INTERSPUTNIK TODAY No 21

CORPORATE NEWSLETTER OF THE INTERSPUTNIK
INTERNATIONAL ORGANIZATION OF SPACE COMMUNICATIONS

NEW HORIZONS

Vadim Belov

Director General
retired on 14 June 2021

Dear colleagues, dear friends,

I would like to extend my heartfelt appreciation and gratitude to you for fruitful cooperation. In the sixteen years I have held the position of the Director General we have managed to achieve much. I highly value the partner and friendly relationship we have established. Let me describe in very broad brush strokes how our organization approached its 50th anniversary.

16 YEARS IN OFFICE

Vadim Belov was elected Director General of Intersputnik four times – in 2005, 2009, 2013, and 2017.

Since 2005 the organization has expanded its membership and geographic extension: it was joined by one more, twenty sixth, country – the Federal Republic of Somalia – from the African region, which had not been represented in Intersputnik earlier, and the number of national Signatories grew from twenty one to twenty five. There was laid the groundwork for the accession to Intersputnik of a new Member, which we will be able to welcome to our multinational family after domestic procedures are completed.

26 MEMBER-COUNTRIES

There were carried out a number of major international satellite projects involving the use of Intersputnik's orbit and spectrum resource. They have become a qualitatively new area of the organization's business.

x3.5 DIVIDENDS

Over the past period Intersputnik's revenues have grown more than two times. This helped to improve financial stability and pay nearly 3.5 times more to Intersputnik Members and Signatories in terms of dividends.

Intersputnik's subsidiary Isatel has also been developing successfully providing full-scale services to build and operate satellite telecommunications networks, including ground infrastructure.

To identify new avenues leading to the attainment of Intersputnik's goals, there was initiated a Development Program to offer debt financing for the development of space communications business.

In 2007 Intersputnik joined RCC as an observer and has been cooperating with RCC successfully ever since. In the last several years Intersputnik has also consolidated its partner relations with other intergovernmental satellite telecommunications organizations (EUTELSAT, IMSO, ITSO), with which it signed agreements on cooperation. Besides, in 2018 the organization accepted the rights and obligations under the UN treaties on outer space securing at the international level its status of a responsible participant in outer space activities.

№1

Intersputnik became the first international intergovernmental organization that declared its acceptance of the responsibility for compliance with the 1967 Outer Space Treaty

Intersputnik took a more active stance in human capacity building having launched NATSATTEL annual international seminars on satellite telecommunications, training in frequency regulation, and an internship program for young professionals with the Directorate's structural subdivisions, thus contributing to our common future.

50 YEARS IN ORBIT

This year our organization will turn 50, and I am happy to have had the opportunity to travel part of this journey together with you – reliable partners, esteemed colleagues and dear friends. I am sure that owing to your professionalism and dedication to what you do Intersputnik will continue to make steady progress in the interests of all current and future Members and Signatories.

On 14 June 2021 there expired the tenure of Intersputnik's Director General Vadim Belov. As decided by the joint 49th session of the Board and 23rd session of the Operations Committee of Intersputnik, the office of the Director General was taken over on 15 June 2021 by Ksenia Drozdova. At the joint session, the Board and the Operations Committee expressed appreciation to Vadim Belov for his "responsible attitude to the common cause and many years' service in the aim of attaining the goals of the Intersputnik International Organization of Space Communications, and for efficiently putting into practice the tasks the Directorate was charged with".

Andrey Zhivov

Chairman of the Board

Mr. Andrey Zhivov, born in 1987, graduated in 2009 from the Moscow Technical University of Communications and Informatics majoring in Computers, Computer Complexes, Systems and Networks. In 2014 he earned a master's degree in international relations from the European Studies Institute that is part of the Moscow State Institute of International Relations.

For several years Mr. Zhivov worked as a technical expert for a number of IT and banking companies. Since 2011 Mr. Zhivov has been an officer of the Ministry of Digital Development, Communications and Mass Media of the Russian Federation. Currently, he holds the position of Deputy Director, Department for Mass Media and International Cooperation Development.

Mr. Zhivov coordinates the activity of the telecommunications administration of the Russian Federation focusing on the improvement of the efficiency of Russian Federation's participation in international organizations dealing with information and communications technologies, the Internet, and postal services, such as the International Telecommunication Union, Universal Postal Union, Regional Commonwealth in the Field of Communications, et al.

Besides, Mr. Zhivov is a contact person for the Russian Federation in a number of industry-specific working bodies engaged in the development of the digital economy in such international organizations as the Organization for Economic Cooperation and Development, G20, BRICS, and others. At the same time, he represents Russia in the ICANN Governmental Advisory Committee.

Upon the proposal of the Regional Commonwealth in the Field of Communications, Mr. Zhivov was elected Vice-Chairman of the Working Group of the Plenary during the 2018 Plenipotentiary Conference of the International Telecommunication Union.

Visit the website of the Intersputnik Member for Russia – the Ministry of Digital Development, Communications and Mass Media of the Russian Federation

https://digital.gov.ru/en/

The Board and the Operations Committee of Intersputnik expressed appreciation to Jacek Oko, President of the Office of Electronic Communications of the Republic of Poland, for directing the activity of the Intersputnik Board in the capacity of its Chair in 2020-2021.

Evgeny Buydinov

Chairman of the Operations Committee

Born on 12 November 1964 in Kimry, Kalinin Region. In 1991 graduated from Moscow Aviation Institute majoring in radio engineering. In 2014 earned an MBA in "Management of Innovations in Telecommunications Companies" from Moscow Technical University of Communications and Informatics. In 2016 the same university awarded Mr. Buydinov a DBA in "Management of Infocommunications Companies".

From 1991 Mr. Buydinov was employed as a design engineer by MKB Raduga in Dubna. In 1995 he took another job at ZAO Rustel rising from engineer to Deputy Technical Director to Technical Director. From 2007 – Director of Department at OOO Inline Technologies Group. In December 2007 Mr. Buydinov came to work at Russian Satellite Communications Company (RSCC) as Investment Projects Director – Head of Investment Projects Service. From May 2011 he held the offices of Head of Investment Projects Service and Deputy Director General for Innovative Development at RSCC. In November 2017 Mr. Buydinov was appointed Deputy Director General for Communications Systems Development and Operation.

Visit the website of Russian Satellite Communications Company, Intersputnik's Signatory for Russia

https://eng.rscc.ru/

Author of the RSCC Innovative Development Program. Member of the International Telecommunication Academy. Holder of the Medal of the Order "For Merit to the Fatherland", Class 2, ministerial awards and company awards, and the Russian Federation Presidential Certificate of Honour for a significant contribution to the implementation of the project of digitizing TV broadcasting in the Russian Federation. Married, one daughter. Serves as the Chairman of the Operations Committee since April 2021.

Read at intersputnik.online Mr. Evgeny Buydinov's statement concerning the performance of the functions of the Chairman of the Operations Committee and proposals concerning lines of business aimed at developing Intersputnik.

STRATEGY

- High throughput geostationary satellites (GEO HTS) with universal digital payload
- Low Earth orbit multi-satellite systems for high-speed Internet access and IoT
- Shared access systems in VSAT networks
- Use of satellites of Members and Signatories for the benefit of the organization
- Informing Members and Signatories of the latest trends in satellite communications

Ksenia Drozdova

Director General
taken office on 15 June 2021

Dear colleagues, dear friends – readers of our newsletter,

First of all, I would like to thank all the Members and Signatories of the Intersputnik International Organization of Space Communications for the confidence they placed in me by electing me to the office of the Director General of our organization. It is a great honour and an even greater responsibility!

I would like to express my gratitude personally to Mr. Vadim Belov and his team for the job done to create a solid foundation for the further development of the organization and effective interaction between the Directorate and the Operations Committee, of which I have been the Chair in recent years. I promise that I will do my best to develop Intersputnik for the benefit of all its Members and Signatories.

In November of this year, Intersputnik is celebrating its 50th anniversary. The establishment of the organization in 1971 helped set up a deeply integrated radio-information space of the member countries using telecommunications satellites. All these years, our organization unites professionals from different continents who, working dedicatedly to implement projects to eliminate the digital divide, and caring for the next generations, are engaged in modern solutions in the field of communications and broadcasting.

Today, Intersputnik unites 26 countries, which have appointed 25 national Signatories in the Operations Committee. In the near future, Intersputnik's family will welcome another member state, which is completing domestic procedures and will soon announce its decision to join our organization.

I believe that the principles of respect for the sovereignty, independence and equality of the member states laid down half a century ago have become the guarantee of Intersputnik's longevity.

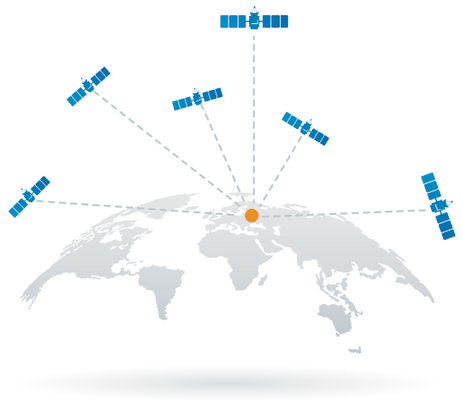
In May of this year, at the 49th session of the Board and the 23rd session of the Operations Committee of Intersputnik, we reviewed the organization's development strategy up to 2026. This strategy is based on the ideas and proposals that the members of the Operations Committee came up with in the course of the interviews given (visit intersputnik.online), as well as on my personal experience in dealing with major business projects.

https://intersputnik.online

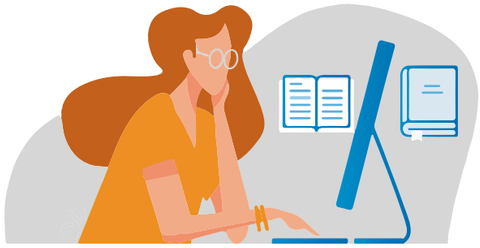
Most of the interlocutors expressed interest in deepening the interaction of the Signatories with the Directorate with respect to joint satellite projects and the establishment of new satellite constellations within the framework of partnership programmes, where Intersputnik could take over the functions of a project office. The point is that the organization needs to continue coordinating the orbit and spectrum resource both for its own projects implemented with the organization's Members and Signatories, and for joint projects with third-party partner operators.

The cooperative model, in which operators agree on the joint operation of satellites on certain principles, helps use satellite communications services as a temporary solution (until national systems are put into operation) or on an ongoing basis. Joint projects in this area will be cheaper owing to the use of existing own fragments of the satellite communication and broadcasting network. At the same time, it is proposed to make wider use of the possibilities of the Members and Signatories of Intersputnik in various regions of the world.

At the same time, it is proposed to actively develop Intersputnik's own satellite fleet, among other things, assuming the model of a virtual network operator, that is, to create a coordinated distributed network of satellite communications of the organization based on satellite constellations of operators-members of the Operations Committee. The form can be different, including using the so-called hosted payload.



The new strategy also reflects the fundamentally important cooperation with international organizations. The Directorate will continue to regularly inform Members and Signatories of major events, activities and decisions that have a significant impact on the state and future of the digital technologies market. An important area of our activity will be the consolidation of cooperation with the International Telecommunication Union (ITU), among other things, in protecting the interests of the space component in the new 5G standards. We believe that one of the areas of cooperation with the ITU could be joint training programmes, conferences and the necessary cultural exchange.



INTERNATIONAL RELATIONS

- inform Members and Signatories of major events, activities and decisions
- protect the interests of the space component in the new 5G standards
- organize joint training programmes, conferences and the necessary cultural exchange
- deepen integration with the Regional African Satellite Communication Organization (RASCOM)
- train local personnel and inspire regional elites with the opening possibilities of the infrastructure being created

Intersputnik will continue to pursue a policy of deepening communication and coordination with regional telecommunication organizations. For example, a representative of Intersputnik heads the recently created permanent Working Group on Satellite Technologies under the Telecommunication and Infocommunication Operators Board of the Regional Commonwealth in the Field of Communications (RCC). Our plans include deeper integration with the Regional African Satellite Communication Organization (RASCOM), which unites more than 40 African states. The experience of cooperation on the African continent shows that for the success of projects it is not enough to offer an effective solution for establishing communications – you need to be ready to train local personnel and inspire regional elites with the opening possibilities of the infrastructure being created. Of course, this is not a complete list of international and regional organizations with which we plan to interact, their list is much broader.

Satellite communication is needed where there is no alternative access to the public network or the Internet. But many people, including you and me, are already accustomed to staying connected all the time.

Our task is to provide citizens of the states of Intersputnik with convenient forms of access to any satellite-based services: from solutions for the B2B segment to communication options for the end user.

Members of the Operations Committee have satellite fleets in different orbits – low, medium, geostationary – and the service areas of their spacecraft cover the entire globe. Over the past few years, satellite communications have ceased to be an elite infrastructure and are being transformed into a service of mass demand. I believe that Intersputnik will in its activities use all the modern capabilities of the constellations in any type of orbit after testing, understanding the features of their work and creating a database, to prepare various solutions for accessing the communications infrastructure, depending on the wishes of the customer.

STRUCTURAL TRANSFORMATION

- modernize the customer service management system
- introduce uniform standards for management and business administration systems in the Directorate and regional offices

Space technologies and related industries are constantly opening up new opportunities, and therefore new needs for investment and skilled personnel. The industry has changed dramatically over the past two years. The market for services of mass demand is rapidly developing – satellite broadband Internet access, offered by different operators and satellite constellations in geostationary and non-geostationary orbits.

In my opinion, the satellite industry is today the most innovative and promising industry, in which scientific discoveries and practical engineering create completely new professions.

These professions require erudite specialists from various fields of science and technology. In this regard, Intersputnik is planning a structural transformation by drawing human and technical resources of the organization's Members and Signatories. As we develop, we will modernize the customer service management system, introduce uniform standards for management and business administration systems in the Directorate and regional offices.

In interviews with the Signatories of the Operations Committee, there was always asked the following question: "How do you see Intersputnik in the future and how can it be useful for your company?" Almost all the answers were that Intersputnik should remain a reliable partner in the implementation of complex integration projects, a training centre for specialists and an active assistant in advocating for interests in coordinating the orbit and spectrum resource in the ITU. It was repeatedly noted that it is Intersputnik that should become a provider of knowledge and integrated solutions to the national markets of the member states in the 5G system. I believe that the Directorate is ready to perform these tasks.

This is how I see today the main goals and areas of the future development of Intersputnik under my leadership. I would be grateful to each of you for supporting the implementation of our joint ambitious projects. I am sure that together we can make a significant contribution to the development and prosperity of our countries and the space communications industry as a whole.

INTERSPUTNIK IN THE FUTURE

- reliable partner in the implementation of complex integration project
- training centre for specialists
- active assistant in advocating for interests in coordinating the orbit and spectrum resource in the ITU
- provider of knowledge and integrated solutions to the national markets of the member states in the 5G system

AWARDING OF HONORARY DIPLOMAS

for considerable contribution to the development of Intersputnik, consolidation of cooperation among its Members and Signatories, and enhancement of the international prestige of our organization

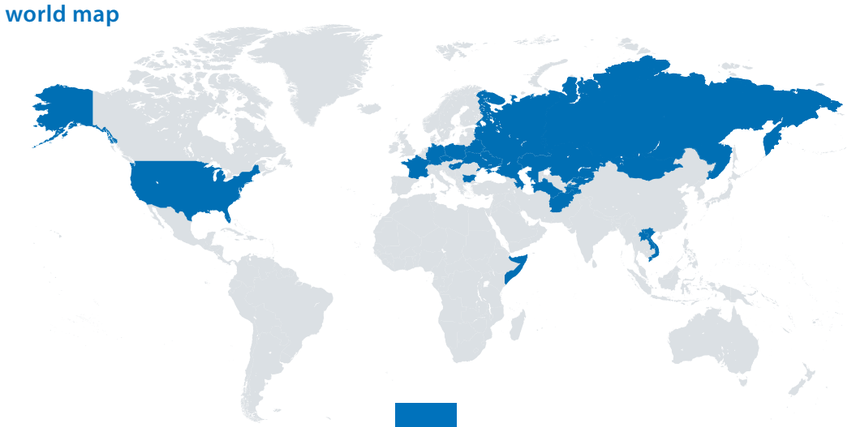
During the joint 49th session of the Board and 23rd session of the Operations Committee held in May 2021 the Intersputnik Board decided to award honorary diplomas to

Natalia Akutina (Russia)
Akmuhammet Amanov (Turkmenistan)
Valentin Anpilogov (Russia)
Maksat Astankulov (Turkmenistan)
Lyudmila Babayeva (Russia)
Vadim Belov (Russia)
Yevgeny Bochkarev (Russia)
Namshir Bumchin (Mongolia)
Yuri Chyorny (Belarus)
Diána Daczi (Hungary)
Dimitar Dimitrov (Bulgaria)
Tsegmid Gantugs (Mongolia)
Xayluxa Insisiengmay (Laos)
Mohamed Jama (Somalia)
Leonid Konik (Russia)
Konstantin Lanin (Russia)
Darhan Maral (Kazakhstan)
Rashad Nabiyev (Azerbaijan)
Arkady Nedbai (Russia)
John Ogalo (Somalia)
Batyr Orazdurdyev (Turkmenistan)
Grigory Osipov (Russia)
Onideth Oudomsak (Laos)
Lyubomir Panchev (Bulgaria)
Dietmar Plesse (Germany)
Nadezhda Popenko (Russia)
Victor Romantsov (Russia)
Vithaya Sayvisith (Laos)
Alexander Semyonov (Russia)
Farkhad Shukurov (Tajikistan)
Elena Shulepova (Russia)
Galina Shvyrkova (Russia)
Oleg Spevak (Russia)
Dulguuntengis Tsedev (Mongolia)
Andrai Uranchimeg (Mongolia)
Nana Yakovenko (Russia)
Dmitry Zakaliukin (Belarus)
Andrey Zhivov (Russia)
Staff of the Moscow Technical University of Communications and Informatics (MTUCI)

We are grateful to those whose contribution to Intersputnik's growth was commended earlier. In the last 10 years the Board has awarded honorary diplomas to

Luvsanchimed Banzragch (Mongolia)
Yevgeny Buydinov (Russia)
Yury Chechin (Russia)
Boris Chirkov (Russia)
Thomas Choi (USA)
Mariusz Czyżak (Poland)
Garam-Ochir Damba (Mongolia)
Josef Dolecki (Poland)
Detlef Drews (Germany)
Ksenia Drozdova (Russia)
Jan Duben (Czechia)
Wiesław Dzierżak (Poland)
Magdalena Gaj (Poland)
Alexandr Ganin (Russia)
Aleksandr Gromov (Russia)
Dmitri Gudenko (Russia)
Baryalai Hassam (Afghanistan)
Rashid Ismayilov (Russia)
Stefan Kollar (Czechia)
Yuri Kolosov (Russia)
Valery Komarov (Ukraine)
Viktor Kotelnikov (Russia)
Boyko Kotzev (Bulgaria)
Bozhidar Kozhuharov (Bulgaria)
Gennady Kudryavtsev (Russia)
Lam Quoc Cuong (Vietnam)
Le Thi Hien (Vietnam)
Boris Mayorsky (Russia)
Lyudmila Mikhailina (Russia)
Andrei Mukhanov (Russia)
Nurudin Mukhitdinov (Russia)
Irvuz Norovzhav (Mongolia)
Bayish Nurmatov (Kyrgyz Republic)
Nikolay Orlov (Russia)
László Pados (Hungary)
Denis Pivnyuk (Russia)
Iosif Povolotskiy (Russia)
Yuri Prokhorov (Russia)
Boris Prytkov (Russia)
Tamás Puss (Hungary)
Christian Roisse (France)
Marek Rusin (Poland)
Hans-Joachim Schemel (Germany)
František Šebek (Czechia)
Dmitry Shedko (Belarus)
Sergey Sivodedov (Belarus)
Harald Stange (Germany)
Victor Strelets (Russia)
Valery Timofeev (Russia)
Péter Vári (Hungary)
Mikhail Vaskovskiy (Russia)
Victor Veshchunov (Russia)
Peter Voss (Germany)
Aleksandr Yakovenko (Russia)
Gennady Zhukov (Russia)
Natalya Zorya (Russia)
Aleksandr Zubets (Russia)
Staff of the Department of International Law, Peoples' Friendship University of Russia
Staff of scientific and technical journal of telecommunications Elektrosviaz

Intersputnik honorary diplomas on the world map



All readers of our newsletter are invited to intersputnik.online! On this website you can find a series of interviews with the members of the Intersputnik Operations Committee under the title “Voice of Satellite Industry” and review an analysis of the satellite video broadcasting market in various parts of the world

Stay up to date on the latest developments and trends – learn what is happening in the field of satellite telecommunications on the website of the Operations Committee

Most recent releases of our Signatories

LAOS

Interview with Xayluxa Insisiengmay, Director General of Radio Frequency Department, Ministry of Technologies and Communications, Lao People’s Democratic Republic

Follow the link for a video interview in English.

BELARUS

Articles by Leonid Fedotov, Senior Business Development Consultant of the Satellite Capacity Sales Department, Republican Production Unitary Enterprise “Precise Electromechanics Factory”

These articles will help telecommunications satellite operators in examining the possibilities of offering their services to broadcasters from the countries and regions in question.

“The Outlook of the Satellite TV Broadcasting Market in Sub-Saharan Africa”

This article is available in Russian and English.

“Satellite video broadcasting markets in India and China: conditions and opportunities for satellite operators”
With a larger total number of Indian satellite television channels compared to Chinese, the latter have a wider range of distribution, which reflects the distinctive features of state policies of the Republic of India and the PRC in the development of national television systems.

This article is available in Russian and English.

MONGOLIA

Interview with Battsengel Bolor-Erdene, Chairwoman, Communications and Information Technology Authority of the Government of Mongolia
"Satellites play an important role to increase digital connectivity and reducing the digital divide in Mongolia"

Follow the link for an video interview in English.

RUSSIA

Interview with Yuri Prokhorov, Acting Director General, Russian Satellite Communications Company

Follow the link for a video interview in Russian.

VIETNAM

Interview with Lam Quoc Cuong, Managing Director VNPT-I, Vietnam Posts and Telecommunications Group

Follow the link for a video interview in English.

GERMANY

Interview with Detlef Drews, CEO, FidusCrypt – USG GmbH

Follow the link for a video interview in English.

And these are just our most recent releases…
Visit intersputnik.online and immerse yourself in the captivating world of telecommunications!

On the pages of our newsletter read the article «Mechanisms for resolving disputes related to violations of coordination agreements»

Authors of the article -
Elina Morozova,
Executive Director, Intersputnik
and
Yaroslav Vasyanin,
Senior Legal Counsel,
International Legal Service, Intersputnik

Among numerous space activities, satellite communications remain the most widespread, essential, and advanced. To perform their primary function, i.e. communication, satellites need to be placed in orbit and use the radio-frequency spectrum. Radio frequencies and satellite orbits – limited natural resources of outer space – are managed by the International Telecommunication Union (ITU), which ensures their rational, equitable, efficient, and economical use in an interference-free environment.

Before a new satellite or a satellite system is brought into use, its operator carries out coordination with the users of ‘neighboring’ satellite networks. The results of the coordination are set forth in coordination agreements. Though coordination may last for years, the difficulty is not so much the conclusion of an agreement as its due performance.

Generally, coordination agreements contain mutually acceptable technical parameters for the operation of certain frequency bands, and their breach may cause harmful interference toward communications satellites’ operations. At the request of national telecommunications administrations, the ITU investigates harmful interference and formulates recommendations. Such a process has a few drawbacks, and the ITU’s inability to take into account the provisions of the coordination agreements is one of the most significant.

If the ITU’s recommendations cannot satisfy the parties or are not duly followed, or if damage is caused by harmful interference and requires compensation, a judicial recourse seems inevitable. As disputes may involve parties around the globe, to which court should they apply? Commonly drafted by technical experts, coordination agreements hardly provide for a dispute resolution mechanism or governing law, while the application of general rules may bring parties to a jurisdiction equally irrelevant to both. Furthermore, whatever forum is chosen, the question of specific knowledge arises. However, the ITU’s practice has always been not to get involved in disputes.

Disputes related to coordination agreements pose a number of legal challenges. Where to adjudicate the case and what law to apply are just the tip of the iceberg. These issues apparently require legal advice.

Read the article →

MECHANISMS FOR RESOLVING DISPUTES RELATED TO VIOLATIONS OF COORDINATION AGREEMENTS

Since the beginning of the space era, numerous space applications have become an integral part of people's everyday life. Among them, the most widespread and advanced are satellite communications that provide telephony, television, and the Internet, thereby connecting countries and continents.

Need advice on establishing your national satellite system and constructing its ground segment?
Contact the Regional Projects Development Division of Intersputnik at
divrpd@intersputnik.int

According to the Satellite Industry Association, in 2019, the global space economy amounted to 366 billion US dollars. 74% of revenues worldwide were generated by the satellite industry. Almost half of them were satellite services, including communications.[2] That is, satellite communications are a significant part of the global space economy today.

To perform a communication function, i.e. transmit and receive signals carrying different types of information, satellites need to be placed in certain orbits in space and use radio frequencies, which are limited natural resources. Such resources are managed by the International Telecommunication Union (ITU) – the United Nations specialized agency for information and communication technologies.

One of the ITU's missions is to ensure that radio-frequency spectrum and associated satellite orbits are used in an interference free environment.[3] Interference can be caused if two satellites are closely located and use similar frequencies. Harmful interference seriously degrades, obstructs, or repeatedly interrupts a communication service,[4] thereby preventing both satellites from operating normally. To avoid this, the ITU regime provides for several mechanisms, including the so-called international frequency coordination.

INTERNATIONAL FREQUENCY COORDINATION

Before a new satellite or a new satellite system can be deployed in orbit, an operator submits to the ITU Radiocommunication Bureau a general description of the planned satellite network which contains, among other things, requested frequencies and satellite orbits.[5] Then, such operator has to coordinate its new network with operators of the existing or earlier planned satellite networks if they may be affected by the new one.[6]

[1] The original full version of this article titled 'Disputes in satellite communications: settlement mechanisms available for breach of coordination agreements' was first presented at the 70th International Astronautical Congress (Washington, D.C.; 2019) in the English language. The paper is included in the Digital Library of the International Astronautical Federation and can be purchased using this link.
[2] 2020 State of the Satellite Industry Report, Satellite Industry Association. Available for a fee
[3] Para. 1, Art. 12, Constitution of the International Telecommunication Union
[4] No. 1.169, Radio Regulations of the International Telecommunication Union
[5] No. 9.1, Radio Regulations of the International Telecommunication Union
[6] Nos. 9.6 and 9.7, Radio Regulations of the International Telecommunication Union
[7] According to the Annex to the ITU Constitution, 'Administration' means any governmental department or service responsible for discharging the obligations undertaken in the Constitution of the International Telecommunication Union, in the Convention of the International Telecommunication Union and in the Administrative Regulations. Administrations of the ITU Member States represent both governmental agencies and non-governmental (private) entities. In some cases, administrations also act on behalf of a group of administrations meaning that they represent an international intergovernmental organization before the ITU
[8] Views of the Radio Regulations Board on Resolution 18 (Kyoto, 1994), 1996

Need help with international frequency coordination?
Contact the Technical Department of Intersputnik at
technical@intersputnik.int

Here, it is important to note that the communication environment of outer space is rapidly changing. When a new satellite network is deployed, newer frequency filings are made, which, in turn, are required to be coordinated with those that have been filed earlier. Hence, international frequency coordination is an ongoing process, which aims at constantly meeting relevant requirements and constitutes a permanent part of each satellite operator's activity.

International frequency coordination is generally conducted by and between national administrations of the ITU Member States.[7] At the same time, operators of the relevant satellites and satellite systems, which can be public or private companies or international intergovernmental organizations, are also entitled to take part in the coordination process on an equal footing with administrations.[8]

The results of the coordination procedure are reflected in coordination agreements to be executed by the corresponding administrations or signed or otherwise formally approved by them, if initially concluded between operators. In this regard, depending on parties to a coordination agreement, there exist the so-called administration-to-administration, administration-to-operator, and operator-to-operator agreements. In any case, the ITU must be notified by the corresponding national administrations of the outcomes of the coordination.

Besides the conventional form of a bilateral or a multilateral written agreement embodied in a single paper instrument, the outcome of a coordination process can also be reflected in the minutes of meetings, through the exchange of letters, or otherwise as the parties consider appropriate. Sometimes, coordination agreements are even entered into as a result of a peaceful settlement of a dispute. All the above documents, which aim at specifying the results of international frequency coordination, are referred to as 'coordination agreements.'

CONTENT OF COORDINATION AGREEMENTS

Coordination agreements are largely complex technical documents. They contain mutually acceptable parameters for the operation of certain frequencies, which are utilized by adjacent satellites and satellite systems, including frequency bands segmentation schemes and sharing conditions, satellites' coverage zones, geographical separation and compatible use of beams, types of uplinks and downlinks, transponders' polarization and saturation flux density, signal bandwidth, maximum equivalent isotropically radiated power, etc. Violations of such technical parameters are generally constituted in causing harmful interference.

However, not only the technical parameters agreed to avoid harmful interference can be contained in coordination agreements, but other terms and conditions, which are identified by the participants of international frequency coordination, including those that are based on purely commercial reasons. A breach of such terms and conditions may result in quite significant financially assessable damage. To illustrate this, the following example can be considered.

As a result of frequency coordination, operator A agrees to maintain only those of its frequencies that are actually used by its satellite and refrain from resuming the use of other recorded frequencies. In turn, operator B undertakes not to bring into use part of its filed frequencies, which leads to their cancellation, and adjust its satellite's coverage zone in such a manner as to exclude a certain area, which is the core market for operator A. The agreement remains in full force and effect for a while. Later, the situation on the satellite market changes, and for operator A it becomes economically impractical to comply with the coordination agreement. Hence, in breach of the agreement, operator A resumes utilizing those frequencies which have been suspended. That causes interference to the satellite services of operator B, some of whose customers complain and terminate contracts. As a result,

operator B suffers damage caused by its voluntary abandonment of some of its frequencies and loses profits. The question is, what legal steps can be taken by operator B in this situation in order to protect its rights and be compensated for damage?

The first thing operator B should do, is check the content of the coordination agreement and proceed accordingly. However, the problem is that, being the realm of technical experts, coordination agreements are rarely drafted by lawyers and, therefore, do not often contain any legal provisions, such as consequences of a breach and compensation for damage. Neither do they usually contain any provisions on applicable law and settlement of disputes.

In this regard, it is worth noting that most of the ITU recommendations related to the conclusion and content of coordination agreements only mention technical aspects that should be agreed upon by the parties.[9] However, given that the ITU's competence extends exclusively to technical matters, it is reasonable that the ITU does not provide any recommendations related to the legal content of coordination agreements. The latter is completely within the scope of the parties to agreements.

Therefore, if a dispute arises, a satellite operator will first have to determine which one of the existing judicial authorities will be competent to hear such a dispute.

COMPETENT FORUM – INTERNATIONAL BODIES

International Court of Justice

Taking into account that coordination agreements are usually entered into by governmental authorities of different states and relate to the use of outer space having specific international status, one can think that the examination of disputes arising out of these agreements can be within the competence of the International Court of Justice. However, one should also consider that the International Court of Justice only deals with disputes between states. Moreover, the jurisdiction of the Court extends exclusively to cases which are either specially provided for in international treaties or expressly referred to the Court by states.[10] Bearing in mind that in most cases disputes arising out of coordination agreements relate to the operation of commercial satellites or their systems, it is doubtful that states might decide to refer such disputes for the consideration of the Court. Furthermore, no international treaty explicitly empowers the Court to hear cases related to the use of the radio-

frequency spectrum. In this regard, it appears that the International Court of Justice is not a competent forum for the settlement of disputes arising out of coordination agreements.

International Telecommunication Union

In considering possible legal steps in relation to a coordination agreement, one can think of addressing the ITU, since a breach of such agreement usually causes harmful interference. Indeed, as making environment for satellite communications free from interference is the core goal of the ITU, it renders assistance to administrations in the coordination process. In particular, the ITU makes efforts to help participants prevent coordination from being blocked and reach agreements. However, it can neither give instructions identifying technical measures to be taken by the parties to a coordination, nor draft coordination agreements. For instance, if coordination negotiations are inconclusive, the matter can be discussed under the auspices of the ITU Radiocommunication Bureau. Upon request, the Bureau carries out investigations of harmful interference and submits reports to the ITU Radio Regulations Board[11] which formulates recommendations on how to resolve a case. Indeed, the Board has been recently involved in resolving quite a few disputes related to harmful interference and has become perceived as a quasi-judicial body. Hence, disputes arising out of coordination agreements, if they involve harmful interference, can be referred to the Board for consideration. The process has, however, a few drawbacks.

In the first place, it has to be noted that by virtue of its specific nature the Board only treats disputes administratively, i.e. it adjudicates them in the absence of the parties concerned. As a result, it may happen that the relevant circumstances of a dispute are not fully examined. Furthermore, the inability of the parties to personally take part in the adjudication makes this process non-adversary, while the adversary character is an important principle of justice. Secondly, decisions of the Board can be revised by World Radiocommunication Conferences (WRCs) making them non-final. The fact that WRCs are convened every three to four years may put a final decision in a case in limbo for a long period of time. Thirdly, decisions of the Board are not binding. Consequently, their fulfillment fully depends on the good faith of the parties involved.

What is even more important, is that, when considering disputes arising out of coordination agreements, the Board finds itself not in a position to examine the content of these agreements. Such agreements contain confidential information of the administrations and operators concerned and, therefore, cannot be published, disclosed, or otherwise made public. At the same time, the Board must make its activities fully transparent, which is now entirely in the public domain. Agendas of meetings, submissions made by administrations, other contributions, including reports prepared by the Bureau, as well as summaries of the Board's decisions and the minutes of its meetings are available on the official website of the ITU. In other words, the Board can only work and make decisions on the basis of open documents and open sources of information, while all the materials containing confidential information are not accepted by the Board and, if for whatever reason received, are returned to the relevant parties.

Finally, the Board does not, and has no right to, review compensational claims. However, disputes involving harmful interference can undoubtedly result in damage.

All these drawbacks can discourage satellite operators from submitting their disputes to the Board and make a judicial recourse inevitable.

COMPETENT FORUM – ARBITRATIONS AND COURTS

As disputes arising out of coordination agreements may involve parties around the globe, to what forum should they apply to resolve disputes?

International Arbitrations

There are many highly professional and well-established international arbitrations, including, for instance, the Permanent Court of Arbitration (PCA) applying the Optional Rules for Arbitration of Disputes Relating to Outer Space Activities,[12]

[9] A Method of Spectrum Management to Be Used for Aiding Frequency Assignment for Terrestrial Services in Border Areas, International Telecommunication Union, 1995

[10] Arts. 34 – 38, Statute of the International Court of Justice, 26 June 1945

[11] The ITU Radio Regulations Board is a collegiate body that consists of twelve skilled experts thoroughly qualified in the field of radiocommunication and possessing practical experience in the assignment and utilization of frequencies

[12] Optional Rules for Arbitration of Disputes Relating to Outer Space Activities, 2011. Available on the website of the Permanent Court of Arbitration

however, it is only with the agreement of the parties that a dispute can be referred to an arbitration. If a coordination agreement does not contain an arbitration clause, the parties are still able to agree to refer a dispute to arbitration at a later stage, including when such a dispute has already arisen. Examples where international arbitrations consider disputes arising out of coordination agreements already exist.

In 2012, the arbitral tribunal established under the rules of the International Chamber of Commerce (ICC) reviewed the case of two satellite operators – Eutelsat S.A. and SES S.A. – related to a coordination agreement on the use of frequencies over Europe at the 28 degrees East geostationary orbital position. Due to the circumstances, the parties to the dispute did not wait for the tribunal's decision and signed, in January 2014, a series of instruments to finally settle the case.[13] It is not clear whether their coordination agreement contained a forum selection clause, but, one way or another, the parties managed to agree on submitting their dispute to the arbitral tribunal established under the ICC rules.

National Courts

If an arbitration agreement cannot be reached, the parties can only apply to national courts. The national court that will be competent to consider disputes arising out of a coordination agreement can be chosen by the parties. But what court will have such competence, if there is no forum selection clause in the coordination agreement?

Generally, the exclusive competence of national courts extends to disputes related to state ownership, intellectual property, and real estate and does not cover disputes arising out of coordination agreements. Also, national courts usually consider disputes if a defendant has residence in their country. In this regard, there is little doubt that one of the parties to a coordination agreement can file a lawsuit in the national court of the other party. However, this option appears to be the least preferable to plaintiffs. This means that for the plaintiff, the dispute will be considered in a foreign country, in a foreign court, and in a foreign language, while for the defendant, all these foreign elements, on the contrary, are national and well-known.

There are other rules that, for example, allow a national court to consider a dispute if damage is caused in that country, if a contract is to be performed in that country, or in other cases when a contentious relationship is closely connected with that country. The possibility of applying these and other conflict of laws principles to coordination agreements largely depends on the circumstances and has to be determined on a case by case basis.

For example, in one real case, a party to a coordination agreement invoked the principle which suggests having recourse to the court of the place where the contract has been made. It was the case of Eutelsat S.A. and Fransat S.A. versus ABS US Corp. which was heard at the Commercial Tribunal of Paris[14] and related to the alleged violation by ABS of the coordination agreement executed in Paris. ABS, in turn, challenged all the above claims as well as the competence of the Commercial Tribunal of Paris to adjudicate this case. The opinion of the Commercial Tribunal of Paris regarding its competence to adjudicate this dispute remains unknown as the case was closed for formal reasons.

If the dispute had been adjudicated by this French court, this would have probably been quite a good turn of events as France has a well-developed modern legal system. However, the application of some conflict of laws principles may bring parties to an exotic jurisdiction equally irrelevant to both.

NECESSITY OF SPECIAL KNOWLEDGE

Whatever forum is chosen, the question of specific knowledge arises. Disputes related to coordination agreements can be extremely complicated from the technical point of view. To adjudicate such disputes, one not only needs to be properly qualified in the field of law but also in the area of information and communication technologies, including satellite communications. For instance, the source of harmful interference is technically difficult to determine and legally challenging to attribute. It is also difficult to estimate how reasonable a compensational claim is and if the claimed damages are commensurate with a given breach.

In this regard, it might be advisable that the ITU designate an expert to take part in legal proceedings in national courts or international arbitrations, provided that the relevant rules are met. There are no provisions in the ITU basic texts that would prevent the ITU from doing so,[15] while actions which are not expressly prohibited are allowed.[16] Therefore, the ITU can formally use such practice, which would increase the effectiveness of the settlement of disputes related to the use of the orbital and frequency resource. Yet, the ITU's practice has always been not to get involved in conflicts between Member States or between operators from Member States in order to remain neutral.[17] At the same time, the ITU could, at least, consider responding to official judicial requests from national courts, if it is not willing to respond to requests from parties to a conflict. Such a request might be sent through diplomatic channels directly to the ITU Secretary-General and should only relate to the regulatory or technical issues.[18] Provided that the questions posed by such a request do not jeopardize the ITU's neutrality or immunity and are within its mandate and competence,[19] the ITU Secretary-General might decide to instruct the Bureau to respond. In this case, a response by the ITU might relate to legal or technical questions within the framework of the conflict, but not to the subject of the dispute. [20]

APPLICABLE LAW

Another legal challenge of adjudicating a dispute related to a coordination agreement would be to determine governing law to be applied to each aspect of the dispute.

On the regional level, certain arrangements exist on what laws must be applied in different situations. For instance, on the territory of the Europe-

[13] SES and Eutelsat Settle Their Dispute and Conclude a Series of Agreements Concerning the 28.5 Degrees East Orbital Position, 30 January 2014. Available on the SES website

[14] Decision in the case No. 2017045737 between Eutelsat S.A. and Fransat S.A. against ABS US Corp., 29 September 2017. Available for a fee on the website of the Commercial Tribunal of Paris

[15] *Ibid.*, Para 2.85

[16] *Ibid.*, Para 2.94

[17] Para. 2.84, Minutes of the 75th Meeting of the Radio Regulations Board, ITU Document RRB17-2/8-E, 21 July 2017

[18] *Ibid.*, Para 2.95

[19] *Ibid.*, Para 2.84

[20] *Ibid.*, Para 2.89

an Union such issues are governed by the Regulation on the Law Applicable to Contractual Obligations (Rome I Regulation).[21] However, there are no legally binding documents on the conflict of laws principles at the international level, such as UNCITRAL, Unidroit, the Hague Conference on Private International law, etc. Consequently, the choice of law is mainly regulated by national rules, which are to be followed by the relevant national courts or international arbitrations.

According to the most widespread and generally accepted rule, it is suggested that a contract be governed by the law of the country where the party required to effect the characteristic performance of the contract has its habitual residence. For instance, this is the case of the abovementioned Rome I Regulation and some national rules such as the Civil Code of the Russian Federation.[22] For almost all of the known types of contracts these documents determine the party that effects the characteristic performance. For example, in a contract for the sale of goods it is the seller, in a contract for the provision of services it is the service provider. Predictably, there is no such provision with regard to a coordination agreement, because this type of contracts is hardly known to national legislations. Moreover, it is doubtful that there can even exist a party effecting the characteristic performance in a coordination agreement, taking into account that the rights and obligations of both parties are very similar and equally essential for the agreement's performance. Therefore, it is unlikely that the law applicable to coordination agreements can be determined using the principle of characteristic performance.

In such cases, national legislations usually suggest to use another conflict of laws principle, which is considered one of the most universal that applies when no other is applicable. According to this principle, the contract is governed by the law of the country with which it is most closely connected. However, taking into account that coordination agreements govern the relations of the parties with respect to the use of frequencies and associated satellite orbits and the operation of communications satellites deployed in outer space, i.e. beyond the territory of any state, and can potentially affect territories of a number of states that are within the coverage area of such satellites, it is hardly possible to determine only one country which a coordination agreement would have close connection with.

In some jurisdictions, there exist other conflict of laws principles that can be used to determine the law applicable to a specific contract. Such connecting factors include, inter alia, the law of the place where contractual obligations are to be performed, damage has been caused, or an offence has been committed. These principles can be used in respect of coordination agreements. For instance, if as a result of a breach of a coordination agreement one party causes damage to terrestrial services or infrastructure of another party, the affected party might request to apply the law of the place where damage has been caused. Or, if the station that uplinks the signal causing interference to a satellite is known, the law of the place where the offence has been committed might be used. However, such rules can only be applied to very specific situations that may result from a breach of a coordination agreement and cannot generally determine what law must govern disputes arising out of coordination agreements.

At the same time, applicable law has a decisive effect on relations of the parties and can even determine the outcome of a dispute. It is applicable law that governs such aspects as the definition of the legal nature of an agreement and its interpretation, validity of an agreement or any of its provisions, rights and obligations of the parties, including the possibility to withdraw from the agreement, consequences of a breach or termination of an agreement, liability of the parties for non-performance or undue performance, and the assessment of damage. Furthermore, applicable law can also give answers to other questions associated with conclusion and performance of an agreement. For instance, whether the provisions of a coordination agreement correspond to the competition law or if such an agreement has a good, valuable, and proper consideration in the context of the common law system.

[21] Regulation (EC) No. 593/2008 of the European Parliament and of the Council on the law applicable to contractual obligations, 17 June 2008. Available

[22] Art. 1211, Civil Code of the Russian Federation, 1 march 2002. Available

Interested in this article? Want to learn more about drafting legally protected coordination agreements?
Contact the International and Legal Service of Intersputnik at
legal@intersputnik.int

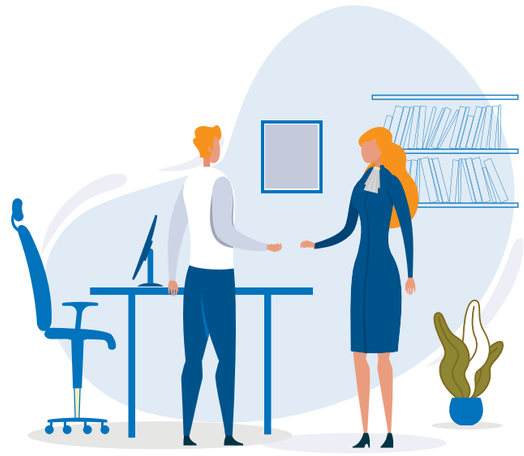
CONCLUSIONS

Over the past decades, satellite communications have become an integral part of our everyday life. Cutting-edge satellite telecommunications methods ensure instant delivery of huge amounts of data, relay of real-time voice and video, broadcasting of radio and television, and broadband access worldwide. By transmitting signals over any distance, communications satellites connect locations everywhere on Earth. In this regard, sustainable operations of currently orbiting and planned satellites or their systems are of vital importance both to supporting government interests and the quality of life, health, and well-being of people.

Apparently, disputes that can disrupt the operation of satellites and their systems have to be settled promptly and professionally in order to respond to the pressing needs of the industry. For this reason, it is worth considering if there is a need for a specialized arbitration that would be competent to consider disputes arising out of coordination agreements and how it can be established.[23] In the meantime, the satellite industry awareness of the issue should be increased and the focus should be on the content of coordination agreements executed by satellite operators.

It is advisable that satellite operators start considering coordination agreements as any other contracts that can be breached and, therefore, require appropriate measures of legal protection. It would be reasonable to promote lawyers' involvement into coordination agreements' drafting process. It is, however, not suggested that these agreements be fully drafted by lawyers. Rather it would suffice, at least, to consult lawyers and let them define, in the main text or as an annex thereto, some essential legal provisions which equally protect both parties.

If a dispute arises out of a coordination agreement with no legal provisions, it is advisable to encourage the parties to agree, at least, upon a neutral forum for dispute settlement. Choosing the applicable law would be more challenging, as it can determine the outcome of a dispute, although agreeing on a neutral law is another step that the parties to the dispute must take together to ensure a fair dispute-settlement process.



[23] Establishment of a Specialized Tribunal Under the International Telecommunication Union to Adjudicate Disputes as a Means to Improve the Efficiency of the Management of the Radio Frequency Spectrum, Victor Veshchunov, Elina Morozova, IAC-13-E7.2.4,2013

INTERNATIONAL FORUMS AND OTHER INDUSTRY EVENTS

Intersputnik

Intersputnik carries on a series of specialized webinars on satellite telecommunications and broadcasting in various countries and regions of the world. Traditionally, the webinars are attended by renowned experts in information and communications technologies, international and local services providers and suppliers of satellite telecommunications equipment, other industry-specific companies and representatives of financial and credit institutions.

12 April 2021
The International Day of Human Space Flight, a series of presentations and a roundtable were dedicated to satellite communications in **Indonesia**. This was already a second webinar for this promising market in South-East Asia. Winners of a quiz dedicated to the 60th anniversary of Yuri Gagarin's space flight were rewarded with access to one-month free testing on the ABS-2A satellite.

8 June 2021
A webinar was held for countries in **Latin America**. Presentations and a roundtable were focused on three countries: Nicaragua, Argentina, and Peru. The first webinar for this region drew participants from Argentina, Brazil, Colombia, Nicaragua, Uruguay, and others. This time the winners of the quiz were granted one-month free testing in C band on the Express-AM8 satellite.

1, 17 June 2020, Indonesia
2, 21 July 2020, Latin America
3, 5 November 2020, Africa and the Near East
4, 12 April 2021, Indonesia
5, 8 June 2021, Latin America

Want to receive materials of these webinars? Interested in discussing the satellite telecommunications market in your region?
Write to us at
sales@intersputnik.int

World

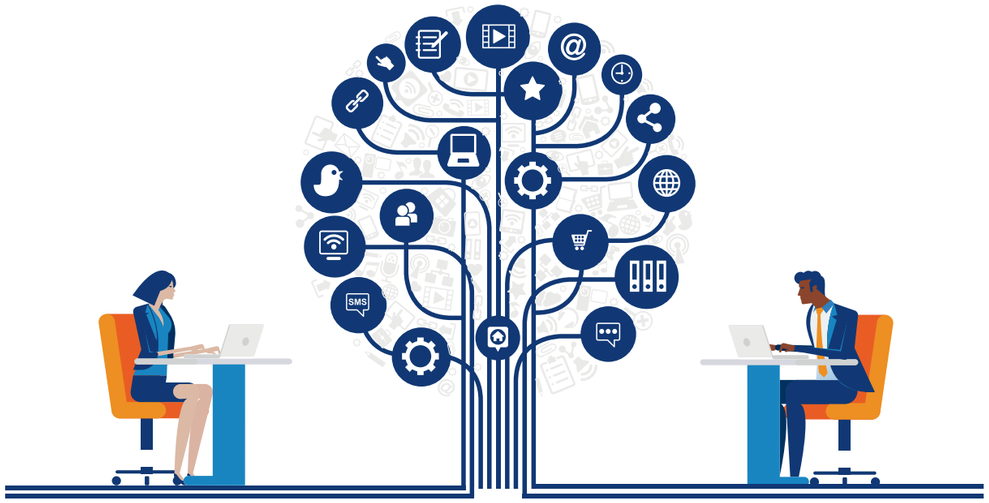
The UN Committee on the Peaceful Uses of Outer Space (COPUOS) held meetings of its **Scientific and Technical** (**19 – 30 April 2021**) and **Legal** (**31 May – 11 June 2021**) **Subcommittees**. Intersputnik took part in the meetings as a permanent observer at COPUOS.

Without prejudice to the prevailing role of the International Telecommunication Union – the UN specialized agency for information and communications technologies – the Subcommittees reviewed the utilization of the geostationary orbit, including in the field of space communications, and ways to ensure that it is used rationally and equitably.

Some delegations expressed the view that the utilization by states of the GSO on a "first come first served" basis was unacceptable and, therefore, it was necessary, with the involvement of ITU, to develop a regime guaranteeing equitable access to orbital positions for states.

Read more in the conference room paper on the issue of equitable access of the developing states to geostationary orbit submitted by the delegation of Iran (available at this link in English) and draft reports of the STSC (Part XIV) and LSC (Part V).

Hungary



On the occasion of World Telecommunications and Information Society Day on **13 May 2021**, Széchenyi István University in Győr (Hungary) held, with a wide-ranging involvement of the Hungarian infocommunication sector, a **symposium** with participants from international and national industry organizations, operators, universities, as well as the government sector. During the event there took place parallel sections for mobile and cable communication, as well as broadcasting. Intersputnik was honoured to take part in the satellite technologies section and discuss selected aspects of applying international space law to satellite telecommunications. We would like to thank the National Media and Infocommunications Authority, the Intersputnik Signatory for Hungary, for cooperation in building up human capacity!

Russia

11 February 2021
There was held with support from Intersputnik the second international conference **#SpaceCom Digital Russia 2021** "Satellite Communications Industry in the Era of Digital Transformation". Satellite communications experts shared experience in overcoming the consequences of the pandemic. Participants in the discussion laid special emphasis on the new government concept of developing TV and radio broadcasting in 2020-2025 and bridging the digital divide in Russia.

8-9 April 2021
There took place with support from Intersputnik the XIII international conference **"SATELLITE RUSSIA & CIS**: spacecrafts and satellite communications on all orbits: market recovery in the aftermath of COVID-19, integration into 5G, IoT and digital economy". Experts exchanged opinions on broadband services in geostationary and non-geostationary satellite systems, the use of low-Earth-orbit constellations for IoT services, standardization of the satellite component of IMT-2020 and IoT, changes on the satellite direct-to-home market, requirements of space startups, and ways to keep the satellite sector stable.

INTERSPUTNIK TODAY

5 business areas

Lease of satellite capacity
Largest choice of geostationary orbit satellite resource of various satellite systems

Orbit and spectrum resource
Interspunik filed 46 satellite networks in 29 geostationary orbital positions and 2 non-geostationary satellite networks

Business Development Program
Investment fund for the implementation of innovative space projects – $ 4,500,000

Full-scale solutions
Your own facilities for global satellite telecommunications

OpenTeleport
Platform for sales of teleport services and telecommuni cations equipment

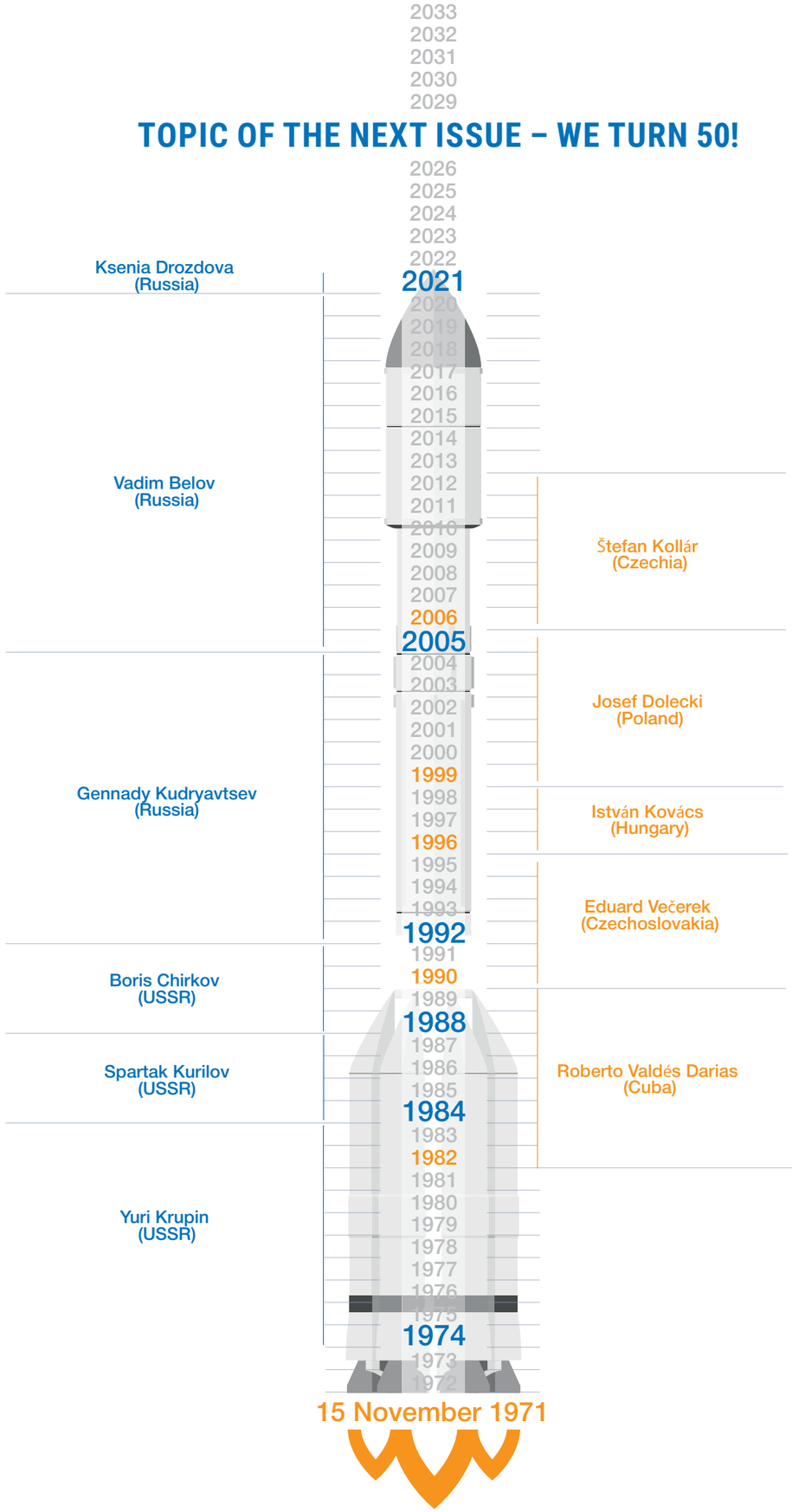
Founded in 1971 under the Agreement on the Establishment of the Intersputnik International System and Organization of Space Communications, Intersputnik is an international intergovernmental organization headquartered in Moscow. The organization's mission is to contribute to the consolidation and expansion of economic, scientific, technological and cultural relations using satellite telecommunications, video and audio broadcasting and to support cooperation and coordination of the efforts of the member countries aimed at designing, procuring, operating and expanding an international satellite telecommunications system. Intersputnik can be joined by the Government of any state that shares the principles of Intersputnik's activity. Today, the organization has twenty six member countries.

Intersputnik's core activity is to make available to interested customers the world over geostationary satellite capacity used to offer a full range of satellite telecommunications services. At present, Intersputnik provides access to satellite resources of major satellite telecommunications systems, including ABS, Azerspace, Eutelsat, Intelsat, SES, Express, and Yamal. To offer full-scale services encompassing the establishment and operation of satellite telecommunications networks, including ground infrastructure, Intersputnik founded Isatel, its Russian subsidiary company.

Owing to its status of an intergovernmental satellite organization and according to its technological policy, Intersputnik files with the International Telecommunication Union satellite networks on various orbits, which may be further used in cooperation with the Organization's member states and other partners in order to implement projects aimed at establishing national satellite telecommunications systems.

More information on Intersputnik is available at intersputnik.int

TOPIC OF THE NEXT ISSUE – WE TURN 50!



INTERSPUTNIK
INTERNATIONAL ORGANIZATION
OF SPACE COMMUNICATIONS

2nd Smolensky per., 1/4,
121099, Moscow, Russia
Phone: +7 (495) 641-44-22
Fax: +7 (495) 641-44-40
dir@intersputnik.int
www.intersputnik.int

Pre-launch sales of capacity of all global satellite fleets

Own frequency resource on GSO

Installation and operation of ground infrastructure

Business development program

OpenTeleport