The Legal and Technical Regulation of the Geodetic, Cartographic and Spatial Data in Russian Federation

Gennady POBEDINSKIY and Alexander PRUSAKOV, Russian Federation

Key words: Geodetic, Cartographic Standards, Manuals, Norms and Regulations, Technical Regulation, Metrology, Method of Measurements, Professional Standards and Practice

SUMMARY

The modern analysis of normative and technical regulation of geodetic and cartographic activity in the Russian Federation was done including national and professional standards, documents of GCINR (geodetic, cartographic instructions, norms and regulations) system. The directions of technical regulation improvements in the field of geodesy and cartography were considered in line with the event of adoption in the year 2015 of Federal laws named “On Standardization in the Russian Federation” and “On Geodesy, Cartography and spatial data and on input of changes in some law acts of the Russian Federation”.

SUMMARY

Выполнен анализ современного состояния правового и технического регулирования геодезической и картографической деятельности в Российской Федерации, в том числе национальными и отраслевыми стандартами, документами системы ГКИНП (геодезические, картографические инструкции, нормы и правила). Рассмотрены направления совершенствования технического регулирования в сфере геодезии и картографии в связи с принятием в 2015 г. Федеральных законов «О стандартизации в Российской Федерации» и «О геодезии, картографии и пространственных данных и о внесении изменений в отдельные законодательные акты Российской Федерации».
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1. INTRODUCTION

The legal and technical regulation of geodetic and cartographic activity in the Russian Federation is being performed on the base of normative legal acts, normative and technical documents of different level.

The main normative legal documents regulating relations in the sphere of geodesy and cartography are: Constitution of the Russian Federation and Federal constitutional laws; International agreements and contracts; Federal laws, regulating the mentioned above activity directly; Federal laws, regulating geodetic and cartographic activity in neighboring industries inside other activity; Acts of the President of the Russian Federation, Orders of Government of the Russian Federation, normative and legal acts of federal bodies of executive power.

2. PRESENT CONDITION OF LEGAL AND TECHNICAL REGULATION IN THE FIELD OF GEODESY, CARTOGRAPHY AND SPATIAL DATA INFRASTRUCTURE

The bases for legal conduction of geodetic and cartographic activity is reflected in the Constitution of the Russian Federation where geodesy, cartography and geographical names of objects according to statement 71 (section “p”) are a part of State activity of the Russian Federation.

Presently, normative and technical regulation in the field of geodesy and cartography in the Russian Federation is conducted according to Federal Laws:

“On Geodesy and Cartography”
“On Geographical Names of Objects”
“On technical Regulation”
“On providence of joining the measurements”
“On licensing of certain types of activity”
“On navigation activity”
“On Space activity”
“On State cadaster of real estate”.

The mentioned above laws regulate relations in the sphere of fixed requirements and norms to products, make possible to check quality of products with fixed requirements, provide a unified technic of all measurements, as well as relations rising along with performance, approval and cancelation of actions, publishing and applying the documents of standardization.

In order to perform legal lows the Government of the Russian Federation and federal bodies of executive power issue sub-law normative Acts.

Up till now, normative and technical regulation in the field of geodesy and cartography is being performed in the framework, approved according to the GCINR instruction (geodetic, cartographic...
instructions, norms and rules) system of Federal Service for Geodesy and Cartography of Russia. For example:

The database of normative and technical documentation of GCINR system includes about 300 approved documents.

The structure of normative documents formed in the field of geodesy and cartography:

![Diagram of normative documents in the field of geodesy and cartography]

3. DIRECTIONS TO IMPROVE PERFECTION OF LEGAL AND TECHNICAL REGULATION IN THE FIELD OF GEODESY, CARTOGRAPHY AND SPATIAL DATE INFRASTRUCTURE

At present, legal and technical regulation in the field of geodesy and cartography is under major changes.

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Federal law “On Technical Regulation” has come into force.
A new Federal laws has been adopted:
“On geodesy, cartography and spatial data and on input of changes in some law acts of the Russian Federation”

“On Standardization in the Russian Federation”

Adoption of the Federal law “On geodesy, cartography and spatial data and on input of changes in some law acts of the Russian Federation” forced to develop and accept a range of normative legal acts for its realization in form of orders of the President of the Russian Federation, Resolutions of

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Government of the Russian Federation, orders of Ministry of Economic Development of Russia, Ministry of Defence of Russia and other federal bodies of executive power.


Structure of normative documents in the field of geodesy and cartography in the light of the federal laws that came in power:

- **Documents of obligatory use**
  - Normative legal acts (NLA)
  - Technical regulations on geodesy and cartography (TRGC)

- **The documents, used at voluntary base**
  - Interstate, state standards (GOST)
  - National Standards (GOSTR)
  - Set of rules on geodesy and cartography (SRGC)
  - Standards of organizations (STO)
  - Methodology of measurements (MM)

In this regard, the development of a 2020 program for technical regulation in the field of geodesy and cartography provides the updating of normative documentation regulating geodetic, topographic and cartographic works based on their harmonization with international standards, optimization of the normative base structure in the conditions of market economy and Russian’s activities in ITO.

The scheme of perfection of legal normative and technical base in the sphere of geodesy and cartography:
The structure of regulatory bodies of normative legal and normative-technical regulation in the field of geodesy and cartography in Russian Federation:
First, it is planned to develop new national standards (GOST R) “The System of standards in the field of geodesy, cartography and spatial data. Main statements” and “The Order of development and acceptance of methodological, normative and technical acts in the field of geodesy, cartography and spatial data in the Russian Federation”.

The draft standard “The System of standards in the field of geodesy, cartography and spatial data. Main statements” has been developed and passing through necessary procedure.
REFERENCES


BIOGRAPHICAL NOTES

Gennady POBEDINSKIY
Ph.D.
In 1980, he graduated from Novosibirsk Institute of geodesy, aerial photography and cartography (NIIGAiK).
From 1978 to 1984, he worked in Scientific-research Institute of applied geodesy.
From 1984 to 1986, he worked at the Central Research Institute of geodesy, aerial surveys and cartography (TsNIIGAiK).
From 1986 to 1989 - senior engineer, then Chief Engineer of the Expedition No. 131 of Enterprise No. 7 of the Main administration of geodesy and cartography under the Council of Ministers of the USSR.
From 1989 to 1992 - Chief of the Expedition no. 129, then Chief of the Verkhnevolzhskiy territorial geodetic center of the Moscow aerial geodetic enterprise of the Main administration of geodesy and cartography under the Council of Ministers of the USSR.
From 1992 to 2006 - Director of Federal state unitary enterprise "Verkhnevolzhskoe aerial geodetic enterprise" of the Federal service of geodesy and cartography of Russia.
From 2006 to 2009 - Deputy Head of the Federal agency of geodesy and cartography.
From 2010 to 2012 - Deputy Director of the Central Research Institute of geodesy, aerial surveys and cartography (TsNIIGAiK).
From 2012 to 2013 - General Director, Deputy General Director of the Joint-stock company «Roscartographia».
From 2013 to 2014 year - Deputy Director of Scientific-production association of geodesy and geodynamics.
From 2014 - Director of Federal State Budgetary Establishment “Federal Scientific-Technical Center of Geodesy, Cartography and Spatial Data Infrastructure”.
Author of 4 books and more than 200 articles on geodesy and cartography.
In the 1999 by the President of the Russian Federation, he was awarded the Honorary title "Honored worker of geodesy and cartography of the Russian Federation".

Alexander PRUSAKOV
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Born September 21, 1953.
In 1976, he graduated from Moscow Institute of engineers of geodesy, aerial photography and cartography (MIIGAiK).
From 1976 to 1981, he worked as an engineer in the Expedition No. 121 of the Enterprise No. 7 of the Main administration of geodesy and cartography under the Council of Ministers of the USSR.
From 1981 to 1991 - engineer, senior engineer, Chief of Division, Chief Surveyor, Deputy Chief of the Department of the economy and planning of the Main administration of Geodesy and cartography under the Council of Ministers of the USSR.

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From 1991 to 1993 - Chief of the Department of economy and forecasting of the Main administration of cartography under the Council of Ministers of the RSFSR.
From 1993 to 1998 - Chief of the Department of the economy and planning of the Federal service of geodesy and cartography of Russia.
From 1998 to 2004 - Deputy Head of the Federal service of geodesy and cartography of Russia.
From 2004 to 2005 - Chief of the Department of the scientific and technical activities and cartography and geodesy funds of the Federal agency of geodesy and cartography.
From 2005 to 2009 - Chief of the Department of the economy, finance and management of state property of the Federal agency of geodesy and cartography.
From 2011 to 2012 - Director of Federal state unitary enterprise "Central topographic and mine surveying enterprise "Centmarkshejderija", General Director of the Joint-stock company "Central topographic and mine surveying enterprise «Centmarkshejderija».
From 2012 to 2015 - Deputy General Director for geodesy and cartography of the Society with limited liability «Specgeologorazvedka».
From 2015 - Head of technical regulation and measuring instruments Department of the Federal State Budgetary Establishment “Federal Scientific-Technical Center of Geodesy, Cartography and Spatial Data Infrastructure”.
The author of 2 textbooks for universities on organization and economics of topographic-geodetic and cartographic production and more than 40 articles on geodesy and cartography.
In the 1999 by the President of the Russian Federation, he was awarded the Honorary title "Honored worker of geodesy and cartography of the Russian Federation”.

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