does not preclude cooperation with a number of other foreign countries in the peaceful exploration of space. By following the rules of international law, developing an effective national legal framework, allocating the necessary funding and preparing highly qualified personnel Kazakhstan seeks to take its rightful place among the world's space powers. At the same time, the availability of own space industry is a bright indicator showing the level of development of any modern state, its economic, scientific and technical capacity.

During the development of the present material the authors used the works of foreign and domestic scholars, texts of international treaties and regulations, materials from scientific conferences, periodicals as well as Internet resources. The historical, comparative law, analysis and synthesis as well as other methods were applied.

History of establishment and background of the "Baikonur" complex

The "Baikonur" cosmodrome has a complex, interesting and eventful history which includes a number of milestones of the global astronautics. It all started in the 1950s when the USSR faced the need to design the first Soviet intercontinental ballistic missile "R-7" which required construction of a spaceport. The

flight range of the new missile was more than 8,000 km. This required development of a new route going eastward through almost the entire Asian part of the Soviet Union. At that time, new locations for falling of the used stages as well as new measuring points were needed. A new ground for launching of these missiles was needed. As a result it was decided to accommodate a new site in Kazakhstan, near the Aral Sea around the train station Tyra-Tam of Kyzylorda region.[4].

On 12 February 1955, the Central Committee of the Communist Party of the Soviet Union and the USSR Council of Ministers by a joint resolution # 292- 181cc endorsed establishment of the Applied Research Test Site # 5 of the Ministry of Defense of the USSR (ARTS # 5 of the USSR Ministry of Defense), designed to test missile technology. The polygon district in the first half of 1955 had a code name "Taiga".[5]. From this point on the "Baikonur" complex received dynamic development and was equipped with a wide variety of technological facilities necessary for launching of satellites of various classes.

The first launch of a two-stage intercontinental ballistic missile 8K71 # 5L, a prototype of missiles' family of R-7 "Soyuz" type, was held on 15 May 1957. The first successful launch of 8K71 #6 took place on 21 August. On the 4 October of the same year, opening the era of space exploration, Baikonur launched carrier rocket 8K71 PS with the first artificial Earth satellite "PS-1".[4].

On 29 January 1958 the settlement on the site 10 that then had no name and was informally called "Zarya" was given a name "Leninskiy" by the Decree of the Presidium of the Supreme Council of the Kazakh SSR.[5].

On 12 April 1961 a spacecraft with the first cosmonaut Yuri Gagarin was launched to the outer space.[4].

The ARTS # 5 was openly named "Baikonur cosmodrome". [5]. Baikonur covers an area of 6,717 km² and stretches from north to south for 75 km, from west to east - for 90 km. Azimuth range of carrier rocket launches is from 35 to 92. [6].

In 1969, the village became a town and was officially named "Leninsk". [5].

History of "Baikonur" is part of the global rocket production and development of a complex engineering history. The first launcher launch rocket "Soyuz" was commissioned in 1957, the second, similar to it - in 1961. The two launchers launch rocket "Cyclone-M" were put into operation in 1967. The first launcher of launch rocket "Proton" was put into operation in 1965, the second - in 1966 and two more - in 1979. By and large, the "Baikonur" cosmodrome has made an enormous contribution to

the history of exploration of space by mankind. Here it is necessary to recall the launch rocket "Proton" with interplanetary stations to the Moon, Venus, Mars and the long-term orbital station "Salyut" and "Mir". The "Baikonur" cosmodrome was used for the implementation of space projects such as "East", "Sunrise", "Salute", "MID", "Mars", "Venus", "Moon" and "Energy-Buran".

The greatest role "Baikonur" cosmodrome played in the project "MIR". It was attended by about 220 organizations and 80 research institutions. Overall 104 people attended the station "MIR", among them - 62 foreigners. More than 31,000 experiments in the field of medicine, biology, engineering and astrophysics were held as well as 64 dockings with cargo spacecraft "Progress", 31 - with "Soyuz" spacecraft and under the program "MIR NASA" - 9 dockings with American "Shuttles". The station has received 170 tons of cargo and has returned to Earth more than 4,700 kg of experimental results. All of this is an integral part of the world's history and the name "Baikonur" is inscribed in its history in gold letters. [4].

In 1994 an agreement between the Russian Federation and Kazakhstan was signed according to which Russia would operate the spaceport in exchange for paying annual lease fee to Kazakhstan. The lease term was set at 20 years. In 2004, the lease term was extended until 2050. Soon new utilities were created in Leninsk, life started to improve gradually. In December 1995 Leninsk was renamed to the city of Baikonur by the Decree of the President of the Republic of Kazakhstan.

Since the second half of the 1990s, the number of space launches from Baikonur was increased significantly, the outflow of specialists from Baikonur was stopped. City gradually started to recover and develop.

About 40 years Baikonur operated under the auspices of the Ministry of Defense and Ministry of General Mechanical Engineering of the USSR. Then the baton of responsibility was taken by the military and the Federal Space Agency. Currently, the military component is removed from the spaceport, and operation of the "Baikonur" complex on behalf of the Government of the Russian Federation is exercised by the Federal Space Agency of Russia and the administration of the city of Baikonur. Kazakhstan's interests at the complex are represented by the Special Representative of the President (Mayor of Kyzylorda region) and by the National Space Agency of the Republic of Kazakhstan. Lease extension until 2050 provides a temporary resource for most daring projects. The "Baikonur" Complex is a good link for the development of good-neighborly relations between Russia and Kazakhstan, attractive object for

cooperation with countries near and far abroad. A new generation of chief designers, bright constructors and competent rocket and space technology testers should grow and become professional at the spaceport.

Retaining the status of the first space harbor of the world today Baikonur is the world's largest spaceport, which is unique of its kind and is championing in the number of launches: for example, its launch systems launch about 20 space rockets during the year. [5].

Interaction of jurisdictions of Kazakhstan and Russian Federation at the "Baikonur" complex

The chronicle of the Kazakhstan's space industry starts on 31 August 1991 when the Decree of the President of the Kazakh SSR N.A. Nazarbayev declared the "Baikonur" cosmodrome as a property of Kazakhstan located on its territory. [7]. Collapse of the Soviet Union which was at the same time one of the leading space powers of the world jeopardized the future fate of "Baikonur" cosmodrome which territory-wise appeared to be within the sovereign boundaries and state ownership of the Kazakh SSR. Young independent state faced some difficulties in forming its own full-fledged space industry: the country at that time did not have the necessary financial means and sufficient qualified personnel. However, confident pace of development of scientific and technical progress, including in the world's space industry, increased the state's interest in space exploration. We can say that many countries in the world even then, in the 1990s of the last century, anticipated for themselves ample commercial opportunities and prospects for the peaceful use of outer space in the future. Kazakhstan also was not an exception.

At that time Kazakhstan and Russia discussed the various possibilities of using the spaceport and reached an agreement that the government of our republic would pass into lease the "Baikonur" complex to the Russian Government. [4].

The basis of mutually beneficial cooperation between Kazakhstan and Russia on a wide range of issues was laid by the Treaty of Friendship, Cooperation and Mutual Assistance between the two countries, signed in Moscow on May 25, 1992 (hereinafter – 1992 Treaty).

Article 25 of the 1992 Treaty determined that the parties would expand cooperation in the field of basic research of outer space and in the use of their results in the interests of both countries and the international community, to jointly promote the peaceful exploration of space and monitor compliance with agreements on preventing the spread of the arms race on it. The same treaty defined the future of the "Baikonur" cosmodrome: the parties have agreed to

develop mutually beneficial scientific and technological potential of the "Baikonur" cosmodrome and to determine the terms of its operation by a separate agreement.

In furtherance of the above-mentioned provisions of Article 25 of the Treaty of Friendship, Cooperation and Mutual Assistance between the Republic of Kazakhstan and the Russian Federation, on the same day, May 25, 1992 an agreement "On the terms of use of the "Baikonur" cosmodrome" was signed (hereinafter - the 1992 Agreement).

Article 1 of the 1992 Agreement determines that the "Baikonur" cosmodrome is a part of the space infrastructure and includes technical, launching, landing systems, impact areas of separating fragments of space rockets and ballistic missiles. Accordingly, the subject of regulation by this Agreement was the order of the use of these items on the "Baikonur" cosmodrome located on the territories of the Republic of Kazakhstan and the Russian Federation as well as issues of maintenance and funding.

Treaty of Friendship, Cooperation and Mutual Assistance between the Republic of Kazakhstan and the Russian Federation and the Agreement between the Republic of Kazakhstan and the Russian Federation "On the terms of use of the "Baikonur" cosmodrome", both signed on May 25, 1992 in Moscow became the main reference point for next, but not less important international document the "Agreement on basic principles and conditions of use of the "Baikonur" cosmodrome concluded on March 28, 1994 in Moscow (hereinafter - the 1994 Agreement).

The issue of leasing of the cosmodrome by the Russian Federation was considered for the first time in the history of the cosmodrome and, accordingly, the issue of possible interplay or conflict of jurisdictions of the two states also emerged. Therefore, it was very important to carefully consider international law and national legislation in this area, taking into account the interests of each party.

The 1994 Agreement, unlike the previous 1992 Agreement, views the cosmodrome as an "integrated scientific, technological and social "Baikonur" system", consisting of experimental and technological objects as well as of the supplying infrastructure of the spaceport and the city of Leninsk with their movable and immovable property (Article 1) which is leased to the Russian Federation. In addition, the lessor gives the lessee the right to use the land plots occupied by the objects of the "Baikonur" complex as well as the lands designated for falling of the separating parts of carrier rockets.

In addition to the legal procedure for leasing the objects of "Baikonur" complex by the Russian Federation the 1994 Agreement also intended to

regulate the differentiation of jurisdictions of the both states over the use of “Baikonur” complex, including in relation to the constitutional rights of residents of the city of Leninsk (currently the city of Baikonur).

According to the reached agreements the Republic of Kazakhstan has jurisdiction over the following matters (Article 3 of the 1994 Agreement), which may be the subject of separate agreements or regulations:

- development and implementation of a mechanism to ensure the constitutional rights of citizens of the Republic of Kazakhstan residing in Leninsk;

- joint appointment to the post of the head of administration of the city of Leninsk;

- appointment of the commander of the cosmodrome by the President of the Russian Federation in consultation with the President of the Republic of Kazakhstan;

- collaboration of the law enforcement bodies of the Russian Federation and the Republic of Kazakhstan for purposes of operation of the “Baikonur” complex during the leasing period;

- the order of visitation of the cosmodrome and its facilities by relevant officials and delegations of the Republic of Kazakhstan;

- appointing a special representative of the President of the Republic of Kazakhstan to the cosmodrome “Baikonur”.

The rights and obligations of the parties as well as the scope of their jurisdiction regarding the use of the complex are regulated in more detail by a respective “Baikonur” complex Lease agreement concluded by the Government of the Republic of Kazakhstan and the Government of the Russian Federation in Moscow on December 10, 1994 (hereinafter - the 1994 Lease agreement). This was an important step for determining the status of “Baikonur” complex. The new stage of “Baikonur” history took place on that day. [8].

The subject of the 1994 Lease Agreement became the legal relationship resulting from transfer by a lessor (the Republic of Kazakhstan) and the reception by the lessee (the Russian Federation) of the “Baikonur” complex. According to the Section 1.1 of the Article 1 of the 1994 Lease Agreement the “Baikonur” complex is understood as experimental, technological, scientific, production and technical, social and supplying facilities of the cosmodrome “Baikonur” and the Leninsk city with its movable and immovable property. Thus, not only the spaceport itself but also the concomitant infrastructure of the Leninsk city (the old name of Baikonur city) was transferred for lease by the Russian Federation.

The 1994 Lease Agreement reflected the key provisions related to the purposes of lease, the lease term, the lease cost and the payment settlement procedures between the lessor and the lessee, transfer of the cosmodrome, rights and obligations of the parties, the general conditions of the lease. For example, the complex “Baikonur” was leased for a period of 20 years with an option of extending the term for 10 years by the parties. The lease price is \$115 million.

An important aspect of the 1994 Lease Agreement was the provision on the scope of jurisdiction of the Republic of Kazakhstan over the “Baikonur” complex because in the first place, it was necessary to take into account the rights and interests of citizens of Kazakhstan. As a result, the parties agreed that the citizens of the Russian Federation and the Republic of Kazakhstan residing on the territory of the “Baikonur” retain their constitutional rights. Monitoring over observance of the jurisdiction of the Republic of Kazakhstan at the “Baikonur” complex during the lease period as well as of the constitutional rights of citizens of the Republic of Kazakhstan implements the special representative of the President of the Republic of Kazakhstan at the cosmodrome “Baikonur”. At the same time a number of questions regarding the jurisdiction of both states can be the subject of separate agreements (for example, the Agreement between the Government of the Republic of Kazakhstan and the Government of the Russian Federation on cooperation of the law enforcement agencies in maintaining law and order on the territory of “Baikonur” of October 4, 1997, the Agreement between the Government of Republic of Kazakhstan and the Government of the Russian Federation on social security of citizens of the Republic of Kazakhstan and the Russian Federation residing and/or working at the “Baikonur” complex of October 12, 1998, etc.).

It should be noted that the legal framework establishes a special legal status of the city of Baikonur which should be mentioned taking into account the unity of the spaceport and the city. Baikonur is the administrative and territorial unit of the Republic of Kazakhstan, however during the lease period with respect to Russia it is endowed with the status corresponding to the federal city of the Russian Federation with a special regime of safe operation of enterprises and organizations as well as the residence of the citizens. [8].

The Agreement between the Republic of Kazakhstan and the Russian Federation on the status of the city of Baikonur, procedures of establishment and the status of its executive bodies signed in Moscow on 23 December 1995 laid down the

grounds for operation and maintenance of the city. It covered a number of important issues: from the legal regulation of the status of the city and the procedures of establishment of executive authorities to the special conditions of its operation.

The 2004 agreement gave a new impetus to the development of bilateral relations between Kazakhstan and Russia in the field of space activities. The lease term was extended until 2050 in order to “develop mutually beneficial cooperation between the parties in the joint efforts to ensure further effective use of the cosmodrome “Baikonur” in the interests of the Republic of Kazakhstan and the Russian Federation as well as implementation of international cooperation programs”. [9].

The lease of “Baikonur” complex by the Russian Federation and the subsequent assignment of a special status to the city of Baikonur allow attributing the city with its infrastructure to a mixed mode areas – “those are the territories that simultaneously apply international and national legislation of neighboring states”. [10]. In cases like this the conflicts of jurisdictions are quite expectable. However, in our view, with respect to the special legal status of Baikonur (including the “Baikonur” complex) it is more preferable to talk about interaction of jurisdictions of Kazakhstan and Russia rather than about their conflict.

The numerous international agreements, eternal friendship pacts and a number of other significant documents confirm that the Russian Federation has been and remains an important strategic partner of Kazakhstan in various spheres of international relations including in the area of peaceful exploration of space.

International cooperation of the Republic of Kazakhstan with foreign states in the Outer space activities

The sustainable and responsible use of outer space is becoming a high priority at the international level for balancing many differing priorities and needs including, but not limited to, sensitive national security interests, equitable access to the space domain for emerging States, and protecting the space environment. Time is ripe, for space lawyers, to develop convincing arguments concerning the legal dimension of outer space activities. [11].

At the same time Kazakhstan follows a multi-vector foreign policy and, therefore, is successfully developing cooperation with other foreign countries in the field of space activities.

To date, the Government of Kazakhstan as well as its directly authorized body - the National Space Agency - concluded a number of international agreements and memoranda in the area of peaceful

exploration of space. Among the reliable partners there are both the leading space powers of the world (the U.S., China, Russia) and countries interested in implementing space programs and projects jointly with Kazakhstan (Germany, France, Great Britain, Israel, Japan, India, South Korea and many others).

For example, a Memorandum between the National Space Agency of the Republic of Kazakhstan and the Indian Space Research Organization of the Republic of India on cooperation in the field of space activities was signed on January 24, 2009.[12].

The current intensive development of the space industry in India allows it becoming one of the world’s leaders in the field of trading images of the Earth’s surface from space, the country is constantly expanding its satellite constellation with new devices, and it also offers launching foreign satellites into space using the time-tested PSLV rocket and heavy rocket GSLV. In 2008, India made a breakthrough in the field of space exploration by sending its first probe “Chandrayaan” to the Moon.

The 2010 Memorandum between Kazakhstan and India defines the areas of cooperation (remote probing of Earth, satellite launch services, capacity building in the field of space research, technologies and their application) as well as modalities of cooperation (training and exchange of staff, joint conferences, symposia, exhibitions and other). The parties hold regular consultations and may set up joint working groups. Financing, intellectual property protection, customs regulations, export controls and other issues are subject to regulation by separate agreements.

To support development of cooperation, the delegation of the National Space Agency (NSA) of the Republic of Kazakhstan during the period of 25- 28 August 2010 took part in the second international exhibition of innovative space technologies “Bengaluru Space Expo 2010”. The history of the first in the Asian region space exhibition “Bangalore Space Expo” begins in 2008 when it was organized by the Indian Space Research Organization (ISRO) in collaboration with the Confederation of Indian Industry (CII) and the corporation Antirx. The head of Kazakhstan’s delegation noted that the participation of Kazakhstan’s specialists in the exhibition, meetings with representatives of the Antirx Corporation to discuss the establishment of satellite systems are another practical step towards implementation of the memorandum on cooperation in space activities signed between the ISRO and the NSA of the RK in 2009.

The Government of Kazakhstan and the Government of the State of Israel signed an agreement on cooperation in exploration and use of outer space for peaceful purposes on June 30, 2009. [13]. This

agreement created a legal and institutional framework as well as identified areas and modalities of implementation of the mutually beneficial bilateral cooperation in the area of exploration and use of outer space and the practical application of space systems and technology for peaceful purposes. In addition, the agreement includes provisions on applicable law, intellectual property, and liabilities of the parties, dispute settlement, exchange and protection of information, property protection, customs regulation and export controls.

In practice, of course, the Kazakhstan-Israel Space contacts are not limited to the launch of satellites from Baikonur. The two governments signed and last year ratified the cooperation agreement on exploration and use of outer space for peaceful purposes. It assumes that there will be cooperation in areas such as research of outer space including astrophysics, examining the planets, Earth remote sensing, space communications, satellite tele- and radio broadcasting and related information technologies and services, satellite navigation. In addition, Kazakhstan and Israel intend to cooperate in the research, development, manufacturing and maintenance work associated with spacecraft and systems, associated ground infrastructure, as well as in the field of materials in space and protecting the space environment.

According to the press service of the NSA "Kazcosmos" the mentioned agreement created an organizational and legal framework for the development of mutually beneficial cooperation. This is especially important for Kazakhstan given that Israel is one of the developed countries in the field of space activities. [14].

The beginning of cooperation between Kazakhstan and Japan took place on January 27, 2010. [15]. Corresponding agreement determined the range of possible areas of cooperation, including space science, Earth observation, satellite communications, and global satellite navigation. This list is not exhaustive, and the parties may supplement it on a reciprocal basis. The Agreement is implemented in the form of mutual informing by the parties about the main content of their space programs, discussing and identifying the concrete areas of joint cooperation. Such forms of cooperation and their conditions may be subject to separate agreements.

In December 2013 a delegation of the National Space Agency (NSA) of Kazakhstan headed by Chairman of Kazcosmos was on a working trip to Hanoi which hosted the 20th session of the Asia-Pacific Regional Space Agency Forum (APRSF-20). On the first day of the forum the head of Kazcosmos held discussion with the new chairman of the Japan Aerospace Exploration Agency (JAXA)

Naoki Okumura. Heads of space agencies of Kazakhstan and Japan discussed the issues of cooperation in the field of remote sensing, navigation, creating satellites and launch services.

A cooperation agreement between Kazakhstan and Germany was concluded on July 18, 2010. [16]. The signed agreement aims at developing a common framework of cooperation between the parties in the field of exploration and use of outer space exclusively for peaceful purposes on the basis of equality, mutual benefit and equal relationships. The agreement defined the scope and forms of cooperation as well as paved the way for institutional cooperation through the establishment of the Joint Committee. The agreement also reflects the matters of intellectual property, privacy, liability of the parties, funding.

In respect of practical implementation of the agreement a reference to the following information can be made. On January 21, 2014 a meeting of the Chairman of Kazcosmos, Talgat Musabayev, with the Head of the German company IABG mbH Office in Kazakhstan, Joachim Klein, took place at the National Space Agency (NSA) of the RK. IABG mbH company is one of the leading companies in Germany in the space sector and has one of the largest spacecraft, aircraft and vehicles testing centers. The company was established in 1961 by the Federal Republic of Germany as a central organization for testing in the aerospace industry, as well as for analysis of defense and security systems.

Starting from 2009 until present, the IABG mbH company provides external expertise and consultation services to the JCS "NC Kazakhstan Garysh Sapary" under the projects "Establishing Earth Remote Sensing system of the Republic of Kazakhstan" and "Establishing spacecraft assembly and testing site in Astana". Since 2012 a permanent representation of IABG mbH operates in Astana.

A cooperation agreement on exploration and use of outer space for peaceful purposes was signed between Kazakhstan and China on September 7, 2013 at the level of Heads of Governments. [17]. This agreement intends to create a legal and institutional framework as well as to identify specific areas and modalities for the implementation of mutually beneficial bilateral cooperation in the exploration and use of outer space for peaceful purposes. The agreement regulates the types and forms of cooperation, issues of financing joint activities as well as intellectual property. It also defined the executive bodies. An important provision is the creation of the Kazakh-Chinese joint commission on cooperation in the exploration and use of outer space for peaceful purposes. Another key, in our view, provision is the proposition that the parties will promote cooperation

between organizations and enterprises of the two countries in the peaceful exploration and use of outer space. This situation highlights the specific feature of the international space law in general, especially in the framework of bilateral agreements, when the norms of public law and private law are combined in one.

Within the framework of the 64th International Astronautical Congress held in the Chinese capital the Kazcosmos delegation headed by the Chairman of the National Space Agency (NSA) of Kazakhstan held a series of meetings with the leaders of the China National Space Administration and Industry (CNSA) on September 25, 2013. The Head of the Kazakhstan's delegation raised the issue of flying of one of the Kazakhstan's cosmonaut as part of the Chinese crew. In turn, the Head of the CNSA offered the Kazcosmos cooperation in the area of using the remote satellite sensing of Earth in high resolution. The discussion was about the exchange of satellite images of Earth observation.

Apart from the mentioned international agreements, there are a number of agreements, memoranda with other countries, including Saudi Arabia, the French Republic, the Kingdom of Thailand and many others.

It should be noted that the bilateral agreements between Kazakhstan and foreign countries fully meet the United Nations standards on international agreements in the area of outer space activities. They cover a range of issues from the types and forms of cooperation to the legal regulation of the specific provisions of certain activities (intellectual property, data protection, financing, establishment of work groups/committees and other).

Intellectual property's issues in Outer space agreements

Space technology is one of the most advanced technical areas and in fact, outer space activities are the fruit of intellectual creations. Only in recent years intellectual property issues are raised in connection with outer space activities. Nowadays, space activities is shifting from being state-owned activities to becoming private and commercial activities.

Despite the fact, that space activities are operated under international cooperation mechanisms, which depend on a simple, uniform and reliable international legal framework, in fact, there are many issues, which is not clearly clarified and prescribed.

For instance, as regards inventions made and/or used in outer space, one of the issues frequently raised is the applicability of national/regional patent law in outer space. The acquisition of intellectual property rights is

accomplished intrinsically on a territorial basis. Outer space activity is essentially extra territorial in that a country engaging in outer space activities can not claim territoriality in outer space for such activities. This dichotomy seemingly sets the stage for an inconsistency in the application of intellectual property laws to object and activities in outer space.[18].

As prescribed in Articles I and II of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), the exploration and use of outer space for the benefit of mankind and the non-appropriation of outer space by any nation are fundamental principles under international space law. However, on other hand, the protection and enforcement of intellectual property rights may conflict with the fundamental principles in terms of access to knowledge and information derived from space activities and of the freedom of exploration and use of outer space.

Another issue relates to the interpretation of Article 5ter of the Paris Convention for the Protection of Industrial Property, which provides for certain limitations of the exclusive rights conferred by a patent in the public interest in order to guarantee the freedom of transport (doctrine of temporary presence). The question arises whether the doctrine of temporary presence also applies to space objects, for example, in the case of the transport of patented articles to or from a Space Station through a launching site in a foreign country. [19].

The issues of inventions made/used in outer space, territorial peculiarities of intellectual property, limitations of *sui generis* rights and other aspects are the objects of researches and studies of scholars and international organisations. Currently, the World Intellectual Property Organisation (WIPO), United Nations Office for Outer Space Affairs (OOSA), United Nations/International Institute of Air and Space Law, World Commission on the Ethics of Scientific Knowledge (COMEST), Organisation for Economic Co-operation and Development (OECD), International Institute for the Unification of Private Law (Unidroit), European Centre for Space Law (ECSL) are conducting researches in the sphere of the protection intellectual property rights in outer space.

The problem of solving arising issues is common for all countries, including the Republic of Kazakhstan. And it is no doubt for us, that bilateral agreements concluded between countries and studies of scholars, experts of international organisations play significant role for further development of regulation intellectual property rights in outer space.

Thus, Kazakhstan, having the largest cosmodrome in the world and a huge potential for the development of space industry, aims to foster communication and develop contacts with partners from different countries aimed solely at peaceful space exploration and promotion of scientific and technological progress for the benefit of the mankind. Such provisions are fundamentally important for our country and are reflected in all the agreements.

Corresponding Author:

Dr. Abaideldinov Yerbol Musinovich
L.N. Gumilyov Eurasian National University
Mirzoyan Street 2, Astana, 010000, Kazakhstan

References

1. Malysheva, N., 2008. Space activity and space law in the post-soviet area. The contemporary problems of international space law, People's Friendship University of Russia, pp: 411.
2. 2010-2014 State Program of the Republic of Kazakhstan "On accelerated industrial and innovative development of the Republic of Kazakhstan" of 19.03.2010 Volume 958.
3. Address by the President N. Nazarbayev, Leader of the Nation of the Republic of Kazakhstan "Strategy Kazakhstan-2050": new political course of established state" of 14.12.2012.
4. "Baikonur" cosmodrome: yesterday, today, tomorrow. Date Views 20.02.2014 www.express-k.kz/show_article.php?art_id=40668.
5. Pages of history. Date Views 20.02.2014 www.baikonuradm.ru/index.php?mod=city_1.
6. Baikonur Cosmodrome. Date Views 20.02.2014 www.bayterek.kz/en/info/baykonur.php.
7. The chronicle of the Kazakhstan's space industry. Date Views 20.02.2014 kazcosmos.gov.kz/ru/ob-agenstve/letopis/.
8. Arenova, Y., 2012. Special legal status of the complex "Baikonur" in the set of cooperation between Kazakhstan and Russia in the field of space activities. X All-Russian scientific-practical conference "Actual problems of modern international law" dedicated to the memory of Professor I.P. Blischenko, People's Friendship University of Russia, pp: 69-71.
9. Agreement of the Republic of Kazakhstan and the Russian Federation "On development of cooperation on effective uses of "Baikonur" complex" of 09.01.2004.
10. Abashidze, A. and Y. Abaideldinov, 2013. Textbook on International Law: Common part. Voronezh: Science-Unipress, pp: 221.
11. Marchisio, S., 2012. The legal dimension of the sustainability of outer space activities. X All-Russian scientific-practical conference "Actual problems of modern international law" dedicated to the memory of Professor I.P. Blischenko, People's Friendship University of Russia, pp: 156.
12. Memorandum of the National Space Agency of the Republic of Kazakhstan and the Indian Space Research Organization of the Republic of India "On cooperation in the field of space activities" of 24.01.2009.
13. Agreement of the Government of the Republic of Kazakhstan and the Government of the State of Israel "On cooperation in exploration and use of outer space for peaceful purposes" of 30.06.2009.
14. Space Mission of the Promised Land. Date Views 20.02.2014 www.kazpravda.kz/ida.php?ida=51157.
15. Agreement of the National Space Agency of the Republic of Kazakhstan and the Japan Aerospace Exploration Agency "On establishment of cooperation in the field of space activities for peaceful purposes" of 27.01.2010.
16. Agreement of the National Space Agency of the Republic of Kazakhstan and the German Aerospace Centre "On Cooperation in the exploration and use of outer space for peaceful purposes" of 18.07.2010.
17. Agreement between the Government of the Republic of Kazakhstan and the Government of the People's Republic of China "On cooperation in the exploration and use of outer space for peaceful purposes" of 07.09.2013.
18. Abeyratne, R., 2003. The Application of Intellectual Property Rights to Outer space Activities. Journal of Space Law, 29: 1.
19. Inventions made/used in outer space. Date Views 20.02.2014 www.wipo.int/patents/en/topics/outer_space.htm l.

4/16/2014