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THE FAIR AND RESPONSIBLE USE OF THE GEOSTATIONARY ORBIT: TOWARDS PUBLIC-PRIVATE PARTNERSHIP

Following the common tendency of space commercialization, activity in the area of the geostationary orbit (GSO) experiences significant changes which are related to growth of the interest to orbit/spectrum resources from both state power and private business. Objects of attention are exceptional value, unique physical nature and practical scarcity of this orbit.

Principal multilateral space treaties and space-related documents of the International telecommunication union (ITU) has become the theoretical basis of research. The conceptual background of study of current issues of the GSO usage comprises the publications of specialists in international space law, in particular, Diederiks-Verschoor I., Hobe S., Kopal V., Lafferranderie G., Lyall F., Ospina S., Zhao Y. etc.

Long-term character and wide spectrum of existent legal problems in the area of the GSO confirms the necessity of development and specification of space law principles which are attached to commercial space activity. There is also a need to accomplish tasks which are not paid attention to by international space law until now.

These questions are of current interest for Ukraine which is on the stage of forming its own satellite network of communication and broadcasting on the basis of first geostationary communication satellite «Lybid-GSO».

The GSO is an universal naturally anthropogenic resource of space with defined spatial limits which is used for data acquisition and exchange by artificial earth satellites of various applications.

The orbit area has inseparable links to outer space as both are elements of unique natural complex and single normative system. Accordingly the GSO is the integral component of outer space, natural limits of this spatial duration conditioned by the physical specifics of certain type of satellites that utilized for space activities of mankind. Its legal status and regime are determined on the basis of international space law for taking into account legal rights and interests of all states.

Analyzing the characteristics of current usage of the GSO we can describe it as an aggregate of minefield of natural resources. In other words in each orbital slot it is possible to use only the certain amount of radio bands with the limited volume. It is non-renewable on the period of action of radiofrequency assignments of particular country and further usage by the operator of geostationary satellite network.

According to law it is not the orbit as the physical phenomenon which has the importance, but relations on questions of access, allocation, registration and usage of its resources for space services. The ITU is the exclusive organization which is legally authorized to allocate «…radio frequencies and any associated orbits, including the geostationary-satellite orbit…». The utilization of geostationary satellite is built on the basis of unified space-related rules and procedures which are compulsory for execution by all countries-participants of the Union.

Nowadays international space law remains legal fundamentals deviation from which is not allowed. The obligation of accordance of all activity in the GSO area with provisions and principles of international law which is established by article 3 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 [9] and comes out of article 2 of the Charter of the United Nations, sets in which degree possible application of state jurisdiction and control in relation to international resources and territory is allowable.

The quantitative increase of private-legal agreements the subject of which is orbit/spectrum resources results to dominative interpretation of conception «the use of outer space» as its

commercial exploitation and appropriately needs introduction of binding legal mechanism for governing of economic relations in this area.

Degree of freedom of the GSO use and separation of this resource among common outer space is represented by the legal category of «limited natural resource» in application to the orbit. Understanding of space freedom in the area of the limited resource opens up through the concept of freedom of choice of orbit and allows to talk about existence of only the right on realization of certain types of space activity on the GSO in strict accordance with international space law. Concerning the GSO such concept is itemized in article 44 of the Constitution of the ITU that is purposes of activities on the orbit are providing of the rational, efficient and economical regime of the resources usage; establishing on a basis of equality access and irrespective of degree of economic or scientific capacities of countries; carrying out for the benefit and in the interests of all mankind; taking into account the special needs of the developing countries and the geographical situation of particular countries [3].

Actual users and factual owners of the geostationary satellite systems are business structures, including the specialized communication organizations and transnational corporations which today have direct relation to the use of the GSO resources. The distinctive feature of their participating in a world economy is an association of interests and capital only within the framework that is defined by desire of receiving the maximal profit. There are reasonable concerns that not only the states, but also possibly one or two private structures can claim to the global dominating in the market of space services and technologies.

As Ospina S. underlines in recent years the processes of space commercialization led to a situation, when a «national flag» is only private multi-national emblem [8, p. 258]. This thesis illustrates well the fact that the total market value for launch services over the period 1997 – 2006 decade was made at USD $ 33, 4 billion, of which USD $ 21 billion was used for launching geostationary satellites. Specialists forecast that in the future nearly 70 % of this market will be generated by commercial operators, the remainder coming from governmental agencies [4, p. 159]. In conformity with the Convention on registration of objects launched into outer space the UN Register of space objects nowadays furnished information about 861 operated satellite on the GSO [7]. Moreover, 1109 geostationary satellites networks are in coordination stage of the ITU and 1014 – in notification stage as of 31.12.2009 [1].

The most common cases of commercial agreements in the area of the GSO concern the rent of the radiofrequency satellites channels and orbital locations, cooperation of satellite operators relative to the use of geostationary slots, purchase/sale of spacecraft that placed on accurate position and working in certain radio frequency bands.

Such situations cause the main volume of practical problems which need the proper legal reflection. In particular, the change of owner of spacecraft is complicated by the obvious necessity of its moving as parts of contractual conditions in that part of the GSO which has been assigned to a country whose jurisdiction a buyer is under. At the same time there appears the question of withdrawal of the space vehicle from the national register of objects of space activities and bringing the proper changes in the analogical register of country-buyer and in the UN Register of space objects. Besides the problem of utilized the geostationary spacecraft as in the capacity of credit secure of certain space project sponsor is a growing concern: does such creditor have a right in the case of taking control of the space asset to use the orbit/spectrum resources which were allocated to the country of debtor?

In the resolution 59/115 of the General Assembly of the UN «Application of the concept of the «launching State» recommends that «States conducting space activities … consider enacting and implementing national laws authorizing and providing for continuing supervision of the activities in outer space of non-governmental entities under their jurisdiction» [2].

It is needed to mark that for today there are already a number of countries, which have national space legislation. Questions of state authorization, supervision, registration, liability, safety, transfer of ownership are regulated within the framework of space legislation of Ukraine. So in accordance with article 14 of the Law on Ukraine on space activity (1996) withdrawal of space

vehicles from the State register of objects of space activities of Ukraine by the National Space Agency of Ukraine is foreseen, in particular, in the case of its transfer to other state, international or foreign enterprise, establishment or organization [5, p. 36–43].

The last acts which were accepted at an international level have crucial role for commercial space activity. There is the Agreement on basic telecommunications (GATS/WTO, 1994), the Declaration on international cooperation in the exploration and use of outer space for the benefit and in the interest of all states, taking into particular account the needs of developing countries (UNCOPUOS, 1996), Some aspects concerning the use of the geostationary orbit: paper adopted by the Legal Subcommittee (UNCOPUOS, 2000), the Convention on international interests in mobile equipment (UNIDROIT, 2001).

Consequently the changes of space activity character lead to its complicated governing and continuing supervision by states due to activity of private companies. At the same time the use of such global resource as the GSO turns all participants of international community, at least as users of variable space services, into victims from the irrational, ineffective, uneconomical, inequality utilize and share of the orbit/spectrum resources.

Freedom of the GSO is actually limited because it is very difficult in practice to guarantee that all new comers will get orbital locations betimes. Professor Lyall F. marks that the present system in which in theory at least every state of any size has an equal rights to realization space activity is unrealistic [6, p.266].

It is clear that assignment of rights on the use of orbital slot and radio frequencies is one of a number of possibilities to create the new satellite system at the real congestion of the GSO. The mechanism of dynamic management promotes increasing of efficiency of the use of the GSO. Correspondingly second users be permitted alternative to utilize the GSO which occupies a primary user temporarily, while it is not being used. Thus in 2006 the first geostationary communication satellite of Kazakhstan «KAZSAT-1» was placed on Russian geostationary position for 15 years under Kazakh-Russian interstate agreement.

Taking it into account, freedom of the unforbidden economic activity is the component element of the space freedom, so there is the right of commercial activities in the GSO sphere without any restraints, if they are not enacted by international law.

International space law does not create (however and does not forbid) activity of commercial consortia and only obliges states to control activity of governmental agencies and non-governmental entities. It takes into account a substantial role of private sector in space activity and conforms exactly to fundamental principles of international space law namely of principle of the responsibility of the states for national activity in space which is carried out its natural or juridical persons.

The decision-making function of the ITU reflects the modern, competitive environment in which the private party plays the leading role while the regulatory authorities act as arbitrator of the wider public interest [10, p. 298].

As we can see from the abovementioned, the usage of the GSO hereinafter will be developed not in direction of complete internationalization of public space activity and absolutizing of role of international cooperation, but of the high use of private investments for development of the national and regional satellite systems.

The ITU remains the effective administrative model of governing of such activity, the flexible and adapted to current realities form of world coordination. International intergovernmental status of the organization only underlines the role of the state as central political unit which is considered to be the basic guarantor of adherence to purposes and principles of international space law. However there is not other alternative as use of private capital and accordingly satisfaction of business corporations interests also by realization of state support of space commercialization for providing of the global involvement spacefaring, newcomers and non-spacefaring states in the sphere of the GSO utilization today.

At national level the regulations of the GSO utilize must take place at the telecommunications sector which is managed by operators. Realization of the effective use of the GSO first of all

depends on the users of this space, their opened and mutual cooperation within the ITU framework as an international forum. The role of the state might be limited by questions of safety, competition, protection of consumers and national public interests.

Conclusions

The model of management of the geostationary resources within the international regulatory framework is the example of international-legal regime which encourages investments in the peaceful space exploration and use in the order of non-discrimination principle for interests of all countries.

Confirming the leading role of state administers it is believed that in the GSO sphere the legal regime might develop on a basis of public-private partnership which can be powerful source of fair access, reasonable use of the resources, conscientious trading of space and technologies, and forming single legal space.

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