UNITED NATIONS/CHINA/APSCO WORKSHOP ON SPACE LAW

## National Space Law and Policy of the Russian Federation

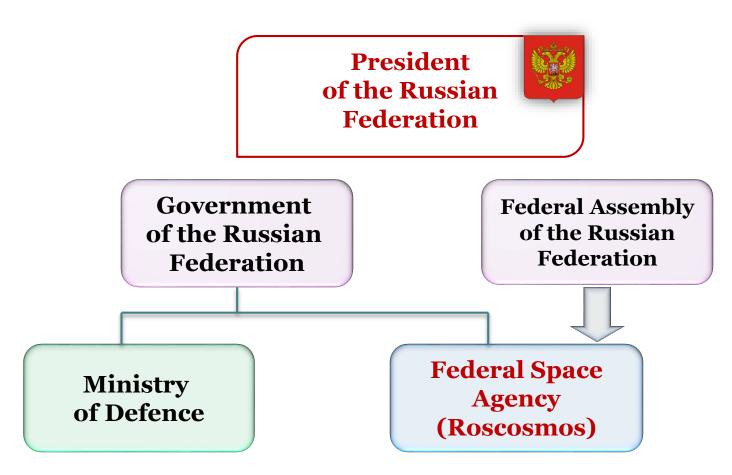


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State Management of Space Activities in Russia



#### **INTERNATIONAL SPACE LAW**

4 Space Treaties (except for the 1979 Moon Agreement) + generally accepted principles of international law

22 framework intergovernmental agreements

50+ multilateral and bilateral agreements

**30+ interagency agreements** 



The Constitution of the Russian Federation (1993)

#### FEDERAL LAWS and CODES

**On Space Activities (1993, as amended)** 

On navigation (2009, as amended)

On licensing of specific activities (2011)

Civil, Customs, Tax, Air, Land, Penal, Administrative, etc. Codes

#### **REGULATIONS BY THE PRESIDENT AND THE GOVERNMENT**

On the Federal Space Programme of Russia for 2006-2015 (2005)	On the Federal Task Programme "Global Satellite Navigation System" for 2012-2020 (2012)
On the maintenance, development and use of the GLONASS system (2008)	On the equipment of transport vehicles with GLONASS/GPS means (2008)

#### **REGULATIONS BY THE FEDERAL MINISTRIES AND AGENCIES**

#### **Roscosmos**:

- Administrative regulation on licensing of space activities (2012)
- Administrative regulation on registration of space objects (2010)
- Administrative regulation on cosmonaut selection and training (2010)

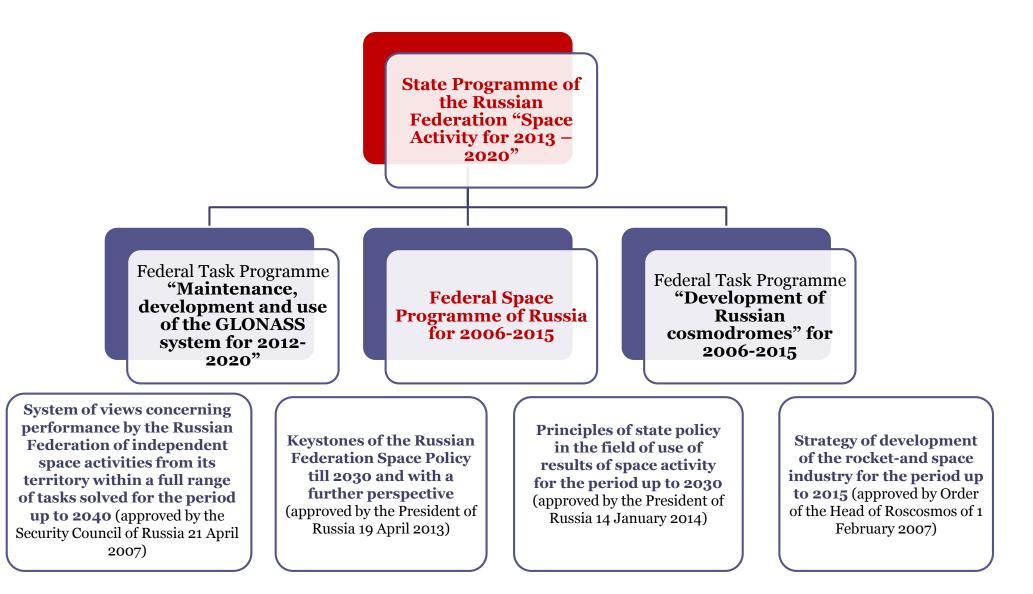
**<u>Ministry of Transport</u>**:

-Order on equipment of transport vehicles with GLONASS or GLONASS/GPS means (2010)

**Ministry of Economic Development:** 

-Order determining the geodetic and cadastre equipment to be equipped with GLONASS or GLONASS/GPS means

#### Modern Russian Space Policy



### Keystones of the Russian Federation Space Policy till 2030 and with a further perspective *Principles of state policy in the field of space activities*

- strict compliance with Russia's international obligations in the field of space activities and universally recognized principles and norms of international law
- the protection of state interests of the Russian Federation in the sphere of space activity with all measures and means available under international law, including the right to self-defense recognized by the Charter of the United Nations
- the development of public-private partnership in the provision of services which use results of space activity, consistent development of opportunities of creation on a commercial basis of space systems for communication, navigation, broadcasting and remote sensing of the Earth, and in the future – of launch vehicles and implementation of manned flights in space
- provision of the safety and long-term sustainability of space activities, compliance with measures for the protection of the environment, including near-earth space and deep space

#### Keystones of the Russian Federation Space Policy till 2030 and with a further perspective *The objectives of international cooperation in the field of space activities*

- active participation in the consideration and resolution of issues associated with the development of international space law, including the advisability of developing of a comprehensive UN Convention on space law, in order to ensure the interests of the Russian Federation
- the creation of a unified state system of information-analytical support of security of space activities and a system of interaction of the appropriate federal bodies of executive power in the event of crisis situations, related to space activities, including cooperation at the international level
- active promoting within the UN and other international forums principal lines of the Russian Federation on the preservation of outer space exclusively for peaceful purposes, in particular the promotion of Russian approaches to the elaboration of a Treaty on the prevention of placement of weapons in outer space, measures of transparency and confidence-building in outer space activities, security and long-term sustainability
- active participation in the process of review and decision making at the international level on the problems associated with anthropogenic contamination of near-earth space, including topics of prevention of creation and removal of space debris from the area of the operational orbits of spacecraft

#### Practical implementation of different forms of international space cooperation promoted by Russia

#### Intergovernmental agreements - Framework

- Specialized

Joint enterprises with foreign partners Contracts for rocketand-space techniques Contracts for space services 7

#### EXAMPLES

**1. ISS agreement** (Russia, US, ESA, Japan, Canada)

2. Baikonur agreement (Russia – Kazakhstan)

**3.GLONASS agreements** (Russia – India)

- **1. Starsem** (Russia -France) – launches of Soyuz, Ariane, Molniya
- 2.RD AMROSS LLC (Russia - US) – RD-180 engines

**3. Eurockot** (Russia – Germany) – exploitation of launchers

- 1. Eutelsat and NPO PM – delivery and launch of spacecraft
- 2. KB KhM and ISRO – rocket engines
- 3. KB KhA and Aerojet (US) – rocket engine based on RD-0120
- 1. Exchange of meteorological information within the framework of the WMO

2. COSPAS - SARSAT

### Space cooperation of Russia in the Asia-Pacific region

APRSAF	Global Navigation Satellite Systems (GNSS) applications
APSCO	Perspective cooperation in the development of space science, techniques, technology and applications
ASEAN	Training programmes in remote sensing and GLONASS technologies application for social and economic tasks in the ASEAN member states
APEC	Satellite navigation for transport management; satellite methods for complex sea surface monitoring; space applications for disaster management in the Asia-Pacific region

### Keystones of the Russian Federation Space Policy till 2030 and with a further perspective *Tasks in the field of security of space activities*

- improvement of state regulation of the procedure for the admission of operators using foreign space systems and tools into information space of the Russian Federation
- creation of a unified state system of information-analytical support of security of space activities and a system of interaction of the appropriate federal bodies of executive power in the event of crisis situations, related to space activities, including cooperation at the international level
- identification of evidence of impact on socio-economic space systems, complexes and means and ensuring their protection and the protection of information obtained with them against unauthorized actions
- maintenance of ecological safety of space activities, adoption of technology and structures, which reduce the creation of space debris during launch and operation of rocket and space technology products

### Federal Law "On Space Activities" (20.08.1993, as amended) Fields of regulation

- Organizational structure of the space activity
- Legal status of space objects, of space infrastructure and its personnel, and cosmonauts
- Safety of space activity
- Insurance of the risks
- Licensing of space activity
- Certification of space techniques
- Legal protection of results of intellectual activity
- International cooperation in space area
- Liability for damage in the course of or as a result of space activities

### Administrative regulation on registration of space objects

- Administrative regulation of the Federal Space Agency on execution of the state function on maintenance of the Registry of space objects launched by the Russian Federation into the outer space (approved on 22.03.2010)
- The Registry is a continuation of the State registry of space objects launched by the USSR, which was maintained by the Academy of Sciences
- Russia continues to exercise full jurisdiction and control over space objects launched earlier by the USSR

### Administrative regulation on registration of space objects Administrative procedures

The following administrative procedures are included in the execution of the state function on maintenance of the Registry:

- preliminary review and amendment of the plan of launches for the next year with objects scheduled to launch
- application to Roscosmos for registration of a space object launched into the outer space
- verification of the completeness and reliability of the obtained information on the launch of the space object into the outer space
- assignment of a registration number to the space object, the recording of its launch in the Registry
- obtaining by Roscosmos of information about space objects that are being launched into orbit around the Earth, no longer are on this orbit
- preparation of information on space objects listed in the Registry and transfer of this information to the Ministry of Foreign Affairs of the Russian Federation for submission to the UN Secretary-General
- obtaining by Roscosmos of information about international registration number of the space object and its inclusion into the Registry

### Administrative regulation on registration of space objects Specific requirements

At the stage of preliminary review and amendment of the plan of launches for the next year with objects scheduled for launch:

- Before inclusion of a space object into the plan of launches Roscosmos takes into account the existence of legal and other bases for registration of the space object
- Application on the launch of a foreign space object should specify the state which will include the space object into its registry. Only after this Roscosmos or other federal executive body upon results of approval by the Ministry of Defense submit a draft order on the launch of such object to the Government
- In those cases where there are two or more launching States, including the Russian Federation, and when the application for registration of a space object is not planned for submission in the Russian Federation, Roscosmos or another federal executive body, to ensure acceptance by the Government of the Russian Federation of order for the launch of this space object, uses the procedures required to obtain from the organization, that concluded the contract to perform the launch, warranty obligations of the state, in accordance with whose legislation the ownership in the space object is registered, or another state concerned about inclusion of the space object into a national registry of specified state.

### Administrative regulation on registration of space objects Submission of registration data to the UN

- Before the 15th day of each month Roscosmos provides for preparation of registration data on space objects launched in the previous month, and sends them to the Ministry of Foreign Affairs for submission to the UN Secretary-General
- Registration data also include information on space objects which were previously registered by the Russian Federation (USSR) and which ceased to exit on the orbit around the Earth during the previous month



#### 10<sup>th</sup> day of month

Getting data from MoD on objects ceased to exist on orbit as of 24:00 Moscow Time of the last day of the previous month

### **Registration of space objects** *What does the real transparency mean?*

The launch profile for orbiting some objects (especially targeted to GEO) can be pretty complex and can include several intermediate orbits where the objects, being still attached to it's upper stage, can spend some period of time (often varying from a few minutes to a few hours). Then, before reaching its target mission orbit, the space object can spend additional time flying around the Earth on various transfer orbits.

Formally, each of these intermediate orbits can be considered as an appropriate one for provision of 'basic orbital parameters' as it is required by the Convention on Registration of Objects Launched into Outer Space which does not specify basic orbital parameters for which of orbits mentioned above have to be submitted during the process of registration of a space object.

Some actors are using this ambiguity when submitting registration data for their objects without any indication of further object major movements in outer space. As a result, there are some doubts that the officially submitted data stored in the UN Registry can be practically sufficient and could provide answer for basic questions such as: How many objects are placed, for example, into GEO region? Or, how many left on HEO?

USSR in the past and Russia at present have always promoted the rule – in order to be fair and transparent in registration it is required to submit to the UN Secretary-General basic orbital parameters which were formed, at least, after separation of the space object from the last upper stage with indication of a mission target orbit or, to be even more transparent, orbital parameters of that mission target orbit.

# Implementation of non-legally binding international recommendations at the national level

Acting in full compliance with the principles of state policy in the field of space activities the Russian Federation, as a responsible space faring state, implements commonly recognized non-legally binding international recommendations devoted to reducing the creation of space debris, increasing safety of space operations, long-term sustainability of space activities, to strengthen transparency and confidence between states.

The Russian Federation has established a legal basis whereby work can be conducted on resolving the problem of space debris. As an example, COPUOS Space Debris Mitigation Guidelines are reflected in the national standard GOST R 52925-2008.

More details regarding this topic as well as the problem of identification of orbiting objects can be found in the working paper Long-term sustainability of activities in outer space submitted by the Russian Federation to the COPUOS (A/AC.105/L.285)

Thanks for your attention!

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