



**GEODETSKA
UPRAVA
REPUBLIKE
SLOVENIJE**

Surveying and Mapping Authority of the Republic of Slovenia

ACTIVITIES REPORT 2017



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01

ADDRESS FROM THE GENERAL MANAGER



Dear reader of the Activities Report of the Surveying and Mapping Authority of the Republic of Slovenia!

Thinking about the tasks and activities we, the employees of the Surveying and Mapping Authority of the Republic of Slovenia, have carried out in 2017 I cannot easily decide which one to mention first, but surely this spot belongs to the regular administrative and expert duties regarding real estate registration mandated by legislation. Regular management and maintenance of land surveying records was one of the priorities of our organization in the year 2017.

Additionally we begun activities to improve data quality and data completeness, actions to harmonize real estate records for interoperability and the establishment of an appropriate IT Infrastructure, as defined in the Projects of the eSpatial Program. The eSpatial Program is part of the Operational Programme for the Implementation of the EU Cohesion Policy 2014-2020, 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 on September 7 2015. We started implementing activities in the scope of the Projects of the eSpatial Program in 2017, which will culminate in an established data link between Land Cadaster data, the Spatial Information System and Detailed Land Use data.

The final months of 2017 and January 2018 will be remembered as Legislative Months in Slovene land surveying history due to the passing of three new acts for the areas of spatial, construction and land survey profession legislation. The bundle of acts is meant to provide more efficient procedures, an easier way to coordinate different interests, higher legal security for investors and more effective supervision. The acts will come

into force on June 1 2018. Another change was the discussion and adoption of the Recording of the State Border with the Republic of Croatia Act (ZEDMRH), which regulates the recording of the State Border with the Republic of Croatia in accordance with the Permanent Court of Arbitration's final decision based on the Arbitration agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia. The Act was passed by the National Assembly on November 11 2017 and came into force December 9 2017. In the middle of December 2018 the National Assembly of the Republic of Slovenia passed the new Real Property Mass Valuation Act (ZMVN-1), which is meant to abolish the deficiencies of the original Mass Valuation Act regarding the definition of the Mass Valuation System and legal protection of property owners. It came into force January 11 2018, while paragraph 4 will come into force on August 1 2019. The last legislative change came at the end of

January 2018 with the passing of the Act Amending the Real-Estate Recording Act (ZEN-A), which brought some needed changes and additions to ensure more complete, reliable and quality real estate data for the purpose of high quality Real Property Mass Valuation. The act was published in the National Gazette February 7 2018 and came into force February 22 2018.

These and many more activities have left a mark on the year 2017. I wish for a pleasant reading.

Anton Kupic
General Manager
Surveying and Mapping Authority of the
Republic of Slovenia







02

ABOUT THE
SURVEYING AND
MAPPING
AUTHORITY OF
THE REPUBLIC OF
SLOVENIA



Identity Card

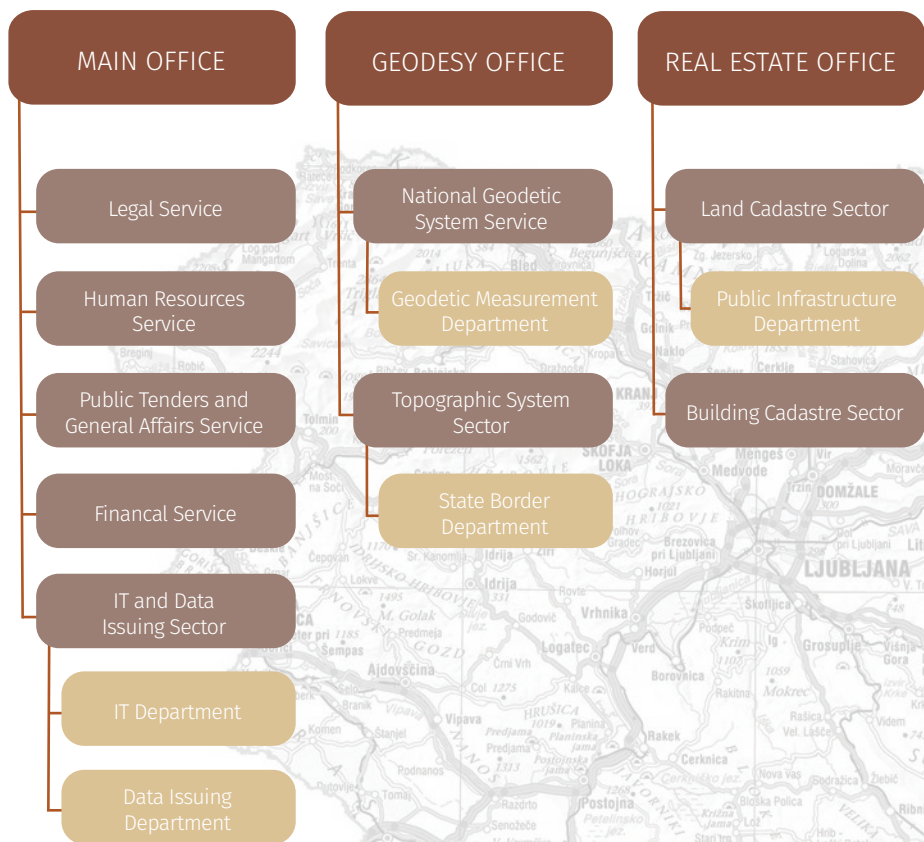
The Surveying and Mapping Authority of the Republic of Slovenia is a body within the Ministry of the Environment and Spatial Planning. The competence of the Surveying and Mapping Authority of the Republic of Slovenia comprises the tasks of the national land survey service, which include the creation, management and updating 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 Surveying and Mapping Authority of the Republic of Slovenia is responsible for basic data on space and real estate in the finalized databases, provides services pertaining to the registration of changes in physical space and on real estate, and performs the role of coordinator for the Real Estate System and Spatial Data Infrastructure.

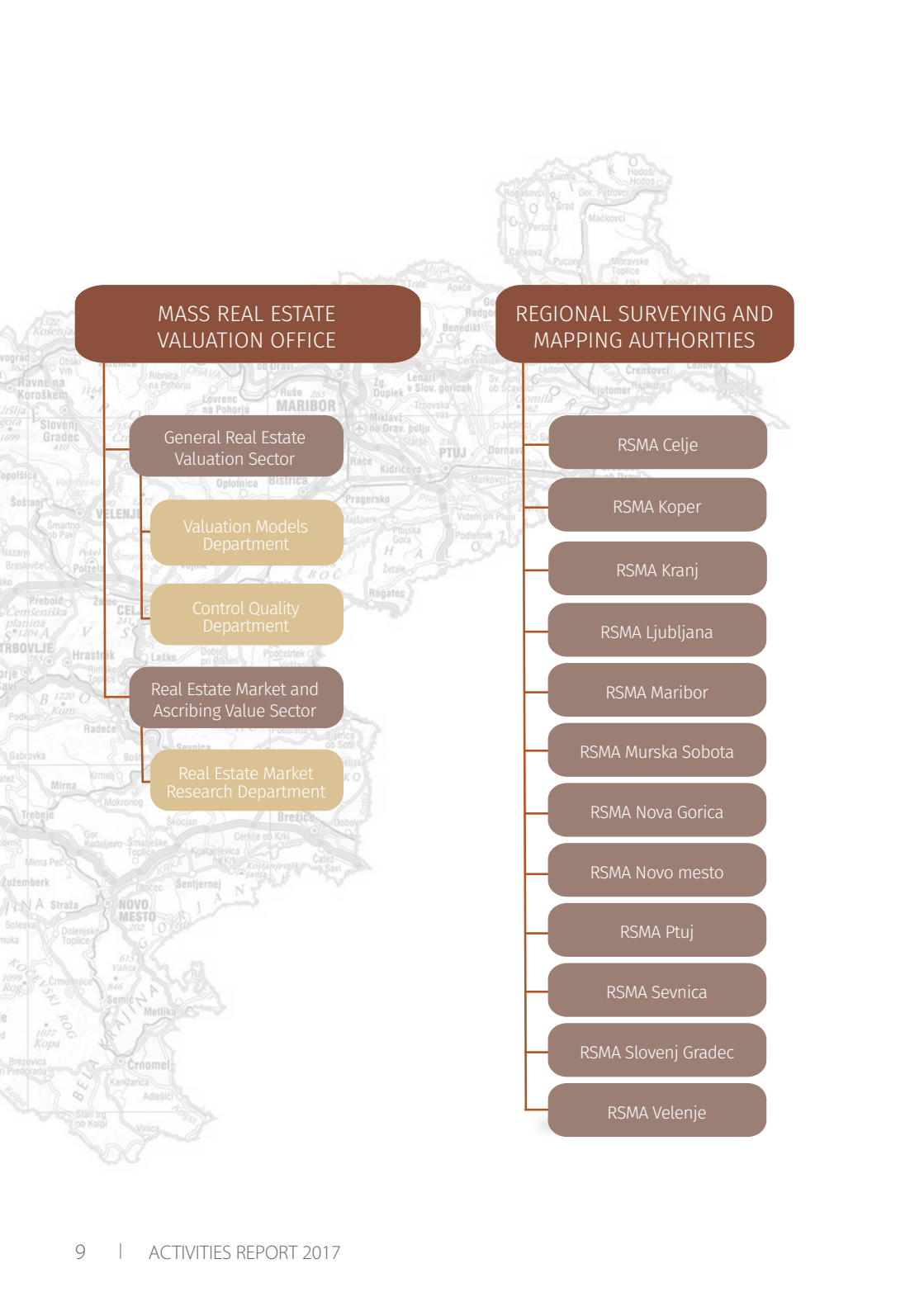
In cooperation with the Ministry of Finance, it is carrying out Mass Real Estate Appraisal with the aim of creating the foundations for successful and efficient real estate management, to provide data for objective and comprehensive real estate taxation and improve the efficiency of the real estate market. It provides for the National Coordinate System and its compliance with the European Coordinate System and creates the conditions for implementing land surveys.



Organization Chart



The Surveying and Mapping Authority of the Republic of Slovenia (SMA) comprises: the Main Office, the Geodesy Office, the Real Estate Office, the Mass Real Estate Valuation Office and twelve regional surveying and mapping authorities. The latter have been set up to streamline operations and increase the accessibility of administrative and professional tasks and services implemented by the SMA.



MASS REAL ESTATE VALUATION OFFICE

General Real Estate Valuation Sector

Valuation Models Department

Control Quality Department

Real Estate Market and Ascribing Value Sector

Real Estate Market Research Department

REGIONAL SURVEYING AND MAPPING AUTHORITIES

RSMA Celje

RSMA Koper

RSMA Kranj

RSMA Ljubljana

RSMA Maribor

RSMA Murska Sobota

RSMA Nova Gorica

RSMA Novo mesto

RSMA Ptuj

RSMA Sevnica

RSMA Slovenj Gradec

RSMA Velenje



Organization Structure

MAIN OFFICE



Head of Office
Janez Slak, MSc

The Main office implements administrative, professional, technical and supervisory assignments relating to the linking of spatial databases, the issuing of data and certificates in analogue and digital form, e-commerce with spatial data, spatial data infrastructure, informatisation of the land survey service. It administers the information and telecommunication infrastructure, provides systemic, application and user support along with IT training and education. Additionally, it implements the assignments pertaining to providing assistance in resolving substantive legal matters of all the offices and regional surveying and mapping authorities, financial operations, public tenders, human resources issues, education, office operation, safety and health in the workplace and other organizational assignments important for the operation of the SMA. In 2017 centralization of processes regarding real estate management and IT system support have been successfully carried out.

REAL ESTATE OFFICE



Head of Office
Franc Ravnihar

The Real Estate Office implements administrative, professional, technical, coordination and supervisory assignments pertaining to the administration of the Land Cadastre, the Building Cadastre, other records on real estate, administration of State Border records, and assignments pertaining to landmarking, restoration and maintenance of the State Border. It implements assignments of administering the Register of Spatial Units and the Register of House Numbers. It operates in an interagency capacity in the work of international committees and other assignments and projects. 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.

Alongside the normal proceedings in regards to real estate records' management the majority of activities in 2017 were focused on the improvement of real estate data quality and completeness.

Regarding Land Cadastre this meant processes for new land surveys of specific areas, where recorded data does not represents reality. Data harmonization of land plot numeration was carried out for 18,629 land plots (numeration changes of land plots divided by roads). A review of building and part of building data was carried out to identify unrecorded buildings. The review was based on gathered data on newly constructed buildings using Cyclical Aerial Photography between 2013 and 2016, which was carried out for the entire territory of Slovenia. With the help of automatic classification of unrecorded buildings and/or changed buildings, field reviews were carried out, formal letters regarding unrecorded/changed buildings were send to property owners and the changes recorded into real estate records. With the improvement of recorded data on land plots,

buildings and parts of buildings the overall quality of recorded real estate data is improving and with this increase in quality the requirements for data migration into the new Real Estate Data Model, prepared in the scope of the IT overhaul for managing and maintaining real estate records, are being meet.



GEODESY OFFICE



Head of Office
Jurij Režek, MSc

The Geodesy Office is responsible for basic, geoinformation infrastructure. It implements administrative, technical and coordination, implementative and supervisory assignments in the field of the National Geodetic System. It is responsible for the establishment and updating of the National Coordinate System and its accessibility through the system of permanent global satellite positioning stations and other geodetic networks. It coordinates the assignments pertaining to the transition to the European Coordinate System and it is responsible for linking the National Coordinate System with the coordinate systems of the neighbouring countries. The office implements assignments in the field of acquisition and administration of national topographic data, it administers the topographic database, it is responsible for the National Cartographic System and ensures the creation of the national cartographic and topographic products. It ensures the compliance of the Basic Geoinformation Infrastructure with the European guidelines. The office participates in European and international projects in the above-mentioned fields.

In 2017, the Geodesy Office ensured the operation of networks of permanent stations for satellite positioning - 16 permanent GNSS stations of the SIGNAL network and 5 permanent GNSS stations of the National

Combined Zero Order Geodetic Network. Users were provided access to spatial positioning data. Field measurements were carried out to control the operation of the SIGNAL network, to implement a new height system, to improve the transformation model for the migration to the new National Coordinate System, perform aerial triangulation used for aerial photography and improve the Cadaster. A software program for data transformation was developed for public use, which utilizes the National Model for Triangular Transformation to transform data into the new National Coordinate System.

Aerial photographs were created for the western part of Slovenia along with a Digital Relief Model as well as color orthophoto. In accordance with standards of EuroGeographics (organization representing Europe's National Mapping, Cadastral and Land Registration Authorities) some changes were made to individual spatial data layers of the EuroRegionalMap (ERM) and the EuroBoundaryMap (EBM). Five sheets of the National and the Military Topographic Maps (DTK and VTK 50, respectively) in a scale of 1 : 50 000 were restored along with the creation of a Continuous Vector Cartographic Data Set and Continuous Cartographic Display for DTK and VTK 50. All of the National Transparent Maps (scale 1 : 250 000, 1 : 500 000, 1 : 750 000 and 1 : 1 000 000) have been renewed. Topographic data were gathered for the National Topographic Model. In the field of cartography and topography activities were carried out in the Commission for the Standardization of Geographical Names as well as special assignments for the Ministry of Defence. Maintenance work was carried out on the State Border with Italy, Austria and Hungary. Tasks defined by international commissions were carried out.

MASS REAL ESTATE VALUATION OFFICE



Head of Office
Dušan Mitrović, MSc

The Mass Real Estate Valuation Office implements the assignments of general real estate valuation and the tasks of ascribing value to real estate properties. Its main tasks are the development, establishment, implementation, management and maintenance of the Mass Real Estate Valuation System for taxation and other public sector needs. The Mass Real Estate Valuation Office carries out tasks relating to ascribing value to real estate properties and monitoring the real estate market, mainly data relating to real estate market price and real estate rental.

The strategic goals in the field of Mass Real Estate Valuation are development, implementation, management and maintenance of the Mass Real Estate Valuation System for the purpose of Real Estate Taxation and other public purposes, successful and efficient execution of tasks relating to assigning value to real estate and the establishment of quality data regarding the state of the real estate market, especially market prices and rental prices of real estate. Achieving these strategic goals in the field of Mass Real Estate Valuation will result in multipurpose data on generalized real estate market value used for providing objective, comprehensive

and harmonized Real Estate Taxation along with a more transparent and efficient real estate market.

The tasks of Generalized Real Estate Valuation are preparing measures and criteria for Mass Real Estate Valuation, preparing drafts, propositions and final propositions of Real Estate Valuation Models, preparing propositions for legislative changes in the field of Generalized Real Estate Market Valuation, providing the annual price index and real estate value index, informing real estate owners regarding informative calculation of their real estate value, establishing, managing and maintaining the Real Estate Valuation Data Set, defining the methodology for Mass Real Estate Valuation, researching and analyzing the real estate market, preparing statistical reports on real estate, the real estate market and real estate value and other activities relating to Generalized Real Estate Valuation.

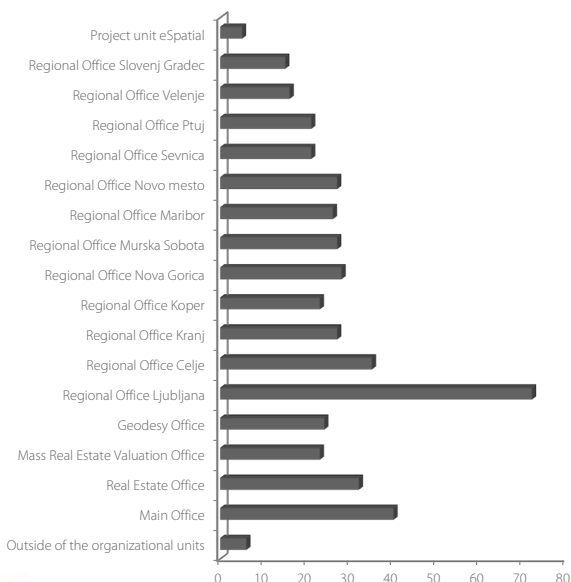


Human Resources

On December 31 2017 the SMA employed 468 people, consisting of 338 employees at the twelve regional surveying and mapping authorities and 130 employees at the central SMA Offices. The personnel structure in subject to the adopted human resources plan of Public Administration and the number of employees has been steadily decreasing over the past 15 years.

In the personnel structure the main part represent surveyors with university or high professional education. In addition, the SMA employs lawyers, economists, agronomists, IT specialist and to a smaller degree administrative workers.

468
employees

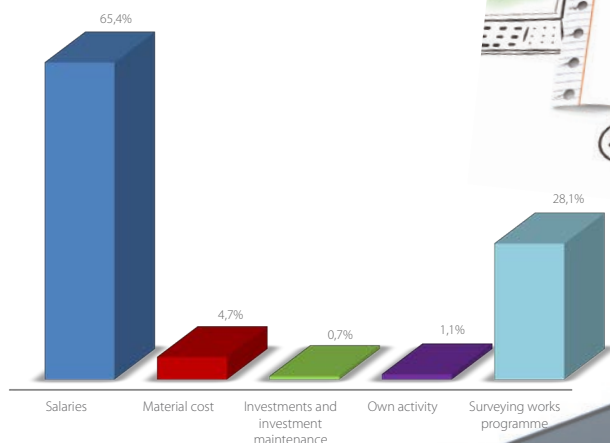




Finance

The SMA is financed primarily from the National Budget and to a lesser extent from income generated by its own activities regarding issuing geodetic data from the Land Cadastre, the Building Cadastre, the Real Estate Register, the State Border Records and the Register of Spatial Units.

The adopted budget of the SMA for the year 2017 was € 23,404,221, while the valid budget after allocation of funds due to Government resolutions was € 20,778,358. The total financial realization of the valid budget was 99.47%.





03

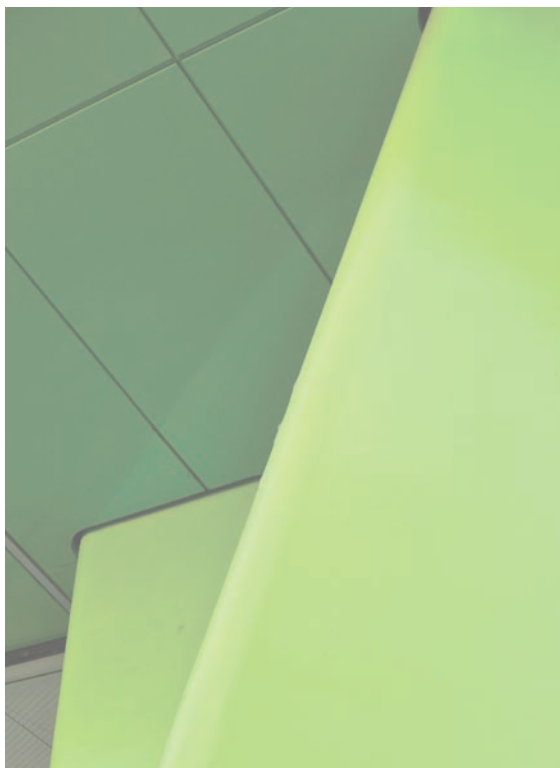
INTERNATIONAL ACTIVITIES AND INSPIRE



In 2017 the SMA has continued the ongoing international cooperation and participation in Institutions of the European Union, cooperation with neighboring countries and countries in the South-East Region of Europe as well as bilateral cooperation with other countries. The employees of the SMA are actively involved in different international organizations and associations. Alongside the longstanding membership in EuroGeographics - European National Mapping, Cadastral and Land Registry Authorities and the European Regional Committee of the United Nations Initiative on Global Geospatial Information Management (UN-GGIM: Europe), the SMA participates in EUREF - Reference Frame Sub-Commission for Europe of the International Association of Geodesy (IAG) in the PPC - Permanent Committee on Cadastre in the European Union as well as in the International Association for the Administration of Real Estate within the United Nations Economic Commission for Europe. A representative from the SMA is also part of the Executive Board of UN-GGIM: Europe. From October 23 2014 the SMA and the Geodetic Institute of Slovenia (GIS) are members of EuroSDR, which unites surveying and mapping authorities and research institutions in carrying out development projects in the fields of geodesy and geoinformatics.

In 2017 the SMA continued with performing tasks as the National Contact

Point (NCP) for the implementation of the INSPIRE Directive. As the NCP the SMA coordinates the establishment of the National Spatial Data Infrastructure (NSDI) in the Republic of Slovenia. The NSDI consists of metadata, spatial data sets, services regarding spatial data sets, network services, technologies, agreements on the reuse of spatial data sets and services regarding spatial data sets, use and access to spatial data sets and services along with mechanisms and processes for coordinating and monitoring the implementation of the provisions of the Infrastructure for Spatial Information Act (ZiPI).





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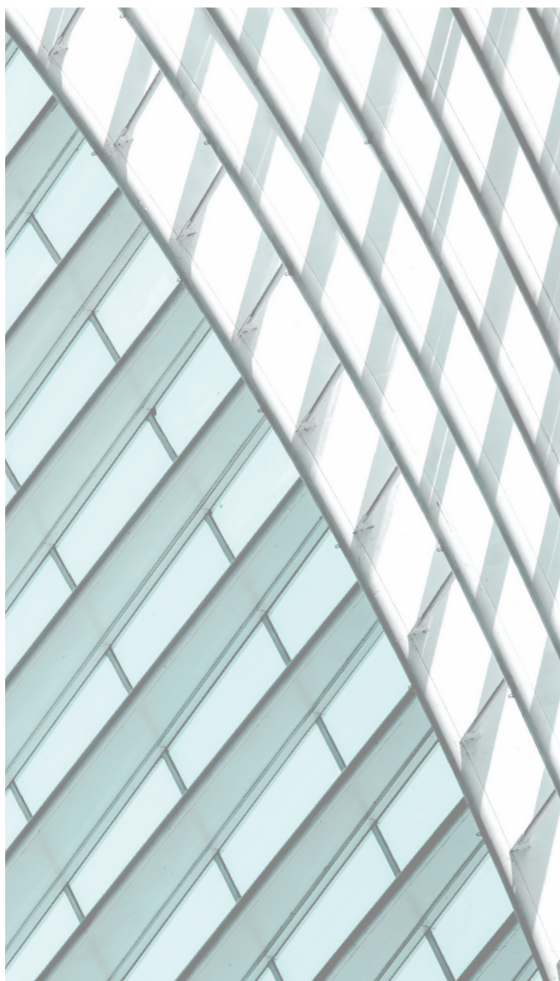
PROJECTS



The SMA was included in the implementation of the international projects SLICE3D and HARMO-DATA in 2017. The Slovenian Center of Excellence on 3Dgeodata (SLICE3D) is a project approved by the Research Executive Agency (REA) in name of the European Commission in the frame of the H2020 Program. The project's consortium consists of 8 project partners, the lead partner being the University of Ljubljana, namely the Faculty for Civil and Geodetic Engineering. The 23 month long project begun September 1 2017 and is meant to provide a scientific and innovation strategy along with a rough business plan for the establishment of a Center of Excellence on Geospatial Data in Slovenia.

The HARMO-DATA Project, which was approved in the frame of the Interreg V-A Italy-Slovenia 2014-2020 Programme, which tackles the challenge of an inconsistent system of spatial management of a crossborder area of Slovenia and Italy. This state of play complicates the acquisition of spatial data needed for quality spatial management of public institutions on the local, regional and national levels. The general goal of the project is to stimulate public institutions and key actors in the field of spatial planning in order to strengthen the cross-border cooperation between institutions and to design common solutions for harmonized, efficient and effective cross-border spatial management.

The set goal will be achieved with the development of a common model for spatial management, which will incorporate a common platform for cross-border spatial data harmonization and a cross-border spatial management protocol that will be ratified by representatives from the responsible public institutions of the project's area.





eSpatial Program

The Projects of the eSpatial Program 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 on September 7 2015.

The main purpose of the eSpatial Program is to shorten and improve procedures in the fields of spatial planning, construction and real estate management by providing linked, easily accessible and standardized spatial data sets.

The Projects of the eSpatial Program will help in optimizing procedures in the fields of spatial planning, construction and real estate management. To help with these improvements revisions of spatial and construction legislation were carried out in the time period of this report, specifically Spatial Management Act and Building Act, and partly in the field of real estate legislation with the passing of the Act Amending the Real-Estate Recording Act (National Gazette RS, No. 7/18). In the near future a more comprehensive revision of the real estate legislation is envisioned. Basic starting points were prepared and a public tender was carried out for the establishment of an appropriate information infrastructure for process optimization and establishment of e-commerce.



www.projekt.e-prostor.gov.si



REPUBLIC OF SLOVENIA
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REPUBLIC OF SLOVENIA
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THE SURVEYING AND MAPPING AUTHORITY
OF THE REPUBLIC OF SLOVENIA



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To support the envisioned e-commerce the tasks of digitizing the real estate records archive and national spatial acts was commenced. An infrastructure was established and initial testing was carried out for the purpose of improving the spatial accuracy of the graphical part of Land Cadastre. In the Prekmurje Region first data acquisition of build-up construction land was carried out. Strategic documents for the establishment of a common information infrastructure for spatial data and real estate data in Slovenia were prepared along with the basis for establishing network services for spatial and real estate data.

The Projects of the eSpatial Program consist of five projects. The first project is meant to establish the Common Infrastructure for Spatial Information, the second is meant to establish the Spatial Information System and e-commerce for spatial management and construction purposes. The third project is meant to renovate of the Real Estate Records System. The forth is meant to acquire

missing spatial data on actual land use of construction land, improving the spatial accuracy of the graphical part of Land Cadastre and digitizing expert elaborates of cadastral measurements. The fifth project is meant for operational support in the management of all aspects of the eSpatial Program.

The key goals of the individual projects are described hereinafter along with the main tasks that were carried out or have been started in the year 2017.

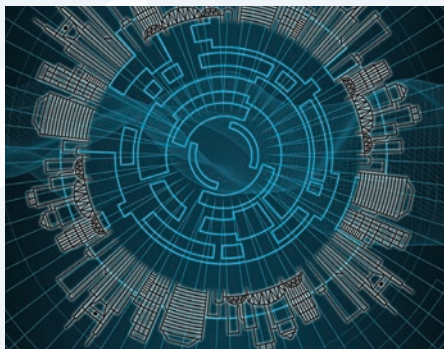


PROJECT »COMMON INFRASTRUCTURE FOR SPATIAL INFORMATION«

The Project is being carried out by the SMA and the Ministry of the Environment and Spatial Planning.

Project goals:

- establishment of needed coordination mechanisms for the operation of the Common Infrastructure for Spatial Information,



- establishing a network of spatial data providers and users,
- establishing a network of services related to spatial data and ensuring conditions for continuous spatial data flow between Public Authorities of the Republic of Slovenia and data exchange with the Bodies of the European Commission and EU Member States.

Strategic and operational documents for the Infrastructure for Spatial Information have been updated along with organizational and action plans for individual elements of the Infrastructure for Spatial Information. Initial meetings and workshops were held with individual groups of stakeholders. In the latter half of 2017 the contract for the establishment of the Common Infrastructure for Spatial Information was signed, which includes tasks to upgrade and update the Slovene Geoportal and the INSPIRE (SI) Metadata System and the creation of network services for spatial data. In the scope of the project new computers and computer displays were acquired.



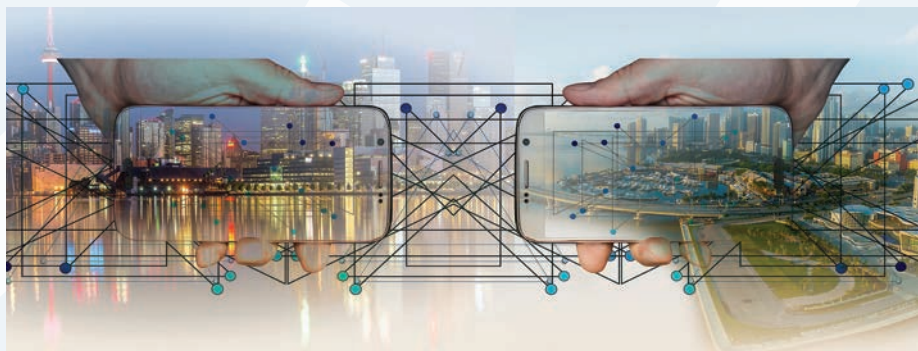
PROJECT »THE SPATIAL INFORMATION SYSTEM«

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

Project goals:

- establishment of the Spatial Information System,
- establishing needed data sets,
- transition to e-commerce in the procedures of spatial management and construction.

In 2017 the necessary changes to spatial management legislation and construction legislation have been made to provide a legal framework for the Spatial Information System and e-commerce along with all necessary activities to prepare a public tender to establish a construction and spatial planning information system. A pilot project for designing and establishing a data set for outlining the jurisdictions



of decision makers was carried out. A proposed methodology was prepared for a warning layer on illegal and non-compliant construction, which was tested on a small scale. A plan for the establishment of a Construction Land Record was prepared along with expert and technical support with the implementation of the project for mass data acquisition for land linked to objects and actual land use in the Prekmurje Region. At the end of 2017 a public tender was prepared for IT support in the fields of spatial planning and construction.

PROJECT »RENOVATION OF THE REAL ESTATE RECORDS SYSTEM«

The Project is being carried out by the SMA.

Project goals:

- IT renovation of the Real Estate Records System (Land Cadastre, Building Cadastre, Register of Spatial Units, State Border)

- transition to e-commerce in the field of real estate registration.

A contract for the renovation of the Real Estate Records System was signed. In its frame activities have been begun to design the project's implementation plan. The needed tasks for the implementation of the IT renovation have been defined. Activities have been started to outline the migration specifications along with designing the establishment of a parallel IT system for testing and analytical purposes of the new renovated SMA system.

For the purpose of implementation and migration to the new system an AS-IS analysis was carried out on existing data along with data inventorization to provide lists for data processing/renovation and provide lists for data migration. Activities were carried out to review Building Cadastre attribute data, review Real Estate Register attribute data and review attribute data of the Distribution System (all in connection with the classification



of actual use of parts of buildings and classification of space types). Activities for the analysis and transformation of 775,092 land plot parts with an outdated Land Cadastre classification into the now valid one have been started. A contract was signed for the distribution of certificates of land parcel data registration. Initial activities have been begun for the design of a software for the digitalization of floor plans as well as activities to reprogram existing software solutions used for tasks relating to the Building Cadastre.

The Real Estate Cadastre Act is being prepared and was partially harmonized within the expert community but not finalized due to the urgency of preparing amendments to the Real Estate Registration Act in light of Real Estate Mass Valuation. Following the passing of the amended Real Estate Registration Act and all corresponding by-laws the negotiations regarding the Real Estate Cadastre Act will continue.

IV. PROJECT »DATA ACQUISITION AND DATA QUALITY IMPROVEMENT«

The Project is being carried out by the SMA that is responsible for the improvement in accuracy of location data of the graphical part of the Land Cadastre and digitizing the archive of the SMA, while the acquisition of actual land use of construction land is being carried out by the Ministry of the Environment and Spatial Planning.

Project goals:

- digitizing the archive of expert elaborates of cadastral measurements,
- improvement in accuracy of location data of the graphical part of the Land Cadastre,
- acquisition of actual land use of construction land.

In the time period of this report 6,750,000 pages of archived documents of the Land Cadastre were digitized, sorted and 78,000 pages were condensed. A test was



carried out for the digitizing of Building Cadastre documents in the scope of 250,000 pages. Digitizing of 58,000 archived documents of National Spatial Plans was also carried out.

With the help of the Geodetic Institute of Slovenia an operational test of the improvement in accuracy of location data was carried out for the Novo mesto Municipality (10 Cadastral Municipalities). This test was used to design and implement a system to carry out the improvement in accuracy of location data of the graphical part of the Land Cadastre for the entire territory of the Republic of Slovenia.

In the end of 2017 a contract was signed for the acquisition of build-up land data and actual land use of build-up land that includes the tasks of data acquisition in stages, internal control of the different implementation stages and acquired data transfer for external control. This project will be running till the year 2021.

PROJECT »SUPPORT FOR PROJECT MANAGEMENT AND INFORMING«

Project goals:

- supporting for project management of the entire eSpatial Program,
- informing and educating participants and stakeholders of the project as well as the broader expert public.

In the time period of this report the Project Office was established, which carries out supporting tasks for project management and project promotion of all the Projects of the eSpatial Program. First consulting activities and administrative coordination were carried out along with first promotional activities, including eSpatial Program communication and promotion with the help of different methods, for example the eSpatial Program Web Page and other printed and promotional materials.



**Surveying and Mapping Authority of the Republic
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Surveying and Mapping Authority
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