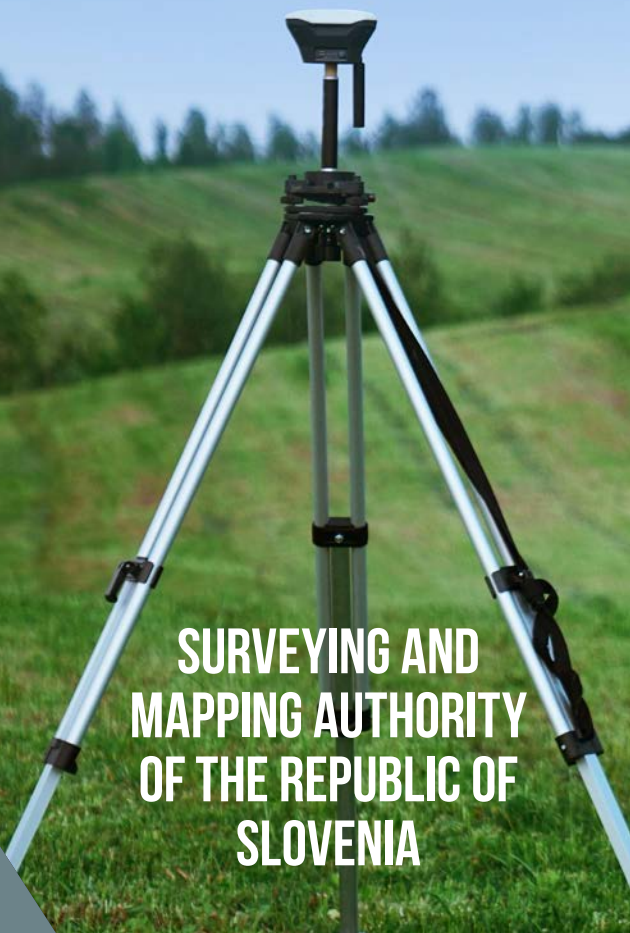


# ACTIVITIES REPORT

2021

SURVEYING AND  
MAPPING AUTHORITY  
OF THE REPUBLIC OF  
SLOVENIA





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# ADDRESS FROM THE GENERAL MANAGER



*Tomaž Petek, General Manager  
Surveying and Mapping Authority  
of the Republic of Slovenia*

*"In 2021, a new "Real Estate Cadastre Act" was adopted, giving the Surveying and Mapping Authority of the Republic of Slovenia the legal basis for fully electronic operations in the process of registering real estate."*

The year 2021 was strongly influenced by measures to prevent infections with the new coronavirus disease COVID-19. It has deprived us of many personal contacts and changed some of our habits. But it did not prevent the tradition of taking stock of the past year in the form of an annual report on the work done by the Surveying and Mapping Authority of the Republic of Slovenia.

2021 was a successful year and we can be very proud of the work we have accomplished. Despite the changed circumstances due to the COVID-19 epidemic, we were able to not just reach but exceed our set goals. Within the Programme of the projects eProstor, we completed all planned activities for 2021. The National Assembly of the Republic of Slovenia adopted the draft Real Estate Cadastre Act, which provides the Surveying and Mapping Authority of the Republic of Slovenia with the appropriate legal basis for e-commerce in the modernised processes of registering real estate and for the use of the new, unified information system of the Real Estate Cadastre. We have completed the second cycle of procedures for real estate mass valuation and carried out a preliminary calculation of real estate value. Due to the measures taken to

prevent the spreading of COVID-19, the public display of these new values, which would include the consideration of special circumstances for individual real estate, was postponed until after the epidemic. In the field of the topographic cartographic system and the national reference system, all the tasks, for which funding was provided in the Annual Work Programme of the National Geodetic Service for 2021, were completed. Everything we accomplished in 2021 is the result of every employee of the Surveying and Mapping Authority of the Republic of Slovenia and I am thankful to every one of them for their effort. Even in these challenging circumstances of the epidemic, optimism prevailed, and we proved that together we can overcome any obstacles, that come our way.

I am confident that together we will continue to demonstrate the importance of working in unison to strengthen geospatial infrastructure at the local, national, regional, and global levels. Only together will we be able to harness the potential of geospatial knowledge by developing innovative, effective and scalable solutions in different areas of our everyday life.

# PRESENTATION AND ORGANIZATION

The Surveying and Mapping Authority of the Republic of Slovenia (hereinafter referred to as SMA) is a body within the Ministry of the Environment and Spatial Planning. The area of work of the SMA encompasses the tasks of the national land survey service, which include the creation, management and maintenance of databases pertaining to the Basic Geodetic System, real estate, the State Border, spatial units and house numbers, and the Consolidated Cadastre of Public Infrastructure, as well as the Topographic and Cartographic System.

The SMA is responsible for the surveying, maintaining, managing and providing fundamental data on space and real estate in their data sets, provides services related

to the registration of changes in physical space and real estate, and performs the role of coordinator for the Real Estate System and Spatial Data Infrastructure.

The SMA maintains the Mass Real Estate Valuation System, records and monitors real estate sales and lease transactions,


analyses and reports on the state of the real estate market and provides data regarding the real estate market and the market values of real estate. It manages the National Coordinate System, which is the foundation to locate data in space and provides the infrastructure to carry out land surveys.



 Surveying and Mapping Authority | GOV.SI

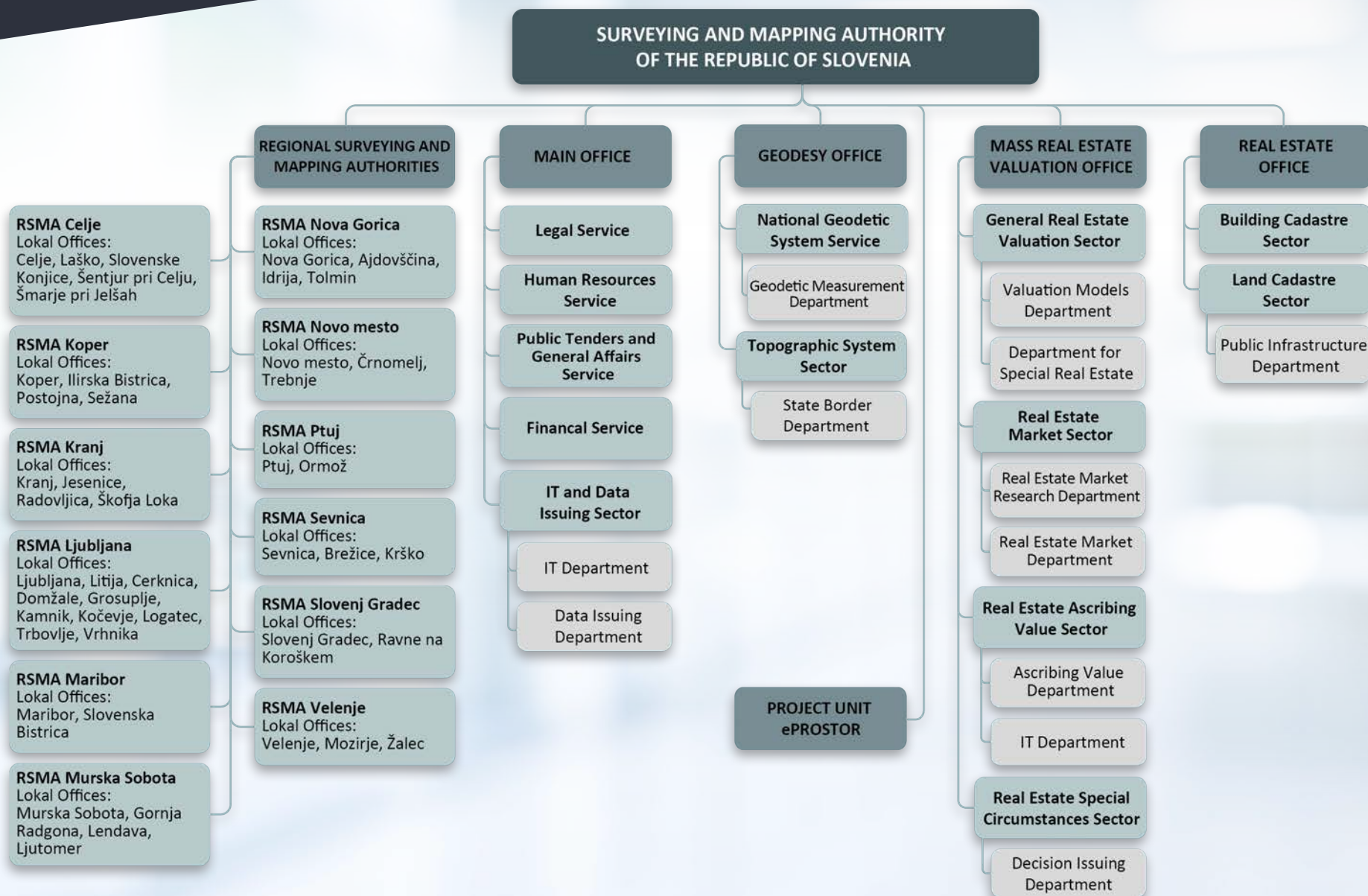
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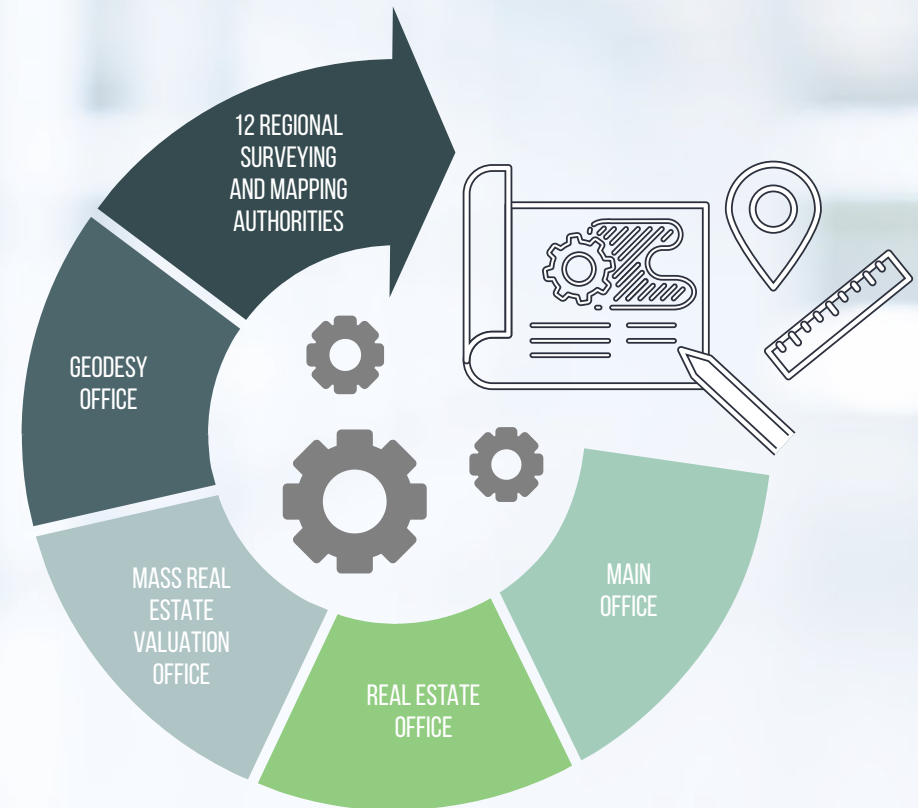


# WORK OVERVIEW

The SMA is responsible for the tasks of the state geodetic service, which include the establishment, management and maintenance of data sets in the field of basic geodetic system, real estate registration, mass real estate valuation, state boundaries, spatial units and house numbers, public infrastructure, and the topographic and cartographic system.

The COVID-19 epidemic continued its influence on the daily operation of the SMA in 2021. Despite certain constraints and measures to adapt activities due to COVID-19 prevention, the scope and quality of the work of the SMA in 2021 achieved the expected results compared to previous years.

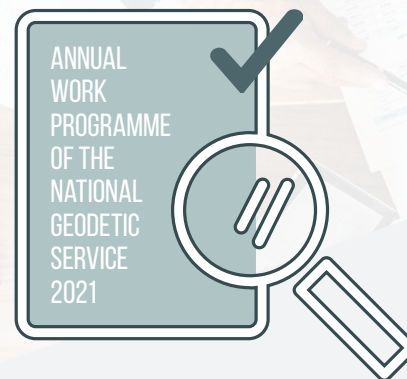
The organizational units of the SMA are the Main Office, the Real Estate Office, the Geodesy Office, the Mass Real Estate Valuation Office and twelve Regional Surveying and Mapping Authorities with associated Geodetic Offices, which carry out the tasks of accepting applications, informing and providing data to clients and carrying out individual actions in administrative procedures related to direct contact with the client at their headquarters and in all surveying offices.





One of the key tasks of the SMA in the field of real estate registration is to carry out administrative procedures at the request of clients, resulting in changes to real estate data records.

In 2021, the SMA resolved **121,421** administrative procedures (at the request of clients and ex officio) and we received **118,133** administrative procedures for resolution. Additionally, **137,393** certificates were issued and changes were accepted from the Land Register.



ADMINISTRATIVE PROCEDURES IN 2021	RESOLVED REQUESTS	DEMANDS RECEIVED	CERTIFICATES ISSUED AND CHANGES ACCEPTED FROM THE LAND REGISTER
JANUARY	11.220	9.344	3.687
FEBRUARY	10.842	10.415	14.644
MARCH	11.606	10.262	17.363
APRIL	8.619	9.083	11.675
MAY	10.594	10.361	12.738
JUNE	7.192	8.077	11.764
JULY	10.197	9.093	8.705
AUGUST	9.560	9.205	7.413
SEPTEMBER	10.001	9.883	14.126
OCTOBER	10.338	10.250	12.288
NOVEMBER	11.058	10.492	11.373
DECEMBER	10.194	11.668	11.617
	121.421	118.133	137.393

Data on the number of received and resolved requests, certificates and accepted changes from the Land Register in 2021

The SMA closed the year 2021 with the successful completion of all tasks set out in the Annual Work Programme of the National Geodetic Service as well as those planned under the Programme of the projects eProstor (eProstor). We managed to harmonise the text of the Real Estate Cadastre Act – ZKN, which was adopted by the National Assembly of the Republic of Slovenia on March 26, 2022, and entered into force on April 4, 2022. The importance of this adoption is the legal basis ZKN provides for e-commerce in the modernised processes of real estate registration and for the use of the new, unified information system of the Real Estate

Cadastre. Due to the measures taken to prevent the spreading of COVID-19, the public display of real estate values, which would include the consideration of special circumstances, was postponed. But it did not stop the consolidation of mass valuation models. Also, in the fields of the topographic mapping system and the national reference system, all tasks, for which we had been allocated funds in the Annual Work Programme of the National Geodetic Service for 2021, were completed.



# MAIN OFFICE

The Main office implements administrative, professional, technical and supervisory assignments related to the linking of spatial databases and spatial data infrastructure. It is responsible for the issuing of data and certificates in analogue and digital form, e-commerce with spatial data, spatial data infrastructure and informatization of the land survey service. It is the administrator for the information and telecommunication infrastructure and provides systemic, application and user support along with IT training and education.

Additionally, it helps with resolving legal matters of all the offices and regional surveying and mapping authorities. The Main Office also performs tasks related to personal data protection, financial operations, public procurement, human resources, education and office operations. It takes care of health and safety and performs other common tasks of an organizational nature relevant to the operation of the SMA.

## PUBLIC PROCUREMENT IN 2021

**16**  
PUBLIC PROCUREMENT CONTRACTS, WHICH ADHERE TO THE PUBLIC PROCUREMENT ACT – ZJN 3, HAVE BEEN CONCLUDED

**18**  
DIRECT CONTRACTS HAVE BEEN SIGNED

**60**  
SMALL PUBLIC ORDERS HAVE BEEN CONCLUDED

In the past year, **in the field of information technology and data issuance**, the SMA provided uninterrupted access to geodetic data to public and professional users, companies, state administration and wider public administration with the help of its distribution system network services and, traditionally, at all locations of the SMA. Activities were carried out to inform the public about the existence of data and services and support their use by spatial data users. The gradual **digitization of archived data (aerial photographs)** was continued. Funds were transferred for the concessional management of the GEOSS area. In cooperation with the Ministry of Public Administration, **the basic infrastructure conditions for the operation of the information systems** were ensured and **assistance to users of the information infrastructure** was provided to facilitate the smooth running of work processes.

## LEGAL FIELD IN 2021

**DAILY LEGAL ASSISTANCE** TO REGIONAL SMA OFFICES AND LOCAL OFFICES, ON AVERAGE 6 LEGAL ISSUES PER DAY

**LEGAL AID IN CONDUCTING ADMINISTRATIVE PROCEEDINGS** FOR THE ANNULMENT OF ADOPTED ADMINISTRATIVE DECISIONS (30 CASES) OR IN PROCEEDINGS FOR CONSIDERATION OF PROPOSALS FOR REOPENING OF PROCEEDINGS (26 CASES)

**PREPARATION OF AROUND 100 DRAFT ADMINISTRATIVE ACTS** OR PROCEDURAL DECISIONS IN ACCORDANCE WITH THE REAL ESTATE RECORDS ACT (ZEN) AND THE NEW REAL ESTATE CADASTRE ACT (ZKN) AVAILABLE TO OFFICIALS FOR CONDUCTING OF ADMINISTRATIVE PROCEEDINGS FOR FASTER AND MORE PROFESSIONAL WORK

**PROFESSIONAL IMPLEMENTATION OF MEASURES AND A UNIFORM WAY OF WORKING IN ADMINISTRATIVE CASES** (IN COOPERATION WITH THE REAL ESTATE OFFICE) RELATING TO THE ENFORCEMENT OF MEASURES TO PREVENT THE SPREAD OF COVID-19



# REAL ESTATE OFFICE

The Real Estate Office implements administrative, professional, technical, coordination and supervisory assignments pertaining to the administration of the Land Cadastre, the Building Cadastre, the Real Estate Register and other records on real estate. It administers the Register of Spatial Units, house numbers, the Consolidated Cadastre of Public Infrastructure and carries out different tasks relating to real estate. One of its assignments is also the substantive management and coordination of the work of the regional surveying and mapping authorities in the field of real estate.

One of the key tasks of the SMA in the field of real estate registration is the management of administrative procedures at the request of clients, resulting in changes to data in the Land Cadastre, Building Cadastre and Real Estate Register. The data on the number of requ-

ests received and resolved, certificates issued and changes took over from the Land Register in 2021 are presented in more detail in the Work Overview section of this report.

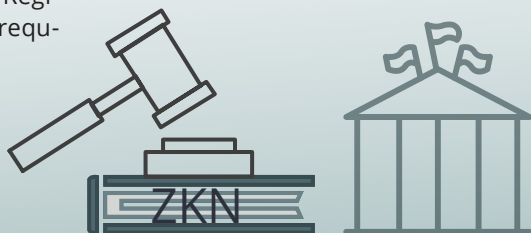
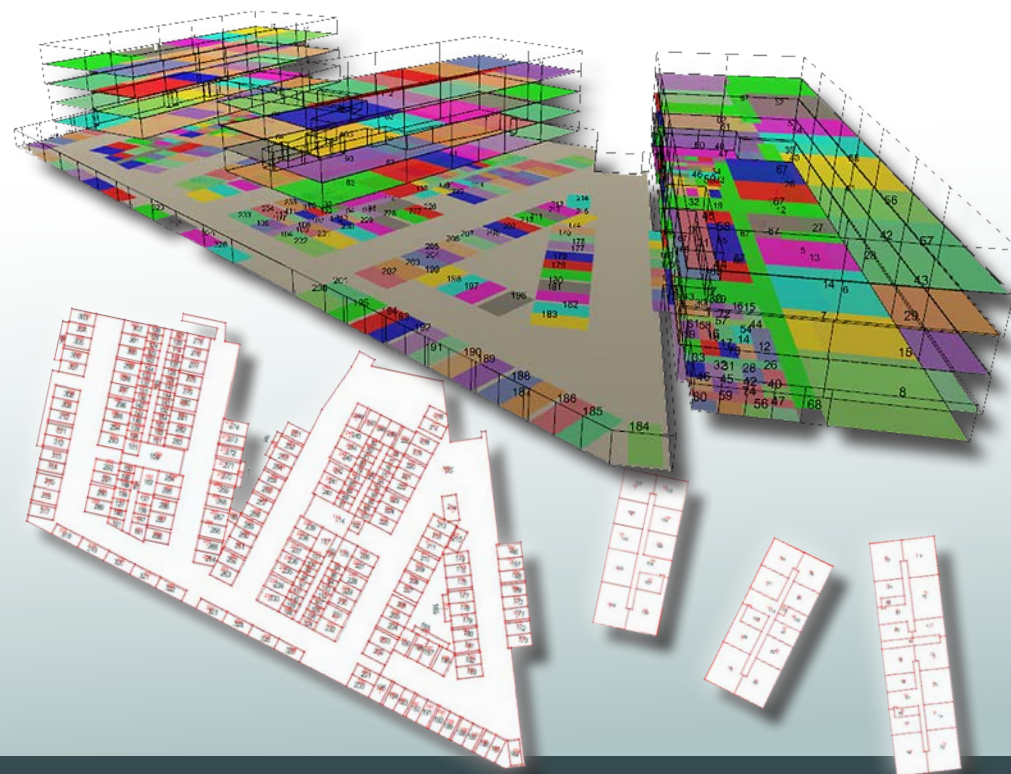
In March 2021, the National Assembly of the Republic of Slovenia adopted the **Real Estate Cadastre Act - ZKN** (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 54/21), which entered into force on April 4, 2022, and replaced the 2006 Real Estate Records Act - ZEN. Based on ZKN, draft by-laws have been prepared and, following inter-ministerial coordination, most of them have been adopted. Among others, the SMA carried out activities related to the **implementation of the IT overhaul of real estate registers**: implementation

of the planned activities of eProstor, migration of data into the new information system, developing and inter-connecting the IT application solutions IR Kataster and IR Delovodnik, pilot vectorisation of existing floor plans for 574 buildings, development of an IT solution for the management and maintenance of the data of the Consolidated Cadastre of Public Infrastructure.

**In the field of real estate registration**, the Real Estate Office and the Regional

SMA Offices have carried out regular procedures for managing and maintaining data in real estate registers along with activities to improve data quality. Some minor but necessary software upgrades for the management and maintenance of real estate records were implemented.

With **providing general ICT and geodetic infrastructure**, upgrades were made to the existing software solutions Gekat-GEOS, Geopro, GEOVector,



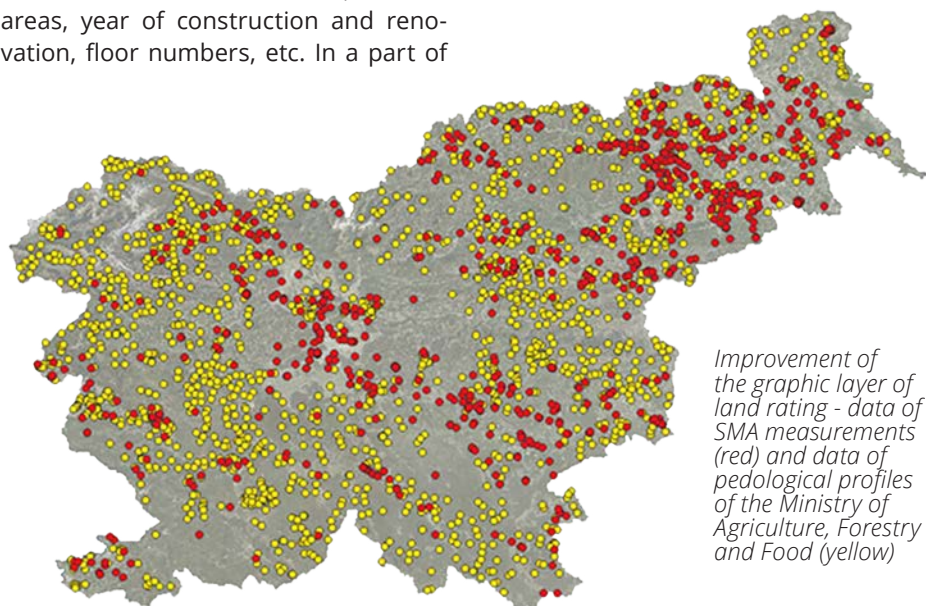
and SYSGeoPro, which enable the import and export of data in new exchange formats, topological and contextual data checks, data transformation, review and processing of data for improving positional accuracy of data and support for additional processing of expert elaborates due to the transition of real estate records management into the new information system in 2022.

**In the area of data improvement of real estate records,** reviews and controls of recorder data were carried out. Checks and reconciliations were carried out on buildings and parts of buildings, for a total of more than 68,000 different attribute values - actual use, surface areas, year of construction and renovation, floor numbers, etc. In a part of

the cadastral municipality 1603 - Dol, the first phase of land cadastre adjustment was carried in an area, where land ownership location and extent is recorded different that landowners are using it. For about 1/3 of the country, automatic classification of unregistered buildings has been carried out. The boundaries of municipalities recorded in the Spatial Unit Register were aligned with land parcel boundaries from the Land Cadastre. In cooperation with the Faculty of Civil and Geodetic Engineering, a research task under the Targeted Research Programme 2019 (CRP) was completed. Procedures for the migration of additional data (archival data of

land cadastre points) into the new cadastre information system were developed. Extensive measurements (230 sample boreholes) and data review were carried out to improve the graphical layer of land rating.

The day-to-day **management and maintenance of the Consolidated Cadastre of Public Infrastructure** was ensured, which included the registration of infrastructure facilities into the Consolidated Cadastre and registration of network connection points (OPT) - a total of 1,061 elaborates were submitted for registration of infrastructure facilities and 108 elaborates for OPT registration.





# GEODESY OFFICE

The Geodesy Office is responsible for the state geodetic reference system. The national spatial coordinate system is the basis for the placement of objects and phenomena in space. Spatial placement means determining or assigning coordinates to points that describe objects or phenomena in the state coordinate system. The national spatial coordinate system is the official valid coordinate system in the country and is in line with the European Coordinate system. The national topographic reference system provides databases of topographic data on natural and constructed environment, geographical names, and national topographic and base maps. In accordance with ratified international treaties, it performs the tasks of keeping state border records, marking, maintaining and restoring the state border markings and participates in the work of such international commissions.

In the field of the **national coordinate system**, the Geodesy Office ensured the operation of 16 permanent stations of the GNSS network SIGNAL and 5 per-

manent stations of the GNSS network of the National Combined Zero Order Geodetic Network. It provided real-time data for satellite positioning via a mobile network and for post-processing. The purchase, upgrade and maintenance of the necessary technical equipment for the smooth operation of both GNSS networks and regular maintenance and service work of geodetic measuring instruments were carried out. Geodetic fieldwork was carried out to maintain the geodetic networks at both horizontal and vertical (level and gravimetric) points. The quality of the SIGNAL network was regularly monitored by measurements on the network of GNSS control points. The geodetic base was aligned with additional reference points in border areas. The three fixed GNSS stations of the Zero Order network were integrated into the European Network of Fixed GNSS Stations (EPN), which will allow for better monitoring of the geodynamic developments in the national territory. Two research projects under the Targeted Research Programmes (CRP) were completed. The EUREF International

Symposium was successfully held digitally in Ljubljana and attended online by over 100 participants from more than 25 European countries.

In the area of the **national topographic system**, the Cyclic Aerial Photography of Slovenia project (CAS) produced aerial photographs for the central part of Slovenia, aerotriangulation, a digital relief model, colour orthophotos and quality control of the project tasks. Technical and tender documentation for laser surface scanning and aerial photography of the Slovenian territory was prepared. DTM topographic data for the National Topographic Model were acquired for 8% of the Slovenian territory - **thus covering the whole country area with detailed topographic data at a 1: 5,000 scale**. The establishment of the land cover layer was started. Instructions for the maintenance of topographic data were prepared. Seven sheets of the national/military topographic map (DTK/VTK 50) at 1: 50,000 scale were renewed. All national overview maps were renewed. Cartographic and administrative boundary data for EuroGeographics data sets were produced. Work was carried out in the Commission for the Standardisation of Geographical Names and regarding geographical names data quality. In the field of cartography and topography,

specific tasks were carried out for the Ministry of Defence. An inspection of cyclic aerial photography products and a field inspection of topographic data capture were carried out.



*Renovated state geodetic point of the 1<sup>st</sup> order - Kucelj*



## MAINTENANCE WORK ON THE NATIONAL BORDER



### ITALY

- periodic checks were carried out in Sector III on 20 km (250 land markers) of the border and maintenance of some border signs in Sector V,
- clearing of vegetation in Sector III (15 km),
- holding a meeting of the Joint Group of Experts and a meeting of the Slovenia-Italy Joint Commission (Gorizia, December 2021)



### AUSTRIA

- all fieldwork for the 7 Periodic Check of Border Signs, covering a length of about 13 km (315 land markers), has been completed,
- GNSS measurements of land markers in 6 sectors (XIII, XIV, XV, XVI, XVII and XVIII),
- two meetings of the Joint Technical Group and one meeting of the Slovenia-Austria Joint Commission (Vienna, November 2021)



### HUNGARY

- all fieldwork for the 8 Periodic Check of Border Signs and maintenance of border signs for approx. 14 km (215 land markers),
- vegetation cleared along the entire border from land marker A1 to A644.3 (100 km),
- holding a meeting of the Joint Expert Group and the Joint Working Group in Ljubljana



### CROATIA

- data collection and fieldwork to prepare a geodetic basis for the demarcation of the border with Croatia and upgrade the GIS application for the management of the southern border. In Cadastral

municipalities surveyed on the border with the Republic of Croatia, over 350 boundary markers representing the boundaries of parcels or cadastral municipalities have been found. All of them have been geodetically surveyed. Some of them had a special purpose in the past (Rapallo land markers, land markers of the Duchy of Styria, land markers of the Duchy of Carniola and others)

Maintenance work and other tasks defined by the joint intergovernmental commissions were carried out regarding **national borders** with the Republic of Italy, the Republic of Austria and Hungary.



*Provincial boundary marker of the Duchy of Styria (worked stone with engraved number and inscription)*



*Indirect boundary marker on the border with Hungary*



*The main boundary marker on the Austrian border*



*Work on the Italian border in hard-to-reach terrain*



# MASS REAL ESTATE VALUATION OFFICE

The Mass Real Estate Valuation Office carried out tasks of **recording data from sales and lease agreements regarding real estate, analysing the real estate market and preparing reports on the real estate market.** Based on real estate market data and methods of mass valuation, which are based on statistical and other mathematical methods, the Mass Real Estate Valuation Office **develops and calibrates valuation models** and carries out processes to define the models adhering to defined criteria.

The valuation models are managed and maintained in the **Register of valuation models.** The management and maintenance of the mass real estate valuation is being carried out in the Valuation Register. Real estate values are calculated based on real estate data and valid valuation models. The valuation models do not consider special circumstances, which are considered through administrative procedures.



These special circumstances influence real estate value, and their impact and expiration date are recorded in the Valuation Register.

The Act Determining Temporary Measures to Mitigate and Remedy the Consequences of COVID 19 – ZZUOOP (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 152/20) has moved the deadlines for the implementation of certain tasks of the real estate mass valuation to a date to be set by a new Decree determining real estate valuation models, as provided for in Article 20 of the Real Property Mass Valuation Act – ZMVN-1 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 77/17, 33/19 and 66/19). Despite the delay under ZZUOOP, the SMA, as the valuation body, is obliged to carry out all the tasks assigned to it under ZMVN-1, ZZUOOP only postpones the public display of data in the valuation register and the assertion of special circumstances, while the provisions of ZMVN-1 are not affected in the remaining part. This means that the SMA must monitor developments in the real estate market, to carry out appropriate analyses and if it finds that the models no longer meet the criteria set out in ZMVN-1, adapt them to the new situation. The statutory time limit for the verification of va-

luation models is 2 years (Article 10 of ZMVN-1).

In 2021, the statutory procedures for determining valuation models were therefore continued. Preliminary activities have been carried out to prepare the draft proposal for the valuation models (Article 15 of ZMVN-1), to prepare for the consultations with the expert public (Article 16 of ZMVN-1) and to coordinate the models with municipalities (Article 17 of the ZMVN-1), which are planned to be carried out in mid-2022.

Within the budget provided, the system of real estate mass valuation was maintained and adapted to support the implementation of the statutory procedures and tasks efficiently and effectively, with a focus on the process of establishing valuation models and the transition to the new Real Estate Cadastre.

Real estate sales and lease transactions for commercial real estate were reviewed and processed for modelling purposes and the preparation of regular reports on the real estate market in the Republic of Slovenia. A more detailed picture of property market developments was empirically presented in the semi-annual report for 2021.



REAL ESTATE MARKET



EVALUATION MODELS



GENERALIZED VALUES



OTHER/RELATED

# HUMAN RESOURCES

On December 31<sup>st</sup>, 2021, the SMA employed 473 employees, of which 333 were stationed at twelve regional surveying and mapping administrations and 140 at the central SMA Offices. The personnel structure is subjected to the adopted human resources plan of the Public Administration. Compared to the end of 2020, the number of employees decreased by 1.1% due to the conclusion of fixed-term employment.

The educational structure of employees is predominantly surveyors with a university degree or higher. In addition to surveyors, the SMA also employs lawyers, economists, agronomists, IT specialists and, to a lesser extent, administrative and technical staff.

**473**

*employees in offices  
and regional geodetic  
administrations*

## EMPLOYEES IN OFFICES AND REGIONAL GEODETIC ADMINISTRATIONS



MAIN OFFICE	40
REAL ESTATE OFFICE	31
MASS REAL ESTATE VALUATION OFFICE	24
GEODESY OFFICE	26
PROJECT UNIT eProstor	12
OUTSIDE OF THE ORGANIZATIONAL UNITS	7
REGIONAL OFFICE LJUBLJANA	69
REGIONAL OFFICE CELJE	31
REGIONAL OFFICE KRANJ	30
REGIONAL OFFICE KOPER	24
REGIONAL OFFICE NOVA GORICA	28
REGIONAL OFFICE MURSKA SOBOTA	27
REGIONAL OFFICE MARIBOR	27
REGIONAL OFFICE NOVO MESTO	28
REGIONAL OFFICE SEVNICA	18
REGIONAL OFFICE PTUJ	21
REGIONAL OFFICE VELENJE	17
REGIONAL OFFICE SLOVENJ GRADEC	13
TOTAL	473

## EDUCATIONAL STRUCTURE OF EMPLOYEES

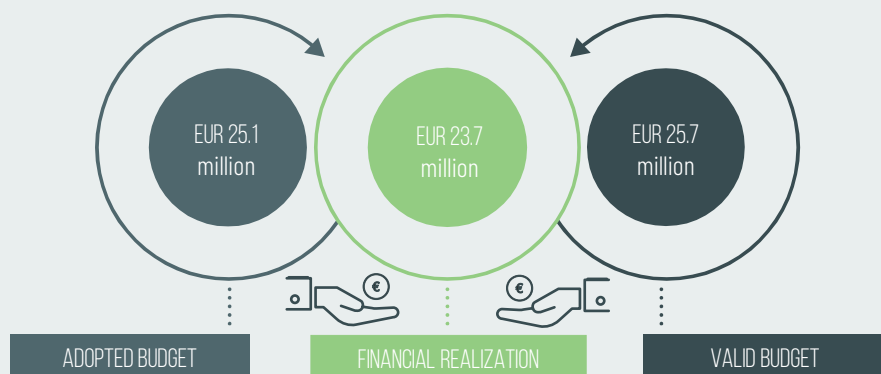


SURVEYORS	59%
AGRONOMISTS	2%
IT SPECIALISTS	2%
LAWYERS, ECONOMISTS AND ADMINISTRATIVE STAFF	37%



# FINANCE

The adopted budget of the SMA for the year 2021 was € 25,083,549, while the valid budget after the allocation of funds due to Government resolutions was €25,713,146. The total financial realization of the valid budget was 92.19% (€23,705,197).



The SMA is financed primarily from the National Budget and to a lesser extent from income generated by its own activities with the operation of permanent GNSS stations of the SIGNAL network. The Annual Work Programme of the National Geodetic Service is confirmed by the Government of the Republic of Slovenia.

## USE OF BUDGET IN 2021



SALARIES <sup>1</sup>	66.2 %
MATERIAL COSTS <sup>2</sup>	5.8 %
INVESTMENTS AND INVESTMENT MAINTENANCE	0.2 %
OWN ACTIVITY	0.6 %
PROGRAM OF GEODETIC WORKS	27.2 %

<sup>1</sup> Includes additions according to Article 71 of ZIUZEOP – COVID-19

<sup>2</sup> Includes funds for battling the COVID-19 epidemic

# INTERNATIONAL ACTIVITIES

By contributing and engaging in the international community, the SMA governs over the **implementation of European guidelines and directions in the fields of real estate registration, cartography and geoinformatics**. The SMA is also the National Contact Point (NCP) regarding the implementation of the INSPIRE Directive and as such coordinates the establishment of the Infrastructure for Spatial Information in the Republic of Slovenia.

In accordance with the guidelines of the declaration of the National Assembly regarding Foreign politics of the Republic of Slovenia and tasks defined in the Annual

Work Programme of the National Geodetic Service, the SMA contributes to many international organizations, among other [EuroGeographics](#), United Nations Group of Experts on Geographical Names ([UNGEGN](#)), Working Party on Land Administration ([UNECE](#)), Permanent Committee on Cadastre in the European Union ([PCC](#)), European Regional Committee of the United Nations Initiative on Global Geospatial Information Management ([UN-GGIM Europe](#)), [EuroSDR](#), [EUPOS](#) and the Reference Frame SubCommission for Europe ([EUREF](#)) of the International Association of Geodesy (IAG).

In 2021, the SMA actively cooperated with similar institutions in the European area and the region of the South-Western Balkans and carried out activities in accordance with strategic objectives set out in the Annual Work Programme of the National Geodetic Service. The international cooperation funds were used to pay the membership fee for EuroGeographics and participation in related activities, such as KEN group meetings, and the provision of data to the common products provided by the association at the pan-European level. Part of the funding was earmarked for active involvement in the activities of UN-GGIM



Europe and the EuroSDR association. The SMA was involved in the work of other international associations and initiatives (PCC, EUREF, WPLA, etc.) and carried out regional cooperation tasks in South-Eastern Europe and the Western Balkans.

Unfortunately, the COVID-19 epidemic did not allow for in-person events in 2021, so most of them took place online. The online meeting of the Permanent Committee for Cadastre (PCC) of the European Union was held from 27 to 28 May 2021, together with the meeting of the Cadastre and Land Registry Group – CLR KEN, which is part of

EuroGeographics. During the Slovenian Presidency of the EU Council from July 1<sup>st</sup>, 2021, to December 31<sup>st</sup>, 2021, the SMA chaired the EU Permanent Committee for Cadastre (PCC) and organized a joint conference in November with the theme "Role of National Mapping, Cadastre and Land Registry Authorities in Resilience and Recovery program". The event was attended by more than 100 participants from 34 countries. The SMA hosted the 30<sup>th</sup> EUREF Symposium from 26 to 28 May 2021, which was attended (online) by 150 registered guests from 30 countries, the highest ever. On June 1<sup>st</sup>, 2021, the SMA hosted (online) the

13<sup>th</sup> Regional Conference on Cadastre and Spatial Data Infrastructure, which brought together geodetic administrations from the Western Balkans Region. From 13 to 14 October 2021, the 8<sup>th</sup> Regular Plenary Meeting of the United Nations (UN) Regional Committee for Global Geospatial Information Management (UN-GGIM Europe) was held, with the participation of the General Manager of the SMA as the current Chair of the Executive Committee. The 7<sup>th</sup> Slovenian INSPIRE Day entitled "New Perspectives on National Spatial Information Infrastructure" was held in November. The online event was attended by 15 speakers and 70

participants. Representatives of the Slovenian Geodetic Administration were also involved in the work of the ISA2 Inter-governmental Public Administration Group and the INSPIRE Standing Committee of the European Commission.

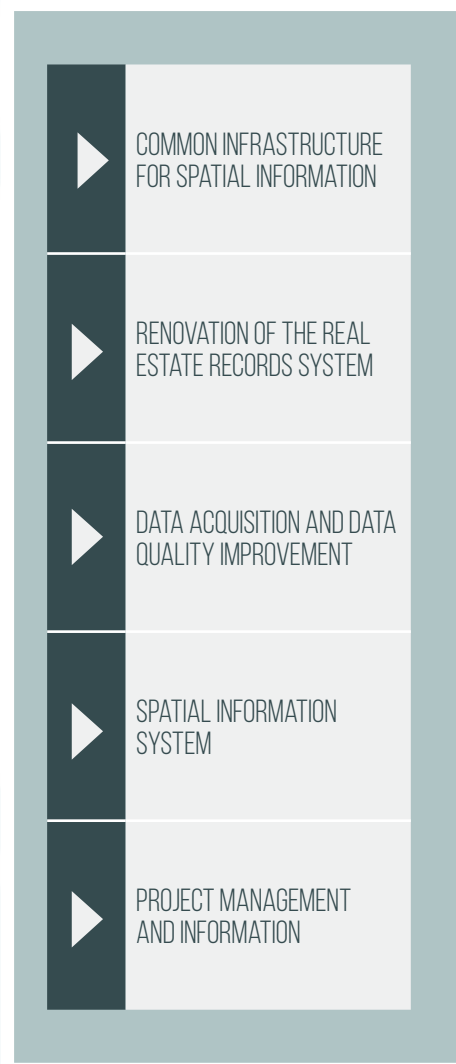


THE SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA PARTICIPATES IN MANY INTERNATIONAL ORGANIZATIONS.



# THE PROGRAMME OF THE PROJECTS eProstor

The **Programme of the projects eProstor** is part of the Operational Programme for the Implementation of the EU Cohesion Policy 2014-2020 (CCI 2014SI16MAOP001), specifically the second Priority Axes titled »Enhancing access to, and use and quality of, information and communication technologies«. A detailed description of activity implementation is provided in the Implementation Plan for the Operational Programme for the Implementation of the EU Cohesion Policy in the Period 2014-2020, which was passed by the Government of the Republic of Slovenia.



In 2021, the SMA, together with the Ministry of the Environment and Spatial Planning, continued with the implementation of eProstor, which is successful in establishing a common and unified information infrastructure for spatial data in Slovenia in accordance with the European INSPIRE Directive. This will enable the shortening of real estate and spatial management procedures and make them simpler and more efficient.

The Programme of the projects eProstor is comprised of **four projects, which are interconnected and interdependent, and a fifth project meant for management support and informing**. Within the Programme,

tasks were performed in the field of establishing spatial data infrastructure and connecting to the national computing cloud, establishing information infrastructure for real estate records and improvements to the positional accuracy of the graphical part of the land cadastre.

The Programme of the projects eProstor was implemented throughout 2021 and, due to the extension of the project, will continue in 2022. Some tasks have already been completed and the final implementation of new business processes and IT solutions will be carried out in 2022. The following is a project-by-project description of the tasks carried out in 2021.



# COMMON INFRASTRUCTURE FOR SPATIAL INFORMATION

The **Spatial Information Infrastructure** consists of metadata, spatial data sets and network services, technologies, agreements for reuse of spatial data and services and coordination, monitoring mechanisms and procedures to ensure compliance with the Infrastructure for Spatial Information Act - ZIPI, which is the basis for systematic work in the field of spatial information infrastructure in the Republic of Slovenia.

The fundamental goal of SDI is to establish an infrastructure that provides spatial data to public institutions, business entities, organizations and citizens with the help of standardized online services. The reference organization and the **National Contact Point** is the SMA, which manages and coordinates all activities for the establishment and operation of SDI.

In 2021, the SMA regularly performed the tasks of the National Contact Point in the

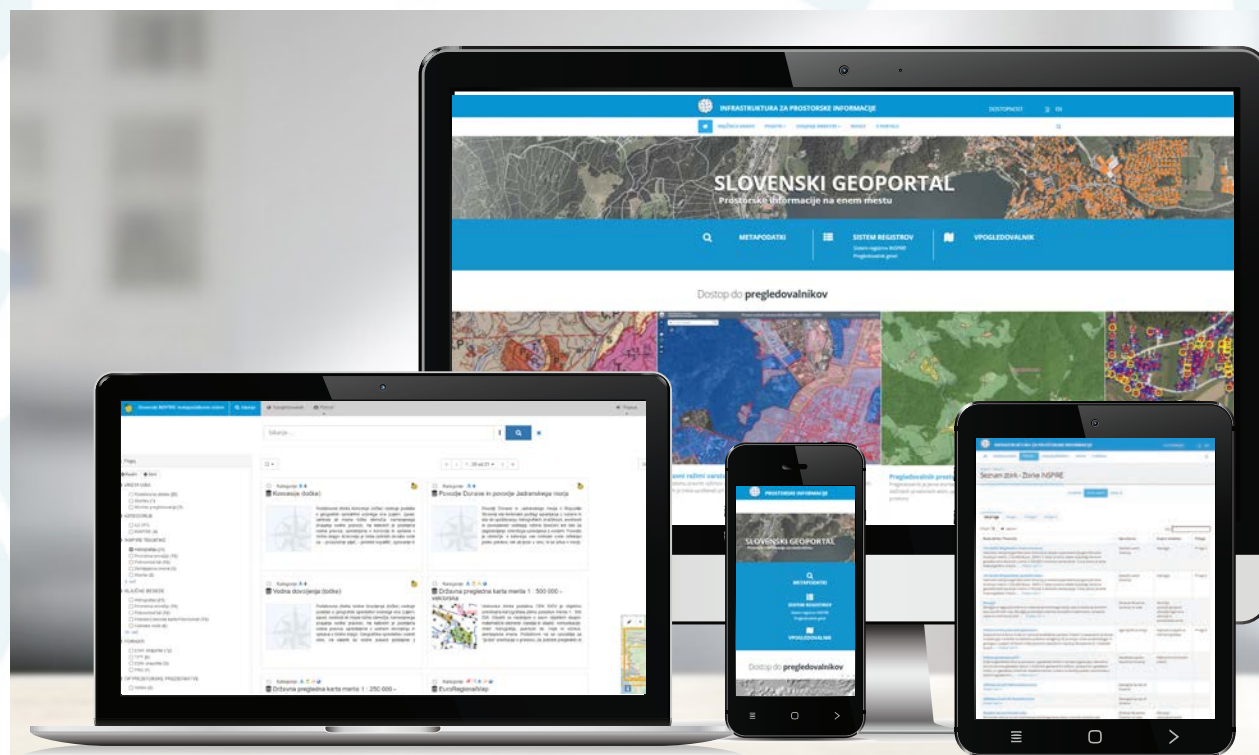
implementation of obligations from the INSPIRE Directive. Representatives of the National Contact Point regularly attended INSPIRE working meetings of the MIG-T and MIG-P groups.

Activities continued in the field of coordination with other spatial data managers, which are obligated to provide spatial data and services in accordance with the INSPIRE Directive.

**The Slovenian Geoportal** was regularly updated, which provides access

to all information on the SDI in one place. The System for spatial metadata was also regularly updated and maintained in accordance with the valid Slovenian metadata profile. Spatial metadata is regularly harvested from the Slovenian INSPIRE metadata system to the European INSPIRE geoportal and the Slovenian Open Data Portal.

Most of the tasks in the scope of this project were completed in 2021. The Slovenian INSPIRE Metadata System was regularly monitored and support to the



*SLOVENE GEOPORTAL provides access to all information regarding SDI in one place. ([www.geoportal.gov.si](http://www.geoportal.gov.si)).*

91

**spatial datasets**  
are compliant  
with the INSPIRE  
Directive in  
the Republic of  
Slovenia.

125

**view and  
download  
services,**  
compliant with the  
INSPIRE Directive,  
exist for spatial  
datasets.



INSPIRE National Contact Point was provided. The **7<sup>th</sup> INSPIRE Day**, themed: »**New Perspectives on the National Spatial Information Infrastructure**« was carried out. The INSPIRE Day focused on the current state of play of the Spatial Data Infrastructure, the activities carried out in accordance with the INSPIRE timeline, the experience and knowledge of Spatial Data Managers, and how Europe is looking at the further development and implementation of the INSPIRE Directive – where is the evolution of National Spatial Data Infrastructure and what are the new perspectives for the (re)use of INSPIRE.



A brochure entitled **New Perspectives on the INSPIRE Directive** was published, presenting some new initiatives and potential opportunities in the field of spatial information.



During the year, the **Slovenian System of Registries and Code lists** was set up, various tests were carried out and documents for users were prepared. Much attention was also paid to the quality of metadata.

The **Data Exchange and Network Services** task to establish new network services for data exchange was completed, where several network services for INSPIRE spatial data sets were created to establish and facilitate the flow of spatial data between public administrations and other stakeholders in Slovenia and their exchange with the European Commission and the Member States. Network services for the display of basic country maps have been developed.

Decades ago, the SMA, in cooperation with the then Government Informatics Centre, set up the Distribution Environment of the Geodetic Services, which is now part of the common IT infrastructure of the Ministry of Public Administration. The distribution environment is used by various users, ranging from the general public to State Bodies. The Ministry of the Environment and Spatial Planning participates both as a data user and as a representative data source for different uses: view services, for the integrated spatial planning viewer and a system for recording construction administrative acts as well

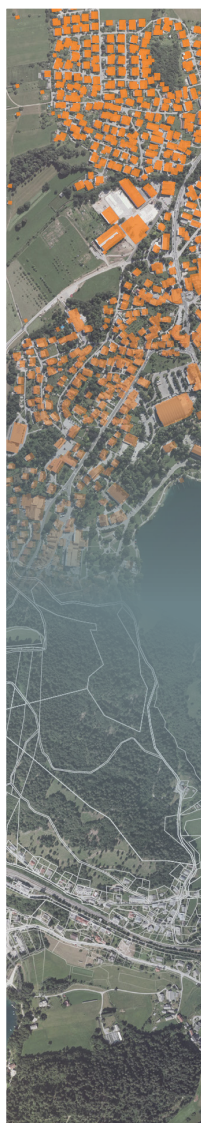
as for distributing data from production systems (administrative acts in the field of construction, spatial acts). Within the framework of the Programme of the projects eProstor, **the technological and content-wise renovation of the distribution system** is being carried out. To this end, two contracts were signed in 2020, one in the scope of the Infrastructure for Spatial Information, and the second in the scope of Portals. Implementation projects were drawn up for both activities.

In 2021, most of the work was done on the **renovation of the web portal »Prostor« and the merging of the eProstor portal, real estate mass valuation portal and Geoportal into a central point.** The installation in the test environment was carried out and a time annex was signed for the completion of the task in line with the extension of the overall project programme. A time annex was also signed for the Distribution Environment contract for the first project – Infrastructure for Spatial Information. For this task, development and deployment activities were carried out throughout the year.

In 2021, the public tender for the activity Definition of Guidelines to ensure compliance of the Information Systems and Quality Control in the framework of the Programme of the projects eProstor was finalised and the contract signed.



# RENOVATION OF THE REAL ESTATE RECORDS SYSTEM



The aim of the project is to **renovate the real estate records system** of the SMA and thus the establishment of a unified IT solution that will enable modern operation of the new real estate system and will represent a unified fundamental national spatial infrastructure. This will establish a single platform with **a single-entry point** for communication between the SMA and the private sector and surveying service providers. A **connection with other IT systems** will be established via real estate identifiers (Spatial Information System, eGovernment, Land Register, Slovenian Business Register, Central Population Register...). All this will facilitate e-commerce and in doing so remove many administrative barriers.


Within the framework of the contract for the financing of public authority tasks and the financing of the tasks relating to public service, developmental and technical tasks for the renovation of the real estate records system continued in 2021. These tasks included data preparation for the transfer into the new data system, periodic data migration, monitoring and supervising the work done in the scope of the renovation of the real estate records system.

The developed application IS Kataster, which includes two content mo-

dules (IR Kataster and IR Delovodnik), was integrated with external data exchange systems through network services (Central Population Register, Slovenian Business Register, Land Registry) and with microservices of the information solution for office management (IS Krpan) along with an archival and document storage system.

In the area of implementation of the renewed system of real estate registers, the contractor cooperated with the developers of the application IS Kataster for the necessary modifications and connections to other IT

## OBJECTIVES OF INFORMATION RENEWAL OF THE REAL ESTATE RECORDS SYSTEM

	UNIFIED INFORMATION SOLUTION (IR KATASTER)	DIGITAL SUBMISSION OF ALL EXPERT ELABORATES – PROPOSAL FOR RECORD UPDATES	CONNECTION WITH OTHER INFORMATION SYSTEMS
A SINGLE-ENTRY POINT FOR COMMUNICATION BETWEEN ALL USERS	EXPERT ELABORATE CONTROL IN ALL PHASES OF UPDATING RECORDS	E-COMMERCE BETWEEN ACTORS AND USERS OF THE SYSTEM	OPTIMIZATION AND A UNIFIED WAY OF DATA MAINTENANCE AND PROCESS MANAGEMENT

solutions. Based on the prepared implementation roadmaps, part of user training was carried out.

A pilot project for **the vectorisation of existing floor plans** was carried out. These floor plans are part of expert elaborates for building recording in the Buildings Cadastre and were produced in paper form. The vectorisation was carried out for the floor plans of 574 buildings.

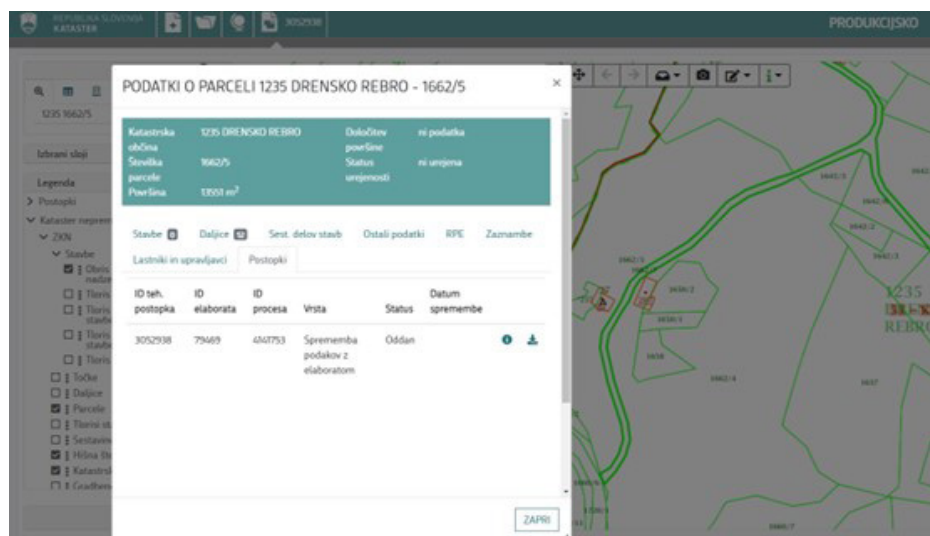
For **Public Infrastructure Data** managed in the Consolidated Cadastre for

Public Infrastructure, an information solution for management and maintenance was developed based on a prepared implementation project.

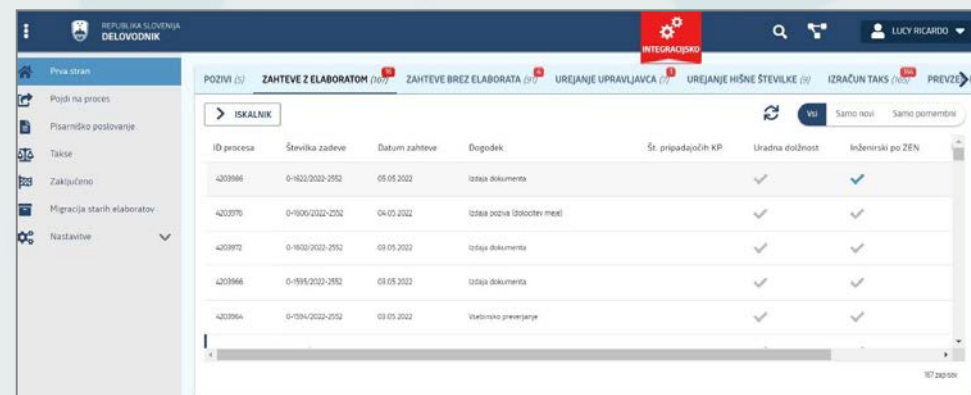
IT solutions for state border data management were developed and tested.

**The Real Estate Cadastre Act - ZKN** (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 54/21) was adopted. Most of the by-laws of ZKN were adopted after the proposals were made and inter-ministerial coordination was carried out.

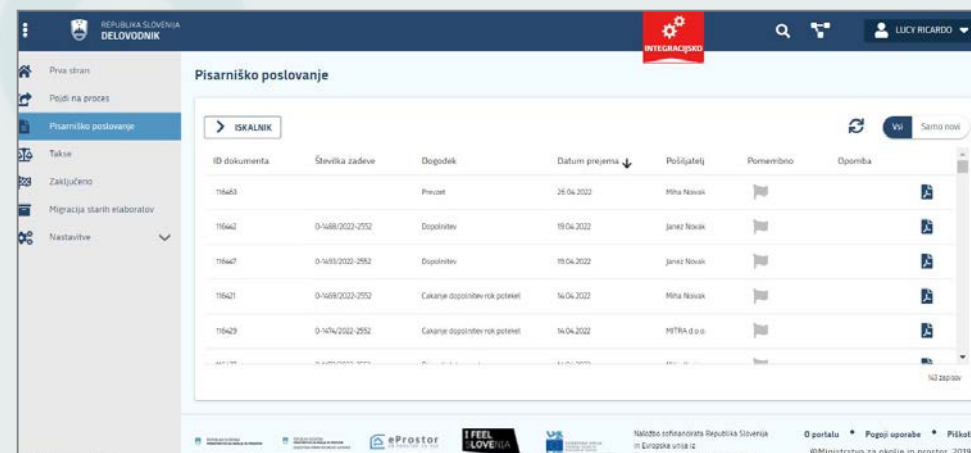
*IR Kataster - Detailed view of land parcel data (list of procedures):*



*IR Delovodnik – Display of a list of activities regarding an expert elaborate at different stages of the administrative part of the entire procedure:*



*IR Delovodnik – Display of a list of all received documents:*





# DATA ACQUISITION AND DATA QUALITY IMPROVEMENT

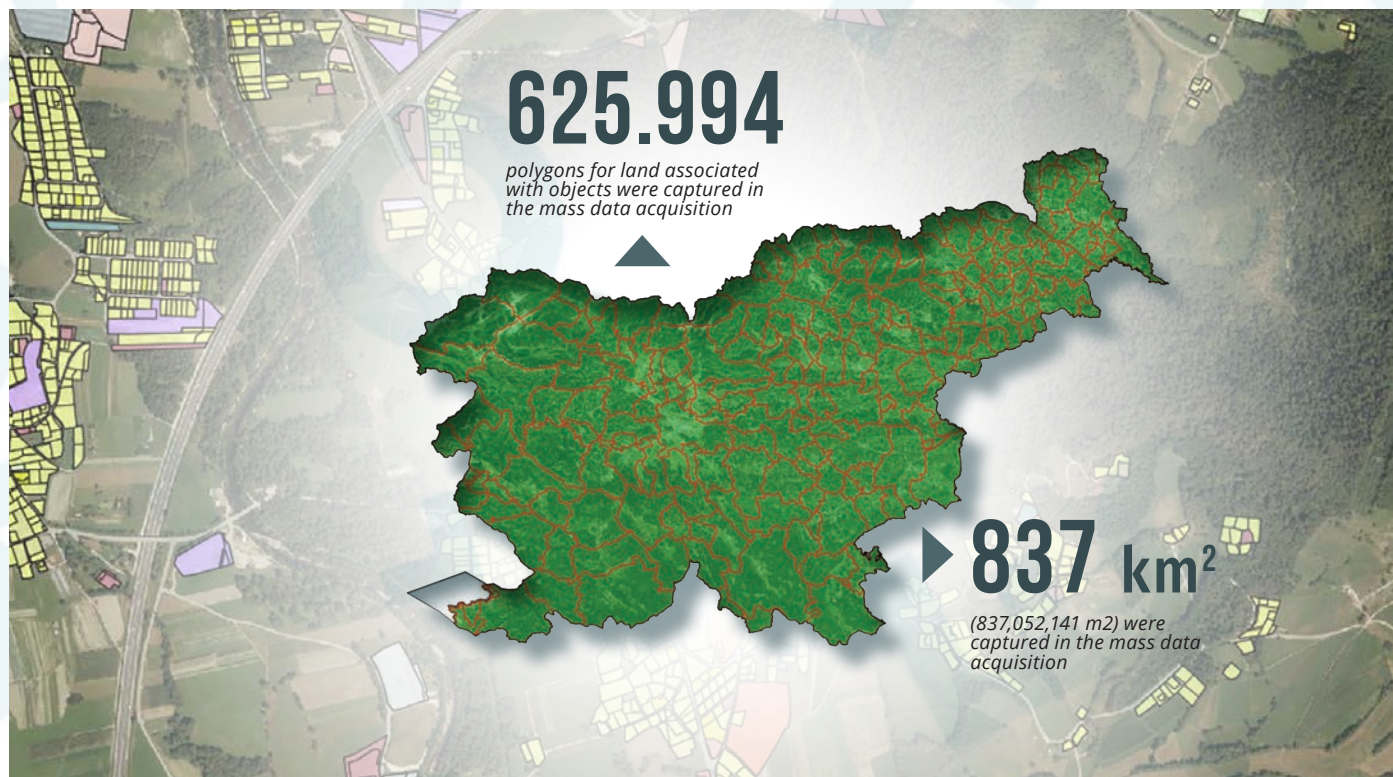


Most of the project's objectives have been achieved in previous years, including the scanning of the archival data for Land Cadastre, Building Cadastre and archival documents of national spatial planning acts along with spatial positioning of these documents and the completion of the positional improvement of the graphical part of the land cadastre in cadastral municipalities. These results are available to users in the form of a land cadastre layer that is being incorporated into the new real estate records system, in accordance with the adopted Real Estate Cadastre Act - ZKN and are replacing the existing data sets (land cadastre, building cadastre and real estate register).

In 2021, the acquisition of populated land data was concluded. It was

carried out in the frame of the **Mass acquisition of inhabited land and the actual use of inhabited land project** and added 15% of data to the data set of land associated with objects in Slovenia. The data collection was carried out in three phases: part of Phase 9 (Gorenjska region and part of the Osrednjeslovenska region), part of Phase 10 (Goriška region) and Phase 11

(Obalno-kraška region and part of the Primorje-Notranjska region). The data from the mass acquisition of inhabited land and the actual use of inhabited land will be used for the establishment of the construction land register and are used by the SMA in the process of creating the joint actual land use layer and in the process of spatial joining actual land use data to land parcels.

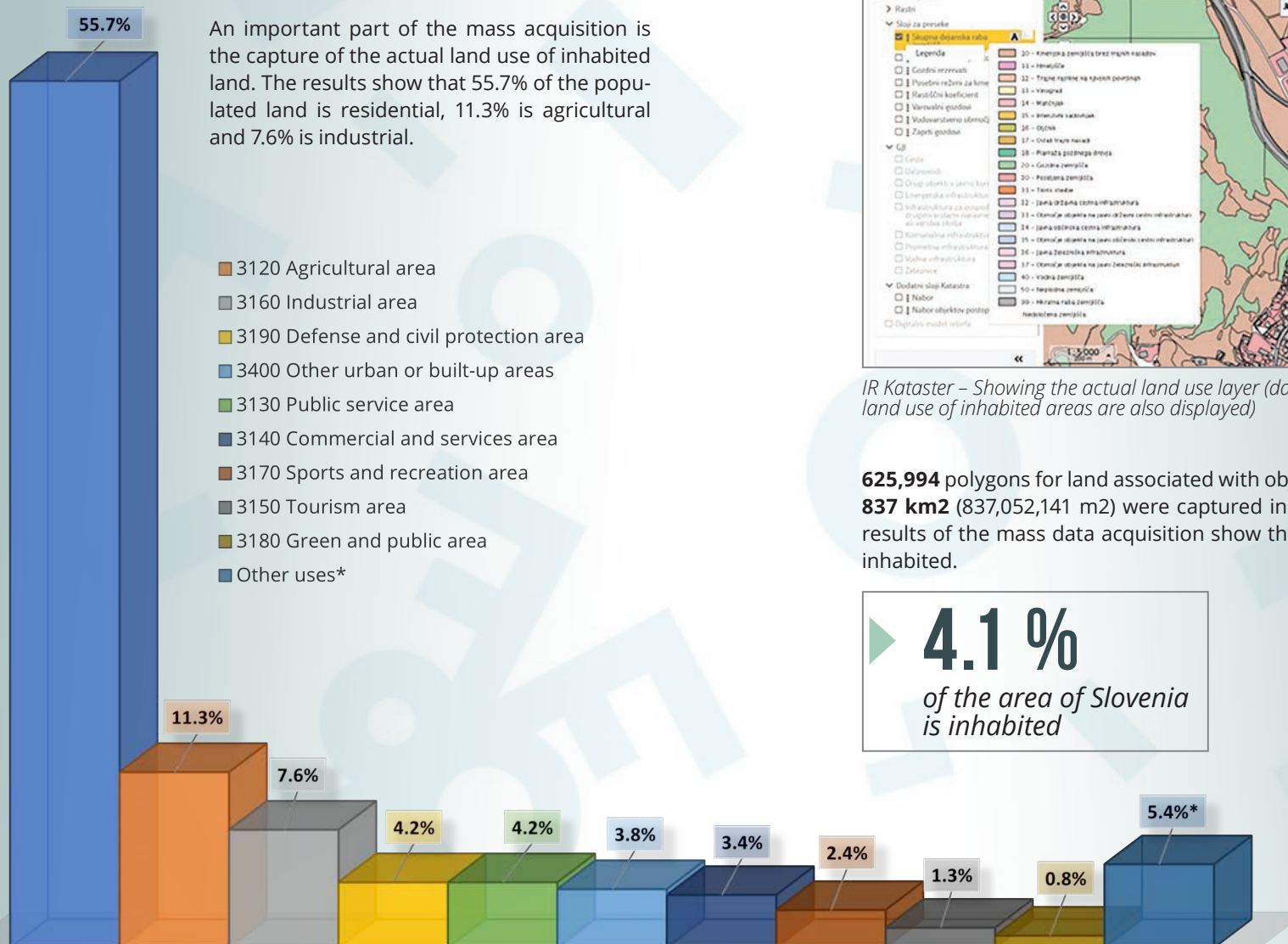


The results of the mass data acquisition are available on the public [PIS website](#) or [viewer](#).

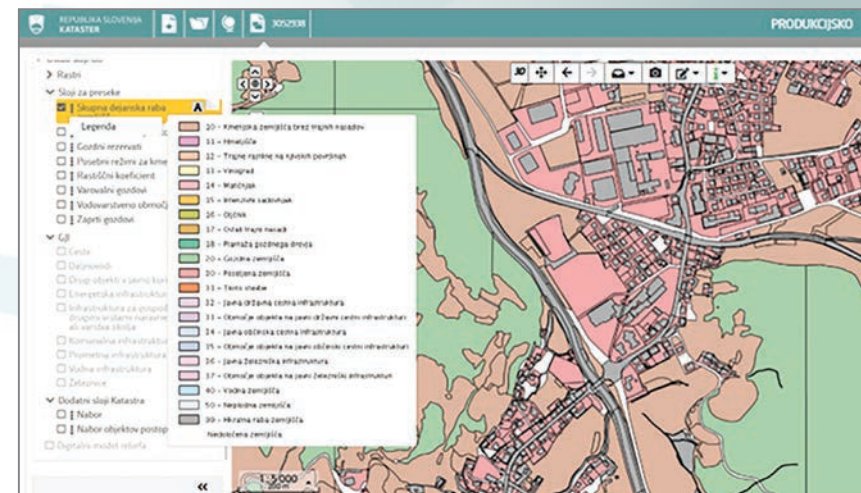


## DIVISION OF ACTUAL LAND USE TYPES IN SLOVENIA

An important part of the mass acquisition is the capture of the actual land use of inhabited land. The results show that 55.7% of the populated land is residential, 11.3% is agricultural and 7.6% is industrial.



\* Other uses: 3210 Road and parking areas, 3230 Other transport and logistics areas, 3240 Areas for public utility infrastructure, 9000 Area of unspecified use.



IR Kataster – Showing the actual land use layer (data from inhabited land and actual land use of inhabited areas are also displayed)

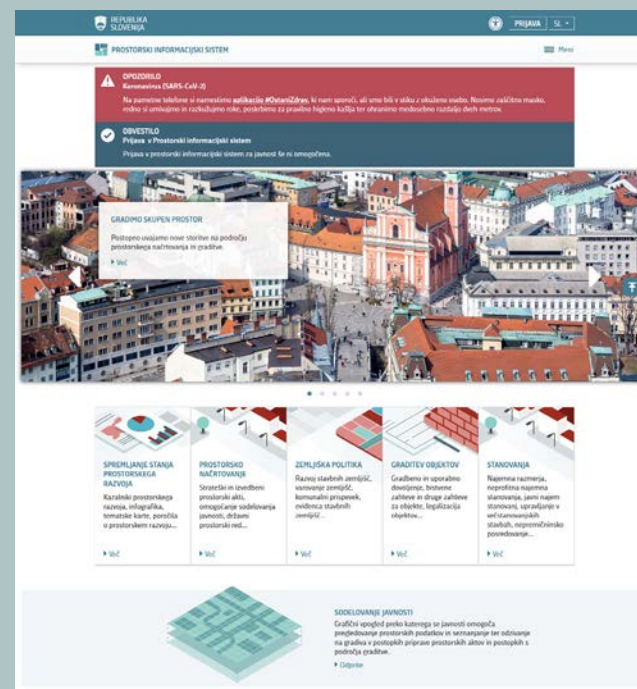
**625,994** polygons for land associated with objects with a total area of approx. **837 km<sup>2</sup>** (837,052,141 m<sup>2</sup>) were captured in the mass data acquisition. The results of the mass data acquisition show that **4.1%** of Slovenia's territory is inhabited.

**4.1 %**  
of the area of Slovenia  
is inhabited

# SPATIAL INFORMATION SYSTEM

The Project is being carried out by the Ministry of the Environment and Spatial Planning, namely the Spatial Planning, Construction and Housing Directorate.

As part of the contract for IT support in the field of spatial planning and building construction, testing and a production environment were established for the so-called **Single-Entry Point** portal, **ePlan** and **eGraditev** systems and the **Spatial Development Monitoring System**. Most of the activities were dedicated to testing, maintaining and upgrading the systems, integration with external systems and preparing data for migration. Activities related to the deployment and implementation of the systems in user environments have started.

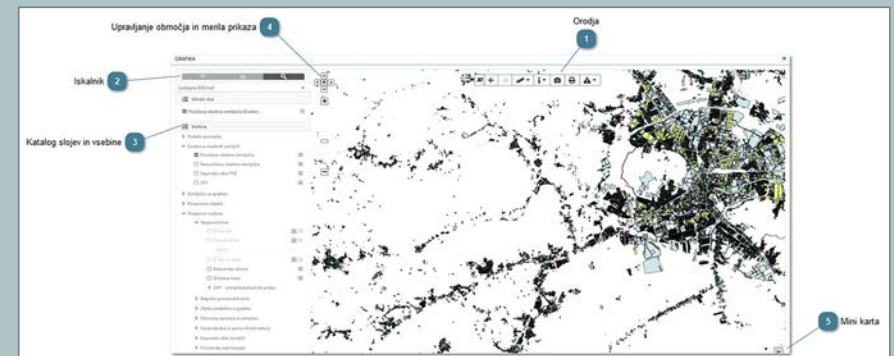


Single-entry point and ePlan and eGraditev systems

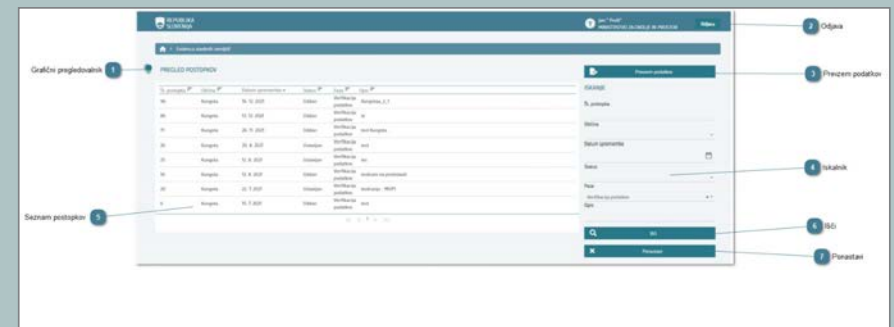


In 2021 (up until the conclusion on April 30, 2021), the necessary base layers needed by the mass data acquisition process were prepared on a regular basis and in accordance with the timetable along with controls (external control) to ensure data quality. Regular and necessary maintenance of the monitoring system for the control of mass capture data was carried out.

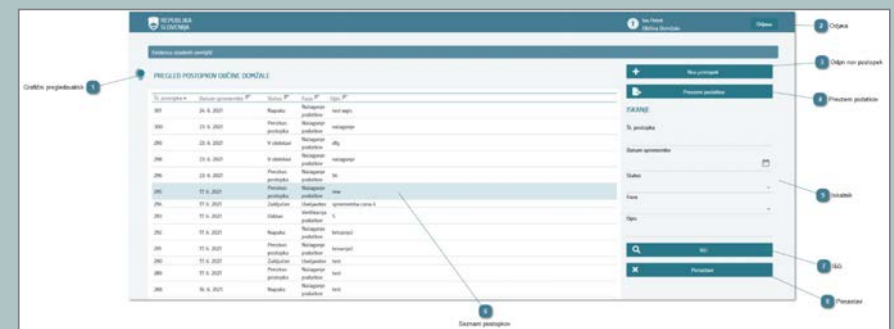
IS ESZ - graphical viewer:



IS ESZ - user interface for the Ministry of the Environment and Spatial Planning:



IS ESZ - user interface for municipalities:





# PROJECT MANAGEMENT AND INFORMATION

The project means to provide **operational support for the Programme of the projects eProstor and inform and educate all participants of eProstor as well as the general public.** In the scope of this project the project office has been established in 2017 and provides organizational and technical support for the management and implementation of all eProstor projects. These support tasks were carried out on an ongoing basis in 2021 as well.

Promotion services were provided, including tasks for the implementation of communication activities such as electronic news (eNovice), events, website, printed materials, promotional products, etc. Editions of **eNovice** from number 14 to 17 were published, **the website of the Programme of the projects eProstor** was maintained, and the content for the **book "From the quill to the cloud"** was prepared. The book, approximately 250 pages long, is also available in digital format and translated into English. Due to the situation related to the COVID-19 epidemic, a small number of events were prepared and the INSPIRE Day conference was held as an online event.



In 2021, activities were carried out to provide new and replacement staff for project vacancies.

In the financial area, a detailed presentation of the implementation plan was harmonized. During the reporting period, claims for payments went smoothly, as did communication with the intermediary body. The work of legal and advisory work of the project office was ongoing.

electronic news "eNovice" ►



# ACCESS TO DIGITAL DATA

The main mission of the SMA is providing the Infrastructure for Spatial Information, effective services and high quality authoritative spatial data, provided in a manner that meets the quality standards of a geoinformation-enabled society. The demand for digital spatial data has been constantly increasing over time. This demand has only increased due to improvements made regarding the accessibility of spatial data over different digital channels.

The SMA still provides access to spatial data through written order at the **Department for processing data orders**. In 2017 there were 1,325 such orders and in 2021 the number was 378. If we look in a longer timeframe, from 2011 till 2021, there is a clear trend of reduction in the number of written orders and on the other hand an increase in digital viewing and downloading of data over all available digital channels the SMA provides.

2021

## DOWNLOADS INQUIRIES, USERS

More than 157.000.000

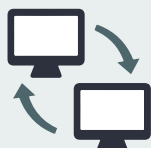
inquiries have been made into spatial data of the SMA.

More than 371.000

spatial data packets of the SMA were downloaded.

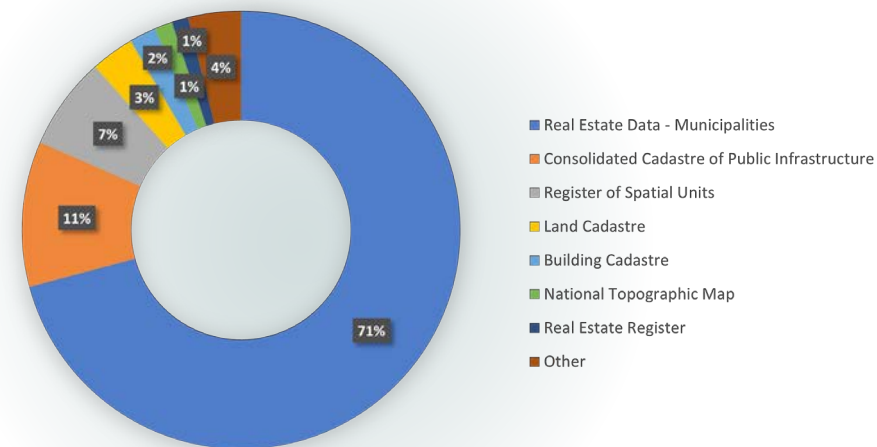
More than 45.000

active users have the web portal for downloading spatial data packets of the SMA.

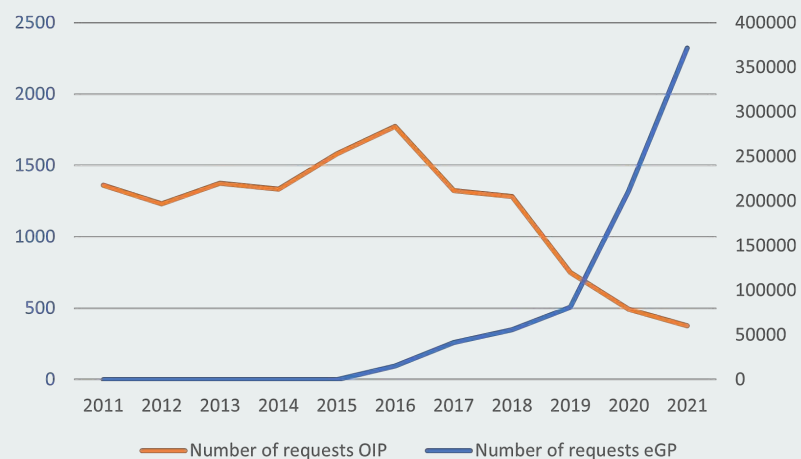


A direct comparison of the number of data requests using written orders and downloading via the web portal shows positive trends in the digitalization of operations of the SMA, increased use of spatial data and thus an increase in the value of spatial data.

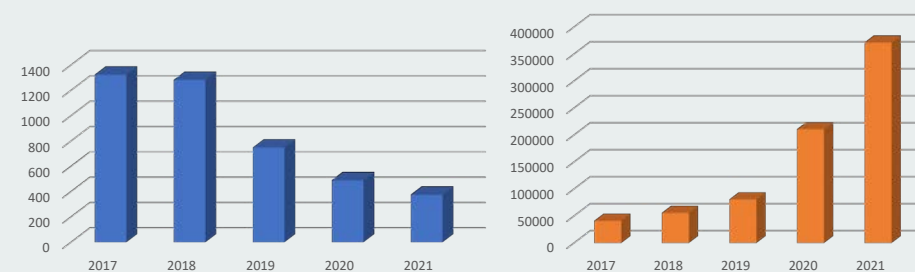
A constant increase in traffic and use can be also seen at the web portal for accessing and downloading spatial datasets of the SMA called **PORTAL e-GEODETSKI PODATKI**, which was established at the end of 2016 to provide free and open access to regularly refreshed public spatial data of the SMA in the form of prepared packets.



*Distribution of digital data download by spatial datasets.*



*Joint display of data requests using written orders and downloading via the web portal.*



*Number of orders at the Department for processing data orders (written requests).*

*Number of orders over the web portal e-Geodetski podatki (digital requests).*



# SLOVENIA IN NUMBERS

ON DECEMBER 31<sup>st</sup> 2021



» **566.333**  
house numbers

» **10.445**  
streets

» **6.036**  
settlements

» **212**  
municipalities

» **5.753.836**  
land plots

» **1.196.928**  
buildings

» **1.909.754**  
parts of buildings

» **2.698**  
cadastral  
municipalities

Activities Report 2021

Text

Surveying and Mapping Authority of the  
Republic of Slovenia, Digi data d.o.o.

Conceptual and Design Concept  
Digi data d.o.o.

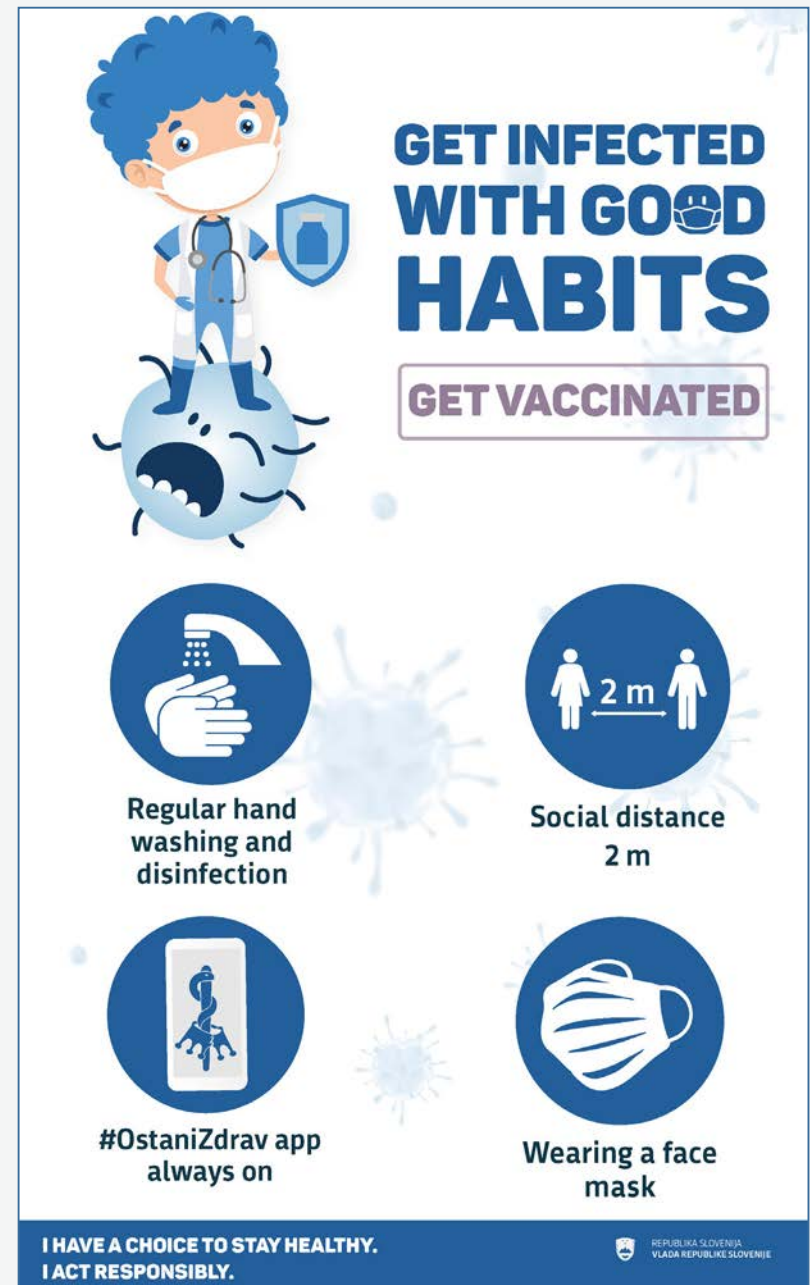
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Ljubljana, 2022



Guidelines of the Government of the Republic of Slovenia regarding preparation for  
the spread of COVID - 19

