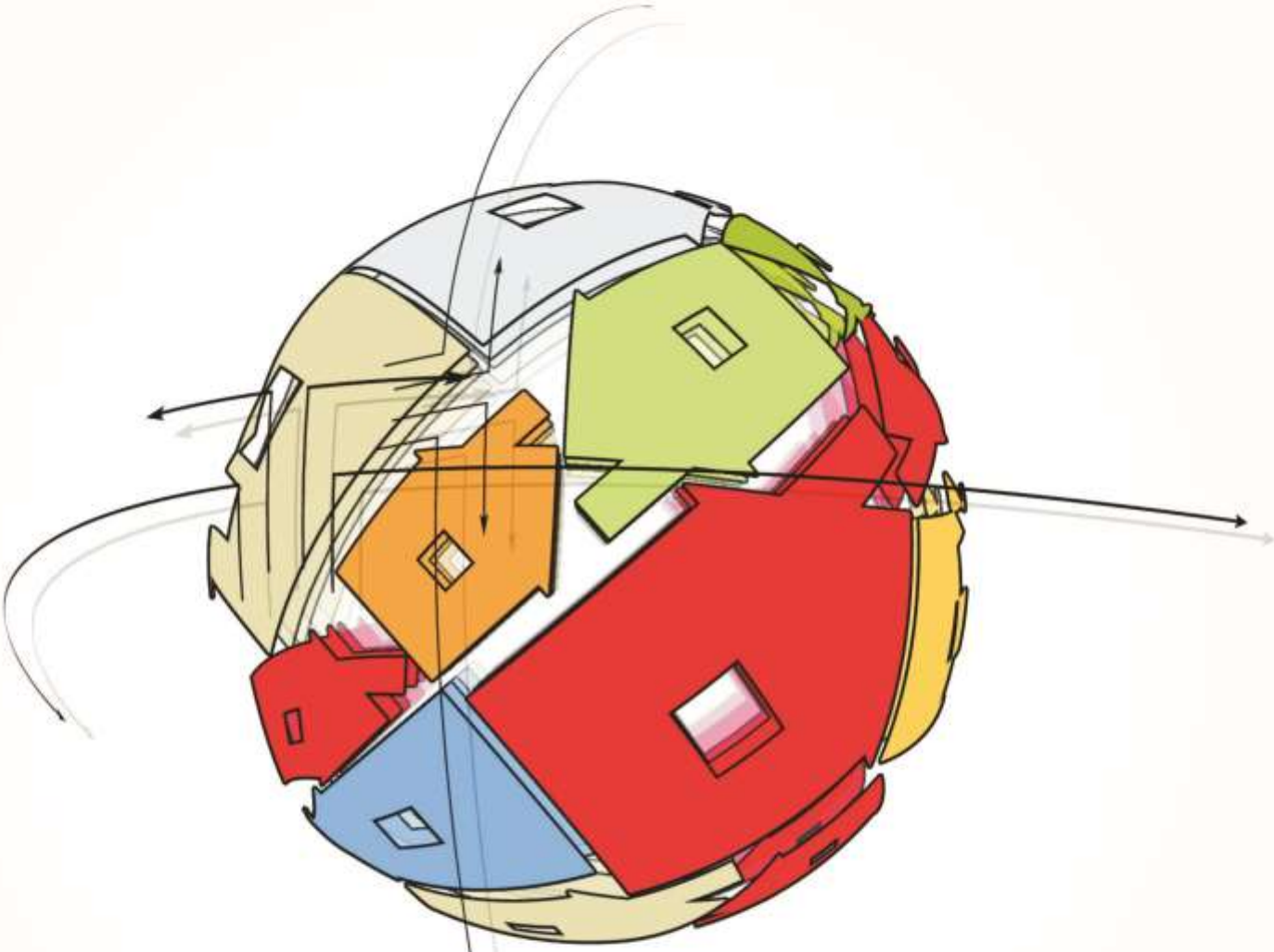
GEODETSKA UPRAVA REPUBLIKE SLOVENIJE

SURVEYING AND MAPPING AUTHORITY
OF THE REPUBLIC OF SLOVENIA



2013

LETNO POROČILO

ACTIVITIES REPORT

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ADDRESS FROM THE DIRECTOR GENERAL

1. ADDRESS FROM THE DIRECTOR GENERAL

Dear users of data and services provided by the Surveying and Mapping Authority of the Republic of Slovenia!

Like every year so far our wish for the Activities report is to ensure mutual informing and the exchange of experience regarding our achivements and activities that were performed by the surveyor service in Slovenian society in the year 2013.

The Administrative part of land survey was in the past weeks and months to often the target of the media in connection with data management of real estate because of the deployement of the real estate tax which was based on the implemented real property mass valuation. We publicly received in many cases justified but all too often unjustified criticisms which almost entirely overshadowed the other parts of land survey and the other stakeholders in the surveyor proffesion. In times when the media's attention is focused solely on the procedures of recording real estate we must not forget that land survey and the surveyor proffesion are much more than just the recording of real estate for the purpose of taxation. More than 10 years ago we wrote into our strategic documents that the correct path for development of the surveyor proffesion is in such a way that we transform from an administrator of spatial datasets to a manager of spatial data which enabels the development of urban and rural areas as well as the managing of land plots.

In our report we want to describe the success of our pledges and the steps we still must take to achive them.

In the Spatial development strategy of Slovenia we wrote that coordinated, up-to-date, reliable and sistemicly linked state statistics have to be provided as well as the continuing supplementing of statistical databases with spatial management data so spatial management can have an appropriate support. Measures to improve real estate records were also proposed. In all the subsequent strategic documents we at the ministry abided by the mention proposition. The tasks ahead are not simple and easy to solve but I am confident that we will be able to find the necessary consensus as this is a

prerequisite for achieving the needed changes in this field in regulations as well as in practice.

The goal of all the activities of the Surveyor and Mapping Authorityof the Republic of Slovenia is to provide up-to-date data to all our users in the state administration, private companies as well as individual citizens. Most of our data is accessible trough electronic means in the friendliest maner for the user.

All of this is written down in this activities report. My hope is that you will get a lot of usefull information and possibly ideas how to use our knowledge and products.

I wish you pleasant reading!

Anton KUPIC
Director General

ABOUT THE SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA

2. ABOUT THE SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA

2.1 IDENTITY CARD

The Surveying and Mapping Authority of the Republic of Slovenia is a body within the Ministry of Infrastructure 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 finalised 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 a 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.

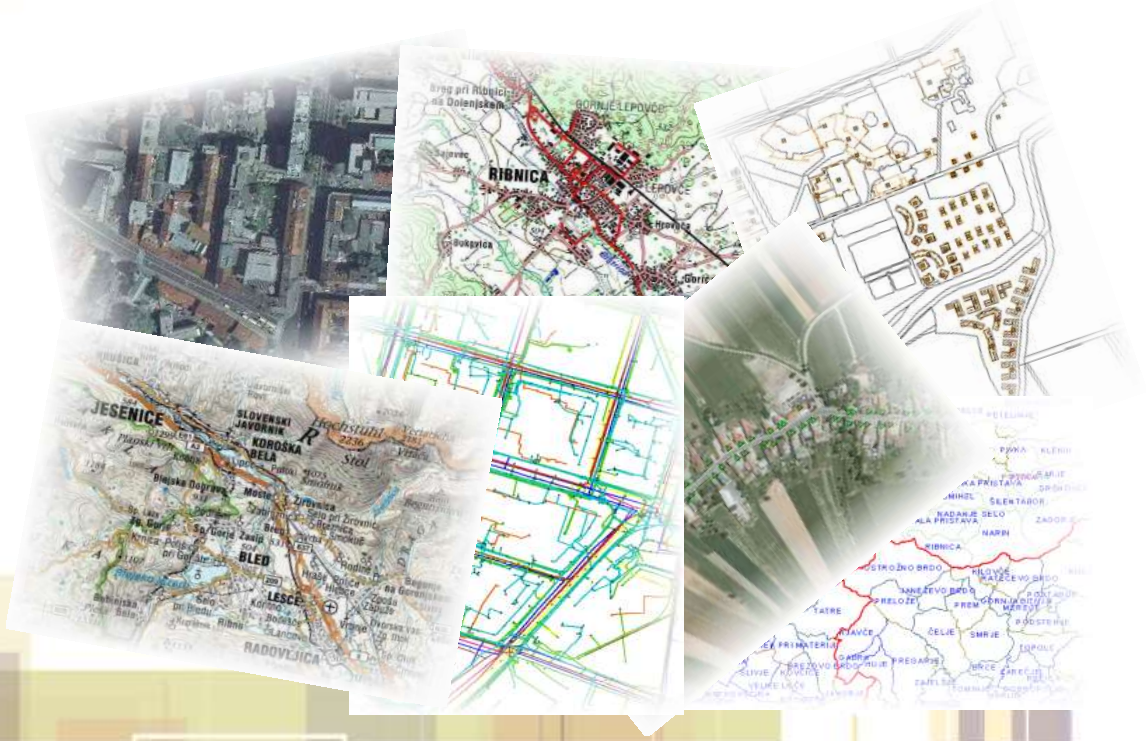

Figure 1: Information on the Surveying and Mapping Authority of the Republic of Slovenia

2.2 MAIN TASKS AND ACTIVITIES

The Surveying and Mapping Authority of the Republic of Slovenia comprises: the Main Office, the Real Estate Office, the Mass Real Estate Valuation Office, the Geodesy 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 Surveying and Mapping Authority of the Republic of Slovenia.

In cooperation with the regional surveying and mapping authorities, the regional offices implement the following joint tasks:

- preparing the national land survey service annual programme and the report on its implementation,
- organising the work of the regional surveying and mapping authorities, monitoring their work and ensuring the uniform implementation of national land survey service assignments,
- directing the implementation of development assignments pertaining to surveying and mapping activities,
- implementing operational, professional and administrative assignments from the offices' fields of work,
- drafting regulations on surveying and mapping activities,
- meeting international obligations in the field of national land survey services.

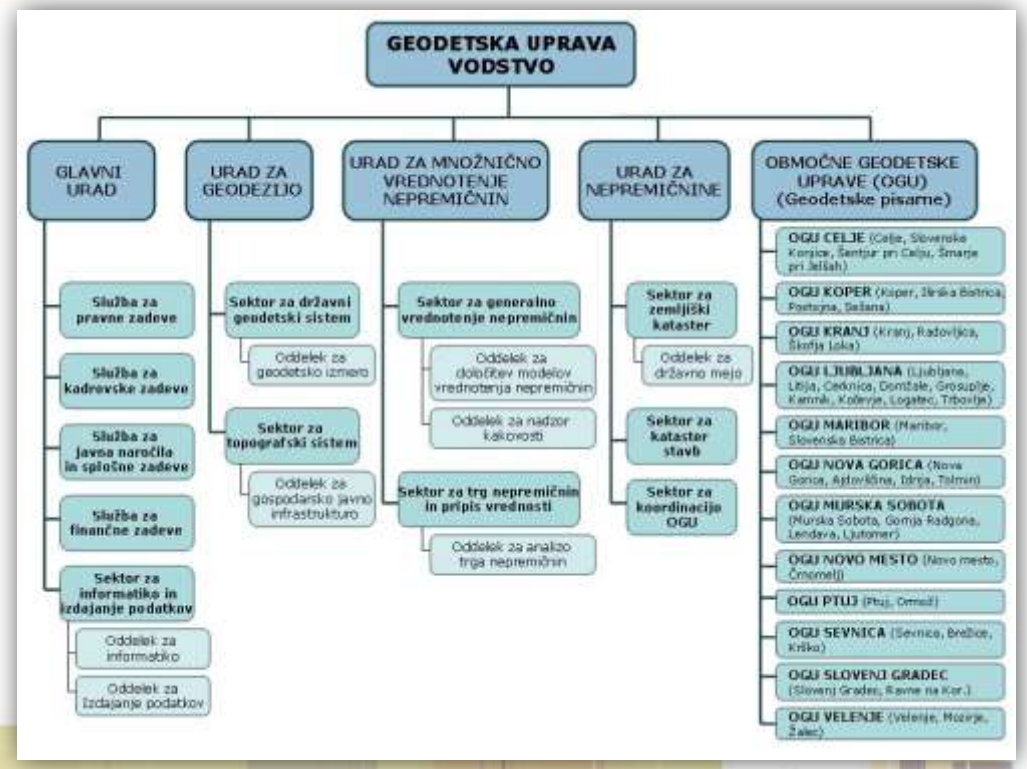

Figure 2: Organisation chart of the Surveying and Mapping Authority of the Republic of Slovenia

2.3 ORGANISATIONAL STRUCTURE

Main Office

The Main Office deals with administrative, professional, technical and supervisory activities relating to the linking of spatial databases, the issuing of certificates and data in analogue and digital form in relation to e-commerce with spatial data, the spatial data infrastructure and developing electronic land survey services. It administers the information and telecommunication infrastructure and provides systemic, application and user support and IT training and education. Additionally, it implements activities pertaining to providing assistance in resolving the substantive legal matters of all offices and regional surveying and mapping authorities, financial operations, public procurement, human resources issues, education, office operations, health and safety at work and other organisational activities important for the functioning of the Surveying and Mapping Authority of the Republic of Slovenia.

Figure 3: The headquarters of the Surveying and Mapping Authority of the Republic of Slovenia

Real Estate Office

The Real Estate Office is responsible for administrative, professional, technical, coordination and supervisory activities pertaining to the management of the Land Cadastre, the Building Cadastre, the Real Estate Register and other records on real estate, the management of state border records and activities pertaining to marking, restoring and maintaining the state border. It is also engaged in managing the Register of Spatial Units and the Register of House Numbers. It operates in an interagency capacity in the work of international commissions and in other activities and projects, and is responsible for the training and education of employees of the regional surveying and mapping authorities. It prepares subject matter and material for the mandatory

training of geodesists with a geodetic permit in cooperation with the Slovenian Chamber of Engineers. The substantive management and coordination of the work of regional surveying and mapping authorities in the field of real estate is another of its tasks.

Mass Real Estate Valuation Office

The Mass Real Estate Valuation Office implements the tasks of general real estate valuation and the tasks of ascribing value to real estate properties. The main tasks comprise the preparation of real estate valuation models, determination of real estate value indices and monitoring of the Slovenian real estate market. The main products are valuation models for individual types of real estate that, on the basis of data from the Real Estate Register, provide for the calculation of the market value of real estate, calculated indices of the value of real estate that enable updating of market values with regard to price trends in the real estate market during the period between general valuations of real estate and periodic reports on developments in the market based on systematic monitoring and analysis of data on the market. The Office manages and maintains the Real Estate Market Record, which is a multi-purpose public database on purchases and rental agreements pertaining to real estate. The Real Estate Market Record is managed in order to provide data on realised prices and rents in the real estate market for the purposes of mass valuation and other public purposes determined by law. On account of the changes in real estate markets, the Office verifies individual real estate valuation models at least every four years. The Office manages and updates the Real Estate Valuation Database, which is a public database on real estate valuation models and data on value indices. The Office provides for the procedure of ascribing values, whereby the values of all recorded real estate are calculated on the basis of data on real estate entered in the Real Estate Register by using the mass valuation model for calculation of generalized market value, and enters the calculated values into the Real Estate Register.

Geodesy Office

The Geodesy Office is responsible for the basic geo-information infrastructure, represented by the national coordinate system and the national topographic system. In these fields, it implements legislative, professional, technical and coordination, implementation and supervisory assignments. It is responsible for establishing and updating the national coordinate system and its accessibility through the system of permanent global satellite positioning stations and other geodetic networks (the SIGNAL network). It coordinates and implements activities pertaining to the transition to the European coordinate system ESRS (European Spatial Reference System) and is responsible for linking the national coordinate system with the coordinate systems of neighbouring countries. It carries out field work required to set up the horizontal and vertical (geometric and physical) components of the national coordinate system, provides transformation parameters between the existing (old) national and (new) European coordinate system and captures spatial data of the Surveying and Mapping

Authority for the purpose of controlling. It manages a collection of data on geodetic points. It also implements organisational and coordination activities regarding the capture, management and integration of topographic data. It manages a collection of topographic data and the Consolidated Cadastre of Public Infrastructure. It is responsible for the national cartographic system and ensures the creation of national topographic and cartographic products for the needs of the state, ministries and local government. It provides for the compliance of the basic geo-information infrastructure with the European guidelines. It prepares regulations and participates in European and international projects in these fields.

Regional Surveying and Mapping Authorities

- Create, manage and update the Land Cadastre, the Building Cadastre, the Register of Spatial Units and other databases provided by law; provide information from the Land Cadastre, the Building Cadastre and the Register of Spatial Units and other databases,
- Implement administrative procedures and make first instance rulings in administrative matters for which they are competent,
- Provide professional assistance to clients and information to users,
- Participate in the planning and programming of land survey activities, primarily in cooperation with local communities,
- Coordinate activities in the land survey offices,
- Implement individual activities in the areas of financial operation, personnel matters, office operation and other organisational activities,
- Implement other activities as stipulated by the Director General of the Surveying and Mapping Authority.

Regional surveying and mapping authorities receive applications, provide information, provide data to clients and carry out individual tasks in administrative procedures pertaining to direct contact with customers at their head offices and all other geodetic offices.

Figure 4: The territorial division of the regional surveying and mapping authorities

2.4 HUMAN RESOURCES

On **31 December 2013** The Surveying and Mapping Authority of the Republic of Slovenia employed **483** public employees with employment for an indeterminate term and none with employment for determinate term, it also did not employ any interns. **10** employees ended their employments in 2013, there were not any new employees with employments for an indeterminate term. In comparison with the end of 2012 the number of employees dropped for **1.02 %.**

Table 1: Number of employees in offices and regional surveying and mapping authorities on 31 December 2013 in terms of expertise and level of education

Staff structure by field of expertise in 2013	
Surveyors	252
Agronomists	10
IT specialists	16
Lawyers, financial and administrative staff	215
Total	**493**

Staff structure by level of education in 2013	
University/Bachelor's degree	596
First level university	41
Secondary	150
Primary	6
Total	**493**

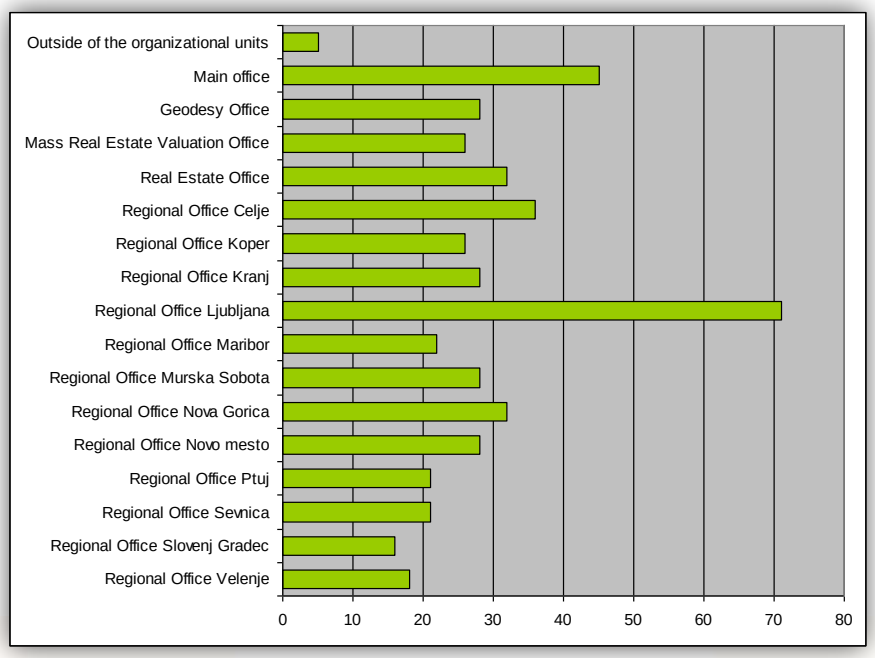

Diagram 1: Number of employees in offices and regional surveying and mapping authorities on 31 December 2013

2.5 FINANCE

The Surveying and Mapping Authority of the Republic of Slovenia is financed primarily from the national budget and to a lesser extent from income generated by its own activities. The surveying works programme is prepared for a period of two years and is approved by the Government of the Republic of Slovenia.

Revenue generated from issuing geodetic data from the Land Cadastre, the Building Cadastre, the Real Estate Register, the state border records and the Register of Spatial Units for payment is revenue generated by our own activity. In accordance with the Budget Implementation Act, revenue deriving from an entity's own activities may be used only to cover material costs, the costs of storing and issuing data and investments in property, plant and equipment for the needs of the Surveying and Mapping Authority of the Republic of Slovenia in implementing its own activities.

Table 2: Budget expenditure in 2013

Budget 2013	**€**
Surveying works programme	4,596,195
Wages	12,801,770
Material costs	2,189,059
Investments and investment maintenance	413,590
Own activity	101,768
Total	**20,102,382**

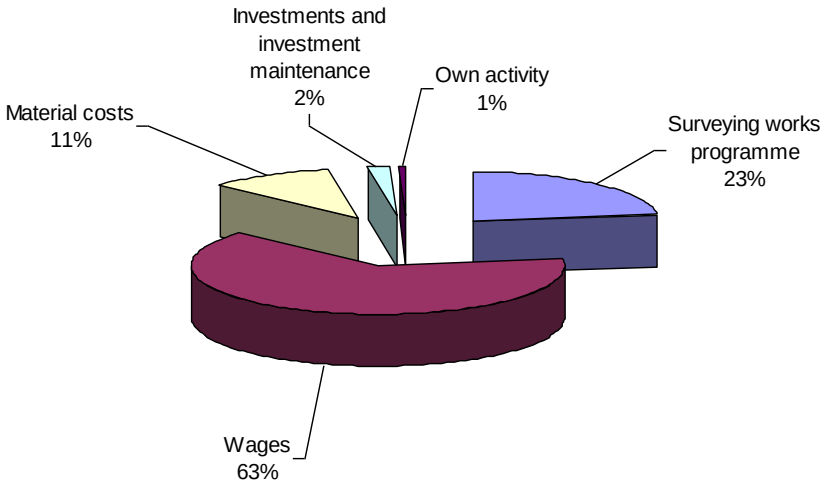

Diagram 2: Shares of expenditure by purpose in 2013

Table 3: Budget expenditure by year (all figures in €)

	2008	2009	2010	2011	2012	2013
Surveying works programme	2,662,839	3,488,762	3,870,418	2,363,387	2,235,824	4,596,195
Wages	13,551,555	14,137,920	14,098,625	13,976,793	13,538,511	12,801,770
Material costs	3,072,550	3,004,407	2,753,562	2,697,185	2,602,459	2,189,059
Investments and investment maintenance	437,209	161,390	109,496	101,145	108,782	413,590
Own activity	221,871	110,512	113,558	230,820	167,292	101,768
Total	**19,946,024**	**20,902,991**	**20,945,659**	**19,369,330**	**18,652,868**	**20,102,382**

2.6 INTERNATIONAL ACTIVITIES

The Surveying and Mapping Authority of Republic of Slovenia performed activities of international cooperation in accordance with directions and strategic goals, written in Programme of work for state surveying services for 2013 and 2014.

In 2013 international cooperation covered inclusion in activities, performed by EuroGeographics: Association of National Mapping, Cadastral and Land Registry Authorities (such as European global and regional map, European administrative borders, European digital model of relief, European geographic names and work on European projects of horizontal and vertical network and cooperation with project ELF).

Representative of The Surveying and Mapping Authority of Republic of Slovenia in current mandate held the role of a member of executive board of this association. Funds of international cooperation were used for paymet of membership fee for membership in EuroGeographics. The Surveying and Mapping Authority of Republic of Slovenia also cooperated with work of other international organisations and associations, but, because of saving measures, it's employees did not participate in those meetings. Contacts were made and maintained by means of electronic comunication.

General assembly of EuroGeographics

Association of National Mapping, Cadastral and Land Registry Authorities held from 29 September to 2 October 2013 in Warsaw it's annual general assembly, on which was, besides discussing current topics, approved the budget and work plan of association for 2014.

Figure 5: Attendees of general assembly 2013 (foto: EuroGeographics)

Host of the assembly was director general of Polish Bureau for Mapping, Cadastral and Land Registry, and he presented the field of their work and the role of institution in modern Polish society. Delegate of Ministry of Administration and Digitalisation of Polish government outlined in his speech the meaning of public informations and important role of spatial data in this informations. Vanessa Lawrence, the Director of Ordnance Survey of Great Britain summed up the achievments of EuroGeographics in period between previous and current general assembly. She mentioned progress with opening the informations of association to public, because Euroglobal map is from last year free for all users. Together with Eurostat the association strived for simplification of license policy and lowered the prices for some products.

A lot of attention was directed towards establishment of European subgroup with United Nations Initiative on Global Geospatial Information Management – UN GGIM. UN GGIM Europe held its founding meeting at the end of this year's assembly, formal

appointments will be made at session of Economic and Social Council UN in August 2014.

Amongst achievments in 2013 we count the fact that 31 of 46 member states of EuroGeographics signed the letter about sharing the data for means of protection and rescue in programme Copernicus (GMES Emergency Mapping), and Slovenia is among those countries. Besides that the executive board outlined new strategy of association and operational plan for execution of all planned tasks, and project ELF is the most important among them. In 2013 three new agencies submitted applications for membership, and so the association now includes 59 institutions from 46 European states.

The directors of Norwegian and Iceland surveying and mapping authorities Anne Cathrine Forstrup and Magnus Gudmunson signed agreements about partnership with execution of projects, financialy supported by financial mechanism EEA.

Figure 6: Agreement about partnership with project FM EGP

SBE

As active member of EuroGeographics The Surveying and Mapping Authority of Republic of Slovenia with its data joins common projects, which are being executed by this association. In February 2013 The Surveying and Mapping Authority of Republic of Slovenia signed an agreement and joined the project State Boundaries of Europe (SBE), which is from 2008 on executed by EuroGeographics. There are already 16 national mapping, cadastral and land registry authorities participating in project. These authorities are sharing its information about state borders to their users in harmonised form and from common entry point. International harmonisation of other spatial data is possible, which was one of the demands of INSPIRE Directive. You can read more about the project on the website of EuroGeographics (www.eurogeographics.org).

ELF

In March 2013 we signed an accession agreement to consortium of project European Local Framework – ELF, which EuroGeographics got on competition, announced by programme ICT/PSP (Competitivenes and Inovation Framework Programme) with European Commision. Goal of project is to ensure common European location framework (ELF), which will be in line with European Interoperability Framework – EIF) and Infrastructure for Spatial Information in Europe – INSPIRE. Various activities are included in project: establishment of interoperability framework, preparation of data, technological infrastructure, license and price policy. With acomplishment of that goal we will enable increase of re-use of official spatial data of public sector on various levels of accuracy, in pilot phase of the projects and later. Application to the project was prepared under patronage of EuroGeographics, which also formed a consortium of 30 members, which includes The Surrveying and Mapping Authority of the Republic of Slovenia (SMA) and Geodetic Institute from Slovenia. Project will last 36 months and is coordinate by Norwegian surveying and mapping authority. Project includes nine working areas (WP) and estimated extent of work is 114 man/month. Value of project – that includes the work of participants – is 12,999,997 €, EU is co-financing 50% of it. Project will result in 48 planned products, modules for control of quality, generalisation and cross-border coordination of data as well as service infrastructure in the cloud. Project started on the 1 of March 2013, opening session was held on the 7 and 8 March 2013 in Frankfurt, SMA was represented by Uroš Mladenovič, M.Sc.

Figure 7: Attendees of intial session of project ELF (foto BKG)

INSPIRE

The Surveying and Mapping Authority of Republic of Slovenia continued in 2013 with fulfillment of obligations for establishment of spatial data infrastructure on base of Law of infrastructure for spatial information and INSPIRE Directive (Directive 2007/2/EC). It worked as a national point of contact. Delegates of SMA attended conference INSPIRE

and meetings of permanent board for INSPIRE, which was established on the base of INSPIRE Directive by European Commission.

Representatives of The Mapping and Surveying Authority of Republic of Slovenia participated with report on INSPIRE conference in Florence in June 2013. Goal of the conference was to study the progress and to exchange the views on how INSPIRE suits past and repeated challenges and needs, how it fulfils the tasks, and how it identifies new oportunities. We would like to find out how can INSPIRE in future develop even bigger effects for society as a whole. INSPIRE conference in Florence was organised with support of JRC and Italian Ministry for the Environment, Protection of Land and Sea. There were more than 400 participants, which in three days of the conference participated on 20 workshops and 40 sections, where they represented more than 150 referates and articles. Five plenaries took place, and for most of the time work was divided on six parallel sections. Workshops covered all the fields, that are connected with execution of INSPIRE Directive. Plenarys, apart from opening speeches, dealt with environment and e-administration, capabilities, inovations and »networking«. Parallel sections dealt with execution of INSPIRE (regional and national level), as well as with data specifications, download services, topical aplications, network services, semantic questions, cross-border coordination, geoportals, open data, e-administration, etc.

Solemn Academy

The Surveying and Mapping Authority of Republic of Slovenia cooperated in organisation of Solemn Academy in celebration of 2nd Day of the European Surveyor and GeoInformation, which took place on the 25 April 2013 in Brdo pri Kranju under patronage of Minister of Infrastructure and Spatial Planning and in organisation of Slovenian Federation of Surveyors. It took place in convention centre Brdo under title »Digital highway to the future«. Council of European Geodetic Surveyors, which unites more than 35 states, recommended that we dedicate Day of the European Surveyor and GeoInformation in 2013 to Italian scientist Galileo Galilei.

Event hosted several guests from Slovenia and foreign countries; among them was the president of CLGE Jean Yves Pirlot. On base of connections of delegates of Slovenian Geodesy on international level we evaluated that records of economival infrastructure and its management is growing in stature in European Union as well as in Balkans. In this area Slovenia is one of the best countries in the world, which represents new opportunities for Slovenian economy and profession. Two directors of surveying authorities also responded to our invitation, Bence Torony from Hungary and Danko Markovinović from Croatia.

Figure 8: Participants of Solemn Academy (Photo: ZGS)

Regional cooperation

On 28 May the surveyors of ex Austro – Ogre countries met for the thirtieth time. This year's meeting was organised by Austria under the patronage of BEV (Bundesamt für Eich- und Vermessungswesen) in Eisenstadt. Czech Republic, Slovakia, Hungary, Slovenia, Croatia and regions Trentino and South Tirol were present on this meeting. Representative of EuroGeographics was also present. Slovenia was represented by Martina Vošnjak and Darja Majcen, both from regional surveying authority Celje. Topics of jubilee meeting were organisational, legal and technical history of land cadastre in the past 30 years and predictions for future five years.

Figure 9: Participants of jubilee 30th meeting of countries and regions of ex Austro – Ogre in Eisenstadt

The Surveying and Mapping Authority of Republic of Slovenia in 2013 continued with cooperation with government surveying services from East Balkan and south east of Europe. Activities were directed towards transfers of good practices from Slovenian surveying and mapping field to other markets and cooperation in bilateral and

multilateral events of other state authorities on real estate, mapping and geoinformation areas. As a part of this we hosted representatives from Banja Luka and Sarajevo and also representatives from Agency for Real Estate Cadastre of Republic of Macedonia.

From the 22 to 26 July 2013 The Surveying and Mapping Authority of Republic of Slovenia hosted representatives of Administration for real estate cadastre of Republic of Macedonia. Visit took place as part of a programme for bilateral technical help TAIEX, which is supported by European Commission.

Figure 10: Representatives of Administration for real estate cadastre of Republic of Macedonia on visit of The Surveying and Mapping Authority of Republic of Slovenia

On the visit of The Surveying and Mapping Authority of Republic of Slovenia we represented to our guests working areas of state surveying service with emphasis on basic surveying system and transformation to new coordinate system, which we are executing in our country. Our guests also visited Geodetic Institute of Slovenia, where they became familiar with operational methods of GNSS stations »SIGNAL«. We also presened them the tasks, connected with maintenace of state borders and the work of mixed commissions for state border. We also visited the example of markation of state borded in the field, we visited IX. and II. border sector on Slovenian – Austrian border.

Figure 11: Guests from Macedonia visiting state border

From 10 to 12 July 2013 delegations from Republic administration for geodetic and property affairs of Republika of Srpska and Federal Bureau for Geodetic and Property Relations of Bosnia and Herzegovina visited The Surveying and Mapping Authority of Republic of Slovenia. Visit was organised as a study visit in project for build-up of human resources, which is executed in Bosnia and Herzegovina (BIH), Swedish government. Representatives from both authorities in BIH in time of their visit came to know the system for mass evaluation and estimated value of real estates, as is functioning in Slovenia. Director of Federal Bureau for Geodetic and Property Relations of Bosnia and Herzegovina from Sarajevo, Željko Obradović, assistant director of the Republic administration for geodetic and property affairs Republic of Srpska from Banja Luka, Marko Kovačevič, and head of Swedish project in BiH, Andja Zimić, met with management of The Surveying and Mapping Authority of Republic of Slovenia.

Figure 12: Guest from BiH visiting management of SMA

We presented to our guests from Bosnia and Herzegovina the field of work of The Surveying and Mapping Authority of Republic of Slovenia and current priorities and activities. In the second part of the meeting we discussed the possibility about future cooperation between institutions, and our guests expressed great interes in strengthening professional technical cooperation in the following three years, as long as project for strengthening of human resources takes place. In its frame they will carry out a series of seminars, workshops, courses and exchanges of examples of good practices. At the end of the meeting we stated an iniciative for execution of round table about establishment and arrangement of private sector in field of geodesy in BiH.

On the sixth regional conference about management of real estates and implementation of INSPIRE Directive, which took place in June 2013 in Belgrade, the representatives of The Surveying and Mapping Authority of Republic of Slovenia cooperated with two referates.

Figure 13: Participants of 6th regional conference in Belgrade from 3 to 4 June 2013 (foto RGZ)

Employees of The Surveying and Mapping Authority of Republic of Slovenia participated in 2013 in bilateral and multilateral events of Ministry of Defence in geospatial field, including with forwarding and exchange of geospatial data, in line with Agreement about cooperation with implementation of geodetic matters of common importance.

Figure 14: Roman Novšak in the middle of presentation of referate in Belgrade (foto RGZ)

State border

The Surveying and Mapping Authority of Republic of Slovenia fulfilled obligations from international treaties on maintenance of state borders with Italy, Austria and Hungary, which are defined in the State Border Control Act. After the amending of state budget we suffered a decrease of finances, so we performed only the most necessary maintenance work with renovation of damaged boundary stones.

Annual session of Mixed Slovenian – Italian commission for state borders took place in Ljubljana between 4 and 5 December 2013. In Slovenian delegation were representatives from The Surveying and Mapping Authority of Republic of Slovenia, representatives from Ministry of Foreign Affairs and Ministry of the Interior of Republic of Slovenia. On this annual session the commission for border discussed the tasks for renovation, markation and maintenance of state border and information about replenishment of new boundary documentation on common state borders. Both delegations revised results of work, performed in 2013, and passed the programme of work, which will be done in 2013 by geodetic professionals of both neighbouring countries. On session of commission the members of the commission were represented the content of work meetings of Mixed professional group, which were held in 2013.

Figure 15: Participants of Slovenian – Italian commission for maintenance of state borders at session in Ljubljana (photo: G. Lobnik)

We carried out the same annual sessions with Hungary on May 2013 in Kormend and with Austria on September 2013 in Kranjska Gora.

WHAT WAS ACCOMPLISHED IN 2013?

3. WHAT WAS ACCOMPLISHED IN 2013 ...

3.1 REVIEW OF THE ACTIVITIES OF THE SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA IN 2013

In the field of **drafting of regulations**, the Surveying and Mapping Authority of the Republic of Slovenia prepared the following act, which was later adopted by the Government of the Republic of Slovenia:

- Programme of work of the national land survey service for 2013 and 2014 (Government of Republic of Slovenia decision No. 35301-1/2013/4 from 13 March 2013),
- Report on the implementation of the programme of work of the national land survey service for 2011 and 2012 in part, that refers to year 2012 (Government of Republic of Slovenia decision No. 35301-2/2013/3 on 18 March 2013),
- Report on providing infrastructure for spatial information in Republic of Slovenia for the period 2010-2012 (Government of Republic of Slovenia decision No. 35300-5/2013/4 on 13 June 2013),
- Decree on cadastral income scale tables determination and lump-sum estimation of income per hive for the year 2014 (Official Gazette of the RS, No. 71/2013),
- Decree on the calculations determination for the cadastral income calculation of land and for lump sum estimation of income per hive (Official Gazette of the RS, No. 71/2013),
- Decree on Real Estate Valuation Indexes Determination (Official Gazette of the RS, No. 79/2013), and
- Decree amending the Decree on the method for registering real estate administrators in the land and building cadastre (Official Gazette of the RS, No. 104/2013).

Moreover, four sets of rules, adopted by the minister of infrastructure and spatial planning, the first two in agreement with the other minister, were prepared:

- Rules on the method of calculating annual real estate price indices and on the method of determining real estate value indices (Official Gazette of the RS, No. 4/2013),
- Rules amending the Rules on keeping the real estate market register and on the method of communication of data (Official Gazette of the RS, No. 51/2013),
- Declaratory decision for the beginning of the application of the adjusted records of the real estate market (Official Gazette of the RS, No. 51/2013), and
- Rules on determiming building plots (Official Gazette of the RS, No. 66/2013).

Three bills have been also prepared, but failed to be adopted for various reasons.

The Surveying and Mapping Authority of the Republic of Slovenia also actively participated in the preparation of regulations by other ministries and state bodies.

In the field of geodesy, topography and cartography, the Geodesy Office performed control of the configuration of fifteen permanent GNSS stations of the SIGNAL network and purchased and upgraded the necessary technical equipment. The operation of the network and the GPS Service at the Geodetic Institute of Slovenia, which monitors the network operation and transmits data to users and the mobile phone network, was ensured. Regular maintenance and service works on geodetic measuring instruments and equipment were performed. Geodethic measurments of high accuracy were carried out on 123 km of leveling lines, GNSS measurements on EUREF points, gravimetric measurements on benchmarks. We also executed measurements for the recording of land underlying a building and we renewed some of the trigonometers of the Ist order. Maintanance of the application for the manadgement of geodetic points and transformations was performed.

In line with Financial mechansim of European economy field for period from 2009 to 2014 (FM EGP) we gained funds for donations for co-financing of the execution of project »Modernization of spatial data infrastructure to reduce risks and impacts of floods«, which will be executed by The Surveying and Mapping Authority of Republic of Slovenia in cooperation with Ministry of Agriculture and Environment and project partners – Norwegian Mapping Authority (Statens kartverk) and National Land Survey of Iceland (Landmælingar Íslands). We executed basic starting activities on project.

A proposition for the Act on georeference system was prepared and a professional, interdepartment coordination was conducted. The resulting matterials were then forwarded to the relevant ministry to be handed over to the Government of the Republic of Slovenia.

We made aerial images for 30% of Slovenia (North-Eastern part), aerotriangulation and digital model of relief, colour ortofoto and infrared ortofoto. We did the quality check on execution of project. In line with standards of EuroGeographics we executed completion of some data layers of EuroRegionalMap (ERM) and EuroGlobalMap (EGM). We renewed public review map of scale 1 : 250,000. We did some work for Commission for standardisation of European geographic names. We captured topography data for 70 sheets of scale 1 : 5,000 and special takst for Ministry of Defence on the field of cartography and topography. 470 studies for registering public infrastructure buildings into the Consolidated Cadastre of Public Infrastructure were forwarded and 497 studies were entered into the Cadastre. Together with Ministry for Education, Science and Sport we executed two tasks: »Informational suppord for management of cadastre of economic public infrastructure« and »Accessibillity of data about accessibillity of broadband internet in Republic of Slovenia«. We succesfully organized the 3rd Conference on the recording of public infrastructure in Slovenia.

In the field of registering real estate, the Real Estate Office and the regional surveying and mapping authorities implemented regular procedures to manage and maintain data from real estate records and activities to improve the quality of data. The envisioned tasks whicht were determined as part of the revised budget were fully implemented.

The planned tasks in the field of managing and maintaining data on the state borders with Italy, Austria and Hungary as determined by intergovernmental commissions were implemented. Minor measurements of border posts and regular periodical control of border stones were carried out, and border documentation for individual sectors on the state border was drafted.

It was ensured that current operations in the field of information support for the functioning of real estate registers – management and maintenance of real estate registers – run smoothly.

In the field of renovation and creation of new informational solution we started drafting public tender for full informational renovation, we implemented a tender for first phase of the task – creation of graphic module of land cadastre and some minor replenishments in the field of graphic data.

For improvement of data we implemented locational improvement of data of land cadastre in field of permanent plantations and two municipalities. We implemented many coordinated tasks for organisation and cleansing of data about land cadastre reference points in whole area of Slovenia. We digitalised more than 4 milions of documents of archive of land cadastre and established system for recording and use of these data.

In the field of mass real estate valuation, the Mass Real Estate Valuation Office operatively implemented the tasks of general real estate valuation under the Real Property Mass Appraisal Act – ZMVN (Official Gazette of the Republic of Slovenia, Nos. 50/2006, 87/2011 and 40/2012 – ZUJF). We emphasised preparation of models for mass evaluation as a means to implemen the Real Property Tax Act. For that purpose we executed adjustments to evaluation models based on price changes on the real estate market, mostly in form of calculating the price tendencies for specific real estates, and thus generaly lowering real estate prices for specific real estates in specific areas in the country. The Information system for real estate market records was upgradet in a way that enables systematical recording of all the purchases of real estates, which are subject of taxation with taxes on real estates transactions and Added value tax, and also recording of rental business for whole buildings as well as parts of buildings.

We managed and maintained a production and distribution environment of the public records of the real estate market, which provides good groundwork for improvements in the clarity of the real estate market in the Republic of Slovenia. We reviewed and processed real estate sales for the means of modeling the real estate market in Republic of Slovenia and for calculating the value indexes for individual models of evaluation of real estates. In substantive and informational – technological sense we mainatined and upgraded the system for general evaluation of real estate. We made analysis and calculations on which the government of Republic of Slovenia determined value indexes for real estate. With those indexes they adjusted the calculated values of real estate to to those on the market at the start of the year 2013. In line with the Real estate valuation models determination decree (Official Gazette of the RS, No. 95/2011) an the Decree on

Real Estate Valuation Indexes Determination (Official Gazzete of the RS, No. 79/2013) we established and maintained application for postscripts of the value of real estate, and based on this information all the real estate, recorded in the real estate register, were given general market values based on changed data of real estate. Models for evaluation of real estate and value indexes of real estate were managed and made avaliable to the public through the internet in form of real estate value collections. Analysis of the real estate market shows us a minor decrease of sales in the real estate market, but they do not show a major drop of real estate prices. The Detailed state of developments in the real estate market will be empirically outlined in the annual report about the real estate market for the year 2013, which will be published in august 2014. In the period of the implementation of the Real Property Tax Act it was determined, that the processes for defining the models of evaluation of real esatate in conection with the processes of taxation of real estate, determined in the Real Property Tax Act - which was put on hold by the Constitutional Court of Republic of Slovenia, is a prolonged and financially irrational process, and so the holder of both laws – Ministry of Finance – will have to present new guidelines in when implementing the Real Property Tax Act in 2014, as was directed by the Constitutional Court. The new period for implementation of the act is longer and so it is neccesary that the communication with the public is broader and more professional.

In the field of issuing data The Surveying and Mapping Authority of Republic of Slovenia guaranteed the users access to geodetic data through the electronic ways with the system of distribution and in classic form on information windows on all the locations of The Surveying and Mapping Authority of Republic of Slovenia.

We carried out activities for informing of users and broader public about data and services, we prepared bilingual Annual report (report about work of The Surveying and Mapping Authority of Republic of Slovenia) for year 2012, funds for implementation of concession for management of GEOSS were guaranteed.

The Surveying and Mapping Authority of Republic of Slovenia in 2013 continued with activities for establishment of common informational structure on the base of Infrastructure for Spatial Information Act – ZIPI (The Official Gazette of RS, No. 8/2010).

In the field of informational technology we guaranteed adequate informational conditions for operation of informational systems.

3.2 IMPORTANT ACTIVITIES OF THE MAIN OFFICE

Electronic Access to Data

The Surveying and Mapping Authority of the Republic of Slovenia established a computer-supported distribution system for the purposes of accessing data online. It is based at the Ministry of Foreign Affairs as part of the national information system. It provides access to data in various ways. Almost all the databases are included in the

distribution environment: the Land Cadastre, the Building Cadastre,the Real Estate Register, the Register of Spatial Units with Addresses, the Register of Geographical Names, geodetic points, the Real Estate Market Record, the Consolidated Cadastre of Public Infrastructure, as well as the vector and raster topographic data. They are updated daily. Secure and controlled access to personal data is also ensured, and individual solutions, developed jointly with e-administration, are used. The distribution system is separated from the production data, and as such is as independent as possible of the systems and changes in production, of the organisation of data suppliers and changes in the manner of administration and data updating. Through the creation and use of special interfaces, online services and user applications, it enables the simple, secure and correct use of geodetic data.

The Surveying and Mapping Authority of the Republic of Slovenia provides its users with electronic access to online data in two ways:

- access to data, and
- distribution of data (data transfer to the user's system).

Metadata for all data is regularly managed and updated. **Metadata** enables search by data, provider and area of preparation. Metadata contains descriptions of data characteristics, data accuracy, the method and frequency of database updating, etc.

Metadata is available at http://prostor3.gov.si/cepp/ or, when needed in English, at http://prostor3.gov.si/cepp_ang/.

Metadata as well as other information, services and applications relating to geodetic and real estate data are available to users online at the **Prostor portal** at http://e-prostor.gov.si.

Figure 16: Prostor online portal

Access to Geodetic Data

- **A map browser** enables all users to search for a location and a display of this location on the selected cartographic basis (orthophoto, a basic topographic plan, national topographic maps, etc.) free of charge. It is possible to search a location in two ways: using an address or a geographical name. This, for example, makes it possible to obtain an image and a location of a building on an orthophoto map by supplying its address. This service is available at http://prostor3.gov.si/iokno/iokno.jsp.

Figure 17: Location search and display of orthophoto

- **Public access to real estate data** is a free online service that enables users access to descriptive and graphic data from the Land Cadastre, the Building Cadastre, the Real Estate Register, the Register of Spatial Units and the Consolidated Cadastre of Public Infrastructure. Since December 2011, public access to real estate data offers generalised market values of real estate that were determined using the procedures and methods of mass real estate valuation. In September 2013 we added cadastre income for current year, coefficient of forests growth, openness of forest, special regimes for farming and production area to the public insight into data on real estates.

  Data on real estate is available to the public at http://prostor3.gov.si/javni/.

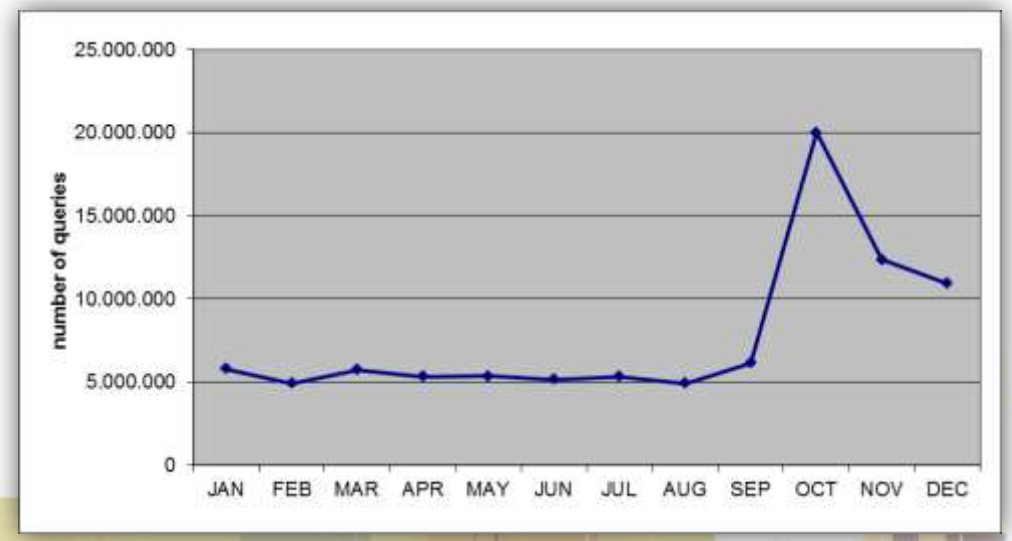

Diagram 3: Number of public access inquiries by month

Increase of the number of queries in October 2013 was consequence of publishment of indexed general real estate market values, which were determined with processes and methods of mass evaluation of real estates.

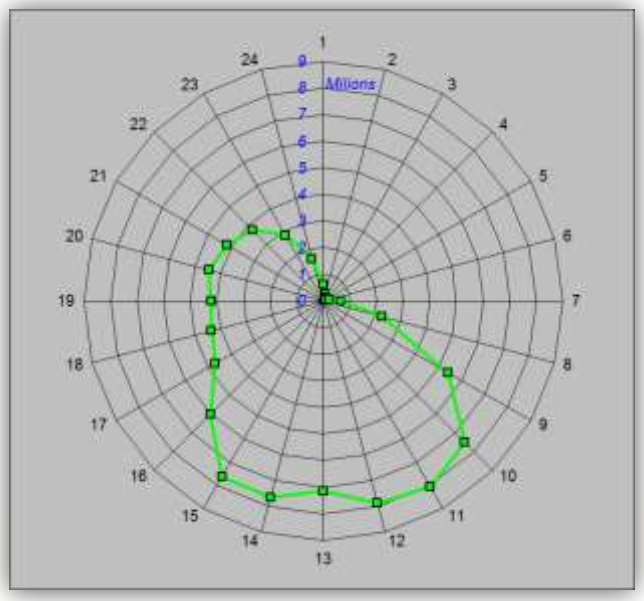

Diagram 4: Number of public access inquiries by hour

- **Personal insight into data about real estates** enables the individual free insight into graphic and descriptive data on real estates, which he/she owns and are managed in our evidences. The Surveying and Mapping Authority of Republic of Slovenia in September 2013 established renovated personal insight into data about real estates with upgraded contents, which enables the owners of real estates, that they through access with web digital certificate SIGOV-CA or SIGEN-CA simply review at which parcels and/or buildings are in land cadastre or cadstre of buildings written as owners. Data about cadastre income for current and following year are also available. With personal insight into data about real estates owners can chech correctness of data and they can, if they found same incorrect data, go to the nearest unit of The Surveying and Mapping Authority of Republic of Slovenia (http://e-prostor.gov.si).

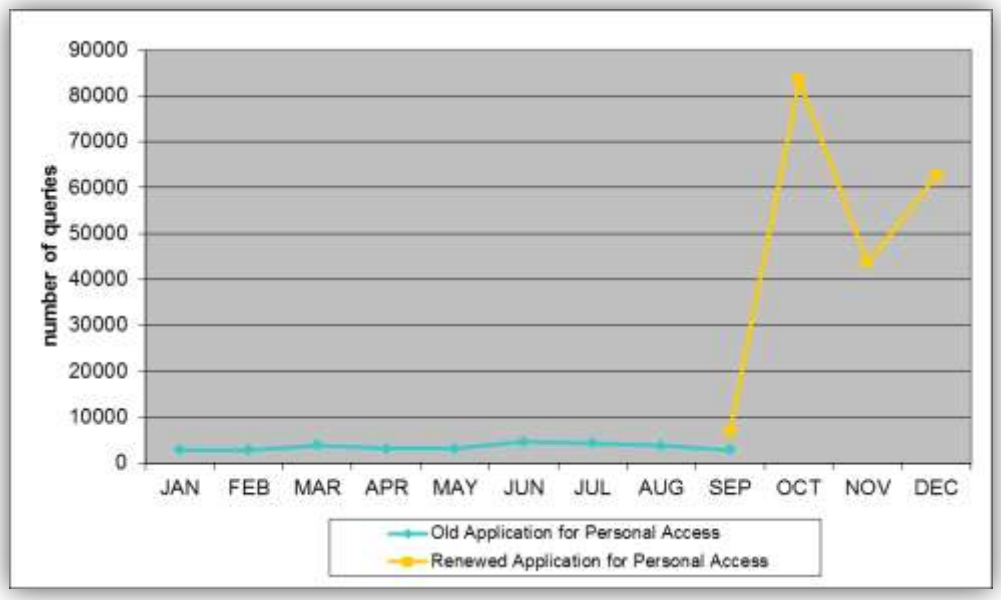

Diagram 5: Number of personal access inquiries by month

Number of personal access inquiries also jumped in October, which is the consequence of publishment of new insight with the option of insight into cadastre income for current and following year.

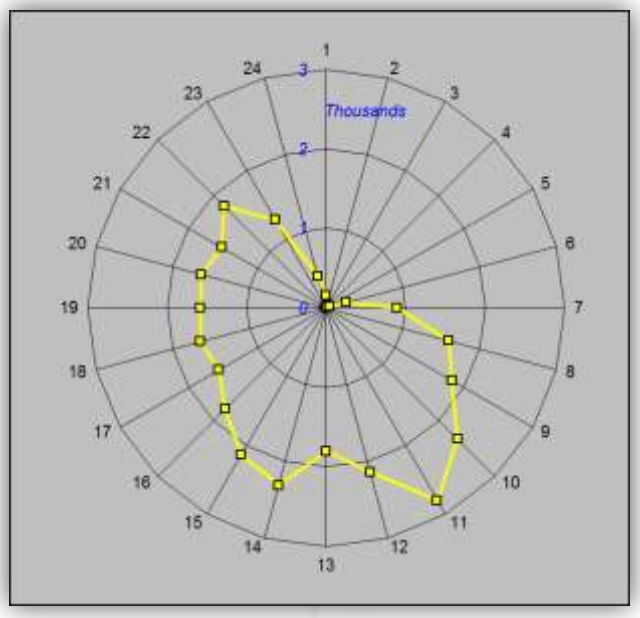

Diagram 6: Number of personal access inquiries by hour

- **Access to real estate data for registered users** (http://e-prostor.gov.si) enables access to all geodetic data in the multi-purpose, user-adapted distribution system. This service of access to geodetic data enables browsing by

attributes and graphics in all databases that are included in the system: the Land Cadastre, the Building Cadastre, the Real Estate Register, the Register of Spatial Units, the Consolidated Cadastre of Public Infrastructure, the Real Estate Market Record, and the Register of geographical names and geodetic points. In addition to searching for data, the graphic section of the browser also offers the user all standard spatial functions (navigation, maximising, minimising, shifting, choice of scale, distance measurements, choice of image quality, facility selection, etc.).

The browser also displays the selected data in graphic form and, depending on the level of detail of the information displayed, it is possible to select an appropriate cartographic basis (orthophoto, basic topographic plan, topographic map, etc.) for such a display (e.g. plot boundaries). This service of access for registered users is intended primarily for users in public administration (state and local level), commercial users (real estate agents, lawyers, insurance companies, banks, etc.) and land survey service providers.

In October 2013 records of real estate markets were withdrawn.

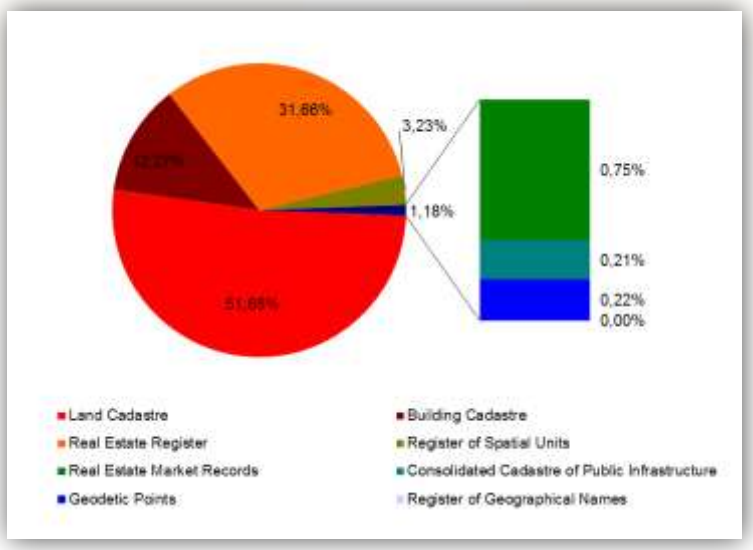

Diagram 7: Share of queries by type of data

For users with the right to search by owner in November 2013 we changed in the tab named Land cadastre the existing insights (owner lists and land parcels owned by a specific person) with new ones:

- List of plots owned by owner with data about valid and future cadastre income for plot and share of ownership, with option of acquiring copy of the list;
- Consolidated data on actual use and the cadastral income;
- Consolidated data on actual use and the ratings classes.

A total of 4,445 registered users from 859 organisations made data inquiries in 2013.

The ‘Access to real estate data for registered users’ service is also intended for all bodies that, in addition to the Surveying and Mapping Authority, are permitted by law to issue certificates from **geodetic databases** (state bodies, notaries and geodetic companies performing geodetic activities).

In 2013, 200,229 certificates from geodetic databases were issued, together with 103,768 plot outlines – unofficial certificates.

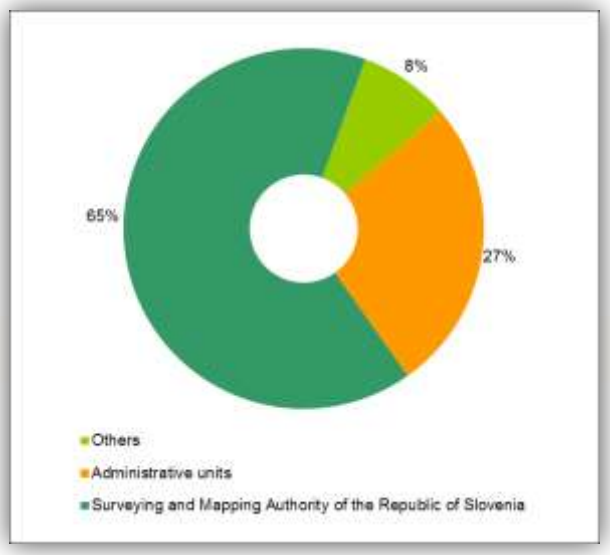

Diagram 8: Share of issued certificates from geodetic databases by body

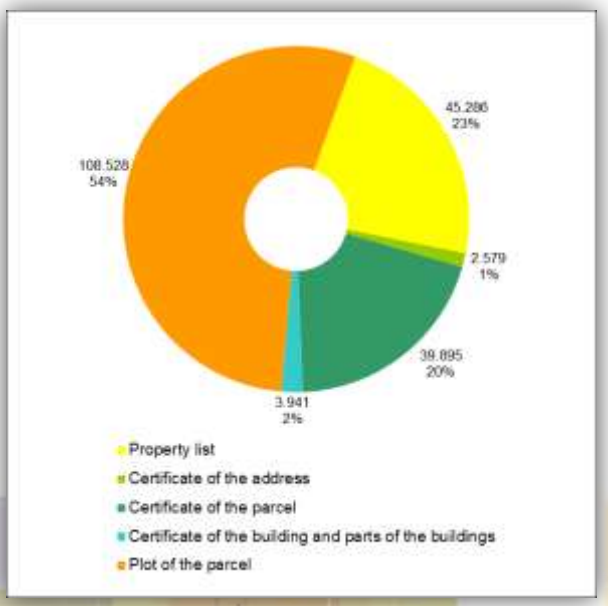

Diagram 9: Quantity and share of issued certificates from geodetic databases by type of certificate

Distribution of Geodetic Data

The distribution of geodetic data is intended for registered users. It is possible with special online services which enable secure and controlled access to make transfers from the distribution system to the user's system. Based on requests from the user, the distribution system creates standardised files, which the users then copy to their system.

The online services that the Surveying and Mapping Authority of the Republic of Slovenia began developing in 2006 are in compliance with the recommendations of OGC (Open Geospatial Consortium). Online services enable access to digital data in accordance with the standards and recommendations pertaining to the field of geographical information systems and online services, taking into consideration the standards of SIST (Slovenian Institute for Standardisation), CEN (European Committee for Standardisation) and ISO (International Organisation for Standardisation), as well as recommendations made by OGC and W3C (World Wide Web Consortium).

In the initial phase, the Surveying and Mapping Authority of the Republic of Slovenia developed a WFS type (Web Feature Service) online service for the majority of the data provided to users. The basic web services are developed for the Land Cadastre, the Building Cadastre, the Register of Spatial Units with House Numbers, the Consolidated Cadastre of Public Infrastructure and the Real Estate Market Register. Simultaneously with the development of web services, the Surveying and Mapping Authority of the Republic of Slovenia also defined the basic interoperability framework based on the XML and GML data exchange format.

The practical use of web services began in the last quarter of 2006, when the larger partners within the public administration (both at state and local level) started using these services to update and manage important national and local registers and records.

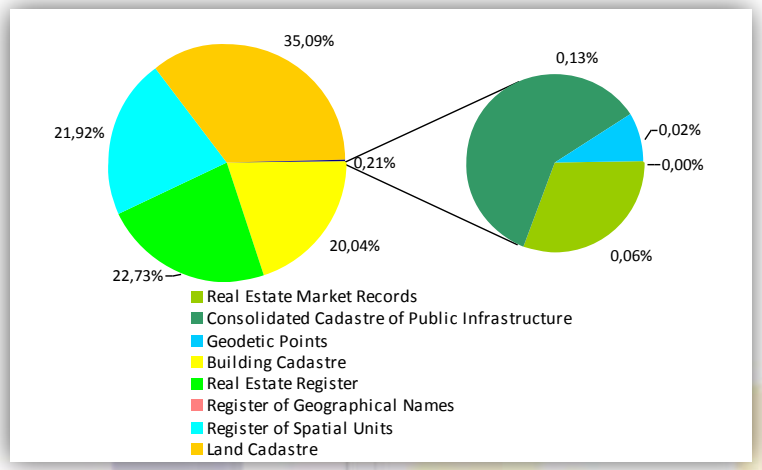

Diagram 10: Number of queries by type of interface

We are also planning to provide these online services to users outside the public administration and also to develop WMS web services.

3.3 IMPORTANT ACTIVITIES OF THE REAL ESTATE OFFICE

Land Cadastre, Building Cadastre and Real Estate Register

In 2013 we focused our attention in the field of Real Estate Register on **upgrade of data on buildings and parts of buildings and parcels**.

In the field of Land Cadastre The Surveying and Mapping Authority of Republic of Slovenia implemented a project for upgrade of locational data of land cadastre. Implementation was divided in two parts, which differed on areas of upgrade. First part – workplaces 1, 2 and 3 – captured only areas of permanent plantations, which means that the areas of upgrade were small and partitoned ower 1,510 cadastre areas in Slovenia. Almost all regional surveying administrations and surveying offices cooperated. In this part we upgraded 256,292 parcels. The other part (workplace 4) captured the area of political municipalities Jesenice and Škofja Loka, which unites 35 cadastre areas. 57,984 parcels were upgraded.

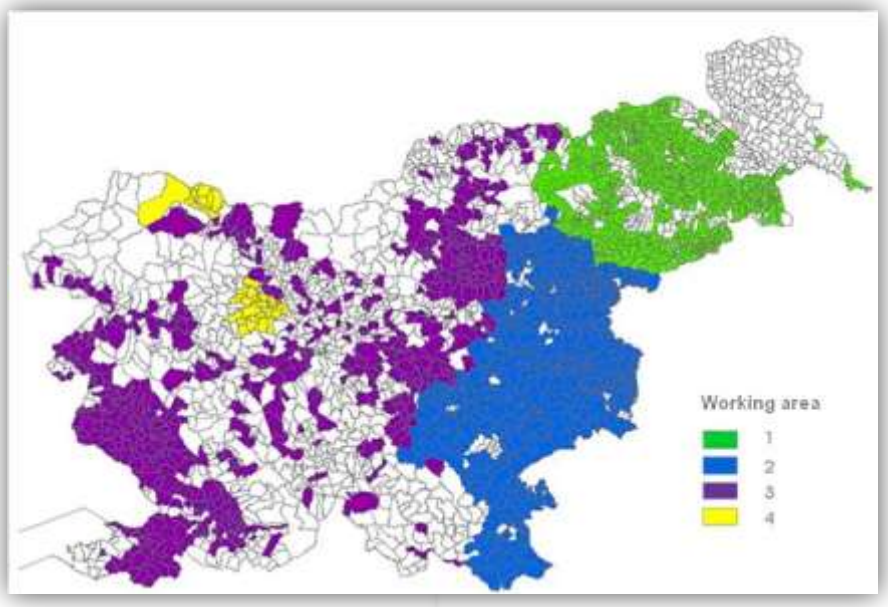

Figure 18: Display of compounds (working areas) of improvement

Beacause of the range of work and short deadlines the project represented big logistical task for The Surveying and Mapping Authority of Republic of Slovenia as well as for the contractors. Central management of land cadastre could ease the publication and reception of data. Implementation was complicated because of the regular mistakes in

data of surveying and mapping authority. We also replenished the rules of implementation with newly acquired experiences and in cooperation with the contractors.

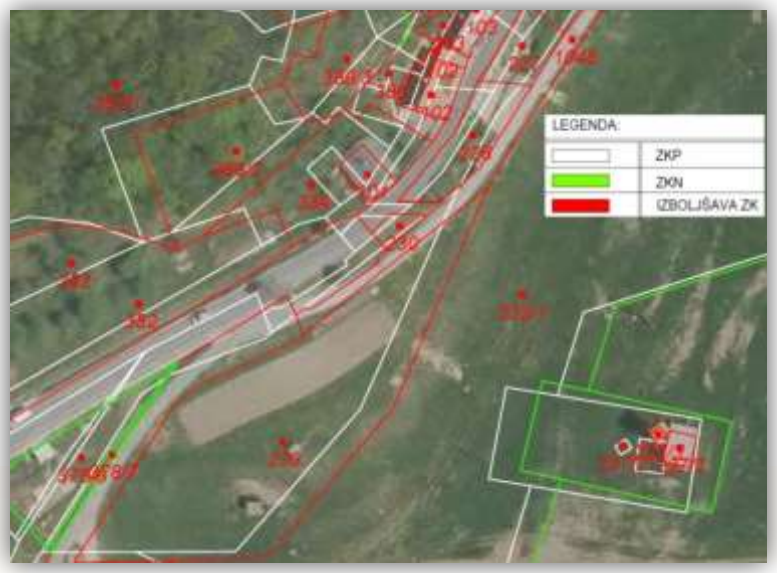

Figure 19: Display of the state of land cadastre before and after the upgrade

Upgrade was implemented mainly with translation and rotation, in some cases also with transformation on the base of measured data and identic dots on DOF. Upper picture displays upgrade of locational data in KO 2035 Škofja Loka – integration of data of land cadastre display on measured data (green lines).

In frame of the task, beside upgrades in the field of permanent plantations, we found out various disharmonies between data in areas, which were not directly included in locational data upgrade. We therefore in the second half of 2013 carried out extensive analysis and harmonization of data, which included:

- harmonization of land cadastre points in all other cadastre areas,
- harmonization of topological disharmonies on the borders of cadastre areas and on the borders of different parts of cadastre areas, and
- chech of unsuitably recorder elaborates with arrangement of coordinates, which were recorderd in different coordinate systems.

With performed activities and harmonization of data the maintenance of data is a lot easier. On the base of previous experiences we prepared recommendations for work and small replenishments of programming solutions for management of data, which eliminate or at least fundamentally diminish the possibility of repeated disharmonies with regular mainetenance of data.

For regular business data from archives are very important. The Surveying and Mapping Authority of Republic of Slovenia manages and maintains archive of all elaborates of geodetic services. Besides elaborates, which are available only in analog form, the users can also access elaborates for the field of land cadastre in digital form. Because of the large range of data there are currently half of elaborates of land cadastre available in digital form, but elaborates from cadastre of building are still available only in analog form.

In 2013 in the field of capturing the data and establishment of the system for management and maintenance of archived data of land cadastre we made a big step towards the final goal, which is management and maintenance of all elaborates of geodetic services in digital form and in line with current legislation also accessibility of elaborates of geodetic services through the internet.

In the field of capturing the data we digitalized (scanned) 256,579 elaborates of land cadastre in 1,156 cadastre areas. Furthermore we updated technical conditions and concept of digitalization of elaborates of land cadastre in line with ISO standard for long term storage of data, we established central station of digital elaborates and we made an application for creation and management of digital elaborate. All digital elaborates of land cadastre and all elaborates, captured in 2013, were transferred to central station of digital elaborates.

The Surveying and Mapping Authority from the middle of 2013 on the base of changes in the Law about cadastre income in land cadastre manages and maintaines the following new data: areas of special regimes for agriculture, production areas and besides basic agriculture actual use also detailed actual use of the lands for farming lands under permanent plantations.

In 2013 we introduced daily maintenance of data about actual use of lands in land cadastre on the base of carried out graphical sections of data of Ministry for Agriculture and Environment and graphical data of land cadastre. We update graphical display of areas with the same benefits, so the data about benefits for new parcels are determined on the base of carried out graphical sections of layers of areas of the same bnefits and graphical data of land cadaster.

For the means of graphical sections of data of land castre with other graphical layers (actual use, benefits of the land, areas of special regimes for agriculture) we made special graphical layer on the base of data about land cadastre reference points, determined in various procedures of maintenance of data of land castre on the request from owners (procedures for arrangement of borders, parcelling, new measurements, land consolidation, …) and in procedures for improvement of locational data of land cadastre. New graphical layer is not continuous – it is made only for parcels, which have all land cadastre reference points determined.

In the field of cadastre of building and register of real estates we carried out several activities for simplification of management of data and upgrade of quality of data about

buildings and parts of buildings. We update minimal registration of building and pars of building in a way, that the process requires the recording of additional data, which in the register of real estate enable immediate calculation of the value of real estate. Prepared and implemented were new formats for exchange of files and changes of code register of actual use for parts of buildings were implemented.

We introduced new informations "number of apartments" and "number of business areas in the building" and also added data about calculated part of ownership, when it is not determined beforehand.

With recording of data about buildings and parts of building was with optic recognition of digital ortofoto created automatic identification of new and changed buildings, which in the cadastre of buildings or register of real estates are not yet recorder or are, basing on the state of outline in the cadastre of buildings, changed. With the implementation of this method we gained data about locations of buildings for the municipalties Slovenj Gradec, Maribor, Velenje, Ptuj, Celje and wider areas of Murska Sobota, Celje, Maribor and Slovenj Gradec. These data were with help from field inspections of regional geodetic offices used for recording of buildings and parts of buildings in the register of real estates.

Additional collection of new or not yet recorded buildings was carried out in the frame of field identification, chech up and creation of maps DTK5, which was executed by co-workers of Office for geodesy.

For the area of approximately two thirds of Slovenia (DOF area – 2011 and 2012) was on the common tracings of DOF and data from cadastre of buildings (ground plan of building or centroid of building) performed visual review of new or not yet recorded buildings. Regional geodetic offices carried out field identification for not yet recorded buildings. For every recorded building they filled a questionnaire (gained minimal data, which are necessary for calculation of real estate value), input of data in the cadastre of buildings and register of real estates and, if needed, they sent filled questionnaires to owners for replenishment or as an appeal for the building to be registrated in the cadastre of buildings. They recorded approximately 25,000 new buildings.

In 2013 we continued activities of reporting of the owners to Geodetic Inspection because of the not yet recorded buildings in the cadastre of buildings or because owners did not pass the data into the register of real estates. 271 reports regarding unregistered buildings in the bulding cadaster were submitted to Geodetic Inspection and 32 reports for not forwarding the qustionnaires of the real estate register.

Some statistics:

On the 31 December 2013 was in the cadastre of buildings 1,170,130 buildings, 88,381 were registered in cadastre.

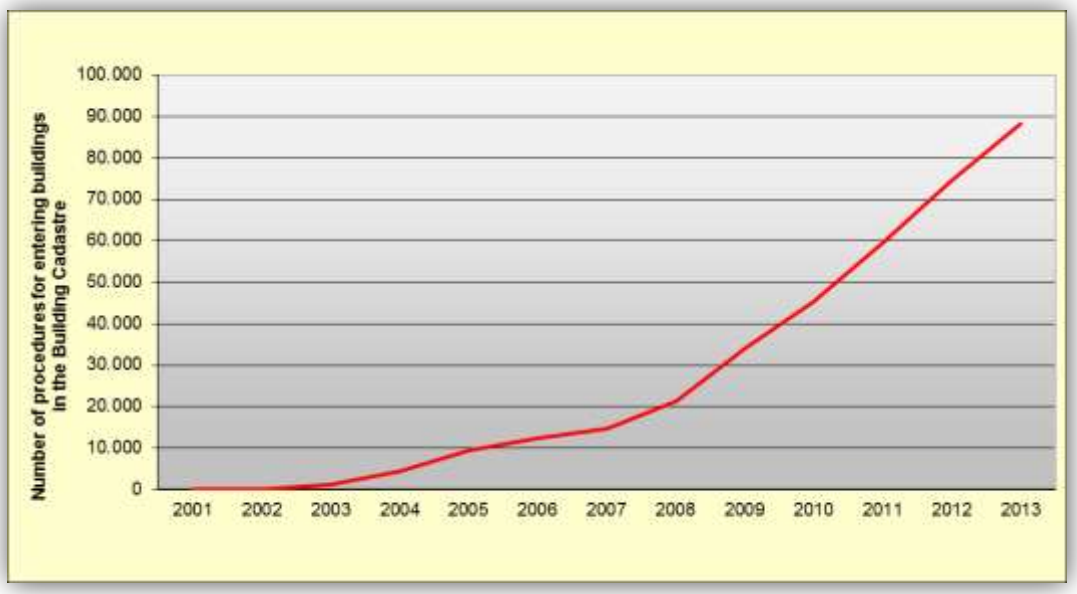

Diagram 11: Number of cadastre registrations through the years

On the 31 December 2013 there were 1,832,752 parts of buildings registered in the buidlings cadastre, 561,564 of them were registrated in the cadastre and in according with ZPPLPS.

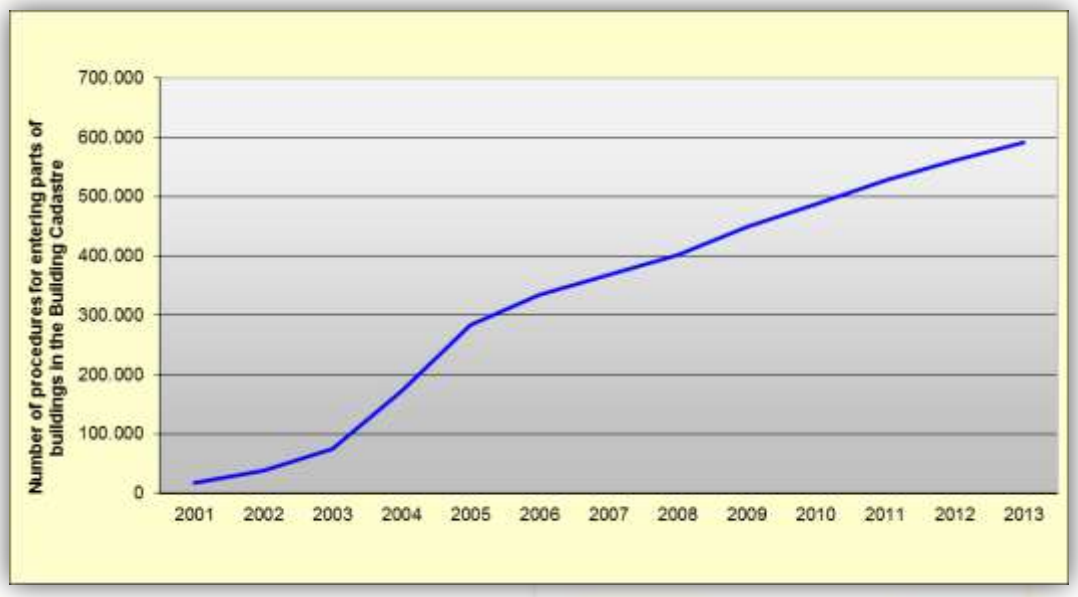

Diagram 12: Number of cadastre registrations of parts of buildings through the years

Number of cadastre registrations in 2013: 13,332.

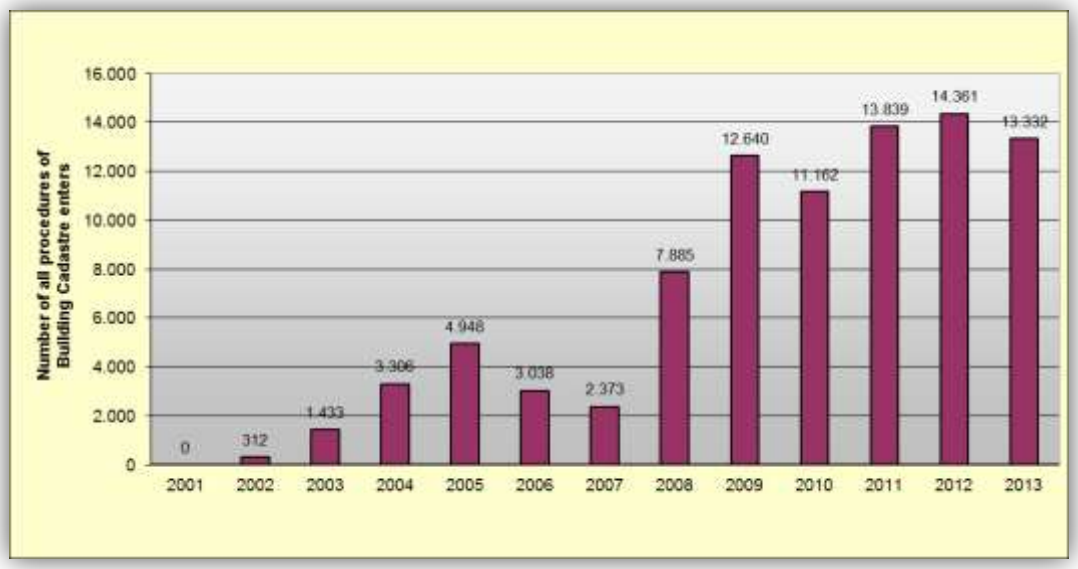

Diagram 13: Number of procedures for entering buildings in the Building Cadastre by year

In the field of real estates register the activities were mainly connected with taxation of real estates. With the passing of Real estate tax act The Surveying and Mapping Authority of Republic of Slovenia were trusted with the tasks of establishment, management and maintenance of new data, which had to be in very short time frame recorded in real estates register. Consequently we had to replenish and change the existing software for support of all new predicted data and services.

In the frame of processing and harmonization of data The Surveying and Mapping Authority of Republic of Slovenia in 2013 succesfully controlled the quality of data of the real estates register, mostly:

- suppression of errors and imperfections, found out at recording of new and changed data on real estates, which demand special procedures – 28,975 parcels and 2,157 buildings;
- review of data and elimination of imperfections for parts of buildings and parcels, with which in the real estate register the owner is registered as "unknown person" or the owner is not registered with a legitament an unique personal identification number (PIN) or unique business identification number (BIN) (registered with fictitious PIN or BIN), are current place of living of the owner is unknown – 67,181 real estates;
- review of data and elimination of imperfections for real estates, which value is not calculated – 23,802 real estates;
- review of data and elimination of imperfections for parts of buildings, of which the determined usable area is zero, but on the address (house number or number of apartment) persons have registrated their residence – 815 buildings;
- variability of data KS – REN – 4,290 corrections;

- review of completeness of records of buildings – review on ortophoto – 728 sheets of ortophoto and 15,533 buildings;
- field review – determination of completeness and correctness of records of buildings – 20,781 buildings;
- elimination of other errors and imperfections, which cause trouble with regular work or use of data – 28,152 buildings.

With the means of improvement of data about managers of real estates with announced taxation of real estates The Surveying and Mapping Authority of Republic of Slovenia at the end of the year 2013 on the base of the agreement of Government of Republic of Slovenia from the 12 December 2013 prepared methodology for registration of temporary managers of real estates, owned by Republic of Slovenia, of which manager is not yet recorded. We registered the managers on 85,260 parcels and 22,995 pars of buildings and lately performed all necessary communication with managers and harmonization of proposals for temporary registration.

Changes were made to the Decree on the method for registering real estate administrators in the land and building cadaster (change in ther Official Gazette of the RS, No. 104/2013, from the 13 December 2013), whose essential content is, that removal of the last manager is possible only with proposal for new manager.

In frame of exchange of data between cadastres (land cadastre and building cadastre) and land register we, at the start of 2013, changed to electronic communication of proposals for changes of the identificatiors of real estates into land register.

Propositions for implementing changes to the identifiers of real estate for parcels as well as for parts of buildings are prepared with the help of software packages Devo Servis and CB Stavbe. at the end of administrative procedures for parcel division and the division or unification of parts of buildings. These propositions are made at the conclusion of administrative procedures of parceling and division or unification of parts of buildings.

Changes of identificators of real estates because of the change of numbering, harmonization of identificators between land register and building cadastre and harmonization of data between records – registrations end removals of parcels, are still proposed through the portal of the land register eZK.

On intranet portal of The Surveying and Mapping Authority of Republic of Slovenia we made a viewer of all proposed changes to identificators, with which all employees can track the implementation of the registration carried out changes to indentifiers in the land register - eZK.

On intranet portal of The Surveying and Mapping Authority of Republic of Slovenia are in various documents published technical instructions and instructions about content for correct preparation of proposals with help of software packages and basic statistic data.

With electronic messaging of proposals for changes of identificatiors of real estats into land register the procedures became faster and easier to understand.

Electronic exchange of data between land register and The Surveying and Mapping Authority of Republic of Slovenia (ownership entries on the base of land register resolutions) was not finished in 2013. The only change was in form of pdf messaging rather than in paper form.

State border

With maintenance of state border we executed the work, determined by interstate commissions:

On Austrian border we performed field periodical control of XI. border sector (reviewed and renovated 300 boundary stones, 15.3 km). In office we finished new documentation for XXth and XXIst border sectors.

On Italian border we performed field GPS measures of dry walls in IIIrd and VIth boarder sectors. We renovated 6 boundary stones and set two new boundary stones – plates on the bridge across Učja and chiseled onto two boundary stones the distance to border line. We determined altitude to boundary point 8a in the tunnel under Mangart and performed test sketch of border line on roadway on past border crossings Šempeter and Solkan.

Figure 20: The experimental traicing of a border line on roadway on the former border crossing Šempeter

Figure 21: The experimental traicing of a border line on roadway on the former border crossing Solkan

In office we filled up a draft of technical documentation for all unmarked breaking points on whole border line with Italy.

We did not perform any field work on Hungarian border in 2013, but we made a document "Replenishments and corrections 2013" in the office, which was made after the finish of periodical control (after two years of maintenance and renovation of boundary stones on the field).

We did not do any cleaning of the vegetation on any border, because of the lack of budget founds. Visibility and recognisabillity of state border in the nature has to be done

according to international treaties with neighbouring states. We have problems on the field with control measurements because we did not do any cleaning for six years.

In 2013 we cooperated with Ministry of Foreign Affairs for determination of state border with Croatia and we offered them professional help with preparation of evidences for arbitration.

Arrears and coordination of OGU work

In 2013 we started special programme for elimination of arrears for administration taks, in which regional surveying and mapping authorities cooperated with solving of administration taks by the inflow of requests on individual location. OGUs Celje, Nova Gorica, Kranj and Sevnica helped OGU Ljubljana; OGUs Murska Sobota and Slovenj Gradec helped OGU Maribor; OGU Celje helped OGU Ptuj.

Trend of decreasing of arrears was succesfull in first half of 2013, but with preparation for implementation of Real estate tax act this trend stopped at the end of the year.

In diagram Decrease of unsolved requests and arrears the number of arrears, outlined in the table, is smaller than the number of unsolved requests, because some of the unsolved requests, which are in phase of waiting for legal effects or in phase of issuing orders, does not count as arrears.

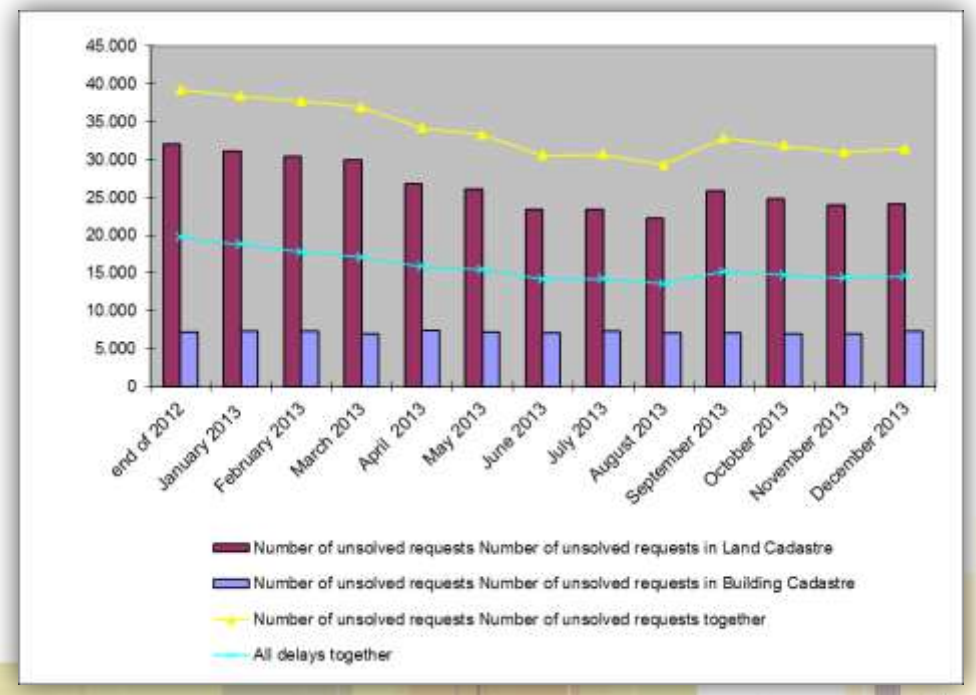

Diagram 14: Decrease of unsolved requests and arrears

Training of Geodesists with a Geodetic Permit and Employees of the Surveying and Mapping Authority

As regards the mandatory training of geodesists holding a geodetic permit, whose organisation and implementation was transferred to the jurisdiction of the Slovenian Chamber of Engineers in accordance with the provisions of the Land Survey Service Act – ZGeoD-1, the Surveying and Mapping Authority participated in the preparation of the training programme. Representatives of the Authority also participated as lecturers in individual training sessions on real estate registration.

3.4 IMPORTANT ACTIVITIES OF THE MASS REAL ESTATE VALUATION OFFICE

Mass real estate valuation is in Slovenia relatively new systemic field, which is connected to real estates and their value and as such affects the decisions and work of practicaly every state authority, municipalities, owners and users of real estates as well as other business subjects and citizens. Public data about market values of real estates ensure visibility of real estate market and are one of basic elements of real estate system of every developed market-oriented economy. These data represent important information for every participant on real estate market and in Slovenia they put management of real estates into whole new perspective. System for mass valuation is multi-user designed. Data about generalized market values are important for whole array of other areas, such as assessment of wealth for social transfers, assessment of loan risks of real estate portfolio, assessment of economy of interventions into space and so on. System of mass valuation establishes a base for methodological upgrade for various means, and so it represents an important reference base for procedures and activites, related to real estates.

In line with legislation the main task of Mass Valuation Office of Real Estates is determination of market values of Slovenian real estates and systematic monitoring of Slovenian real estate market and formation of models fo real estates valuation. Models of real estates valuation define the influence of features of real estates on value of real estates. They are managed in collection of real estates valuation. It is determined by law, that models of real estates valuation are checked (basing on supply and demand) at least every four years. In the mean time changes between supply and demand ration on the real estates market are being coordinated through indexes of real estate value.

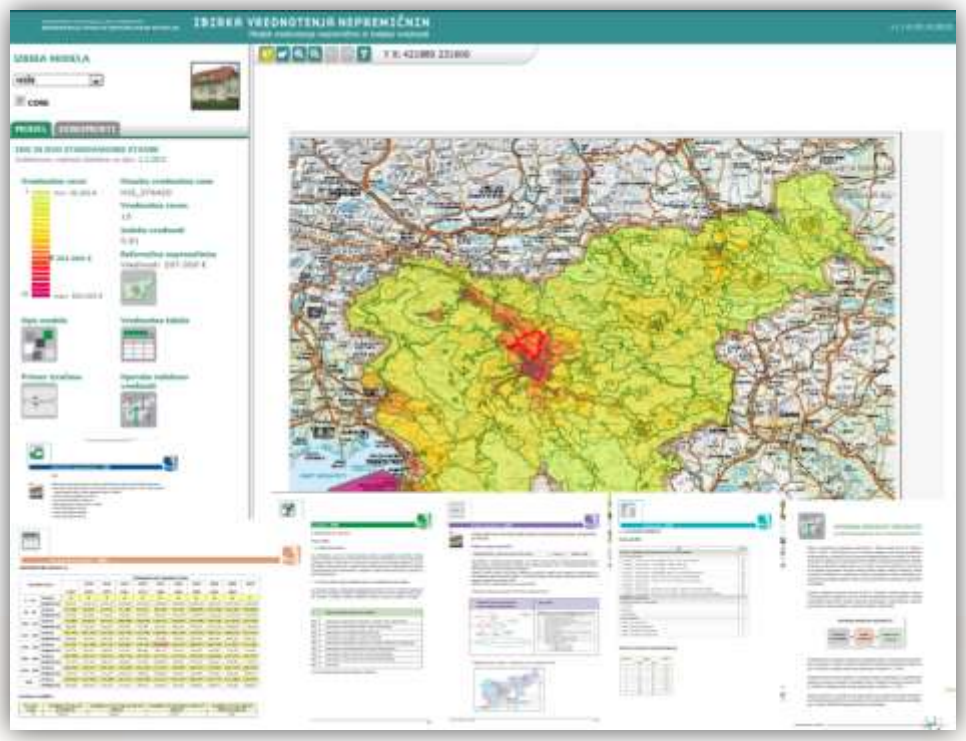

Figure 22: Public insight into collection of real estates valuation

First calculation of generalized real estate market values on base of models of real estate valuation and data about real estates from real estates register was performed in 2011. All real estates, recorded in the real estate register, were given generalized market value. System of real estates mass valuation was finally introduced in practice. It was used for various public purposes, determined by law. First important use of generalized market values was in the field of social transfers for determination of welfare and in the field of taxes for determination of taxable base for taxes on trades with real estates. In 2012 and 2013 the data about generalized market values were used for taxation of real estates with higher values and with determination of taxes on profit because of the change in purpose of the lands.

Most important systemic source of data for real estates mass valuation is real estate market record. This is a collection of data about legal business with real estates, which is managed by The Surveying and Mapping Authority of Republic of Slovenia from 2007 onwards. Cheched and improved data of real estates market record are base for models of real estates mass valuation and analysis of real estate market, on which regular periodical reports about Slovenian real estates market are based. Those reports are prepared by Mass Valuation Office.

In 2013 the Office prepared annual report abou Slovenian real estates market for 2012, which was published at the end of March, and report for the first half of the year 2013, which was published in September.

Figure 23: Reports on the real estate market in Slovenia

With the 1 July new legal regulation for forwarding data into the real estate market record came into effect that stipulates new liable persons to report about purchase transactions and rental agreemements. According to the new regulation besides The Tax Administration of the RS, which must report about purchase transactions for which real estate transfer tax was calculated, liable persons are also the salesman of purchase transactions for which additional value tax was calculated and landlord of buildings and parts of buildings, which are being rented. Such an organization ensures a more complete capturing of data regarding purchase transactions, which are subject to additional value tax, and rental agreements with buisness and housing real estate.

In line with introduction of new order of reporting was in the first half of 2013 carried out adjustment of informational system of real estates market record, which enabled new liable persons reporting into real estates market record through internet application.

In October we carried out first indexation of real estate value in line with regulations. Real estates, which value from first generalized valuation changed for at least 10 percent, were given new indexed value in the real estates register. Generalized real estates market values of other real estates remained unchanged in real estate register. Values did not increase for any type of real estate, in any area.

Law on determination of cadastre income, which was passed, delegated the determination of cadastre income (KD) to The Surveying and Mapping Authority of Republic of Slovenia. Mass Valuation Office was actively preparing the capture of data

about agriculture production from the middle of 2012 and developed a system for calculation of KD. Draft of calculations and scales of KD was created in cooperation with Biotechnical Faculty on University of Ljubljana, Ministry of Agriculture and Environment, Ministry of Finance and Statistical Office of the Republic of Slovenia. This draft was in May 2013 presented to public and it received a lot of criticism, which was taken into account according to its professional justification and feasibility. Then we prepared final proposition of calculations and scales of cadastre income, which was confirmed by Government of Republic of Slovenia in August 2013.

3.5 IMPORTANT ACTIVITIES OF THE GEODESY OFFICE

In the field of the national geodetic reference system, activities in 2013 focused mainly on the transition to the new national coordinate system. Regarding the topographic system, the activities included the capture, maintenance and management of spatial data.

The Surveying and Mapping Authority of Republic of Slovenia as a part of Financial mechanism EGP 2009-20014 along with Ministry for Agriculture and Environment in 2013 started the project *Update of spatial data infrastructure for decrease of risk and consequences of floods.* Goal of the project is mostly establishment of altitude component of state spatial coordinate system, in line with the bill of Law about state geodetic reference system, and update of infrastructure for spatial information for support of management of waters and decrease of danger of floods in line with INSPIRE. It is a project, which is part of a Memorandum of consensus for implementation of Financial mechanism EGP 2009-2014, which was in May 2011 signed by donor states Republic of Iceland, Principality of Liechtenstein and Norway with Republic of Slovenia as a rightful claimant. In 2013 all necessary investition documentation was approved and positive preliminary evaluation of project was published, and Government of Republic of Slovenia secured funds for its own participation in the project in frame of Outline of development programmes. Project is worth 3,060,000 €, financial mechanism will donate 1,773,000 €, remaining funds will be given by Ministry of Economic Development and Technology, Ministry of Agriculture and Environment and The Surveying and Mapping Authority of Republic of Slovenia. We started to operationally perform the project in November, and it will be finished in April 2016. We signed a treaty about partnership in the project with Norvegian and Icelandic geodetic authority. Partners will ensure transfer of their experience on working parts of the project.

In 2013 we performed professional hearing of Act on georeference system. It is a new law from the field of geodetic activity, which determines establishment of state spatial coordinate system (horizontal, vertical and gravimetrical component) and state topographic system (topographic data, geographic names, remote perception, state maps).

Transition to the New Coordinate System

In 2013, the bulk of activities pertaining to the national geodetic system were marked by the transition to the new national, European coordinate system, which is gradually being introduced into geodetic practice. Activities in the following areas were implemented:

- **the horizontal system:**
  - provision of data of the SIGNAL network to users via mobile service operators,
  - remeasurments of EUREF-GPS on some points,
  - connection of some permanent GNSS stations of the SIGNAL network to the levelling and gravimetric network,
  - GNSS observations at points for geoid determination,
  - processing of GNSS observations for determining ellipsoidal heights of levelling points,
  - renovation of some trigonometric points of Ist order.
- **the altitude system:**
  - processing and evaluating the measured leveling line data,
  - restoration of the leveling line of the Ist order Maribor-Ptuj-Rogaška-Mestinje,
  - restoration of a part of the leveling line of high accuracy Hrastovec-Murska Sobota,
  - new stabilization of benchmarks on the leveling line of high accuracy Dravograd-Maribor,
  - Leveling line measurements of benchmarks in the vicinity of some permanent GNSS stations of the SIGNAL network.
- **the gravimetric sistem:**
  - implementation of supplementary gravimetric measurements at high-altitude points (benchmarks).

Horizontal sistem

The SIGNAL network is a fundamental national geo-information infrastructure for determining an accurate position anywhere on the territory of Slovenia by using the global navigation satellite system (GNSS). It comprises a network of 15 permanent GNSS stations (receiver and GNSS aerial), the monitoring and distribution centre, and the GPS Service at the Geodetic Institute of Slovenia in Ljubljana. The Ljubljana GNSS station is included in the European network of permanent GPS stations – EPN (European Permanent Network). The GPS service provides for real time data exchanges with five other networks of the Austrian APOS network, six stations of the Croatian CROPOS national network and with a network station of the Hungarian GNSSNet.hu (ZALA).

In 2013 we executed tasks of regular maintenance of network, we upgraded two stations and perform regular control of functioning of network SIGNAL.

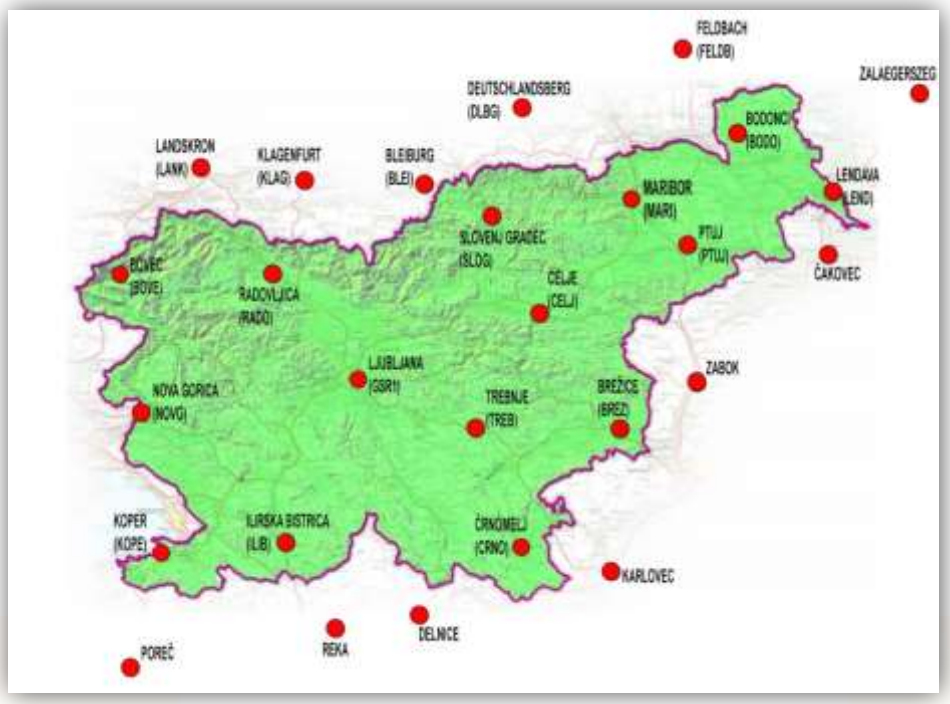

Figure 24: The SIGNAL network stations with connections to stations in neighbouring countries

For the means of upgrading of geoid we performed geodetic measurements on chosen points, which connected horizontal, vertical and gravimetrical components of coordinate system.

Figure 25: GPS measurements on TT of 1st order

Three trigonometric points of the 1st order were refurbished in 2013, namely: TT515 – Kladivo, TT374 – Javornik in TT372 – Velika Kopa.

Figure 26: TT 515 – Kladivo before and after refurbishment of the trigonometric point

Altitude sistem

In line with the transition to the new coordinate system, the Surveying and Mapping Authority of the Republic of Slovenia will continue to carry out corrections to the levelling network. In 2013, several levelling lines of the 1st order with a total length of 122 km were measured.

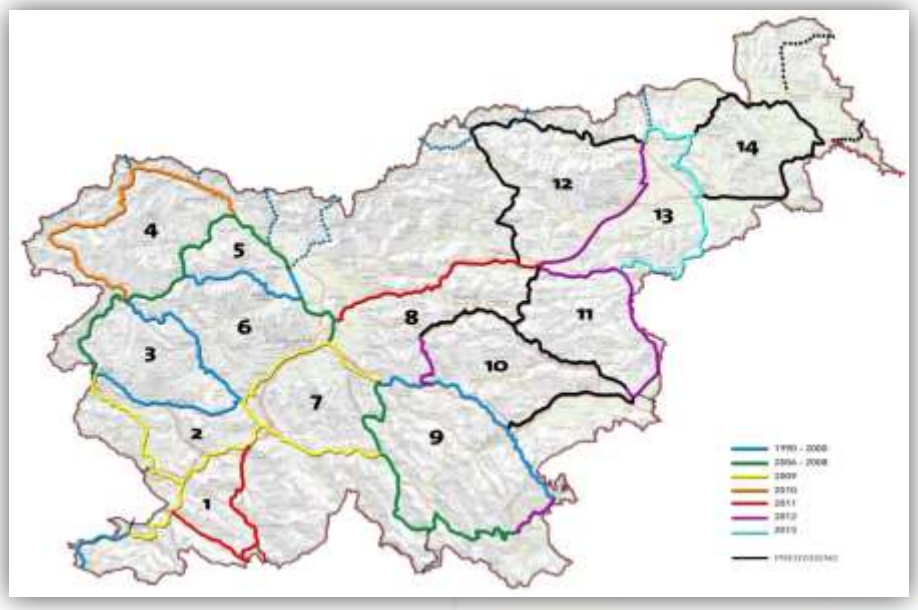

Figure 27: The new levelling network indicating lines measured in the last years

On some benchmarks of the leveling lines network we also performed GNSS measurements with goal of defining ellipsoid heights and control of existing geoid. Around 100 benchmarks were included in that measurement.

Figure 28: Measuring the leveling line of the Ist order

Gravimetric sistem

In 2013, we continued taking gravimetric measurements at high-altitude points (benchmarks) for the needs of introducing the new altitude system and determining the new geoid. The measurements were conducted using two relative gravimeters, the Scintrex CG-3 and Scintrex CG251, on 205 benchmarks. Altogether, more than 1,400 gravimetric points have been measured in Slovenia in the last 7 years.

Aerial Photography and Orthophoto Production

In 2013 we continued in 2012 started three-year-period of aerophotographing of Slovenia. We aerophotographed north-eastern part of Slovenia. Aerial photographs of the southern and south-eastern parts of Slovenia were taken; these are colour photographs (panchromatic + three colour channels – RGB), with a ground sample distance (GSD) of 0.25 m. A digital terrain model (5 x 5 m) and a colour ortophoto with a GSD of 0.25 m (DOF025) and 0.5 m (DOF050) were made for the area covered by aerial photography. An infrared ortophoto with a GSD of 0.5 m was also made. Quality control for all products was carried out in cooperation with the Surveying and Mapping Authority of the Republic of Slovenia.

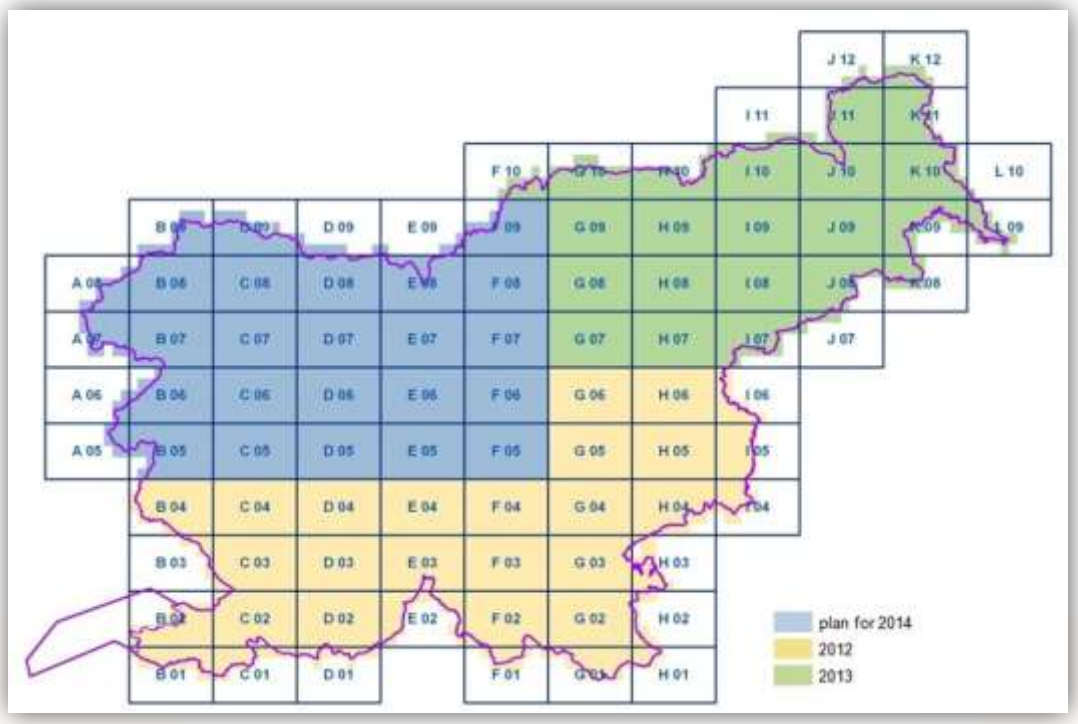

Figure 29: Aerial photography sectors in the 2012–2014 period

Topographic Data of the DTK 5 Collection

DTK 5 is a national vector collection of topographic data with homogenous precision and particularity, on a scale of 1 : 5,000, and is established uniformly for the entire territory of the country. Data is captured from stereo-pairs of cyclic aerial photographs, but other sources can also be used in data capture in accordance with specifications. The unit of capture is a sheet with a scale of 1 : 5,000. DTK 5 data have been captured in the new coordinate system since 2009. In terms of content, DTK 5 are divided into four areas: buildings, transport, ground cover and hydrography. Each of the areas is further divided into types. DTK 5 data is one of the basic sources of information on the spatial situation. In addition to the content which individuals can upgrade according to their own needs, DTK 5 data also provide the geolocation basis for all other spatial data and are useful as a supplement to outdated basic topographic plans.

In the period from 2001 up to and including 2013, the Authority captured more than 2,100 sheets, which represents more than 65% of the entire territory of the country.

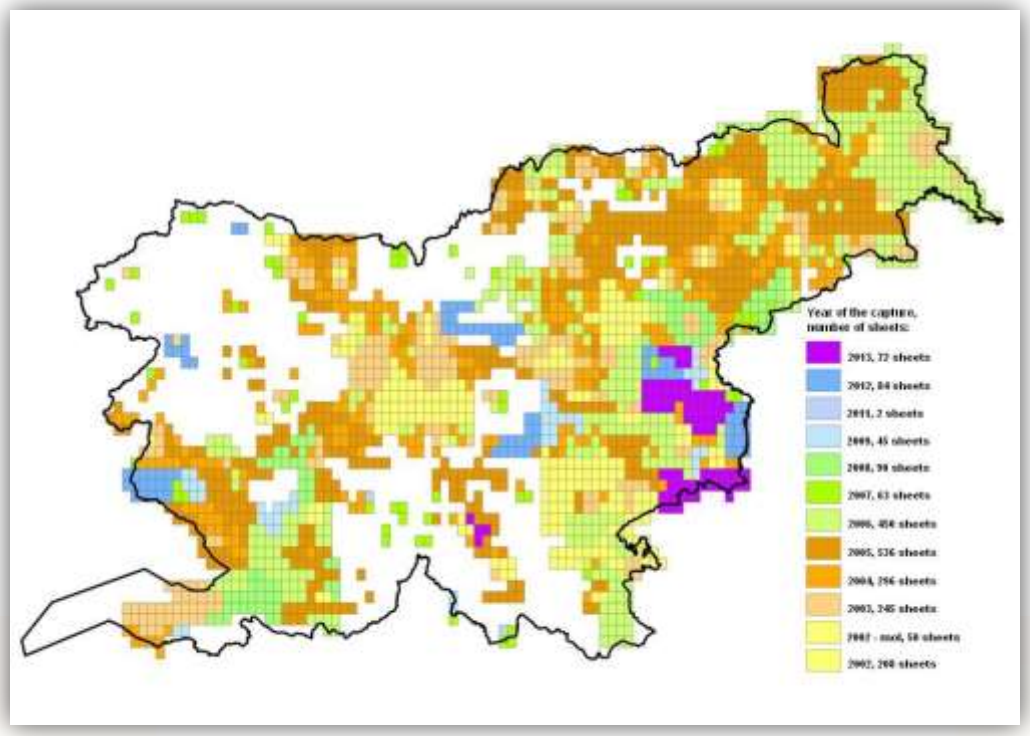

Figure 30: A map of the coverage of Slovenia with DTK 5

State topography card of scale 1 : 50,000 (DTK 50)

Slovenia and parts of neighbour countries are cowered with 58 sheets DTK 50. In 2013 we renewed four sheets:

Number of sheet	Name of sheet
12	JESENICE
22	RADOVLJICA
31	ŠKOFJA LOKA
39	VRHNIKA

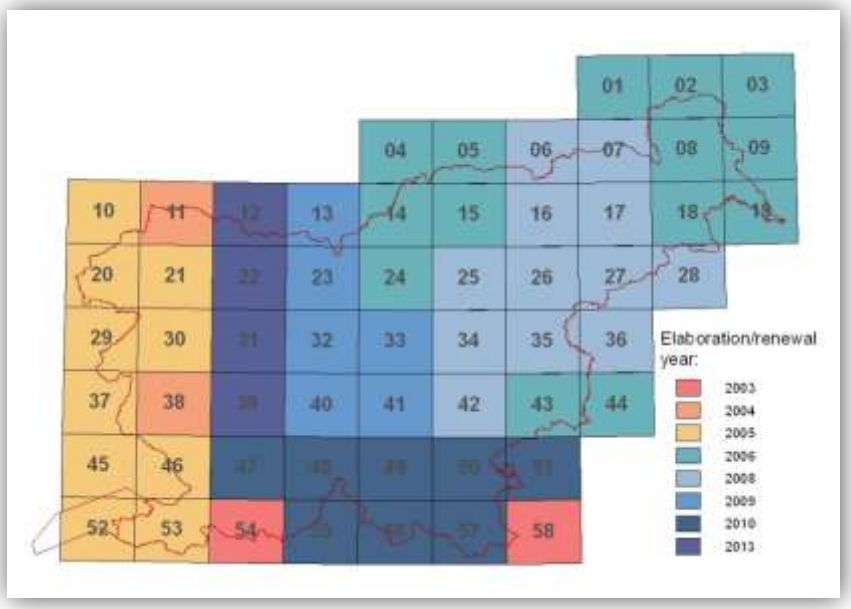

Figure 31: Scheme of coverage of Slovenia with DTK 50 sheets

National transparent map of the Republic of Slovenia, EuroRegionalMap (ERM) in EuroGlobalMap (EGM)

In 2013 we continued maintenance of ERM and EGM, which are European collections of topographic data and they correspond with the scale of 1:250,000 (ERM) and 1:1,000,000 (EGM). Collections are maintained in frame of EuroGeographics. Capture and renewal of data must be done by members of EuroGeographics, and so The Surveying and Mapping Authority of Republic of Slovenia takes care of capturing and renewal of data for the area of Slovenia. In ERM in 2013 we renovated layers of administrative border, hydrographic data and transport. From 2012 onwards geodetic authorities are not responsible anymore for maintenance of EGM data, data is gained through the generalization of ERM data. Geodetic authorities are responsible for correctness of generalization and they can also propose upgrades.

In 2013 we renovated national transparent map in the scale of 1 : 250,000. Besides actual renovation the area of the map was widened towards north, so now the areas of display of all general cards are the same. At the same time we also renovated editorial plan for national transparent maps, which takes into account transformation into new national coordinate system.

Recording Public Infrastructure

A legislative framework for the systematic recording of public infrastructure was created in recent years with the adoption of new spatial legislation. The Authority was

assigned the task of ensuring technical and organisational conditions for the operation of the system at national level. In cooperation with the relevant ministries, local communities and providers of public services, the Authority:

- ensured conditions for recording public infrastructure,
- created the Consolidated Cadastre of Public Infrastructure, and
- ensured the conditions for access to data from the Consolidated Cadastre of Public Infrastructure.

Figure 32: Example of the Consolidated Cadastre of Public Infrastructure: Lake Bled

The owners of public infrastructure are responsible for administering their own infrastructure data and sharing it with the Consolidated Cadastre of Public Infrastructure. The legislation obliges public infrastructure owners to submit data on facilities to the consolidated cadastre within three months of any modification. Therefore, the integrity and quality of data in the consolidated cadastre depends on individual infrastructure owners. In 2013, we received 470 studies on the entry of modifications in the Consolidated Cadastre of Public Infrastructure. A total of 6,292,055 facilities were registered in the Consolidated Cadastre of Public Infrastructure by the end of 2013, with the total length of linear facilities amounting to 191,737 km.

Table 4: Length and number of infrastructure facilities by type in the Consolidated Cadastre of Public Infrastructure on 31 December 2013

Type	Number of facilities	Infrastructure length (km)
Roads	132,271	49,716
Railways	7,526	2,495
Airports	89	
Ports	1,096	
Cableways	164	11
Electricity	1,441,835	40,246
Natural gas	418,820	4,904
Thermal energy	69,867	979
Petroleum products	218	
Water distribution system	936,741	22,561
Sewage system	739,864	9,115
Waste management	4,018	
Water infrastructure	7,871	18
Electronic communications	2,531,675	60,689
Total	**6,292,055**	**191,737**

The Consolidated Cadastre of Public Infrastructure contains most of the public infrastructure of national importance (e.g. state roads, railways, gas pipelines, water infrastructure, transmission and distribution of electricity) and infrastructure belonging to municipalities or private owners.

The system for recording public infrastructure is designed to afford infrastructure owners:

- greater protection of infrastructure against damage (if their infrastructure is recorded, any person carrying out land development activities can obtain information on the location of such infrastructure and protect it against damage during the activities),
- greater legal security in managing infrastructure.

III. Conference on recording of Public Infrastructure in Slovenia

III. Conference on recording of Public Infrastructure in Slovenia took place in Hotel Mons on 25 April 2013. Conference was organised by The Surveying and Mapping Authority of Republic of Slovenia in cooperation with Ministry for Education, Science and Sport. More than 200 guests from state administration, local communities and private sector participated on conference.

Recording of Public Infrastructure is important for the state, because coordinated, prompt and put in order records with quality data about economic public infrastructure

one of basic professional groundworks for efficient enforcement of processes in space and for management of more efficient spatial, environmental, real estate, housing, energetic, defense and other policies, which are key for development of every national economy. Intersector connections are also important and along with it more efficient development of infrastructure of broadband electronic communications in Slovenia.

On this year's conference we represented results of some more important projects in the field of recording Public Infrastructure on state and local level. Emphasis was on connectivity of financial and technical records of economic state infrastructure.

We presented the following topics to wide professional and amateur public:

- arrangement of relations in infrastructure for execution of economic public services,
- divestment in the field of utility infrastructure,
- ensurment of investitional funds in the field of economic infrastructure,
- establishment of spatial informational system,
- consolidated cadastre of public infrastructure and recording of availability of electronic communications,
- connectivity of accounting and technical records of Public Infrastructure,
- adequacy of use of hand GNSS recievers and their locational accuracy in recording of Public Infrastructure.

Figure 33: Opening speeches of the deputy Director General of The Surveying and Mapping Authority of Republic of Slovenia Anton Kupic and of the Director General of the Directorate for Information Society in the Ministry for Education, Science and Sport Marjan Turk

Participating lecturers with their reports were:

- Samo Jereb, Court of Auditors of Republic of Slovenia,
- prof. dr. Albin Rakar, Faculty of Civil Engineering and Geodesy,

- Blaž Mozetič M.Sc., Ministry for Agriculture and Environment, Sector for cohesion politics and investitions,
- Jurij Mlinar, Ministry for Infrastructure and Spatial Planning,
- Nikolaj Šarlah M.Sc., The Surveying and Mapping Authority of Republic of Slovenia,
- Katja Mohar Bastar M.Sc., Agency for Communication Networks and Services of the Republic of Slovenia,
- Petra Pergar, Faculty of Civil Engineering and Geodesy,
- Damjana Tavčar, Javno komunalno podjetje Prodnik d.o.o.,
- Oskar Sterle M.Sc., Faculty of Civil Engineering and Geodesy, and
- Gregor Klemenčič, Komunala Novo mesto d.o.o..

Figure 34: Lecturer in second part of the conference Nikolaj Šarlah, The Surveying and Mapping Authority of Republic of Slovenia

Figure 35: Participants of III[rd] Conference

Figure 36: Participants of III[rd] Conference

Other projects, presentations and international participations of representatives of the Consolidated cadastre of public infrastructure

The Surveying and Mapping Authority of the Republic of Slovenia, the Department of Public infrastructure, hosted on 16 January 2013 in the Faculty of Civil Engineering and Geodesy a lecture titled »Recording of public infrastructure«. The lecture was primarily intended for college graduate candidates, 3[rd] year students of the universty programme geodesy and geoinformatics (first level) and it contributed to the better understanding in this field.

In October 2013 we perforemd a project of unilateral help to Croatia, titled »Comparison of existing systems for recording of public infrastructure«. Project was part of a programme for tight interinstitutional cooperation of the Department for public infrastructure and Gradskog ureda za katastar i geodetske poslove Grada Zagreba. We presented them the procedures for recording public ingfrastructure in Slovenia and with the content of the Report of cadastre of public infrastructure.

The Surveying and Mapping Authority of Republic of Slovenia, Department for public infrastructure and the Faculty of Civil Engineering and Geodesy, University of Ljubljana (UL FGG) organised on 28 August 2013 a professional excursion to Celje as part of connecting the study programme with lectures from professionals to hear form practical expiriences. It was meant for 2[nd] year students of the first level programme technical management of real estates and 3[rd] year students of programme Geodesy and Geoinformatics. The lecturers presented in detaile international cooperation, legislature regarding this field and conditions, procedures and complications, that can happen during the process of recording public infrastructure.

On the 25 and 27 of October 2013 in Opatija (Croatia) there was an International symposium, which was organised by the Croatian Chamber of Engineers (HKOIG). Topic of Vth symposium was »Recording of real estate of Republic of Croatia«. Slovenia was represented by The Surveying and Mapping Authority of Republic of Slovenia, the Department for public infrastructure, with a report titled»Recording of public utillities and other infrastructure in Croatia, Slovenia and Macedonia«.

Figure 37: Guests of symposium »Unused potentials of geodesy« in Opatija

Introduction of the Directive Establishing the Infrastructure for Spatial Information in Europe (INSPIRE) at the Surveying and Mapping Authority of the Republic of Slovenia

The INSPIRE Directive determines basic guidelines for establishment of collective infrastructure for spatial information. The Surveying and Mapping Authority of Republic of Slovenia is responsible for fundamental reference data for space, which is important for locating objects and occurances in space, and therefore this data has the highest priority. This means, that they have to be the first to follow with the demands of the INSPIRE Directive. In 2017 most of the data has to be available designed and demanded by the INSPIRE Directive.

Figure 38: Participants of Paris workshop titeld Strategy for providing data according to the data specifications of INSPIRE Directive

In 2013 we regularly maintained Slovenian geoportal INSPIRE and the information system for metadata, which is available throught geoportal. We renewed the metadata for data collections from the IIIrd annex of the INSPIRE Directive and its connected services. Metadata, managed in Slovenian metadata system, is regularly copied and published on European geoportal INSPIRE. We added a translator, so users can watch the contents of metadata in various languages. A report was prepared on the implementation of the Directive and the collected data from all managers of data collections regarding the establishment of a national infrastructure of spatial information in its use.

The Office for geodesy is in charge of establishment of the INSPIRE Directive at The Surveying and Mapping Authority of Republic of Slovenia. In line with the assignments the Office cooperates in the work of the National point of contact INSPIRE. It is also in charge of managing the INSPIRE geoportal, where among others, the list of data collections is published, which is a part of the Slovenian infrastructure for spatial information. The List of collections is topically arranged, as is directed by the INSPIRE Directive and Slovenian Infrastructure for Spatial Information Act – ZIPI (Official Gazette of the RS, No. 8/2010), where besides every collection there is also the name of its manager. All collections from the list have to follow implementation rules of INSPIRE (decrees and orders of European Commision) and provisions of ZIPI. Important activities are regularly published on geoportal, connected with the execution of the Directive and geoinformations, materials from the European Commision are also published for public discussion. Geoportal is an important tool for informing all stakeholders of national infrastructure for spatial information and to increase awareness regarding the meaning of the INSPIRE Directive in Slovenia.

The representative of the Office for geodesy is participating in the EuroGeographics group for INSPIRE, which deals with demands, that are common for European geodetic authorities, and are connected with INSPIRE. She also prepares recommendations for its implementation. In 2013 she participated in a workshop with the title Strategy for providing data according to the data specifications of INSPIRE Directive, where she formed recommendations and scenarios for harmonizing data with the INSPIRE specifications.

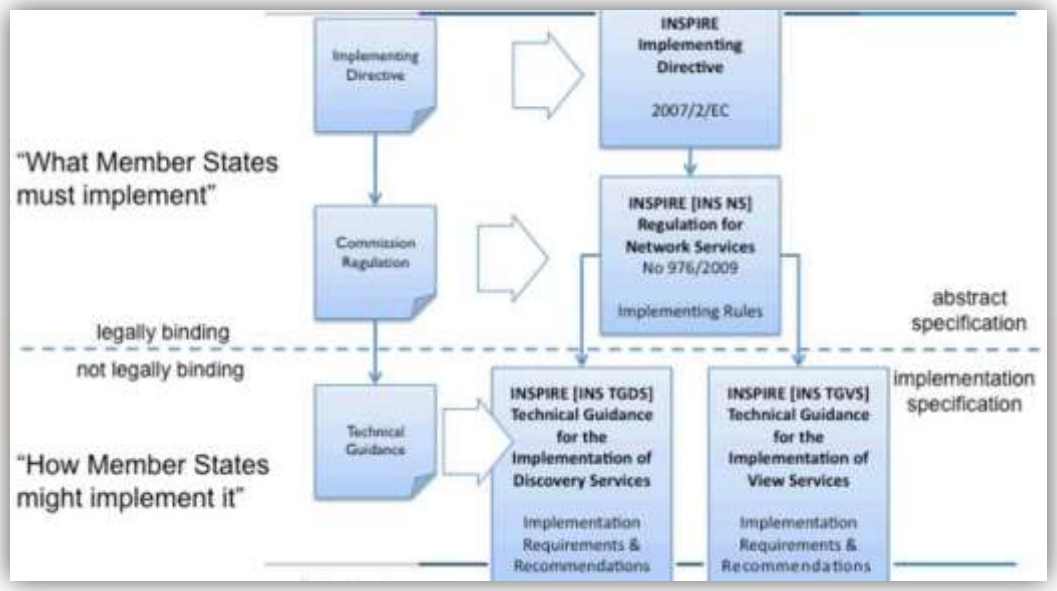

Figure 39: Mandatory and optional material for implementation of INSPIRE

The Office for geodesy participates in European project ELF (European Location Framework), whose results will be the official reference data for Europe, in accordance with INSPIRE demands, and services for data access.

The Surveying and Mapping Authority of Republic of Slovenia cooperates in providing the functioning of the NIO Portal (National interoperable frame) as the holder of one of the important horizontal contents.

In connection with implementational demands of INSPIRE the Office for geodesy manages the committee of the Statistic office of the RS for administrative resources, cooperates in the Group for geographic informations of Slovenian Institute for Standardization and in the Group for Quality in frame of EuroGeographics association.

STEPS FORWARD IN 2014?

4. STEPS FORWARD IN 2014?

4.1 MAIN AND STRATEGIC OBJECTIVES OF THE SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA

The national surveying and mapping authority is responsible for maintaining basic data on land surfaces, facilities and real estate (stored in orderly databases) and for providing services pertaining to the recording of changes made to real estate. Furthermore, it acts as a coordinator of the real estate system and spatial data infrastructure, performs real estate mass evaluations and provides data for an objective and comprehensive real estate tax assessment and improvement of the performance of the real estate market. It establishes and manages topographic system data and national maps, establishes and maintains the national spatial coordinate system, ensures the compliance of this system with the European coordinate system and provides for conditions for implementing land surveys.

The strategic objectives support the development of a comprehensive real estate system and national spatial data infrastructure with regard to providing basic and derived data and services to all users, and especially to support the implementation of spatial planning policy, agricultural and land policies and efficient management of real estate.

The strategic goals in individual activities of the national land surveying service are:

Geodesy Office

In the field of the national spatial coordinate and topographic system, we wish to:

- continue to set up the new national coordinate system (the horizontal, altitude and gravimetric component) as part of the European coordinate system ESRS (Spatial Reference System),
- ensure conditions for implementing national geodetic measurements (horizontal and vertical component, geoid); ensure the operation of the national network of permanent GNSS stations (Global Navigation Satellite System) and the GPS Service, which provides for the control of the functioning of the network, the use of the network for implementing national geodetic measurements and the provision of data for implementing geodetic measurements and location services,
- continue to establish and maintain national data on the features of land surface and facilities (topographic data) in topographic databases, on geographical names and on remote sensing, and provide national maps created in accordance with international standards,
- further develop and maintain the cartographic system of the Republic of Slovenia for defence purposes in accordance with NATO standards and Slovenian military standards,

- continue to ensure conditions for implementing the requirements of the INSPIRE Directive relating to the topographic system.

The attainment of these strategic objectives will enable the easier capture, quality maintenance and efficient use of data in real estate records and other spatial records for establishing the geolocation of data and phenomena in the ESRS. National topographic data, cumulative economic infrastructure data and state maps will be used as expert bases in spatial and environmental planning and management, flood safety and agricultural policy and will thus serve as a basis for producing various topical maps or displays for navigation.

In the field of recording public infrastructure, we wish to:

- ensure the functioning of the system of recording public infrastructure,
- ensure control of the quality of data on public infrastructure in the Consolidated Cadastre of Public Infrastructure,
- establish a system to protect public infrastructure.

The attainment of these strategic objectives will enable more efficient planning, the safer implementation of investment into land and more economical management of public infrastructure facilities. The System for protection of public infrastructure will better safeguard infrastructure from damage, ensure conditions for protection of the environment and protect people from injuries.

When introducing the INSPIRE Directive, we wish to:

- ensure the conditions to fulfilling the requirements of the Infrastructure for Spatial Information Act and the INSPIRE Directive,
- provide access to spatial data and metadata in accordance with the requirements of the Infrastructure for Spatial Information Act and of the INSPIRE Directive,
- cooperate with the European Commission in the process of enforcing the regulations for the implementation of the INSPIRE Directive,
- participate in the establishment and functioning of the national spatial information infrastructure, harmonised with the INSPIRE Directive,
- implement the activities of national contact points in accordance with the Infrastructure for Spatial Information Act.

The attainment of the above-mentioned strategic goals will provide data infrastructure for spatial information. This will lay the foundations for a comprehensive spatial data infrastructure at the national level in accordance with the INSPIRE Directive.

The attainment of strategic goals will enable simpler, more accurate and faster capture of data for the needs of updating of geodetic and other spatial records, establishing the geolocation of data in the European spatial reference system, integration of data and exchange of data in international projects.

Real Estate Office

In the field of real estate registration, we wish to:

- improve the quality and completeness of data regarding real estate,
- simplify procedures, and arrange and update data on all real estate in the Land Cadastre, the Building Cadastre and the Real Estate Register,
- participate in the process of ensuring the conditions for fulfilling the requirements of the INSPIRE Directive in the field of real estate registration,
- create the core of a comprehensive real estate system linked to the Land Cadastre, the Building Cadastre and the Land Register,
- enable dynamic upgrading of real estate data in basic databases (guest data) or the entering of new data by linking data from other databases with basic databases (linked data).

By achieving strategic objectives in real estate registration, we will meet the requirements for the greater legal security of real estate owners, greater security of real estate investments and investments related to real estate; make the real estate market more efficient; make real estate taxation fairer and more efficient; create the pre-conditions for adopting a more appropriate land and housing policy and the planning of land development activities; quickly detect and register all unauthorised activities in the physical environment and effectively perform activities for protection and rescue services.

The strategic objectives in the field of quality and completeness of data and coordination of the integration of real estate registers will, in relation to the appropriate information infrastructure, be achieved as part of the implementation of the e-space group of projects. Regarding the quality of data of real estate records we will emphasise the upgrade of locational precision of the graphic part of the land cadastre. For implementation of this task we will prepare an action plan which will take into account the experience and starting points, gained in 2013, when we implemented locational upgrade of the graph part of land cadastre in field of permanent plantations in Slovenia (connection with establishing cadastre income) and areas of two municipalities (Jesenice in Škofja loka). Developed and used methodology will be upgraded on the basis of experience and will be used to upgrade data in the projects e-space and it will be implemented in regular procedures for maintenance of land cadaster.

Mass Real Estate Valuation Office

In the field of mass real estate valuation, we wish to:

- establish, manage, maintain and develop a mass real estate valuation system for the purpose of real estate taxation,
- managing real estate market records with data regarding sales and rental market of real estate in Slovenia,
- managing the record of high quality data about events on real estate market,

- managing and maintening of data about generalized market values of real estates,
- efficiently adjust the mass real estate valuation system to situations in the real estate market.

The attainment of our strategic objectives will ensure the conditions for the transparent functioning of the real estate market, data on realised prices and rents in the real estate market and data on the generalised market value of all real estate in Slovenia for the purposes of objective taxation of real estate and other purposes.

Main Office

In the field of issuing geodetic data, we wish to:

- provide quality services and data,
- ensure an efficient, user-friendly system for issuing data,
- ensure that geodetic data is used as reference data in the Republic of Slovenia.

The attainment of these strategic objectives will enable the wide use of data for various purposes in a standardised, efficient and user-friendly manner. Data will be available via the entire entry point, while the better understanding of information and wider use of data will enable the faster development of other services as part of the information society.

In the field of information science, we wish to:

- ensure a uniform and effective information system,
- standardise procedures and solutions,
- ensure comprehensive management of the field of information science and information technology.

The attainment of the listed strategic objectives will provide a stable information environment, which will enable the cost-efficient and procedurally efficient implementation of organisational processes determined by law, undisturbed operations and quality data for our own needs and external users.

In the field of the organisational structure of the national land survey service, we wish to:

- develop an optimal organisation of the national land survey service as part of public administration in connection with other institutions recording real estate and spatial data,
- establish an organisational structure that will allow the efficient communication of data, implementation of services and provision of information to our users.

The attainment of the strategic objectives will ensure more economical implementation of the activities of the national land survey service and better implementation of services for user.

In the field of education and training, we wish to:

- ensure an appropriate level of education and competence of employees of the Surveying and Mapping Authority of the Republic of Slovenia with regard to the effective and efficient performance of land survey services,
- improve users' knowledge of the possibilities of using real estate and spatial data and records.

The attainment of the strategic objectives will ensure adequately trained personnel for the Surveying and Mapping Authority of the Republic of Slovenia, providers of the land survey service and users.

In the field of international cooperation, we wish to:

- implement European guidelines on recording real estate, mapping and geo-informatics,
- participate in establishing European and cross-border data sets, taking into account the interoperability of spatial and real estate data and services,
- ensure that we are involved in developing Slovenian and European e-government projects,
- implement NATO guidelines in cooperation with the Ministry of Defence, taking into account interoperability in the preparation of topographic and cartographic products,
- provide professional assistance to other countries both in cooperation with the private sector and independently,
- encourage and support the private sector in penetrating and establishing themselves in foreign markets.

Applying European and other international guidelines and actively contributing to their development will enable the comparable and coordinated development and performance of the land survey service in Slovenia.

4.2 FUTURE PROJECTS

Geodesy Office

In the frame of Financial mechanism EGP 2009-2014 The Surveying and Mapping Authority of Republic of Slovenia in cooperation with Ministry for Agriculture is performing a four year long project »Update of spatial data infrastructure to decrease the risks and consequences of floods«. Goal of this project is establishment of a vertical component of the state spatial coordinate system in line with the demands of INSPIRE Directionand with recommendations of international organisations (IAG and EUREF) and with the demands of the same Direktive to coordinate upgrades of the infrastructure for spatial information to support the decreasing risks of floods and

management of waters. The project presents an important part for the implementations of the Act on georeference system, which is in the passing phase.

With execution of the project the modern geodetic reference will be coordinated with European spatial reference system. National combined geodetic network ("zero level" of horizontal and vertical network) will be established with a long term vision of establishment of 4R reference system. National combined geodetic network will serve as basic national geodetic infrastructure for regular monitoring of geodynamic processes in the area of the state. It will ensure quality georeferences. Vertical component of ESRS will also be established, and a new national altitude system will be determined, which will be based on normal heights. Model of geoid for Slovenia will be established; high quality national geoid is a precondition assure the expected accuracy of altitude data and the use of satellite and other geodetic techniques (highly accurate GNSS-leveling, …) determining location. With this we will assure geodetic groundwork for data on vertical component for all spatial data and we will enable the use of satellite technologies in determination of coordinates for vertical component of location, not only for horizontal, as is in practice now with GNSS network. We will establish topographical database of high accuracy (accuracy 1 : 5000). Existing topographical model will be changed in a way that it will be in great measure compliant with demands of INSPIRE Directive. Existing topographical data will be conveyed into new data model, and new topographical data for suitable data topics from Annexes of INSPIRE Directive in line with responsibilities of The Surveying and Mapping Authority of Republic of Slovenia will also be captured. Data infrastructure for hydrographical data will be updated with establishment of new data model, which will be compliant with INSPIRE Directive, and 10 percent of existing hydrographical data will be conveyed into that model. Managers of hydrographical data will be given roles and authority. This will enable easier reporting about water management, which is demanded by European directives. For access to spatial data we will made internet services with emphasis on topographical and hydrographical data. Services will be compliant with INSPIRE demands on internet services for spatial data. Internet services will be included in Slovenian INSPIRE Geoportal and publicly accessible. Project will finish in 2016.

In the field of **establishment of new national coordinate system** we will carry out basic geodetic measurements especially in the field of leveling line networks of high accuracy and connection of horizontal, vertical and gravimetrical components of coordinate system. Operation of permanent GNSS stations of SIGNAL network and their use in private and public sector will be ensured. Control over operation of network and long term monitoring of stability of network will be ensured. We will make new EUREF measurements for needs of new realization of coordinate system in Slovenia. We will perform time analysis of data of horizontal and vertical component of coordinate system for modeling of geokinematic model of Republic of Slovenia.

In the field of **topographical system** we will take aerophotos of the whole area of Slovenia, one third in the frame of cyclic aerophotos of Slovenia and the remaining part in as a separate task, but with the same technical specifications. We will capture topographic data for part of Slovenia, for which the existing data are outdated. We will

continue with update of informational system for management of topographical data of the highest level. We will capture new topographical data for adequate data topics from Annexes of INSPIRE Directive. We will maintain existing national cartographic products, some of them in cooperation with Ministry of Defence. We will continue with recording of public infrastructure, new legislation in this field is also predicted. We will cooperate with other sectors, especially with Ministry of Education, Science and Sport and with organizations for promotion and establishment of system for protection of public infrastructure.

We will join European processes of introducing the principles and fulfilling of demands of **INSPIRE Directive**. We will cooperate in the procedure of accepting and changing the implementing rules of INSPIRE Directive and its technical guidance. We will compare the existing solutions from the field of Slovenian spatial data infrastructure with the adopted rules and prepare measures and projects for assurance of compliance of data and its services with demands of INSPIRE. We will continue our cooperation with other sectors with integration and harmonization of contents, which are managed in several data collections, in line with INSPIRE Directive.

Mass Real Estate Valuation Office

Because of restrictions in personnel the Office will in 2014 continue only with execution of legally prescribed tasks for establishment, management, maintenance and development of Mass Real Estate Valuation. New projects are not planned.

Real Estate Office

The field of real estate activities will be focused into the field of quality and completeness of data and assuring suitable support with management and maintenance of data. We would like to realize both fields of work in the frame of the **program of projects e-space**, where there are two subprojects directly connected with the field of real estates: Informational renovation of real estate records and Improvement of real estate records data.

In the framework of the **information overhaul**, whose purpose is to ensure appropriate information support for work processes and the more efficient use of real estate and spatial data that provide the basis for recording data on real estate and ownership of real estate, a restoration has started in the year 2014 and is in progress for software solutions to manage the graphical part of the land cadaster as well as the production of the specification for the entire informational overhaul (survey of business processes, defining the physical and logical models, establishing the necessary infrastructure, technical rules and services, a plan for data migration and implementation). In the coming years the focus will shift to the development and implementation of software solutions and data migration.

The planned **data overhaul** includes the transfer of archival studies of the Land Cadastre and the Building Cadastre from analogue to digital form, which will enable the Surveying and Mapping Authority to carry out more efficient e-commerce in the field of recording real estate and the functional integration of the information system for real estate record management and the spatial information system. Due to the large volume of documents to be scanned, the task is expected to continue for the next two to three years.

Graduate improvement of location accuracy of graphical data of land cadastre is included in the frame of improvement of data. Part of data (app. 26 percent of all parcels in Slovenia) is already correct regarding location information or the data have positional accuracy, which enables direct use of location data of land cadastre for execution of graphic sections of land cadastre with other spatial data. In the following years we are planning improvement in the area, where interest will be expressed and the needs of users (for example areas of municipalities, which will approve new spatial plans, areas of agricultural lands, etc.).

Among the regular tasks of recording real estate, emphasis will be put on **further and permanent improvement of the quality of the following data**: data on land plots, buildings and parts of buildings, which includes verification of data, adequate preparation or updating and/or mutual coordination, which gives the recorded data greater use value. An improvement in data in terms of content will be achieved also by gradually eliminating the backlog of unresolved administrative procedures.

In the year 2014 we will implement the second phase of **electronic exchange of data from cadastres to land register**, namely exchange of data from land register into both cadastres.

4.3 REGULATIONS IN PREPARATION

4.3.1 Regulations and Acts to be Adopted by the National Assembly of the Republic of Slovenia

- **The Act on the State Land Survey Reference System**
  The INSPIRE Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (Official Journal of the European Union 108/1, from the day 25 April 2007) on mandatory implementing rules obliges EU Member States to establish a pan-European coordinate system – European Spatial Reference System (ESRS). In the field of national coordination systems, the national land survey services in Europe and the European branch (the EUREF association - European Reference Frame) have been directing activities towards the complete renovation of national coordinate systems for several years. A uniform system is being set up based on the use of satellite technology that

provides a common basis in Europe for performing land surveys, geo-referencing and linking and exchanging spatial data. In Slovenia, the geo-reference system in use was set up in the last century and is no longer technically or methodologically appropriate. Furthermore, the growing importance of private property and rights in rem to real estate require a new definition of the rights and duties of the state and owners of real estate on which facilities and equipment important for establishing the European coordinate system, land survey infrastructure and performance of land surveys are located. The national topographic system will also have to be updated, since the existing regulatory bases do not correspond to the state of technology for capturing, managing and displaying topographic data. Public administration obligations related to ensuring topographic data and maps will have to be re-defined.

The Act on the State Land Survey Reference System will replace the Basic Geodetic Measurement Act from 1974, which is no longer suitable for professional and technical reasons and the different ownership relationships, and will ensure that the geodetic reference system complies with the INSPIRE Directive and its mandatory implementing rules.

The proposition for the Act on georeference system, which was prepared and professionally and interdepartmentally harmonized in 2013, was along with the drafts of regulatory prescriptions in December 2013 sent into discussion and enactment to the Government of Republic of Slovenia.

- **Act on Recording Public Infrastructure**
  The Consolidated Cadastre of Public Infrastructure was established in 2007 as a technical record of all public infrastructure facilities in the Republic of Slovenia. None of the regulations deals with the uniform (systemic) recording of public infrastructure, and the existing spatial legislation primarily regulates the construction of public infrastructure facilities.

  The Act on Recording Public Infrastructure will thus comprehensively regulate the recording of public infrastructure; define the recording of facilities and networks of public and private infrastructure; regulate the obligation of operators to provide data and the issuing of data from the Consolidated Cadastre of Public Infrastructure, and organise the Consolidated Cadastre as an official record. The act will also establish a system to protect public infrastructure from activities affecting space and for the exchange of data on public infrastructure. This will improve safety in land development works and reduce the amount of damage to public infrastructure facilities, which will protect the infrastructure from damage or destruction and the population from injuries and have a positive impact on environmental protection.

  The act will not regulate property rights relationships for public infrastructure facilities and networks, because the preparation of civil legislation (preparation of regulations on property law) is under the jurisdiction of the Ministry of Justice.

4.3.2 Regulations and Acts to be Adopted by the Government of the Republic of Slovenia

- **Report on the implementation of Change to the programme of work of the national land survey service for 2013 and 2014 in the part which relates to 2013**
  Article 29 of the Land Survey Service Act – ZGeoD-1 (Official Gazette of the RS, No. 77/2010) requires that the Government of the Republic of Slovenia adopt the report on the implementation of the annual programme of the national land survey service at the latest on 1 February of the current year.

  The report on the implementation of the annual programme of the national land survey service for 2013 in 2014 where it refers to 2013, comprises reporting on the substantial and financial implementation of tasks determined by the Government of the Republic of Slovenia with the adoption of the Change to the programme of work of the national land survey service for 2013 in 2014 (Government of the Republic of Slovenija decision, No. 35301-1/2013/4 from the13 March 2013).

- **Programme of work of the national land survey service for 2014 and 2015**
  Article 29 of the Land Survey Service Act – ZGeoD-1 (Official Gazette of the RS, No. 77/2010) stipulates that a detailed definition and planned volume of tasks of the national land survey service and the planned amount of funds for the implementation of these tasks be determined in the annual programme of the national land survey service, which is adopted by the Government of the Republic of Slovenia for the current year at the latest on 1 February of the current year.

- **Decree determining real estate value index**
  The Real Property Mass Appraisal Act – ZMVN (Official Gazette of the RS, Nos. 50/2006, 87/2011 and 40/2012–ZUJF) stipulates in the third paragraph of Article 13 that the Government of the Republic of Slovenia shall determine and publish real estate value indices when value indices for individual types of real estate change by more than 10% in comparison to the previous change in the model or previous publication of the value index. On the basis of a regulation by the Government of the Republic of Slovenia, a new calculation of the value of individual types of real estate is made on the basis of real estate value indices determined for individual zones and real estate valuation models determined for these types of real estate.

4.3.3 Regulations and Acts to be adopted by the Minister of Infrastructure and Spatial Planning

The preparation and adoption of executive acts from the Act on georeference system is planned if it will be enacted in the year 2014.

REGULATIONS ON SURVEYING AND MAPPING ACTIVITIES

5. REGULATIONS ON SURVEYING AND MAPPING ACTIVITIES

5.1 VALID REGULATIONS CURRENTLY APPLIED IN PERFORMING LAND SURVEY ACTIVITIES

ACTS
Land Cadastre Act – ZZKat (Official Gazette of the SRS, Nos. 16/1974, 42/1986; Official Gazette of the RS, Nos. 17/1991 – ZUDE, 52/2000 – ZENDMPE and 47/2006 – ZEN)
Act on georeference system – ZDGRS (Official Gazette of the RS, No. 25/2014)
Land Survey Service Act – ZGeoD-1 (Official Gazette of the RS, No. 77/2010)
Law of Property Code - SPZ (Official Gazette of the RS, No. 87/2002) and 91/2013)
Spatial Planning Act – ZureP-1 (Official Gazette of the RS, Nos. 110/2002, 8/2003 - amend., 58/2003-ZZK-1, 33/2007-ZPNačrt,108/2009-ZGO-1C and 80/2010-ZUPUDPP and 106/2010 - amend.)
Agricultural Land Act – ZKZ (Official Gazette of the RS, Nos. 71/2011 – official consolidated text and 58/2012)
Land Registry Act – ZZK-1 (Official Gazette of the RS, Nos. 58/2003, 37/2008 – ZST-1, 28/2009 and 25/2011)
Housing Act – SZ-1 (Official Gazette of the RS, Nos. 69/2003, 18/2004 – ZVKSES, 47/2006 – ZEN, 9/2007 – Constitutional Court Decision, 45/2008 – ZVEtL, 57/2008, 90/2009, 62/2010 – ZUPJS, 56/2011 – Constitutional Court Decision, 87/2011 and 40/2012 - ZUJF)
Construction Act – ZGO-1 (Official Gazette of the RS, Nos. 102/2004 - official consolidated text, 14/2005 - amend., 92/2005-ZJC-B, 93/2005-ZVMS, 111/2005 - Constitutional Court Decision, 120/2006 - Constitutional Court Decision, 126/2007, 108/2009, 61/2010-ZRud-1, 62/2010 - amend., 20/2011 - Constitutional Court Decision and 57/2012 and 110/2013)
General Administrative Procedure Act – ZUP (Official Gazette of the RS, Nos. 24/2006 – official consolidated text, 105/2006 - ZUS-1, 126/2007, 65/2008 and 8/2010 and 82/2013)
Real Property Mass Appraisal Act – ZMVN (Official Gazette of the RS, Nos. 50/2006, 87/2011 and 40/2012 – ZUJF and 22/2014 – Decision of the Constitutional Court)
Access to Public Information Act - ZDIJZ (Official Gazette of the RS, Nos. 51/2006– official consolidated text and 117/2006 – ZDavP-2 and 23/2014)
Spatial Planning Act - ZPNačrt (Official Gazette of the RS, Nos. 33/2007, 70/2008-ZVO-1B, 108/2009, 80/2010 - ZUPUDPP, 106/2010 - amend., 43/2011 - ZKZ-C, 57/2012 and 57/2012 – ZUPUDPP-A and 109/2012 in 35/2013 – Decision of the Constitutional Court)
Administrative Fees Act – ZUT (Official Gazette of the RS, No. 106/2010 – official consolidated text)
Public Servants Act – ZJU (Official Gazette of the RS, Nos. 63/2007 - official consolidated text, 65/2008, 69/2008 - ZTFI-A, 69/2008 – ZZavar-E and 40/2012 - ZUJF)
Act on Designating Areas and Naming and Marking Settlements, Streets and Buildings - ZDOIONUS (Official Gazette of the RS, No. 25/2008)
Cadastra Income Act- ZUKD-1 (Official Gazette of the RS, No. 9/2011, 47/2012 and 55/2013)
Act regarding the siting of spatial arrangements of national significance in physical space - ZUPUDPP (Official Gazette of the RS, Nos. 80/2010 (106/2010 amend.) and 57/2012)
Infrastructure for Spatial Information Act - ZIPI (Official Gazette of the RS, Nos. 8/2010)
Geometric Centre of Slovenia Act - ZGSS (Official Gazette of the RS, No. 101/2003)

IMPLEMENTING REGULATIONS
REGULATIONS ISSUED ON THE BASIS OF THE LAND CADASTRE ACT
Instructions Concerning Location and Marking-Out of Land Property Boundaries (Official Gazette of the SRS, Nos. 2/1976, 6/1987, Official Gazette of the RS, Nos. 52/2000 – ZENDMPE and 47/2006 – ZEN)

Rules for Cadastral Classification of Land (Official Gazette of the SRS, Nos. 28/1979, 35/1983; Official Gazette of the RS, Nos. 52/2000 – ZENDMPE and 47/2006 – ZEN)
Rules on Maintaining the Types of Use of Land Properties in the Land Cadastre (Official Gazette of the SRS, No. 41/1982; Official Gazette of the RS, Nos. 52/2000 - ZENDMPE and 47/2006 - ZEN)
Rules for Evaluation of Soil in Identifying the Production Capability of Pilot Land Parcels (Official Gazette of the SRS, No. 36/1984; Official Gazette of the RS, Nos. 52/2000 – ZENDMPE and 47/2006 – ZEN)
Instruction on the Beginning of the Official Use of the Digital Cadastral Register (Official Gazette of the RS, Nos. 57/1999, 52/2000 - ZENDMPE and 47/2006 - ZEN)
REGULATIONS ISSUED ON THE BASIS OF THE BASIC GEODETIC MEASUREMENTS ACT
Decree on the Use of Geographical Names in Plans and Maps in Multinational Areas in the Socialist Republic of Slovenia (Official Gazette of the SRS, No. 11/1980) – on the basis of ZDGRS it is still valid until the enforcement of regulation enacted by the Government
REGULATIONS ISSUED ON THE BASIS OF THE LAND SURVEY SERVICE ACT
Rules on the Programme and Method of Taking an Exam in Land Surveying (Official Gazette of the RS, No. 10/2011)
Rules on Terms and Procedures for Scoring, Monitoring, Certification and Registration of Mandatory Proficiency Education of Certified Land Surveyors (Official Gazette of the RS, No. 10/2011)
Rules on the Programme and Method of Taking Proficiency Examination for the Performance of Land Surveying Services (Official Gazette of the RS, Nos. 11/2011 and 23/2011)
Rules on the Content, Form and Issuing Procedure of the Land Survey Licence (Official Gazette of the RS, No. 14/2011)
Decision on the Change of the Status of the Land Survey and Photogrametry Institute of the Faculty of Civil Engineering and Geodesy into the Land Survey Institute of Slovenia (Official Gazette of the RS, No. 38/2011)
REGULATIONS ISSUED ON THE BASIS OF THE SPATIAL PLANNING ACT
Rules on Land Consolidation in the Area of the Municipality Location Plan (Official Gazette of the RS, Nos. 21/2004 and 33/2007 - ZPNačrt)
Rules on the Land Register of the Public Communications Network and Associated Facilities (Official Gazette of the RS, Nos. 56/2005, 64/2005 – amend. and 33/2007 – ZPNačrt)
Rules on the Content and Method of Keeping a Database on Actual Land Use (Official Gazette of the RS, Nos. 9/2004 and 33/2007 – ZPNačrt)
Rules on Land Survey Plan (Official Gazette of the RS, Nos. 40/2004 and 33/2007 – ZPNačrt) – used until the issuing of implementing regulations on the basis of ZPNačrt, if this is not in violation of ZPNačrt
REGULATIONS ISSUED ON THE BASIS OF THE LAND REGISTER ACT (ZZK-1)
Rules of Land Register (Official Gazette of the RS, Nos. 30/2011 and 55/2011)
Rules on Electronic Exchange of Data Between the Land Register and Cadastres (Official Gazette of the RS, No. 30/2011)
REGULATIONS ISSUED ON THE BASIS OF THE HOUSING ACT
Decree on the Marking of Apartments and Business Premises (Official Gazette of the RS, No. 63/2006)
REGULATIONS ISSUED ON THE BASIS OF THE CONSTRUCTION ACT (ZGO-1)
Decree amending the Regulation on classification of construction with regard to their complexity (Official Gazette of the RS, No. 18/2013, 24/2013 in 26/2013)
Rules on the Form and Content of Identity Card and Uniform Stamp of Certified Engineers (Official Gazette of the RS, Nos. 51/2004, 60/2005, 73/2005 and 55/2011)
Rules on the Form and Content of the Identity Card and Uniform Stamp of Certified Architects, Certified Landscape Architects and Certified Spatial Planners (Official Gazette of the RS, Nos. 114/2004 and 53/2005)

Rules on Land Survey Plan (Official Gazette of the RS, Nos. 40/2004 and 33/2007 – ZPNačrt) – used until the issuing of implementing regulations on the basis of ZPNačrt, if this is not in violation of ZPNačrt
REGULATIONS ISSUED ON THE BASIS OF THE GENERAL ADMINISTRATIVE PROCEDURE ACT
Rules on the Keeping of Records of Administrative Procedures (Official Gazette of the RS, Nos. 18/2003 and 7/2006)
Decree on Administrative Operations (Official Gazette of the RS, Nos. 20/2005, 106/2005, 30/2006, 86/2006, 32/2007, 63/2007, 115/2007, 122/2007 - amend., 31/2008, 35/2009, 58/2010 and 101/2010 and 81/2013)
Rules on Confirming Finality and Final Decisions in Administrative Procedure (Official Gazette of the RS, Nos. 43/2005 and 94/2007)
Rules on Costs in Administrative Procedure (Official Gazette of the RS, No. 86/2005)
Regulation on Online Address Designation of Unified National E-government Web Portal in accordance with the General Administrative Procedure Act (Official Gazette of the RS, No. 36/2008)
Decree on Education and Proficiency Exam to Head and Decide in the Framework of Administrative Procedure (Official Gazette of the RS, No. 12/2013)
REGULATIONS ISSUED ON THE BASIS OF THE RECORDING OF REAL ESTATE ACT
Decree on the Marking of Apartments and Business Premises (Official Gazette of the RS, No. 63/2006)
Decree on Cadastral Area Territories and Names (Official Gazette of the RS, No. 100/2006)
Rules on the Register of the State Border (Official Gazette of the RS, No. 118/2006)
Rules on the Contents and Method of Administration of the Register of Spatial Units (Official Gazette of the RS, No. 118/2006)
Decree on the Method of Registration of Administrators of Real Estate into the Land Cadastre and Building Cadastre (Official Gazette of the RS, No. 121/2006 and 104/2013)
Rules on Boundary Settlement and Changing and Recording Data in the Land Cadastre (Official Gazette of the RS, Nos. 8/2007 and 26/2007)
Rules on the Land Rating Exam and the Power to Implement Land Rating (Official Gazette of the RS, No. 29/2007)
Rules on the Terms and Methods of Computer Access to Data from Geodetic Data Records and Databases (Official Gazette of the RS, Nos. 25/2008 and 10/2011)
Rules on Establishing Land Rating (Official Gazette of the RS, No. 35/2008)
Rules on Determining and Administering Land Rating (Official Gazette of the RS, No. 47/2008)
Rules on the Types and Contents of Certificates from Geodetic Databases and on the Manner of Data Designation (Official Gazette of the RS, No. 69/1012)
Rules on Building Cadastre Registration (Official Gazette of the RS, No. 73/2012)
REGULATIONS ISSUED ON THE BASIS OF THE REAL PROPERTY MASS APPRAISAL ACT
Rules on Criteria of Real Property Mass Valuation (Official Gazette of the RS, No. 94/2008)
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Rules on Land Survey Plan (Official Gazette of the RS, Nos. 40/2004 and 33/2007 – ZPNačrt) – used until the issuing of implementing regulations on the basis of ZPNačrt, if this is not in violation of ZPNačrt
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REGULATIONS ISSUED ON THE BASIS OF THE CADASTRA INCOME ACT
Decree on the calculations determination for the cadastral income calculation of land and for lump sum estimation of income per hive (Official Gazette of the RS, No. 71/2013)
Decree on cadastral income scale tables determination and lump-sum estimation of income per hive for the year 2014 (Official Gazette of the RS, No. 71/2013)

CONTACTS

6. CONTACTS

6.1 ADDRESSES OF THE SURVEYING AND MAPPING ADMINISTRATIVE BODIE

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@	Email address

STATISTICAL DATA ABOUT SLOVENIA

7. STATISTICAL DATA ABOUT SLOVENIA

7.1 SLOVENIA 2013 IN NUMBERS

Surface area of the Republic of Slovenia	20,273 km^2
Population*	2,060,663

* Number of residents on 1 October 2013.
Source: Statistical Office of the Republic of Slovenia

Geographical Coordinates of Extreme Points

	Latitude	Longitude
north	46º53′	16º14′
south	45º25′	15º10′
east	46º28′	16º36′
west	46º17′	13º23′
GEOSS	46º07′	14º49′

GEOSS — Geometrical Centre of the Republic of Slovenia

Length of the state border

Austrija	318 km
Croatia*	670 km
Italy	280 km
Hungary	102 km
TOTAL	1,370 km
Length of coastline**	46.6 km

* Border not marked on land; the length was calculated on the basis of the borders of cadastral communities.
** The length of the maritime border has not yet been determined.

Highest peak	Triglav (2,864 m)
The longest Karst cave (together with Pivka and Črna Jama)	Postojna Cave (20,570 m)
The largest intermittent Karst lake	Lake Cerknica (24 km^2)
The largest natural lake	Lake Bohinj (3.28 km^2)
The longest river	The Sava (947 km, of which 221 km run through Slovenia)

House numbers	543,373
Streets	10,349
Settlements	6,034
Municipalities	211
Plots	5,480,968
Buildings	1,170,130
Cadastral communities	2,698

December 2013

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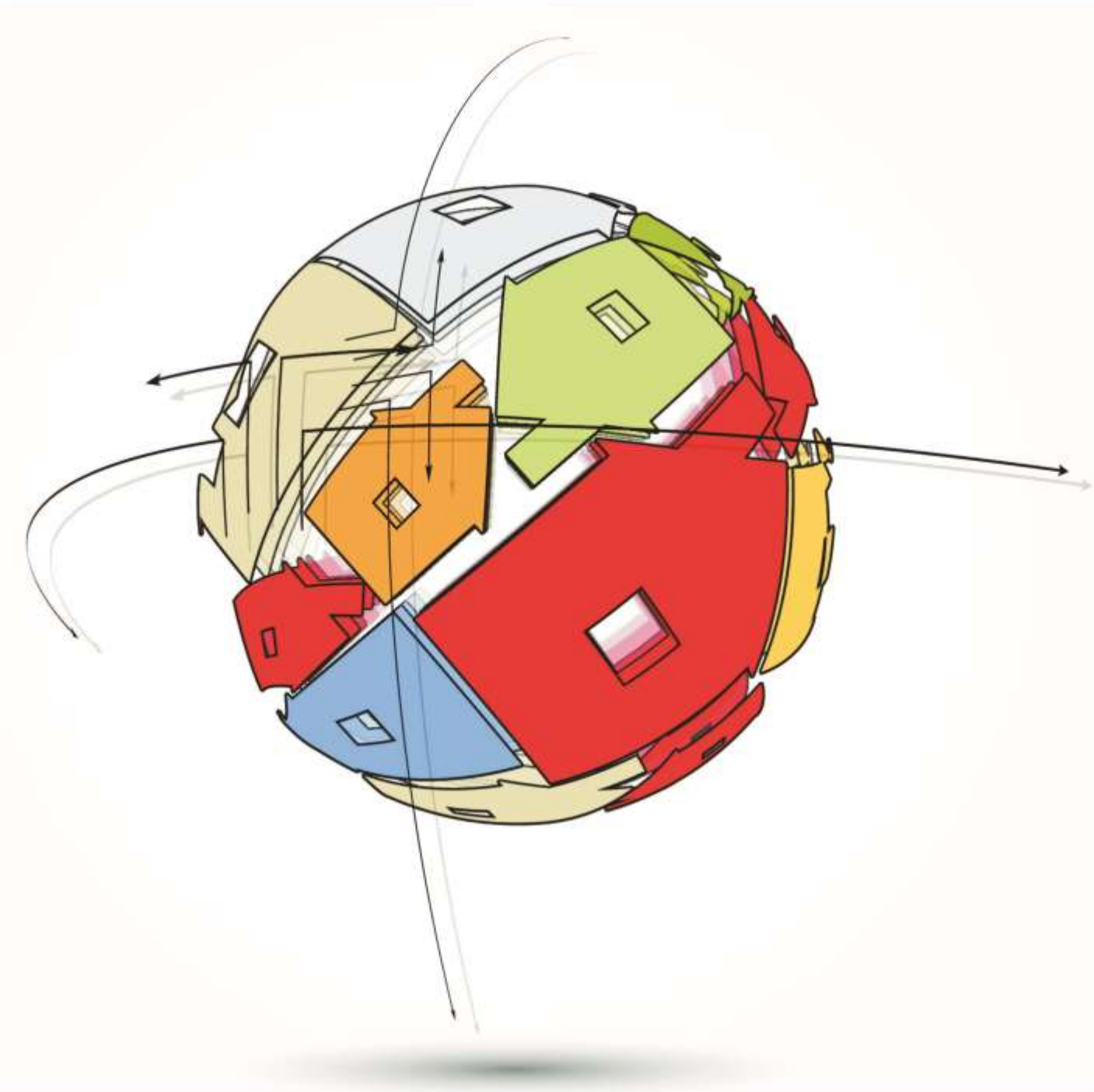
Photos by:
Archive of the Surveying and Mapping Authority of the Republic of Slovenia, if is not otherwise specified and Shutterstock base of photography

Ljubljana, 2014

Republic of Slovenia
Ministry of Infrastructure and Spatial Planning

SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA



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