



ROSREESTR

Federal Service
for State Registration,
Cadastral and Cartography

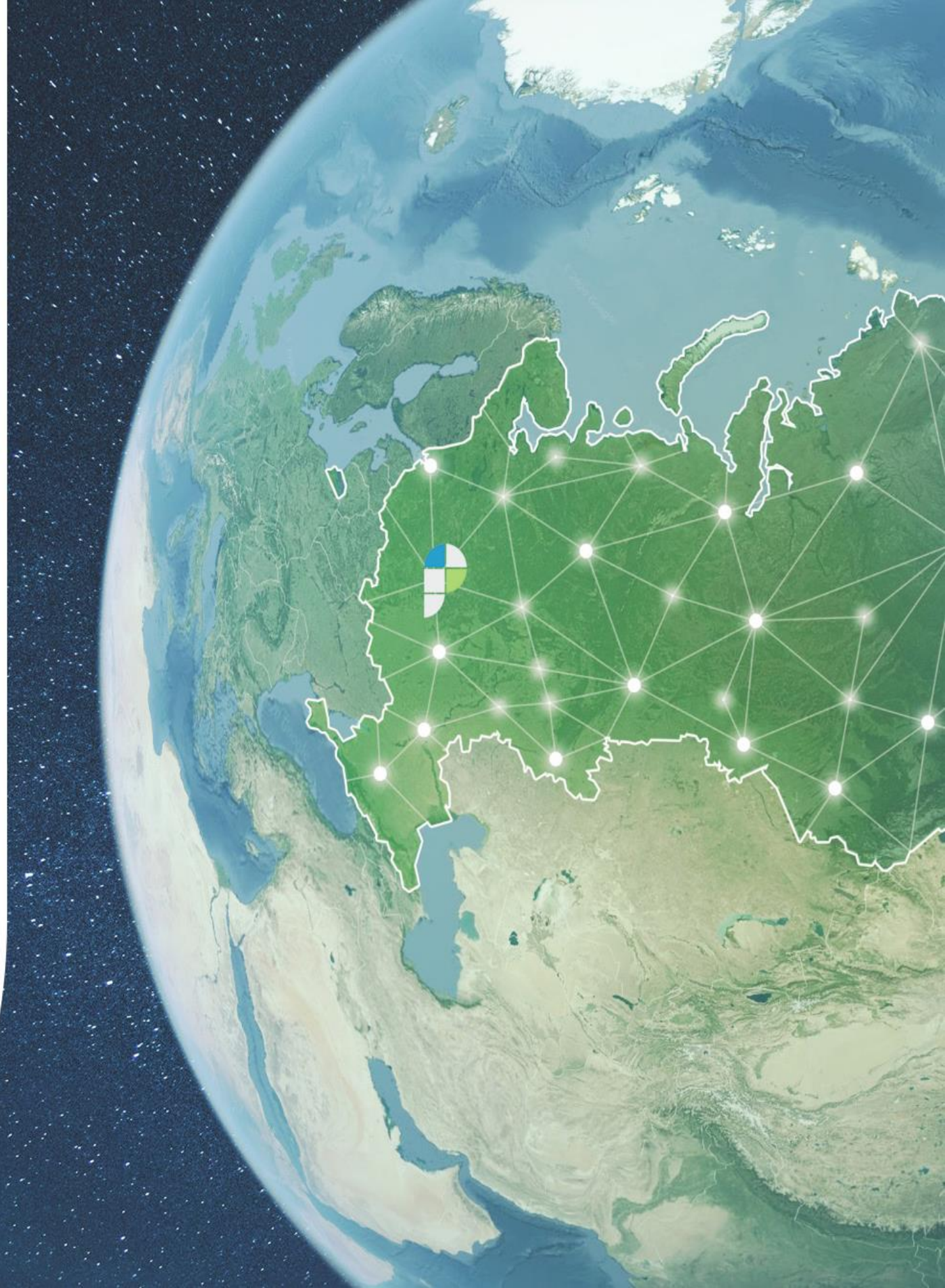
Geospatial Data and Cadastral in the Russian Federation in Support of Economy Recovery Measures

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Cadastral Chamber of Rosreestr**

11 May 2021



FEDERAL CADASTRAL
CHAMBER OF ROSREESTR



Public cadastral map of Russia

Capabilities of map



- type of property unit
- cadastral number
- land category
- information on property type
- cadastral value
- area
- permitted use

- State border of the Russian Federation
- boundaries between constituent entities of the Russian Federation, boundaries of municipalities, settlements
- boundaries of territories with special status
- register numbers
- boundaries of water units
- boundaries of cadastral divisions

- layout of the land plot on the cadastral plan of territory
- land plots for which a decision was made to hold an auction for sale
- land plots which are free of third-party rights, with no capital construction objects
- red lines
- deals with real property
- lands for housing construction

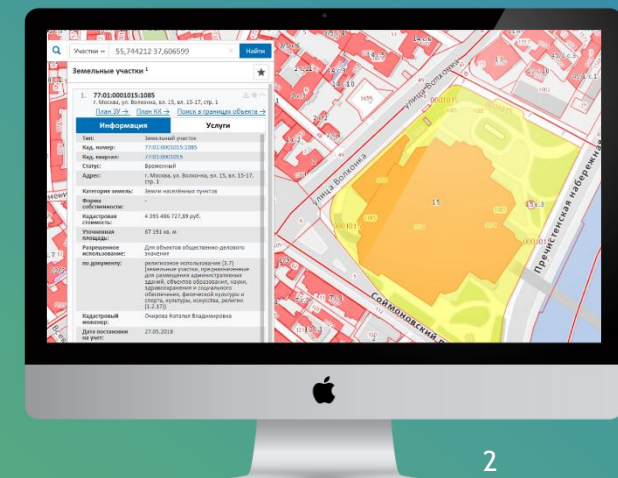
POPULARITY OF SERVICE

  pkk.rosreestr.ru

3.5 thousand
Simultaneously
connected users

200 thousand
Unique users every day

24/7 **ACCESS MODE**
DAILY UPDATE



Public cadastral map of Russia

Capabilities of map

The screenshot displays the ROSREESTR public cadastral map interface with several tool panels overlaid on a map of Russia. The interface includes a left sidebar for layers and a top navigation bar.

Layers Panel (Слои):

- Общедоступные сведения, содержащиеся в ЕГРН:**
 - Единицы кадастрового деления (0%)
 - Земельные участки (0%)
 - Здания, сооружения, объекты незавершенного строительства (0%)
 - Единые недвижимые комплексы (0%)
 - Границы (0%)
 - Зоны с особыми условиями использования территории (0%)
 - Территориальные зоны (0%)
 - Зоны и территории (0%)
- Дополнительные сведения:**
 - Государственный мониторинг земель
- Тематические карты:**
 - Кадастровая стоимость ЗУ (0%)
- Картографические основы:**
 - Категории земель (0%)
 - Виды разрешенного использования ЗУ (0%)
 - Комплексные кадастровые работы (0%)
 - Космические снимки esri (30%)
 - Картографическая основа ПКК (0%)
 - Отмывка рельефа esri Hillshade (0%)
 - Границы на картографической основе (0%)

Search Panel (Поиск):

- Поиск
- Все объекты в точке

Measurement Panel (Измерение):

- Measurement tools: circle, line, polygon, close.

Print Panel (Печать):

- Заголовок карты: ПУБЛИЧНАЯ КАДАСТРОВАЯ КАРТА РОССИИ
- Формат:
 - A4 альбомный (selected)
 - A4 книжный
 - A4 альбомный
 - A3 книжный
 - A3 альбомный
- Печать

Drawing Panel (Рисование):

- Точка
- Линия
- Полигон

Layers List (Участки):

- Участки
- ОКС
- Комплексы
- Проекты ЗУ
- Жилищное строительство
- Адреса
- Кварталы
- Районы
- Округа
- ЗОУИТ
- Зоны и территории
- Территориальные зоны
- Красные линии
- Границы
- Негативные процессы
- Усолье-Сибирское

Map Features:

- Scale bar: 600 км
- Page number: 3

Public cadastral map of Russia

In times of the pandemic

In 2019:

8 053 264
users of Public cadastral map

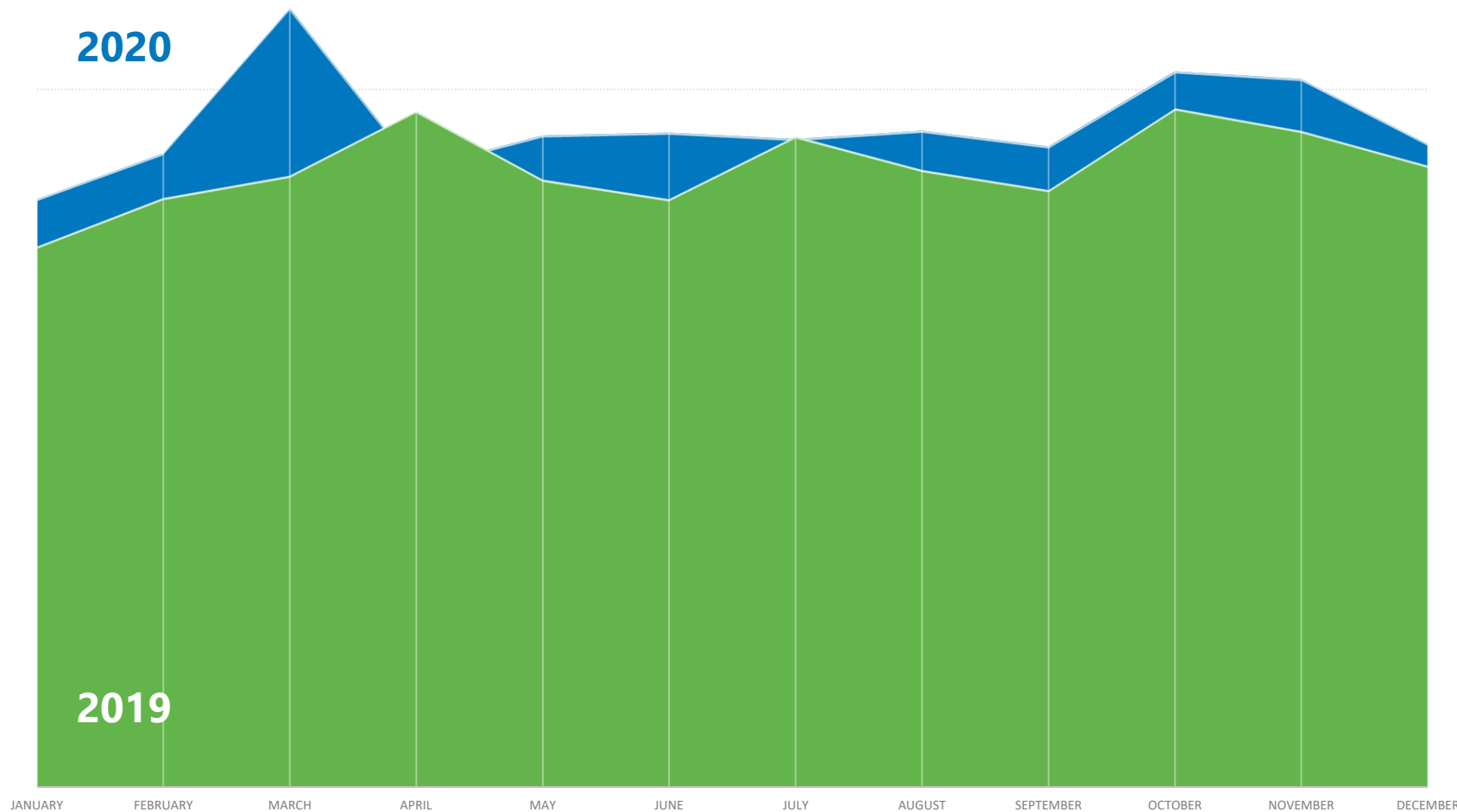
In 2020:

9 304 532
users of Public cadastral map

Increase in Public cadastral map attendance by

15%

is a confirmation of the fact that during the COVID-19 pandemic, when travel of people was limited not only to moving between countries, but also within a country, Russians have increased their interest in renting and purchasing suburban real property



GIS Federal Fund of Spatial Data and GIS Unified Digital Cartographic Framework

National program "Digital Economy of the Russian Federation"



Rosreestr is a federal executive body charged by the state with the task of creating the spatial data infrastructure of the Russian Federation.



This task is performed by Rosreestr through the implementation of a complex of interrelated cartographic and geodetic works.



The aim is to provide cartographic and geodetic support for the defense and security of the state and to meet the spatial data needs of various civilian sectors of the economy.

COMMITMENTS:

1

Development and up-to-date maintenance of the Unified Digital Cartographic Framework that meets the needs of all interested users (federal executive bodies, authorities of constituent entities of the Russian Federation, business, legal entities and individuals).

2

Development and commissioning of GIS Unified Digital Cartographic Framework, which supports the creation, monitoring, updating and provision of Unified Digital Cartographic Framework information, as well as in the form of cartographic webservice.

3

Development and commissioning of GIS Federal Fund of Spatial Data which is an online marketplace that facilitates ordering of Federal Fund of Spatial Data materials and data, interaction with regional and departmental spatial data funds, and legal entities.

Spatial data sources

for creating and updating Unified Digital Cartographic Framework



Spatial data and materials contained in state spatial data funds



Federal funds of spatial data



Regional funds of spatial data



For creation and updating of Unified Digital Cartographic Framework



Information obtained as a result of interagency information interaction



Unified State Register of Real Property



Information systems for urban planning activities



Other documents containing information on the state of the area



For monitoring relevance of Unified Digital Cartographic Framework

Creation, development, content, maintenance of GIS Federal Fund of Spatial Data and GIS Unified Digital Cartographic Framework

GEODESY

Coordinate framework of the country

Federal geodetic network – 85 segments – 2022
State geodetic network – survey and monitoring 20 000 points – constantly

Federal geodetic network - Unified network (continuous updating of network parameters in the computer center, provision of measurement information online)

Basis for cartography and monitoring, land management and cadastral works;
 Navigation;
 Engineering and geodetic surveys;
 High-precision positioning in all industries

EFFECTS

- Basic **legally significant up-to-date digital cartographic framework** for the entire territory of Russia
- Geodetic information in the form of an online service
- **Domestic software**
- **Basis for the creation of geoservices by private and public organizations**
- **Use in all industries, as well as in creation of state digital platforms**
- **"One-stop service" on the turnover of spatial data in Russia**

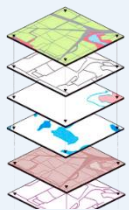
Federal Fund of Spatial Data



Factory for creating a digital spatial data fund - 2022

Monitoring of the industry
 Planning of work at the expense of budget funds
 Automation of the fund's functions
 Digital storage and secure regional network

Unified Digital Cartographic Framework



layers, multiscale

1:2 500 000 | 1:1 000 000 | 1:200 000
1:100 000 | 1:50 000 | 1:25 000
1:10 000 | 1:2 000

Spacecraft of communication

2019-2020
 20% of territory

2021-2024
 70% of territory

Spacecraft of Earth remote sensing

Spacecraft of communication

Monitoring of changes of Unified Digital Cartographic Framework **constantly**

Provision of spatial data (as well as via webservice)

Monitoring of relevance
 Update of Unified Digital Cartographic Framework data

Spatial data marketplace on the Internet

USERS

Individuals



Legal entities



Information systems of federal and regional authorities



Public cadastral map



Unified State Register of Real Property



GISs



GIS Unified Digital Cartographic Framework
GIS Federal Fund of Spatial Data
2021

Unified information resource on land and real property

AIM:

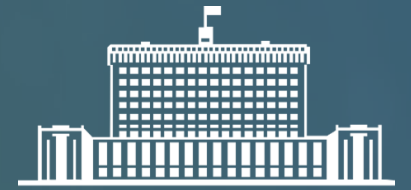
Ensuring the quality and integration of data on land and real property units contained in state information resources, as well as improving the efficiency of the use of land and property complex in the Russian Federation.

TASKS:

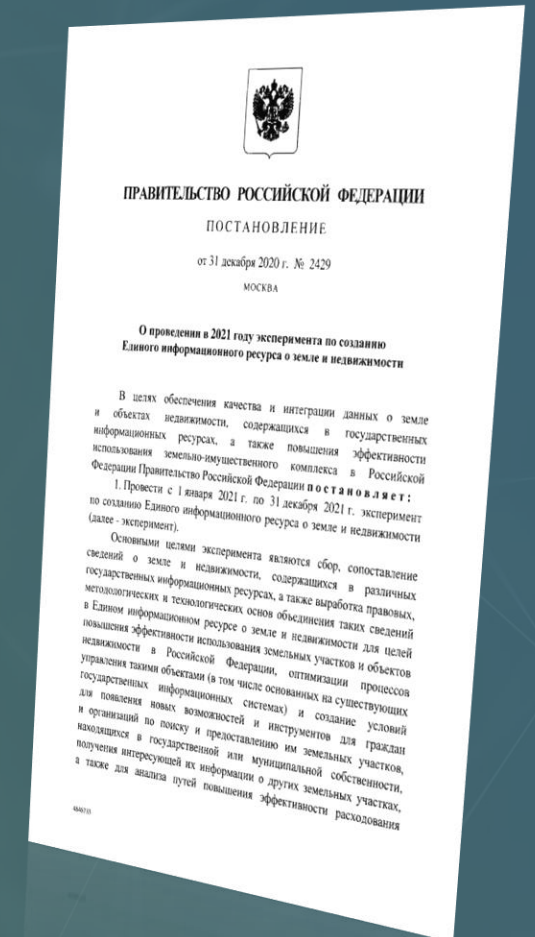
- improvement of reliability, quality and completeness of information on real property units and territories contained in state information resources;
- creation of additional tools for filling the Unified State Register of Real Property with missing information about the boundaries of spatial objects and the rights holders of real property;
- involvement of unused real property units in economic turnover;
- eliminating the need to enter the same data in different information systems as a result of distributed responsibility for the formation of information and the use of information services in data exchange;
- simplification of procedure for the search and provision of land plots and other real property units to citizens and organizations;
- ensuring effective provision of public services and performance of state functions related to the development of territories and objects on them;
- increasement of revenues of consolidated budgets from property tax and fees;
- introduction of modern technologies of intellectual analysis of spatial and semantic data for automation of works and services;
- creation of digital platform for collecting, maintaining and interagency information interaction, including when supporting of investment and social projects;
- providing possibility for adding information resources of other agencies with new reliable data on objects for management.

TERMS OF IMPLEMENTATION:

Conducting an experiment to create a Unified information resource on land and real property is planned from January 1, 2021 to December 31, 2021



**GOVERNMENT
OF THE RUSSIAN
FEDERATION**



DECREE
of the Government
of the Russian Federation
as of 31.12.2020
№ 2429

“On Conducting an Experiment
in 2021 to Develop a Unified
Information Resource on Land and
Real Property”

Unified information resource on land and real property

The following service will be implemented in the federal state information system "Unified Information Resource on Land and Real Property" (FGIS EIR) in accordance with the technical specification:

Service

"Land Simply"

It is intended for facilitating process of granting land plots that are in state or municipal ownership to citizens and legal entities. Using this service, anyone can choose a land plot from those already formed and registered in the state cadastre, independently form the boundaries of the land plot by drawing its contour on the webmap. Moreover, the service will enable implementation of the business process of providing a land plot, including making the necessary decisions by the authorities and conducting auctions through an electronic trading platform.

Unified information resource on land and real property

The following service will be implemented in the federal state information system "Unified Information Resource on Land and Real Property" (FGIS EIR) in accordance with the technical specification:

Service

"Land for Development"

The service will be used to maintain a register of land plots for construction, search for land plots for construction according to the specified parameters, and display the results of such a search in tabular form and on a webmap by means of the geoinformation service.

It will allow investors, developers who are engaged in the construction of apartment buildings and cottages to get information about a land plot, calculate its potential value, and predict future taxes and fees.

Unified information resource on land and real property

The following service will be implemented in the federal state information system "Unified Information Resource on Land and Real Property" (FGIS EIR) in accordance with the technical specification:

Service

"Analysis of the Condition and Use of Land"

It is designed for automated determination of the actual use of land, as well as for detecting changes in the condition and use of land on the basis of remote sensing data from space and comparison with data from other information systems.

Objectives:

- determining boundaries of land use, actual use of land, presence of capital construction units;
- identification of land plots, information about boundaries of which is missing in the Unified State Register of Real Property;
- analysis of changes in the boundaries of real property units in order to identify unauthorized changes in real property units and land boundaries;
- automatic detection of changes in the condition and use of land, recognition of various contours and terrain objects;
- visualization in a graphical form of information on the state and use of land, taking into account the current state and changes that have occurred.

Unified information resource on land and real property

The following service will be implemented in the federal state information system "Unified Information Resource on Land and Real Property" (FGIS EIR) in accordance with the technical specification:

Analytical functions:

The System will be able to build various dashboard panels (up to 20 standard samples), formed on the basis of information from information systems – data sources, as well as analytical reports.

As part of data analysis and reporting, the System is to implement the following functions:

- ability to build dashboards containing generalized information about EIR objects, presented in tabular and graphical form with a cartographic background, in the form of graphs and various types of charts and indicators (dashboard panel elements);
- ability to configure the number of dashboard panel elements displayed on the screen, and composition of the information of such elements;
- ability to select chart types (bar charts, flow charts, pie charts, stacked area charts, etc.);
- interactivity (tooltips, enabling / disabling series in the legend);
- information on the analytical panels will support filtering and aggregation functions (by administrative-territorial units, by types of information);
- uploading and printing the uploaded information.

**THANK YOU
FOR ATTENTION!**



ROSRESTR

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