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

After the successfully conducted real-estate inventory in 2007, we mainly worked on processing and integrating these data in the real-estate register, which was effectively created in 2008. There is one more step to take – the attribution of values to individual real-estate items. In the previous year we therefore finished the calculation models for attributing values to individual groups of real-estate items, and performed relevant co-ordination with local communities.

Our activities were not only limited to the real-estate area; in the field of the geodetic system we started implementing the new co-ordinate system project, which shall be finished in 2010. We managed to obtain a part of the funds for its implementation within the framework of the Norwegian financial mechanism.



General Director Aleš Seliškar

The aim of all these activities is, naturally, to provide up-to-date data for our users: the state administration, companies, and individual citizens. We apply modern information technology approaches and provide most of the data electronically, in view of being as user-friendly as possible.

Clearly, all these achievements are the fruit of efforts and knowledge of my colleagues, who are the first to deserve praise for achieving all the objectives, and bringing us to the same development level as other EU countries, and in many cases being a step ahead of them. Indeed, the smallness of a country can be an advantage, but in a small country sources are limited accordingly, and eventually, achievements cannot be undervalued.

You can read more on everything that has been mentioned, and on other things, in the Annual Report hereafter. I hope the report will provide you with a lot of useful information and ideas about how to use our knowledge and products.

I hope you enjoy reading this report.

Aleš Seliškar  
General Director



## 2.1 The Surveying and Mapping Authority in brief

The Surveying and Mapping Authority of the Republic of Slovenia is a body within the Ministry of Environment and Spatial Planning. The competence of the Surveying and Mapping Authority of the Republic of Slovenia comprises the assignments of the national land survey service, which include the creation, administration and updating of databases pertaining to the basic geodetic system, real estate, state border, spatial units and house numbers, and to the topographic and cartographic system.

The land survey service is responsible for the basic data on physical space and real estate in the finalized databases and provides services pertaining to the registration of changes in physical space and on real estate properties, performs the role of a coordinator in the field of the real estate system and the spatial data infrastructure. In cooperation with the Ministry of Finance, it introduces mass real estate valuation with the facility of creating foundations for successful and efficient real estate administration and provision of data for facility and comprehensive real estate taxation as well as increased efficiency of the real estate market. It creates conditions for implementing land surveys and ensures the compliance of the national coordinate system with the European coordinate system.



Picture 1: The data of the Surveying and Mapping Authority of RS

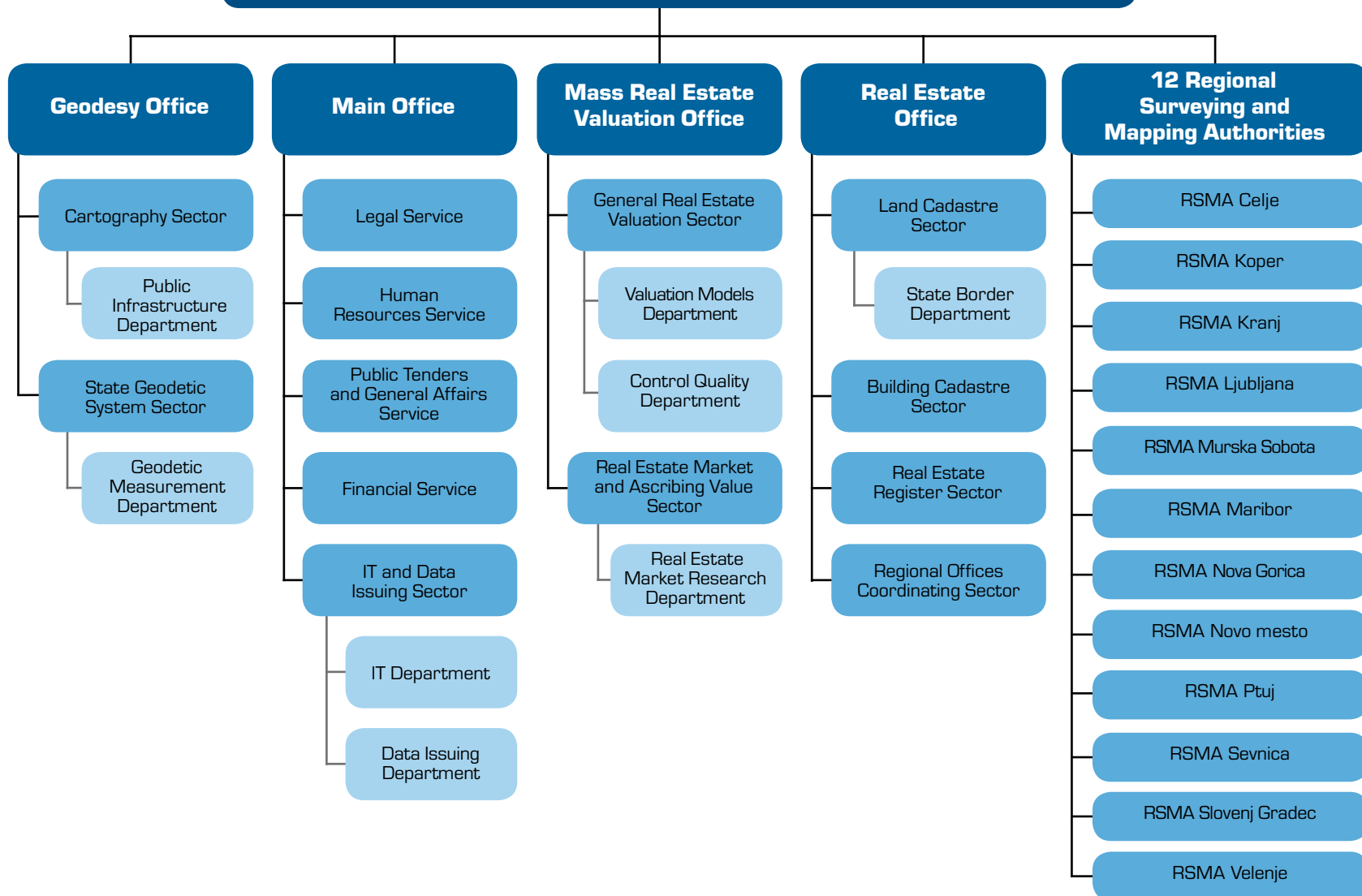
## 2.2 Main tasks and activities

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 administration units. These have been set up for the reasons of streamlined operation and the increased accessibility of administrative and professional tasks and services implemented by the Surveying and Mapping Authority of the Republic of Slovenia.

Together with the regional surveying and mapping administration units the above offices implement the following joint tasks:

- they prepare the national land survey service annual program and the report on its implementation;
- they organize the work of the regional surveying and mapping authorities, monitor their work;
- and ensure the uniform implementation of the national land survey service assignments;
- they direct the implementation of development assignments pertaining to surveying and mapping activities;
- they draft regulations in the field of surveying and mapping activities;
- they implement international obligations in the field of national land survey service.

## SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA



Picture 2: Organization chart of the Surveying and Mapping Authority of the Republic of Slovenia



## 2.3 Organization

### Main Office

The Main office implements administrative, professional, technical and supervisory assignments relative to the linking of spatial databases, the issuing of data and certificates in analogue and digital form, e-commerce with spatial data, spatial data infrastructure, developing electronic land survey service. It administers the information and telecommunication infrastructure, provides systemic, application and user support and IT training and education. Additionally, it implements the assignments pertaining to providing assistance in resolving substantive legal matters of all the offices and regional surveying and mapping authorities, financial operation, public tenders, human resources issues, education, office operation, safety and health in the workplace and other organizational assignments important for the operation of the Surveying and Mapping Authority of the Republic of Slovenia.



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



## **Real Estate Office**

The Real estate office implements administrative, professional, technical, coordination and supervisory assignments pertaining to the administration of the Land Cadastre, the Building Cadastre, other records on real estate, administration of state border records, and assignments pertaining to the landmarking, restoration and maintenance of the state border. It implements assignments of administering the Register of Spatial Units and the Register of House Numbers. It operates in an interagency capacity in the work of the international committees and other assignments and projects. It is responsible for the training and education of the employees of the Surveying and Mapping Authority and land survey companies licensed to implement geodetic services, it is responsible for implementing special professional examinations for the implementation of geodetic services, issues licenses for implementing geodetic services, administers the directory of the land survey companies licensed to implement geodetic services and the directory of persons who have passed a special professional state examination for implementing geodetic services, and supervises their work. One of its tasks is also the substantive management and coordination of the work of the regional surveying and mapping authorities in the field of real estate.

## **Mass Real Estate Valuation Office**

In accordance with the Mass Real Estate Valuation Act (Official Gazette of RS, No. 50/2006) the assignments of mass real estate valuation are implemented by the Mass real estate valuation office within the Surveying and Mapping Authority of the Republic of Slovenia. The Mass real estate valuation office implements the assignments of general real estate valuation and the tasks of ascribing value to real estate properties. The tasks of general real estate valuation comprise the preparation of the criteria for mass real estate valuation, the preparation of outline proposals and final proposals for valuation models, the preparation of the drafts of government regulations in the field of general real estate valuation, the determination of the annual price indexes and the real estate value indexes, informing real estate owners about the trial value assessment, the establishment, administration and updating of the real estate valuation database, designation of knowledge on mass real estate valuation, real estate market research and analyses, the preparation of statistical reports on real estate, real estate market and real estate values as well as other tasks pertaining to general valuation. The assignments of ascribing value to real estate properties comprise value ascription to real estate properties, acquisition of data on real estate in order to ascribe value to them and the establishment, administration and updating of the Real Estate Market Record.

## Geodesy Office

The Geodesy office is responsible for basic, geoinformation infrastructure. It implements administrative, technical and coordination, implementative and supervisory assignments in the field of the national geodetic system and the data on the actual situation in the physical space. It is responsible for the establishment and updating of the national coordinate system and its accessibility through the system of permanent global satellite positioning stations and other geodetic networks. It coordinates the assignments pertaining to the transition to the European coordinate system and it is responsible for linking the national coordinate system with the coordinate systems of the neighboring countries. The office implements assignments in the field of the acquisition and administration of national topographic data, it administers the topographic database and the Consolidated Cadastre of Public Infrastructure, it is responsible for the national cartographic system and ensures the creation of the national cartographic and topographic products, especially for the needs of the state, state agencies and local self-government. It ensures the compliance of the basic geoinformation infrastructure with the European guidelines and coordinates the linking and compliance of other spatial data with them. The office participates in the European and international projects in the above-mentioned fields. The Geodesy Office coordinates the introduction of the European directive INSPIRE at the Surveying and Mapping Authority of the Republic of Slovenia and ensures the conformity of the access infrastructure with the European one.

### **Regional surveying and mapping authorities**

- create, administer 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 customers and information to the users
- participate in the planning and programming of the land survey activities, primarily in cooperation with local communities;
- coordinate activities in the land survey offices;
- implement individual assignments in the area of financial operation, personnel matters, office operation and other organizational assignments;
- implement other assignments as stipulated by the general director of the Surveying and Mapping Authority.

Regional surveying and mapping authorities implement assignments of receiving applications, informing, issuing data to customers and implementing individual tasks in administrative procedures pertaining to direct contact with a customer at their head offices and all the other geodetic offices.



Picture 4: Territorial division of the regional surveying and mapping authorities

## 2.4 Human Resources

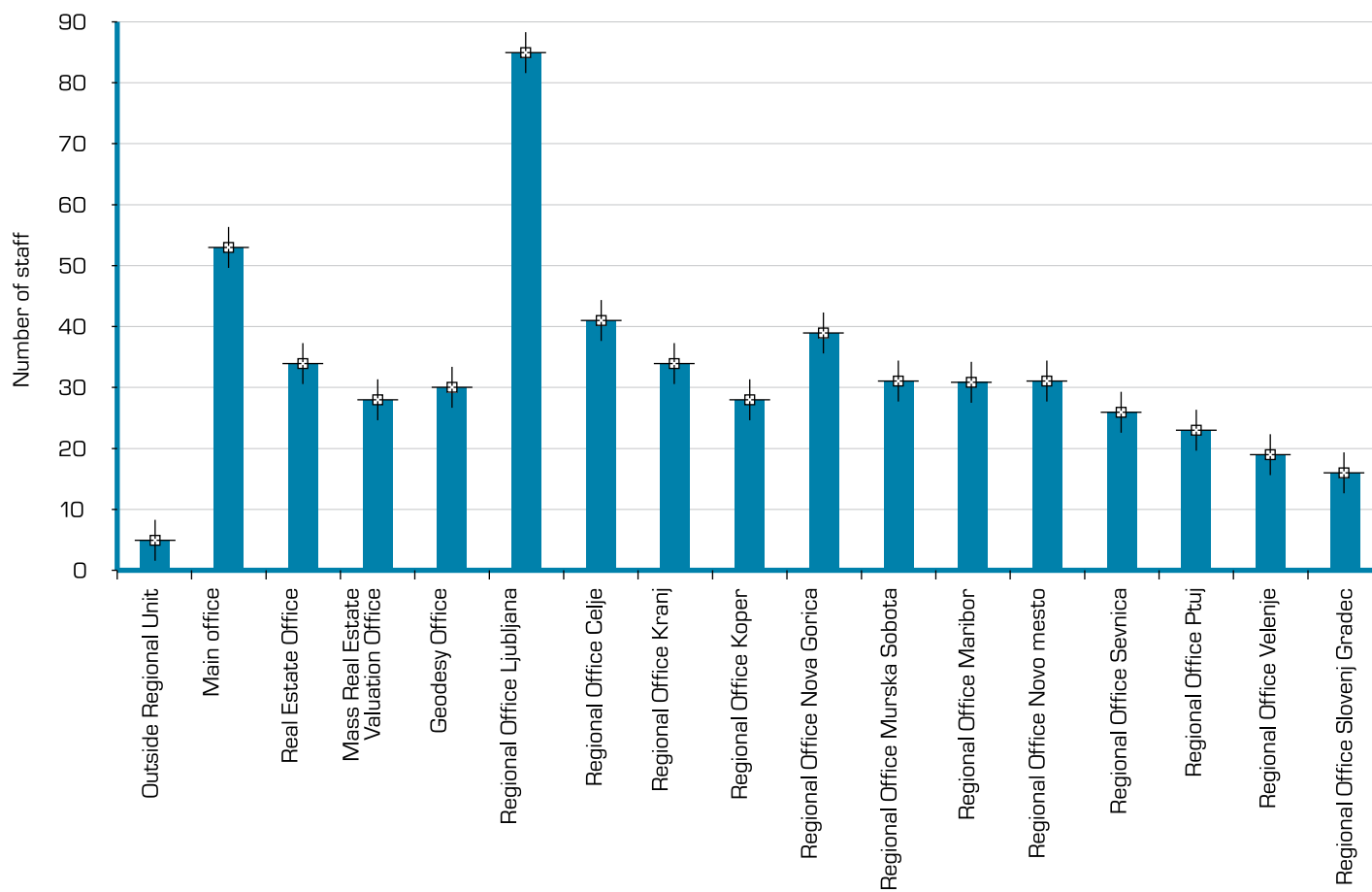
On 31 December 2008 there were 542 permanently employed civil servants at the Surveying and Mapping Authority of the Republic of Slovenia, 12 temporarily employed civil servants, 5 of whom were trainees. 29 employees terminated their employment (permanent or temporary staff), while 11 new employees were employed on a permanent basis. The number of employees decreased by 1.2% in comparison with the end of 2007.

Table 1: Number of employees at the offices and regional surveying and mapping authorities on 31 December 2008

Staff structure by their field of expertise in 2008	
Surveyors	291
Agronomists	11
IT specialists	17
Lawyers, financial and administrative staff	235
Total	<b>554</b>

Staff structure by education level in 2008	
University graduates I	296
First level university	52
Secondary	194
Elementary	12
Total	<b>554</b>

Graph 1: Number of all employees at the offices and regional surveying and mapping authorities on 31 December 2008





## 2.5 Finance

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

Last year the income from the selling of geodetic data and products fell as a consequence of the changed regulations. The income derives from own activities. In compliance with the Budget Implementation Act, the income deriving from own activities may only be used for covering material costs and the costs of administering and issuing data and products.

Table 2: Budget expenditure in 2008

<b>Budget 2008</b>	<b>in EUR</b>
Surveying works program	2.662.839
Salaries	13.551.555
Material cost	3.072.550
Investments and investment maintenance	437.209
Own activity	221.871
<b>Total</b>	<b>19.946.024</b>

Graph 2: Shares of expenditure by purpose in 2008

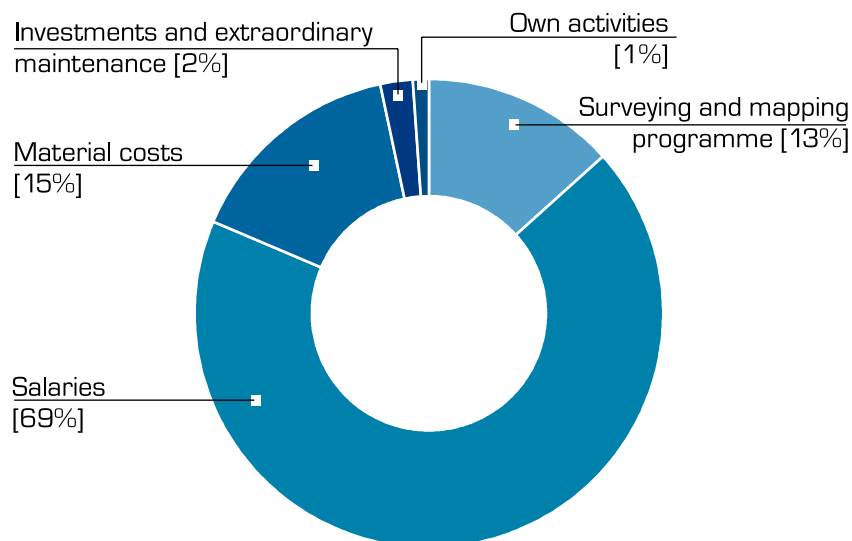


Table 3: Implementation of budget appropriations over years (all figures EUR)

	2003	2004	2005	2006	2007	2008
Surveying works program	5.187.813 (including World Bank funds)	4.809.934 (including World Bank funds)	4.439.094	6.872.254	12.158.409	2.662.839
Salaries	10.973.961	10.913.613	11.151.844	11.468.995	12.915.929	13.551.555
Material cost	1.514.837	1.707.471	2.079.024	1.991.548	2.714.473	3.072.550
Investments	619.730	288.812	310.286	697.742	495.624	437.209
Own activity	772.877	729.680	941.435	520.439	173.759	221.871
<b>Total</b>	<b>19.069.218</b>	<b>18.449.510</b>	<b>18.921.683</b>	<b>21.550.978</b>	<b>28.458.194</b>	<b>19.946.024</b>

## 2.6 International activities

As for international activities, the Surveying and Mapping Authority of the Republic of Slovenia is mainly active within the European environment, where it involves in European initiatives and associations, and in contacts with the neighbouring countries. It has been actively involved in the European association of surveying and mapping authorities, EuroGeographics, the Permanent Cadastre Committee of the European Union (PCC), and the Working Party on Land Administration, within the European Commission for Europe, the United Nations Organisation covering the activities of national institutes, in Europe and North America, dealing in Land Cadastre, Land Register, real property valuation, reallocation of land, and land information systems (WPLA).

The Surveying and Mapping Authority fulfils its international obligations of maintaining the state border in compliance with international contracts on border maintenance, with Italy, Austria, and Hungary, and based on provisions of the State border Control Act. Employees of the Surveying and Mapping Authority co-operate in, and chair, various international committees for state border maintenance, with Italy, Austria, and Hungary.

In 2008, the staff of the Surveying and Mapping Authority of the RS actively participated, with their contributions, in various sessions of the Eurogeographics working parties. Last year, the Surveying and Mapping Authority of the RS was also actively involved in several international projects, within the association Eurogeographics (EuroGeonames, EuroBoundaries, Euro Regional Map, etc.).



Picture 5: Eurogeographics General Assembly session, Sibiu, Romania, September 2008

In 2008, we continued with the activities related to developing a spatial data infrastructure, based on the INSPIRE directive (Directive 2007/2/EC). The representative of the Surveying and Mapping Authority of the RS is the Slovenian delegate at the permanent committee for INSPIRE, established by the European Commission, based on the INSPIRE directive. In 2008, we participated in the organisation of the international INSPIRE conference, held in Maribor (Habakuk Hotel) between 23 and 26 June 2008.

In the first half of 2008, the Surveying and Mapping Authority successfully chaired the Permanent Cadastre Committee (PCC) in the European Union. Its presidency was closed with signing an agreement on the co-operation between EuroGeographics and the Permanent Committee, at the session in June 2008, in Bled.



Picture 6: The PCC session in Bled, June 2008



We continued with the international project, started in 2007, based on a contract signed with the Norwegian Surveying and Mapping Authority, as part of the Norwegian financial mechanism and EEA Grant.

In the past year, the Surveying and Mapping Authority was visited by a series of delegations from foreign Surveying and Mapping Authorities and various associations, while the representatives of our Surveying and Mapping Authority attended several expert meetings abroad, on the co-operation with the Surveying and Mapping Authorities from the neighbouring and other European countries.



Picture 7: The representatives of the Surveying and Mapping Authority at the conference on cadastre reforms – Skopje, May 2008

In August 2008, the Surveying and Mapping Authority of the RS was visited by the Minister for Public Administration of the Republic of Kosovo, Dr Arsim Bajrami. They discussed possibilities of mutual co-operation between the Surveying and Mapping Authorities of Kosovo and Slovenia, in updating land registers in Kosovo.



Picture 8: The visit of the Minister of Public Administration of the Republic of Kosovo, Dr Arsim Bajrami, at the Surveying and Mapping Authority of the RS, August 2008



The staff of the Surveying and Mapping Authority are actively involved in activities of a group of experts on geographical names (UNGEGN - United Nations Group of Experts on Geographical Names), which is a consulting and expert body of the United Nations Organisation.

### **EuroGeoNames**

The Surveying and Mapping Authority of the RS co-operated in the project EuroGeoNames (programme eContent plus), financed by the EU, as a member of the project Consortium, chaired and co-ordinated by 'Bundesamt für Kartographie und Geodäsie' (BKG), from Frankfurt. The purpose of the project EuroGeoNames was to establish a common European geo-information system of geographical names.

The main result of the project EuroGeoNames is two online applications for searching European geographical names – the so-called 'reference application' for final users, and an application for commercial users in the ArcGIS 9.3. environment. Currently, local services of seven members of the reference group are established (Austria, Latvia, Hungary, Germany, the Netherlands, Norway, and Slovenia), which means that geographical names from these seven countries can be searched for using online applications. Local services for other countries of the reference group (15 countries altogether) are still under construction and are supposed to be finished by end of 2009. By 2012, all countries of the EU, or as many European countries as possible, will have been integrated. As of March 2009, the project EuroGeoNames is under the patronage of the organisation EuroGeographics.

The Surveying and Mapping Authority of the RS managed the third phase of the project, the 'data selection', which involved obtaining and assessing data on geographical names from individual countries, defining criteria for data selection, defining the content of metadata description of local services, and providing, and assistance in, completing metadata descriptions of individual members of the reference group.



As a partner, the Surveying and Mapping Authority of the RS also co-operated in the phase of reference application testing, and provided a translation of the reference application EuroGeoNames in the Slovenian language.

Picture 9: EuroGeoNames Consortium meeting, in Ljubljana, 3 and 4 March 2008

### **3.1 Overview of the activities of the entire Surveying and Mapping Authority of the Republic of Slovenia in 2008**

The majority of tasks set in 2008 have been accomplished in their entirety. In that, we must especially emphasize the following results:

Surveying and Mapping Authority of the Republic of Slovenia prepared proposals for two new laws in its regulations preparation process, passed by the National Assembly of the Republic of Slovenia:

- Act on designating areas and naming and marking settlements, streets and buildings - ZDOIONUS (Official Gazette of RS, No. 25/08)
- Act on amending Land Survey Service Act – ZgeoD-A (Official Gazette of RS, No. 45/08)

as well as 8 other acts and rules, which were accepted by the Minister of the Environment and Spatial Planning:

- Rules on the terms and methods of computer access to data from geodetic data records and data bases (Official Gazette of RS, No. 25/08)
- Rules on establishing land rating (Official Gazette of RS, No. 35/08)
- Rules on determining and administering land rating (Official Gazette of RS, No. 47/08)
- Decision that the cadastre of buildings and land register be established (Official Gazette of RS, No. 62/08)
- Regulation on settling issues of determining areas of settlements, determining of house numbers and street layouts and house and street markings (Official Gazette of the RS, No. 76/08)
- Regulation on terms and ways to determinate an official short name of settlement and official short name of street (Official Gazette of the RS, No. 78/08)
- Regulations on the Manner of Determining Annual Price Indexes and Real Estate Value Indexes (Official Gazette of the RS, No. 79/08)
- Rules on criteria of real property mass valuation (Official Gazette of the RS, No. 94/08)

**In the fields of geodesy, topography and cartography:**

- the basic configuration of the SIGNAL network of permanent GPS stations was upgraded,
- measuring equipment and software for operative work was purchased,
- operating of the GPS Office, which monitors network operations and provides users with data, was ensured,
- implementing the “Establishment of a GPS stations network and implementation of the European coordinate system in Slovenia” project that is subsidised by a Norwegian financial mechanism;
- upgrade of the application of the central database of geodesy points,
- organised workshop on the new co-ordinate system in geodesy practice,
- measurement quality control in the new national co-ordinate system,
- ensured work of the Slovene Governmental Commission for the Standardisation of Geographical Names,
- the acquisition of topographic data at 1:5,000 (DTK5) was implemented for 3% of the territory of Slovenia,
- aggregation of all current topographic data DTK 5, topologically and attributively arranged data,
- update of 12 sheets of the national topographic map 1 : 50,000,
- design of national general maps at scales 1 : 250,000, 1 : 500,000, 1 : 750,000, and 1: 1,000,000,
- determination of procedures of changing to the new national co-ordinate system for topographic system data and other surveying and mapping data,
- professional activities have been performed for the renewal of legislation covering the national geodetic and topographic system in line with the provisions of the INSPIRE directive,
- registration of more than 2.5 million facilities of the public infrastructure,
- preparation of 70 detailed expert reports on the co-ordination of roads in local communities,
- establishment of access to public infrastructure data for local communities.

**In the area of real estate registration** most planned activities for 2008 were successfully carried out. An exception was the preparation of modules and interfaces for electronic data exchange between the Land Cadastre, Cadastre of Buildings, and Land Register. The task was not implemented because the data-exchange protocol, representing the basis of the IT solution, was not yet finalised and adopted.

Performed tasks:

- all the planned maintenance activities were executed; geodetic surveys and vegetation clearing at the national borders with Italy, Austria and Hungary were carried out
- introduction of land rating into the Land Cadastre records
- establishment of the Land register
- co-ordination and connection of data between land records and other databases (Permanent Residence Register, Land Register)
- adoption of an initiative to eliminate unsolved requests in resolving administrative procedures of the Surveying and Mapping Authority of the RS, and implementation of its first phase (for 2008)
- preparation and implementation of training for geodesists with a geodetic permit, and the Surveying and Mapping Authority staff, on novelties in land management

**In the area of real estate valuation** in 2008 the Office for Mass Valuation of Real Estate at the Surveying and Mapping Authority of the Republic of Slovenia operatively carried out activities in overall real estate valuation. The real estate transactions were reviewed and processed for the purpose of making a model of the Slovene real estate market and determining a valuation model of individual types of real estate. The production and distribution environment of the Public Real Estate Market Record was managed and maintained, which ensures a good foundation with regard to improving the transparency of the Slovene real estate market. A system of overall real estate valuation, in regard to its content and IT, was established. A draft of proposed models of real property mass-appraisal was prepared and sent to all Slovenian municipalities. The draft of proposed models of real property mass-appraisal was co-ordinated with municipalities. The municipalities submitted their comments and suggestions to the draft of proposed models of real property mass-appraisal, and they will be discussed in accordance with the criteria of real property mass-appraisal. Software solutions for real property valuation databases were developed and maintained, for the purpose of recording mass valuation models, attributing value in view of calculating the value of all real property, based on Land Register data, and maintaining a work register for the implementation of the process of model co-ordination with municipalities and land owners.

**In the area of data issuing** the Surveying and Mapping Authority of the Republic of Slovenia provided electronic access to geodetic data to numerous groups of users through the data distribution system, as well as in the usual way of issuing geodetic data certificates at counters of all locations of the Surveying and Mapping Authority and all administrative units. Data was issued in forms of certificates, maps, plottings, extracts, online browsers, online data distribution and duplicates at counters. In 2008, the number of registered users of the distribution system increased by 17% on 2007, so that the system was used by a total of 4,095 users from 995 organisational units, in addition to other information systems, public and personal queries. The total number of queries made was 18.4 million, a 20% decrease on 2007 when a substantial quantity of public queries was made due to performing a building and apartment inventory. However, the flow of data towards other information systems increased considerably, by as much as 83%, mainly due to increased use of online services. In addition to extracts issued by the Surveying and Mapping Authority, 20,500 extracts from geodetic databases were issued by administrative units. The number of requests for issuing public communication data increased as well, by 17%.

Promotional and other activities for informing the users and the wider community were carried out and various brochures were printed. The Report on the activities of the Surveying and Mapping Authority of the Republic of Slovenia was published in two languages. Funds for the concession of managing the GEOSS area were provided.



## **3.2 Important activities of the Main Office**

### **ACCESS TO THE GEODESY OFFICE'S DATA**

#### **Electronic access to data**

For the purposes of accessing data online the Surveying and Mapping Authority of the Republic of Slovenia established a computer-supported distribution system. It is based at the Ministry of Public Administration (MPA) as part of the national information system. It provides access to data in different ways. Practically all the databases are included in the distribution environment: the Land Cadastre, the Building Cadastre, 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. Their regular daily updating is provided. 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 it is as independent as possible of the systems and changes in the production, which is of the organization of data suppliers and changes in the manner of administration to data updating. Through the creation and use of special interfaces, online services and user applications, it enables a simple, secure, and correct use of geodetic data.

The Surveying and Mapping Authority of the Republic of Slovenia enables its users to electronically access the data online in two ways:

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



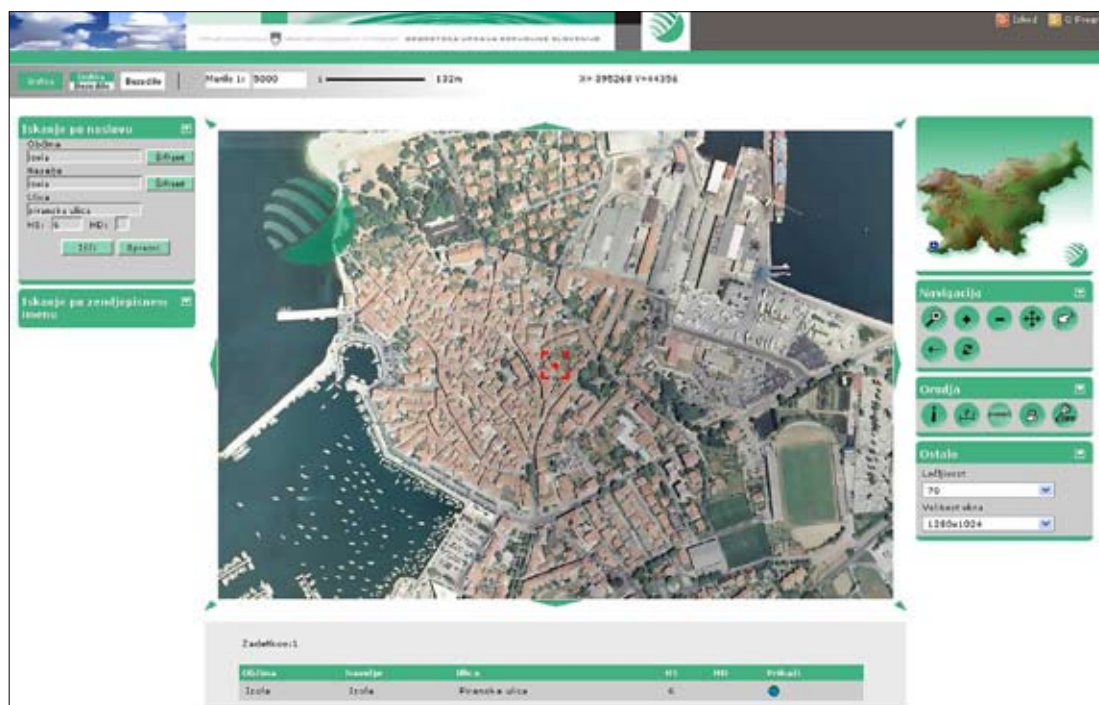
The Surveying and Mapping Authority of the Republic of Slovenia regularly administers and updates metadata for all the data, which is available to users on its website <http://prostor.gov.si>.

The updated online portal is an access point to information, services, and applications related to geodetic and real property information. It is not only the image that is changed; the portal now provides more content and enables users to navigate more easily and faster towards desired information.

Picture 10: Online portal 'Prostor' (Space)

## Access to geodetic data

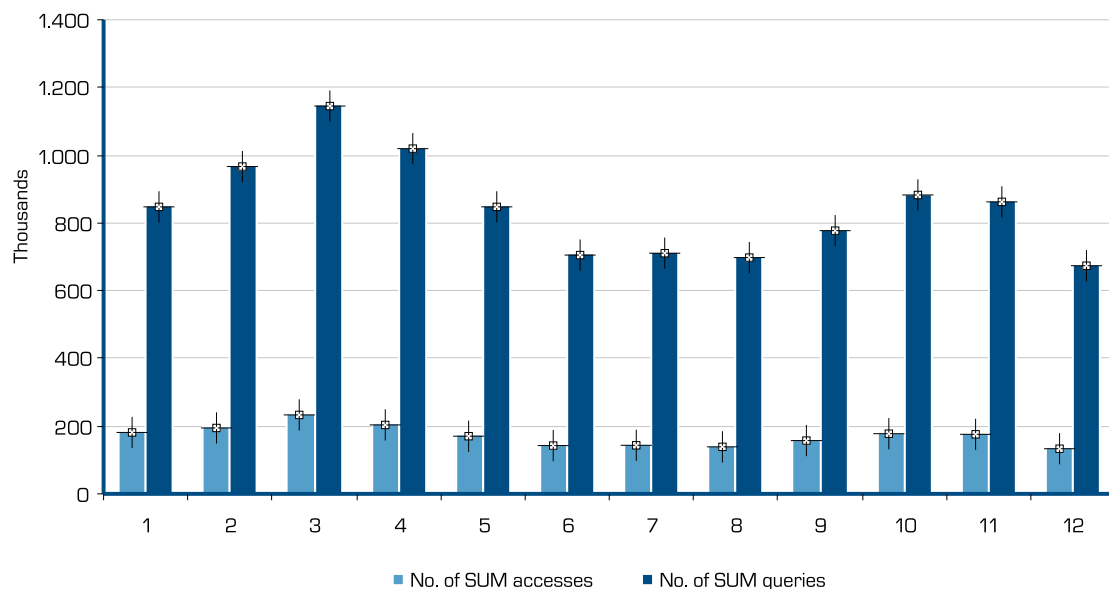
**Free access** to cartographic data is available to all users, allowing them to search for a location and a display of this location on the selected cartographic basis (orthophoto, a basic topographic map, national topographic maps, etc.) free of charge. It is possible to search a location in two ways – 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://prostor.gov.si/iokno/iokno.jsp>.



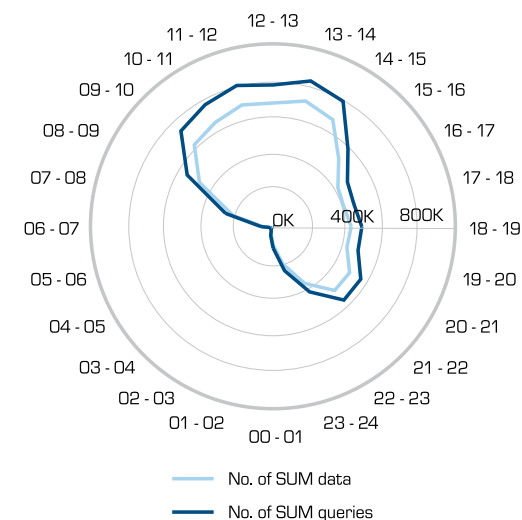
Picture 11: Location search and its display on the orthophoto

**Public access** is access to the latest registered data in the Land Cadastre, the Building Cadastre, the Register of Spatial Units, the Consolidated Cadastre of Public Infrastructure, and real estate transactions on the basis of a real estate identifier (land parcel number, a building or part of a building number or an address). The service is free of charge and publicly available at <http://prostor.gov.si>.

Graph 3: Number of inquiries and data by month

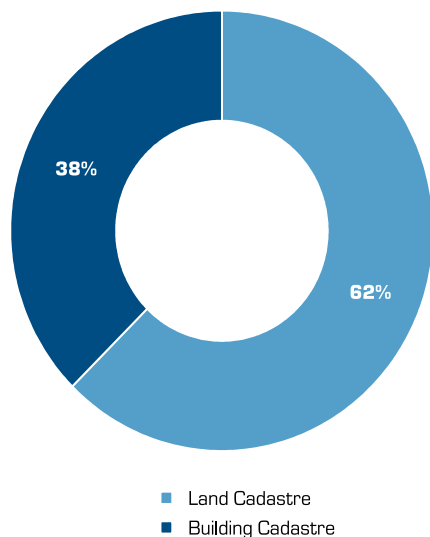


Graph 4: Number of queries and data by hours

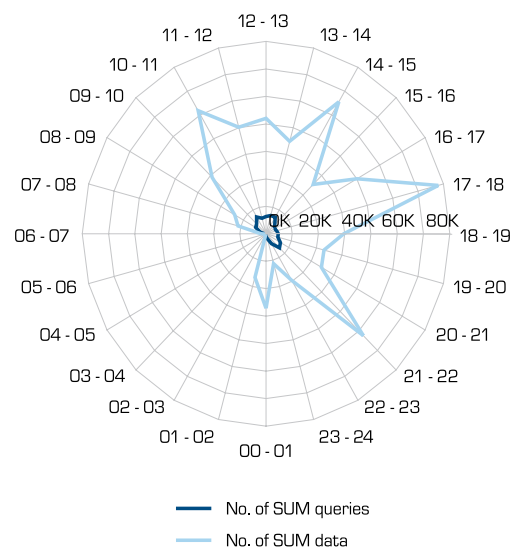


**Personal access** allows an individual a free of charge access to graphic and descriptive data on real estate properties which are owned by that individual and are administered in geodetic records as such. This kind of access allows everyone, after they demonstrate their identity with an appropriate digital certificate, to verify the accuracy of the recorded data in the Land Cadastre, the Building Cadastre and the Register of Spatial Units, and take appropriate action in case of discrepancies (<http://prostor.gov.si>).

Graph 5: Number of queries according to types of information



Graph 6: Number of queries and data per hours

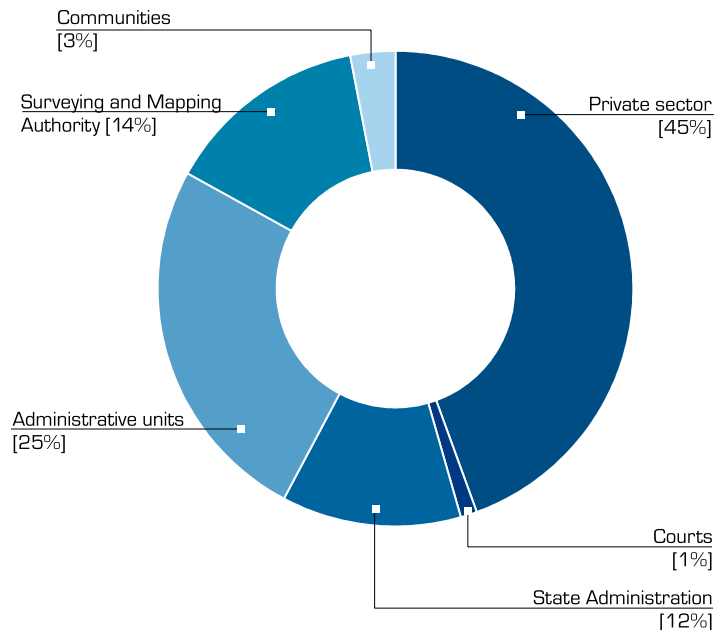


**Access for registered users** (<http://prostor.gov.si>) enables access to all the geodetic data in the multi-purpose, user-adapted distribution system. This service of access to geodetic data enables browsing by attributes and graphics in all databases that are included in the system. In addition to searching for data, the graphic section of the browser also offers the user all standard spatial functions (navigation, enlargement, reduction, shifting, choice of scale, distance measurements, choice of image quality, choice of object, etc.). In accordance with the legislation it is also possible to obtain data on the owner of real estate (land parcel or a building) on the basis of providing a real estate identifier. The browser displays the selected data in the graphic form as well; and depending on the level of detail of the displayed information, it is possible to choose an appropriate cartographic basis (orthophoto, a basic topographic map, a topographic map, etc.) for such a display (e.g. parcel boundaries). This service of access for registered users is intended primarily for users in public administration (national and local level), commercial users (real estate agents, lawyers, insurance agencies, banks, etc.) and land survey service providers.

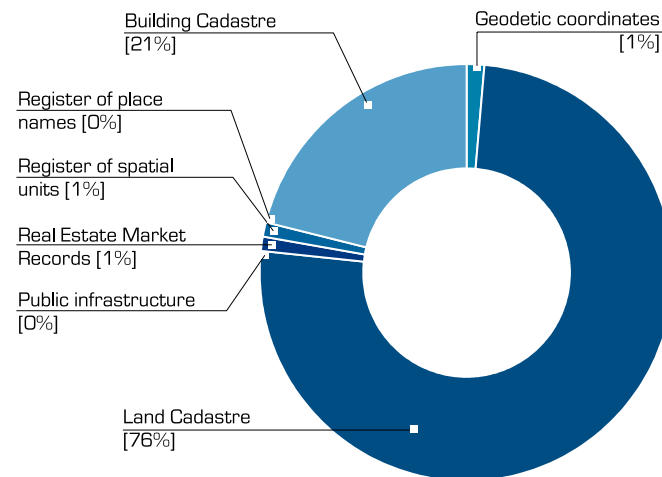
The number of registered users of the service of accessing geodetic data increases each year. In 2008, 2,665 users from 576 organizations submitted their inquiries for data. 762 new users and 261 organisations were registered. The total number of all registered users is 6,126, and the total number of registered organisations is 644.

# WHAT WE ACCOMPLISHED IN 2008 ...

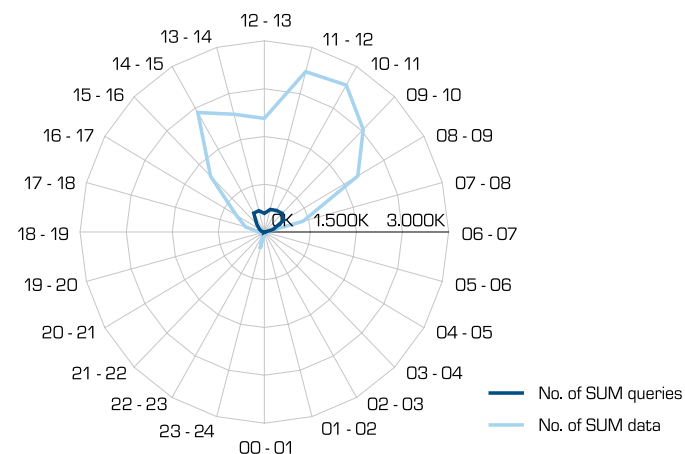
Graph 7: Access to data by groups of organisations



Graph 8: Number of inquiries by type of data



Graph 9: Number of queries and data per hours





**Distribution of geodetic data**

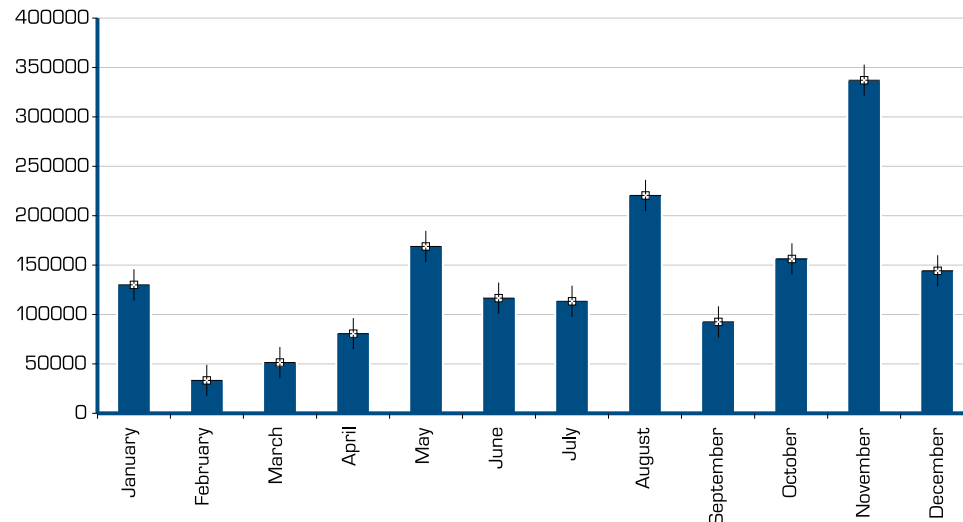
The distribution of geodetic data is intended for the so-called registered users. Special online services, which enable a secure and controlled access, enable data transfer from the distribution system to the user's system. Based on the requests made by the user the distribution system creates standardized files, which the user then copies to their system.

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

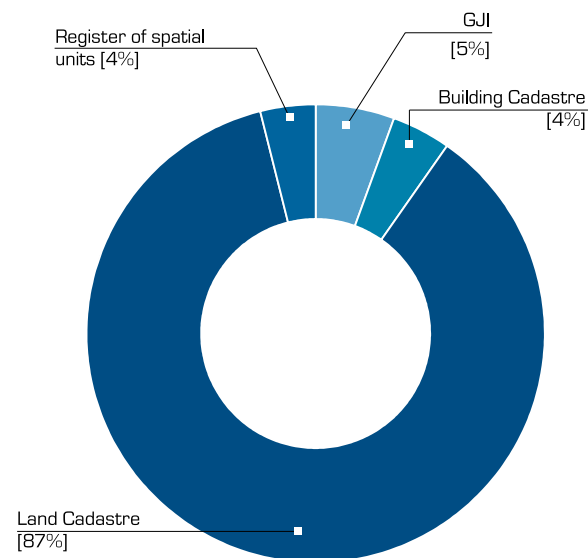
In the initial phase the Surveying and Mapping Authority of the Republic of Slovenia developed a WFS type (Web Feature Service) online service for the majority of the data we provide to the users. The basic web services are developed for the Land Cadastre, the Building Cadastre, and the Register of Spatial 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.

A practical use of web services began in the last quarter of 2006, when the larger partners within the public administration (both at the national and local level) started using these services for the purposes of administering and updating the more important national and local registers and records.

Graph 10: Number of inquiries by month



Graph 11: Number of inquiries by type of interface



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

### **Metadata**

The Surveying and Mapping Authority of the Republic of Slovenia administers and updates metadata for all geodetic databases. Metadata enables searching by data, providers thereof, areas of preparation; metadata contains descriptions of data characteristics, data accuracy, the method and frequency of database updating, etc.

Metadata is available at <http://prostor.gov.si/CEPP> or, when needed in English at [http://prostor.gov.si/cepp\\_eng/index.jsp](http://prostor.gov.si/cepp_eng/index.jsp).

### 3.3 Important activities of the Real Estate Office

#### Adoption of regulations in the area of recording real estate

At the beginning of 2008, the latest two implementing regulations were adopted, based on the Real Estate Recording Act (Official Gazette of RS, No. 47/2006 and 65/2007 - Decision of the Constitutional Court):

- **Rules on establishing land rating (Official Gazette of RS, No. 35/2008)**, provisioning a detailed methodology of establishing land rating with translation charts for cadastral districts, from the system of cadastral classification into land rating, and providing graphical presentation of areas with the same land rating.
- **Rules on determining and administering land rating (Official Gazette of the RS, No. 47/2008)**, provisioning the methodology of determining land rating, manner of recording data on land rating, administering and stating land rating, changing land rating, and managing the graphical presentation of areas with the same land rating.

In 2008, a new **Act on designating areas, naming and marking settlements, streets and buildings – ZDOIONUS (Official Gazette of RS, No. 25/2008)**, was adopted, which replaced the old Act on naming and marking settlements, streets, and buildings from the year 1980. ZDOIONUS stipulates manners and procedures for determining areas and names of settlements, street names, house numbers, and marking settlements, streets, and buildings.

To ensure a complete administering of an area, two implementing regulations related to the above-mentioned acts were adopted, namely:

- **Regulation on settling issues of determining areas of settlements, determining of house numbers and street layouts and house and street markings (Official Gazette of RS, No. 76/2008)**, which governs, in a more detailed way, issues related to detailed expert reports on establishing a street system, and detailed expert reports on street system modification. It also stipulates the criteria for determining the street layout, establishing, changing, and cancelling streets in the street system, rules on street signs, and rules on determining house numbers and house number plates.
- **Regulation on terms and ways to determinate an official short name of settlement and official short name of street (Official Gazette of RS, No. 78/2008)** – In addition to settlement names, the Spatial Unit Register also provides a settlement's short name, which has to be provided when the name of the settlement exceeds a given number of characters. The need for this practice is demonstrated in real life – a passport, personal identity card, driving licence, and firearm certificate all contain the permanent residence of the holder, and provide a limited space for it – e.g. on the personal identity card, 25 characters are available for the settlement name, and 35 characters are available for the street name. The issue with 'long' addresses is especially topical when writing bilingual names.

## **Building Cadastre**

In 2008, we concluded the final phases of real estate inventory, and, based on certain conditions determined in advance, transferred some data into the Cadastre of Buildings. In the second half of 2008, a minimum upgrade of the software for the Cadastre of Buildings was made; it involved an upgrade of the module for recording administrators of state-owned real estate, development of a procedure for importing building outlines, development of an online service for sharing information on apartment numbers with the Ministry of the Interior, and other minimum upgrades made in view of establishing the Cadastre of Buildings.

Based on these activities, the Surveying and Mapping Authority of the RS, announced in Official Gazette of RS, No. 62/2008 that as of 10 July 2008 the Cadastre of Buildings and Land Register are established.

In 2008, we paid a great deal of attention to improving data on buildings, parts of buildings, and their connection to the data on parcels and house numbers, in case a building does not have them.

Because of reporting the residence on a house number, which started on 11 July 2008, we corrected and co-ordinated apartment numbers in multiple-apartment buildings and residential and commercial buildings. Due to the extent of works, the task will continue in 2009.

In 2008, we also published a brochure on the use and purpose of house numbers and apartment numbers.



Picture 12: Apartment marking



Picture 13: House number

## **The Real Estate Register**

Several actions were taken in the area of Real Estate Register in 2008.

The data collected in real estate inventory were processed and completed with data from other public records. Together with the data from the Land Cadastre and the Cadastre of Buildings they form a basis for establishing a multi-purpose database, which represents an image of the real estate situation in Slovenia, providing an overview of the number, age, and size of real estate, its communal facilities, and maintenance. When introducing the Real Estate Register, a press conference was held to present the creation process, the first analyses and statistical results, and a special brochure about the new database.



Picture 14: Press conference on establishing the Real Property Register



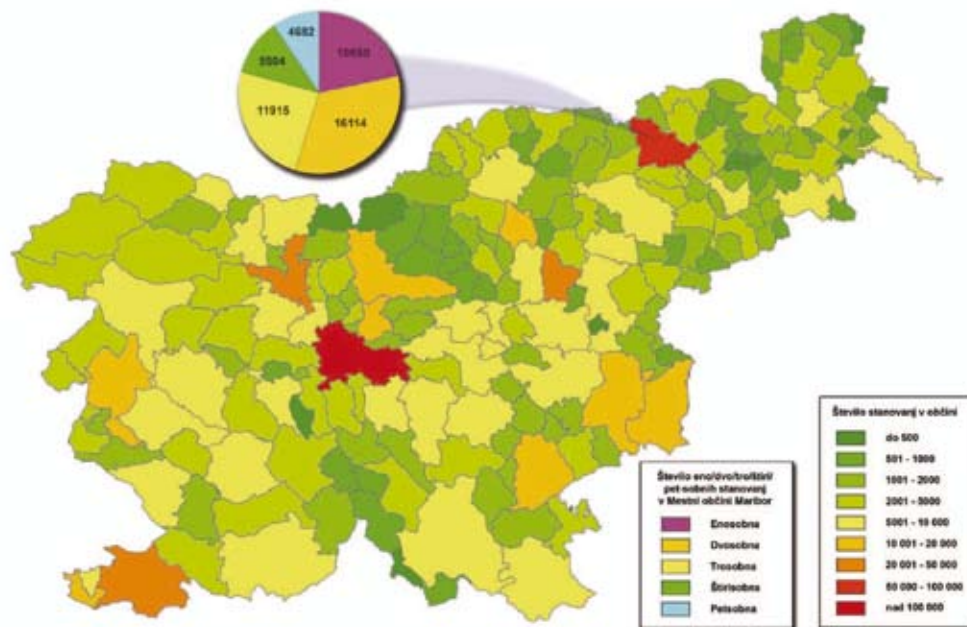
When introducing the Real Estate Register in July 2008, regular data maintenance, involving data acquisition on the basis of questionnaires, capturing, and co-ordinating data between various real estate records, commenced.

As part of the register's creation, a software solution for administering and maintaining data from the Real Estate Register was developed.

As part of the target research programme (CRP) –

Competitiveness of Slovenia 2006-2013 – the Surveying and Mapping Authority co-operates, as a co-financing entity, in the project entitled 'The multi-purpose feature of the Real Estate Register supporting a greater institutional efficiency and improving the quality of services'. The project is supposed to finish in 2009.

Number of apartments per municipality, number of one/two/three/four/five room apartments in the Maribor Municipality



Picture 15: Statistical data – number of apartments per municipalities

## Land Cadastre

At the beginning of 2008, we introduced two new data sets in the Land Cadastre records – land rating, which represents information on the productive capability of the land and which will, based on the existing legislation, replace the cadastral culture and cadastral class in 2011, and the actual land use. Both data sets are considered as attributive data of a parcel registered in the Land Cadastre. Just as any other data in the Land Cadastre, data on land rating and the actual land use are regularly maintained.



Picture 16: Cross-section of equal land-rating area with a built-up area according to the actual use

We introduced parcel centroids in the Land Cadastre, which are useful in identifying the location of a parcel in the process of real estate valuation.

We placed a great deal of attention to co-ordinating and improving the content of the Land Cadastre data, so a purge of data was implemented – unique personal identification number (temporary), purge of connections arising from attributing the status of settled borders, and co-ordination of borders between cadastral municipalities with parcel borders and state borders.

In accordance with Article 139 of the Real Estate Recording Act, we introduced a new co-ordinate system in the system of Land Cadastre administration and maintenance. All land-cadastre points measured after 1 January 2008 will be entered in the Land Cadastre database according to the ETRS89/TM system, which is based on the GNSS assessment.

Despite limited funds, we continued with the scanning of the Land Cadastre archives. In 2008, we scanned about 239,000 documents from the Land Cadastre (A4 format). The scanning was performed by contractors, whereas a preliminary overview and the preparation of documents were performed in individual regional geodesy offices.

Within the task of archive scanning, we conducted a study and established an archiving process prototype of all detailed expert reports, representing historical documents, for both the Land Cadastre and the Cadastre of Buildings. Based on this solution we assume that in the following years we could inhibit the growing number of archive documents for scanning, because all new detailed expert reports will be already captured in digital form in the production phase.

Due to the majority of the Surveying and Mapping Authority staff being involved in the project of real estate inventory, in 2006 and 2007, a substantial delay was produced in administering the Land Cadastre, in the area of ongoing administrative procedures of the Surveying and Mapping Authority of the RS. When trying to solve this issue the Government of the RS adopted a special programme to eliminate unsolved requests in ongoing administrative procedures. Regional Geodesy Offices' staff successfully implemented a part of the task, scheduled for 2008, since, given the increased load and extent of work, they managed to resolve the planned number of unsolved requests.

## State border

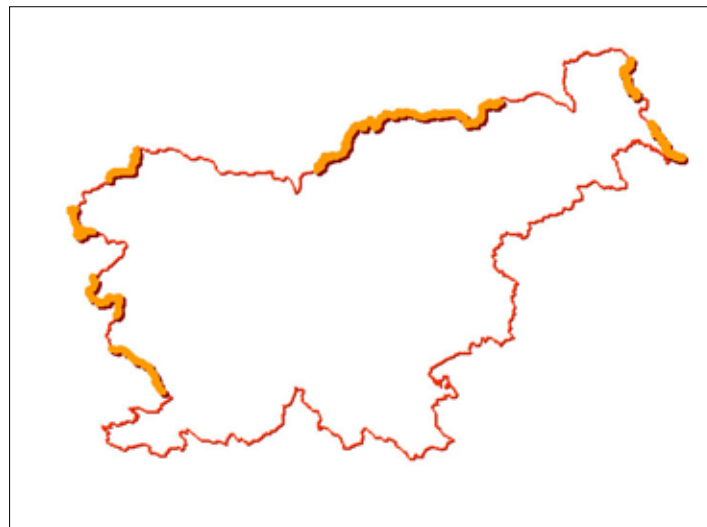
In the area of state border maintenance we were able to carry out most of the activities planned by individual international joint committees.

On the border with **Austria**, we finished the field assessment for the XIX border section (10.0 km), conducted the first calculation of the new field assessment, produced new border documentation for sections XIII, XIV, and XV, and started producing new border documentation for the XVII border section.

On the border with **Italy**, we performed minor maintenance works in border sections 4 and 5. We did not perform the planned vegetation removal in border section 7 due to decreased budgetary resources.

On the border with **Hungary**, only connecting measurements were performed, due to limited funds. We prepared an appendix (description and border plans for the area where the layout of the state border has changed) to the Contract on exchanging land along the Ledava regulated stream. The vegetation removal was performed along the entire Slovenian-Hungarian border, in the length of 100 km.

In 2008, we continued our co-operation with the Border Police and the Slovenian Roads Agency in verifying measures taken on border crossings between Slovenia and Croatia. Since political negotiations related to the determination of the state border with **Croatia** are at a standstill, we did not implement these works.



Picture 17: Sections of the state border maintained by the Republic of Slovenia

### 3.4 Important activities of the Mass Real Estate Valuation Office

The legal basis for the mass real estate valuation is enshrined in the Mass Real Estate Valuation Act, which was adopted in Slovenia in May 2006. This is a new system field pertaining to real estate, real estate prices, values, the real estate market, and consequently affects the operation of and decision making within all state agencies, municipalities, as well as real estate owners and other citizens.

The real estate market records are regularly kept and maintained. For 2008, the Surveying and Mapping Authority of the RS prepared quarterly, semi-annual, and the annual report on the real estate market performance in Slovenia, which is publicly available on the Internet.

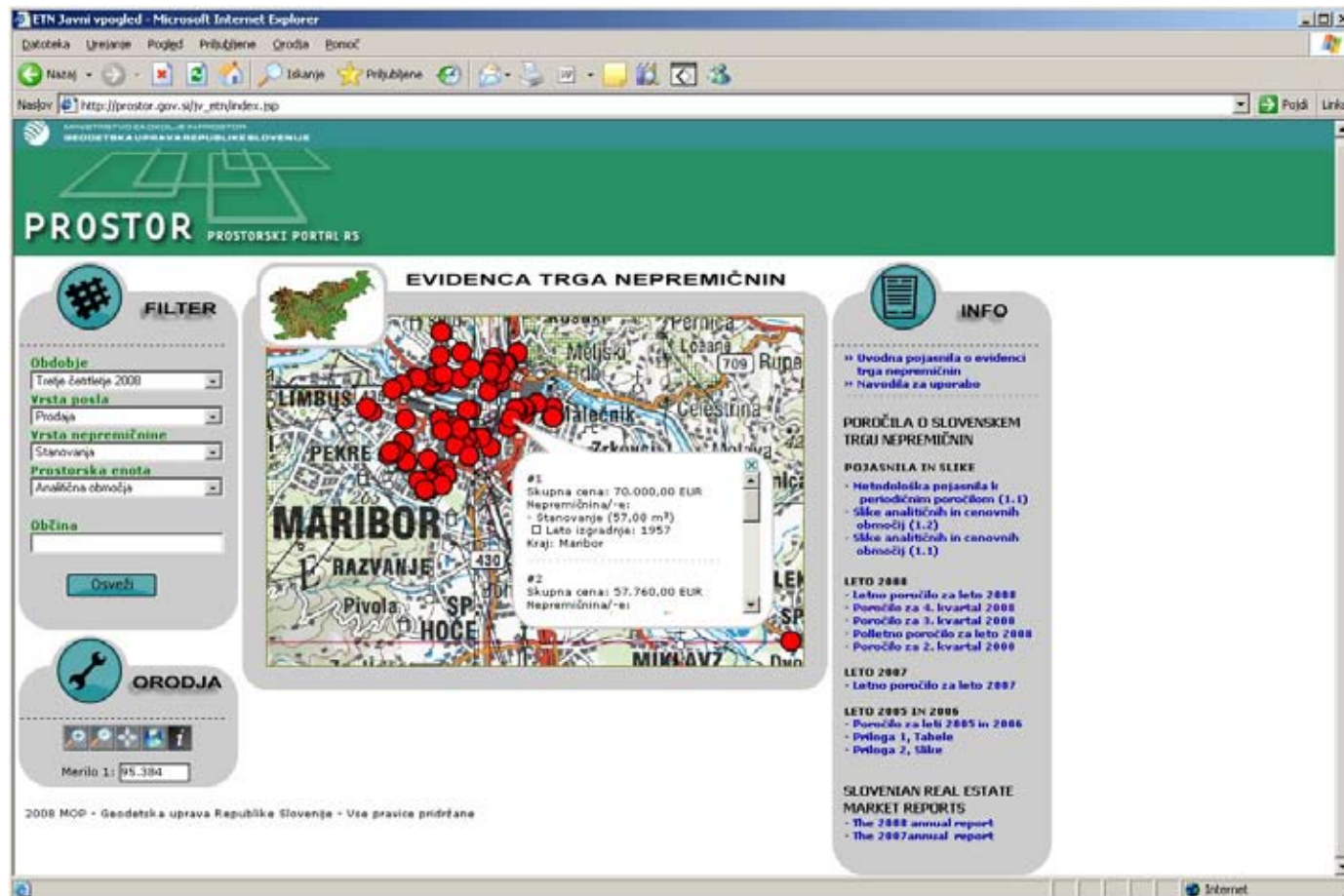


Picture 18: Reports on the real estate market performance in Slovenia



## WHAT WE ACCOMPLISHED IN 2008 ...

The professional and lay public can access the real estate market records through an online application. This ensures improved transparency in the real estate market in the Republic of Slovenia.



Picture 19: Public access to the real property market

Data on purchases and other legal transactions are reviewed and completed in view of drafting model proposals for the real estate mass-appraisal, in the process of general real estate valuation, during which several iterations of zoning and calibrating value charts for each real estate valuation model took place separately. In 2008, a draft proposal on the real estate mass-appraisal was prepared and sent to all Slovenian municipalities. The latter sent their comments and suggestions to the proposals, which will be discussed in 2009 in accordance with the real estate mass-appraisal criteria.

Based on the Real Estate Mass-Appraisal Act, two regulations were adopted and enforced, namely **the Rules on the method for calculating annual real estate price indexes and determining real estate value indexes (Official Gazette of RS, No. 79/08)**, and **the Rules on criteria of real estate mass-appraisal (Official Gazette of RS, No. 94/08)**.



### 3.5 Important activities of the Geodesy Office

#### Transition to the new coordinate system

In 2008, the bulk of activities pertaining to the national geodetic system were marked by the transition to the new European coordinate system, which is gradually being introduced into operative geodetic use. Activities in the following areas were implemented as part of the transition to the new national coordinate system:

- **horizontal system:**

- updating of the national network of permanent SIGNAL GPS stations,
- upgrading of the transformation model,
- update of the Trim application package,
- development of the methodology for quality control evaluation,
- exerting quality control evaluation in the new national coordinate system;

- **altitude system:**

- processing and evaluation of measurement data,
- correction of the Grahovo – Bohinjska Bistrica levelling line of the 1<sup>st</sup> order,
- correction of the Kalce – Vrhnika levelling line of the 1<sup>st</sup> order,
- correction of the Ribnica – Grosuplje levelling line of the 1<sup>st</sup> order,
- correction of the Kranj – Lesce levelling line of the 1<sup>st</sup> order
- stabilization of registration points on the Ljubljana – Logatec levelling line of the 1<sup>st</sup> order;

- **gravimetric system:**

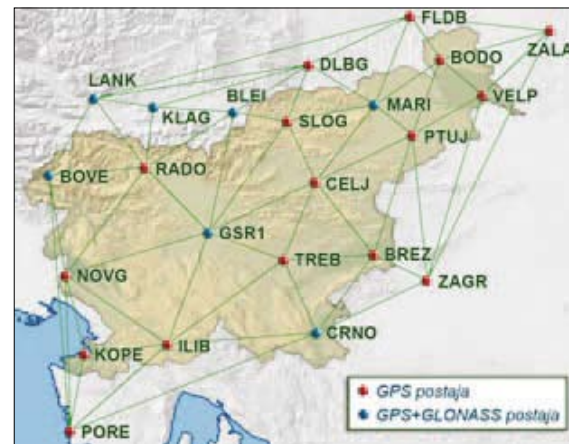
- supplementary gravimetric measurements on high-altitude points,
- upgraded application of geodetic points central base.

## Horizontal system

The establishment of the SIGNAL network began in 2000 and finished in 2006 when it entered a phase of operative testing. It is a part of the geodetic data distribution system that also includes the data on real estate and the national territory topography.

The SIGNAL network is a fundamental national geo-information infrastructure for determining the accurate position anywhere in the territory of Slovenia by using the modern GPS satellite technology. It was created by the Surveying and Mapping Authority of the Republic of Slovenia. It comprises of a network of 15 permanent GPS stations (receiver and GPS aerial) and the monitoring and distribution centre of the GPS Service at the Geodetic Institute of Slovenia in Ljubljana, which runs it in a technical sense. The Ljubljana GPS station is included in the European network of permanent GPS stations. The SIGNAL network provides for real time data exchanges with five other networks of the Austrian APOS network, a station in Zagreb and a station in Hungary (ZALA).

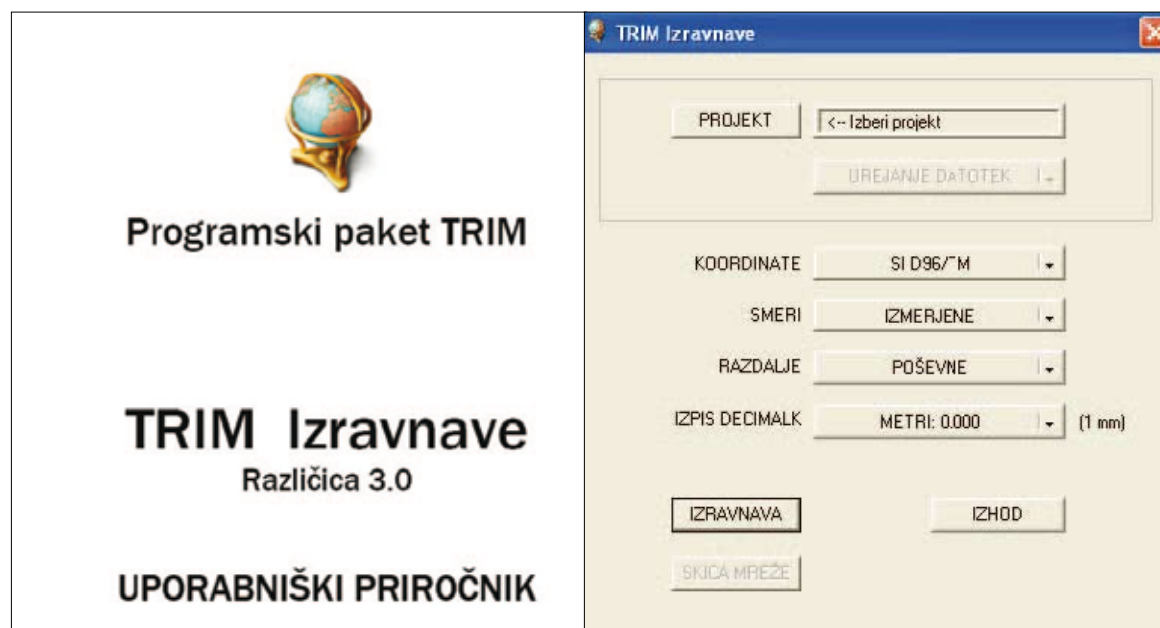
In 2008, we began updating the basic configuration of the SIGNAL network. An additional station was installed in Idrija to assess the performance quality of the SIGNAL network.



Picture 20: The SIGNAL network connected with neighbouring stations

An upgrade of the transformation model was carried out, part of which is also the calculation of the transformation parameters for the connection between the existing and the new national coordination system for different accuracy levels. A prototype of a complex model was further developed for the transformation of data layers at the national level, with an accuracy of a few centimetres.

The introduction of the new national coordinate system into the geodetic practice proved the need to update the Trim application package, which the Surveying and Mapping Authority staff use to process and evaluate measurement data.



Picture 21: Trim application package

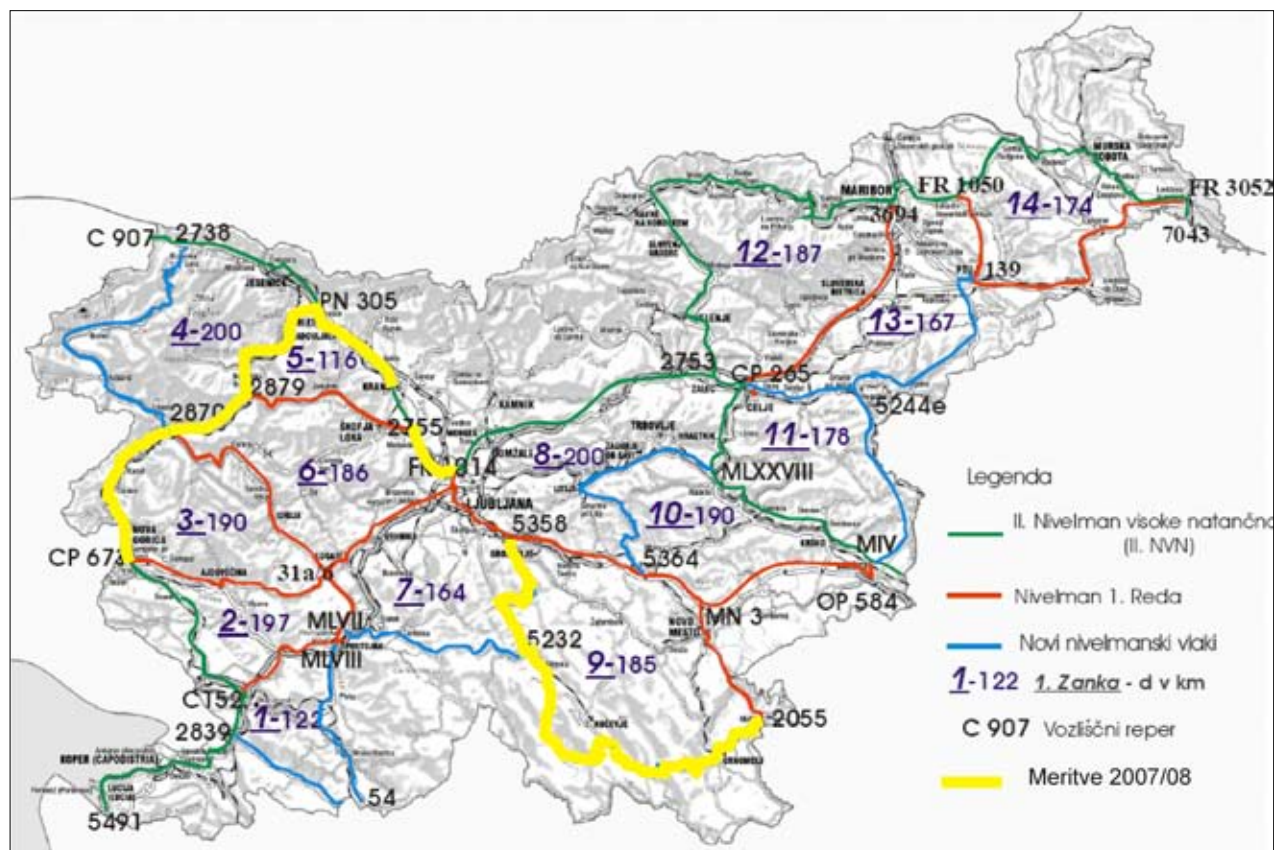
The methodology of controlling the use of the new national coordinate system in measuring the Land Cadastre was developed. In 2008, the Geodesy Office staff performed 240 controls.



Picture 22: Control of Land Cadastre points

## Altitude system

In line with the transition to the new coordinate system the Surveying and Mapping Authority of the Republic of Slovenia is carrying out a correction of the levelling network. In 2008, several levelling lines of the 1<sup>st</sup> order, with the total length of 150 km, were measured.



Picture 23: New levelling network with measured lines in the years 2007/08



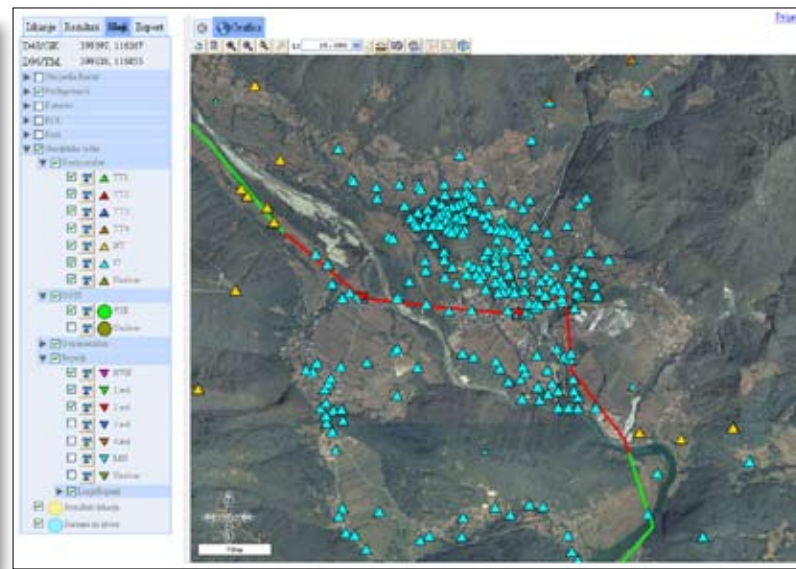
## Gravimetric system

In 2008, gravimetric measurements on high-altitude points were made in view of determining the new geoid of the Republic of Slovenia.



Picture 24: Gravimetric measurement on repers

The application of a geodetic point central base was upgraded, in terms of technical and quality improvement; it is used for administering geodetic points (horizontal, high-altitude, and gravimetric), which are important for the implementation of the national coordinate system.



Picture 25: Application of geodetic point central base

DTK 5 is a national vector topographic database of homogeneous precision and detail, corresponding to the 1 : 5,000 scale, and is established in a uniform manner for the entire state area. The data are captured from stereo-pair photographs, taken during cyclic aerial shooting, whereas, in accordance with specifications, other sources can also be used. A capturing unit is represented by a sheet at 1 : 5,000. Content-wise, the DTK 5 data are divided into four facility sections: buildings, traffic, land coverage, and hydrography. Each facility section is then further divided into facility types.

The DTK 5 data are one of the most important and fundamental sources of information on the spatial situation. In addition to the content, which individual users can complement when necessary, they ensure the geo-location basis for all other spatial data, and can be used as replacement for the outdated fundamental topographic plans.

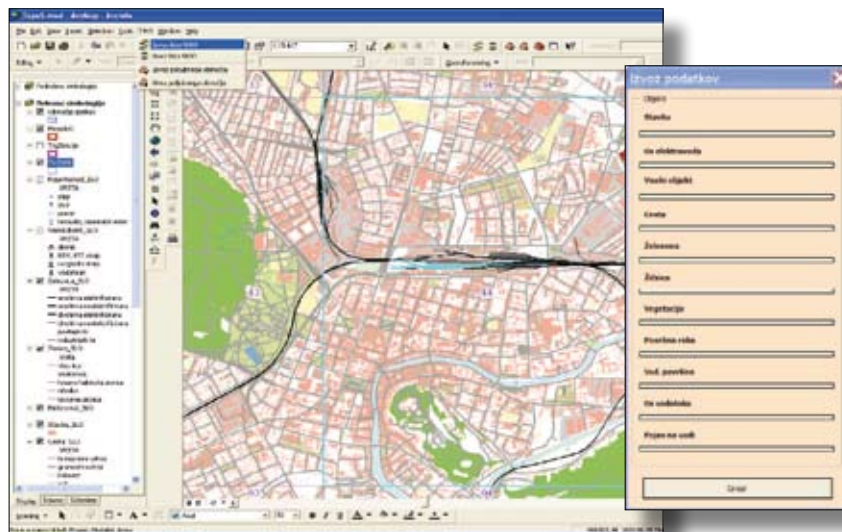
In the period between 2001 and 2008, the Surveying and Mapping Authority, in co-operation with some Slovenian local communities, captured more than 1,900 sheets of DTK 5 data, representing nearly 60% of the entire country area.



Picture 26: Graphic presentation of DTK 5 coverage of Slovenia



To examine the possibility of forming a uniform and homogeneous topographic database for the entire country area, the task of maintaining the topographic database was performed in 2006; it was based on the assumption that the new topographic database be oriented towards facilities, and be easily translatable into the standard format for geographic data exchange (GML). A database prototype for the Ljubljana region was developed as well. Standardisation of existing data, in terms of content and technology, was performed prior to developing the central topographic database. In 2008, topographic facilities were integrated in DTK 5, artificially separated by edges of system sheets at the 1 : 5,000 scale, and topologically organised. As the instructions for capturing were complemented for several years, the attributive part was also co-ordinated. Uniform identifiers for facilities in the topographic database were determined, and the possibility of connecting them to other databases was examined. The procedures for mass imports and exports of data with functionalities prescribed for the prototype application were developed.



Picture 27: User menu DTK 5 in the  
ARCMAP software tool

## Updated national general maps

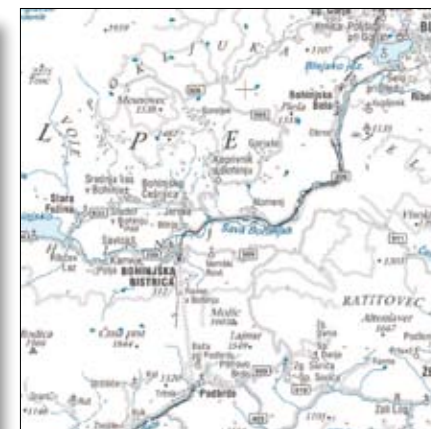
Within the project of updating national general maps, whose purpose was to standardise the system of national general maps, and re-process the content of vector data, national general maps at the 1 : 250,000 (DPK 250), 1 : 500,000 (DPK 500), 1 : 750,000 (DPK 750), and 1 : 1,000,000 (DPK 1000) scale were produced.

In addition to printed sheets and raster layers, maps are also available in the vector form. Map objects are logically divided into eight object groups: mathematical elements (geodetic points, coordinate systems), settlements and facilities, communications, relief, hydrography, land coverage, borders and boundaries, and geographical names.

National general maps are intended for spatial orientation. Because they are displayed on one sheet, they represent a convenient base for planning at the national level. As overview maps they are very suitable for displaying various topics (spatial unit borders, division into trigonometric sections, population density, etc.) which is why variants of general maps are also produced in the grey and blue option. The grey and blue option does not display the relief and land coverage.



Picture 28: Section DPK 250

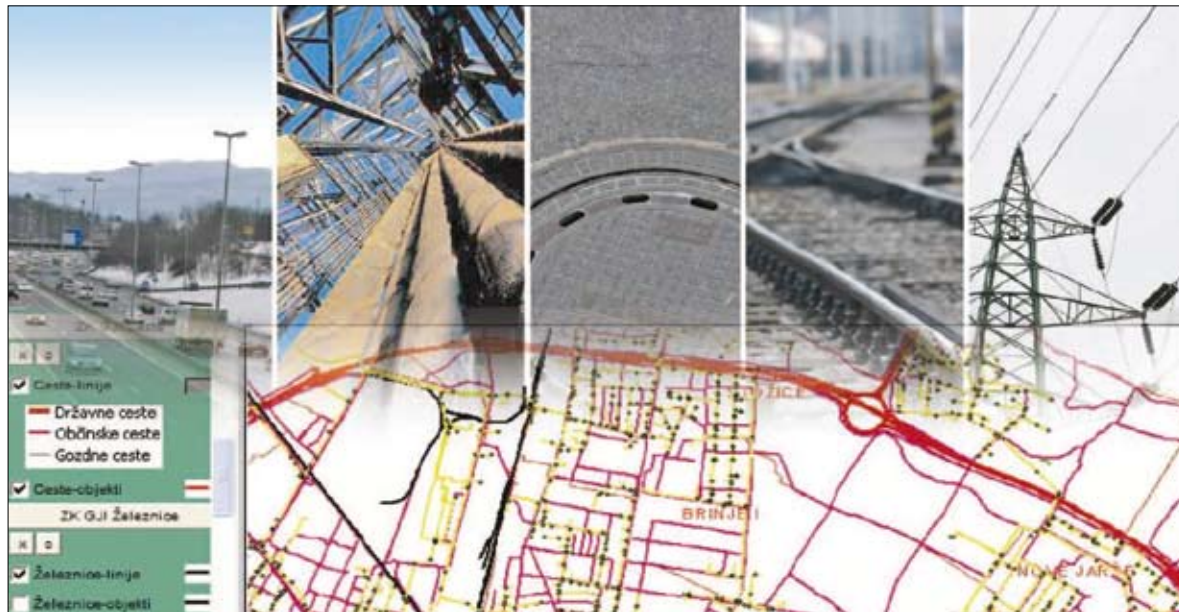


Picture 29: Section DPK 250 in grey and blue option

## Recording the public infrastructure

With the adoption of spatial legislation in 2002 (ZGO-1, 2002; ZUreP-1, 2002) and 2007 (ZPN, 2007) the legal framework for the establishment of systematic recording of the public infrastructure was installed. In co-operation with competent ministries, local communities, and contractors of public companies, the Surveying and Mapping Authority of the RS:

- ensured conditions for recording the public infrastructure,
- established a cumulative cadastre of public infrastructure, and
- ensured conditions for accessing the public infrastructure data.



Picture 30: In the public infrastructure cumulative cadastre, data to all sections of infrastructure are available at a single access point.

The owners of the public infrastructure are responsible for administering own infrastructure data, and sharing them with the public infrastructure cumulative cadastre. According to legislative provisions, public infrastructure owners are responsible for submitting facility data into the cumulative cadastre within three months following any modification at the latest. Therefore, the integrity and quality of data in the cumulative cadastre depends on individual infrastructure owners. By the end of 2008, more than 2,512,709 facilities, in the length of 108,952 km, were registered in the public infrastructure cumulative cadastre. The tables below show the length and number of facilities according to individual types of infrastructure.

Table 4: Length and number of infrastructure facilities according to types in the public infrastructure cumulative cadastre on 31 December 2008

Type	Number of facilities	Infrastructure length (km)
Roads	125.559	47.130
Railways	7.526	2.495
Airports	12	0
Electric energy	119.342	12.844
Gas	99.090	2.098
Thermal energy	24.840	473
Water distribution system	485.308	12.152
Sewerage system	233.667	3.757
Waste management	208	0
Water infrastructure	7.306	1
Electronic communications	1.409.851	28.002
<b>Total</b>	<b>2.512.709</b>	<b>108.952</b>



The public infrastructure cumulative cadastre contains most of the public infrastructure of national importance (e.g. state roads, railways, gas transmission pipelines), and part of the infrastructure belonging to local communities or private owners. In the coming years, the database of newly-built facilities will be completed and maintained.

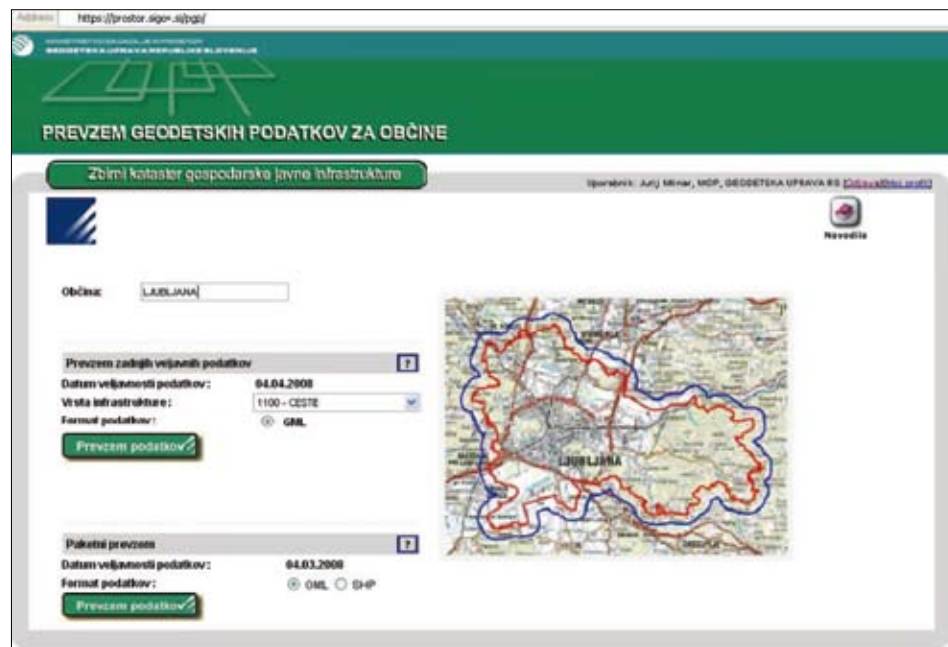


Picture 31: Data in the public infrastructure cumulative cadastre

## Access to data on public infrastructure

Data on public infrastructure are available at the Surveying and Mapping Authority of the RS. They can be accessed through the internet. After the analysis of all received orders in 2008, we found out that the largest interest in accessing data was expressed by local communities. In co-operation with the Ministry of Higher Education, Science and Technology, the Surveying and Mapping Authority of the RS developed an online application (<https://prostor.sigov.si/pgp>), through which public administration, with the emphasis on local communities, can access

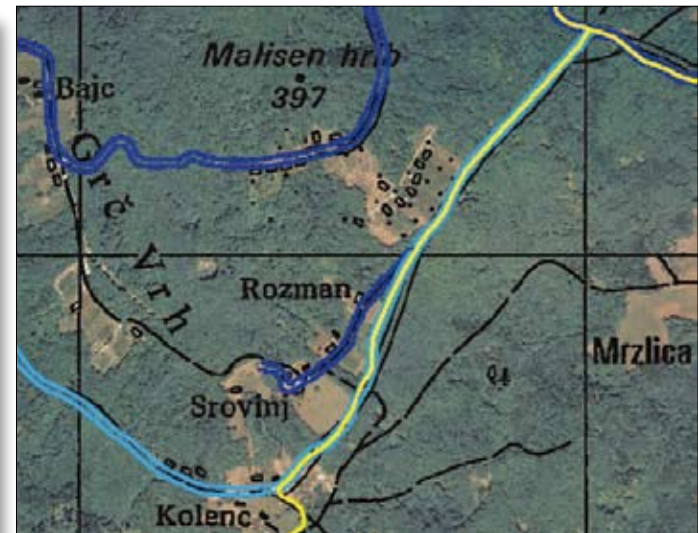
new data on public infrastructure facilities from the cumulative cadastre. Thanks to the online application, individual local communities can obtain information on the location of infrastructure facilities in their respective area. Access to the application is allowed from within the state authority communication network (HKOM) using a digital certificate, and upon prior registration. Access to data is free-of-charge for local communities.



Picture 32: Through the online application, local communities can access new data on public infrastructure free-of-charge

### **Elimination of discrepancies between data on state roads, local community roads, and forest roads**

The public infrastructure cumulative cadastre combines, for the first time, the records of roads of various categories and various owners. The records comprise state roads, administered by the Slovenian Roads Agency, forest roads, administered by the Slovenian Forest Service, and municipal roads, which are owned by local communities. Analysing the data, the Surveying and Mapping Authority of the RS found out that the data between individual owners are not coordinated. Discrepancies result from various data sources (vector data about local community roads, road scanograms, DTK5, TOPO25, DOF5, GPS, GKB25, etc.), and inconsistencies, in terms of content, between records of individual administrators.



Picture 33: Examples of inconsistent data



Therefore, in 2008, the Surveying and Mapping Authority prepared a detailed expert report for each local community in order to eliminate the inconsistencies between state roads, forest roads, and local community roads. Inconsistencies in terms of content were divided:

- according to infrastructure ownership:
  - state roads – municipal roads,
  - state roads – forest roads,
  - municipal roads – forest roads,
  - municipal roads – municipal roads,
- and according to the form of inconsistency:
  - overlapping roads,
  - non-intersecting roads,
  - crossroads inconsistencies.


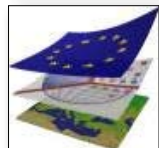



The Surveying and Mapping Authority of the RS coordinated the process of eliminating inconsistencies between the Slovenian Roads Agency, local communities, and the Slovenian Forest Service. The result of data harmonisation between individual owners is the signed detailed expert report on coordination which identified contact points, determined and recorded by the Surveying and Mapping Authority. At the same time the signed detailed expert report is also the document to be considered when preparing new layers on local community roads, or amending the ordinance on municipal roads. In 2008, 70 detailed expert reports on coordination were produced.



Picture 34: Example of coordinated data – with the identified contact point

## Introduction of the directive INSPIRE at the Surveying and Mapping Authority of the RS

On 25 April 2007, the Official Journal of the European Union featured the text of a directive governing the baseline for establishing a European data infrastructure for spatial data, within the European Union member states (the INSPIRE directive). This document outlines the establishment of national infrastructures for spatial information, within member states, which will be compatible (interoperable) at the European level, and, for this purpose, compliant with the regulations and provisions of the directive. The directive stipulates that spatial information infrastructure be comprised of:

metadata for data and services	
interoperable and co-ordinated data and services	
network services and technologies	
measures for shared use of data and services	
co-ordination and monitoring of measures	

Picture 35: Spatial information infrastructure

Member states are obliged to transpose the provisions of the directive into their respective legal systems and prescribe all necessary measures to implement the INSPIRE directive. Every set of spatial information infrastructures requires some implementing rules, which are in the process of preparation and will be adopted in the form of regulations and provisions of the European Commission. When adopted, these rules will become part of the Slovenian legal system, and will thus be legally binding for Slovenia, as for all member states. In 2008, the regulation on metadata was adopted (Regulation of the European Commission No. 1205/2008 of 3 December 2008 on implementing the Directive 2007/2/EC of the European Parliament and Council related to metadata, Official Gazette of RS L 326/12 of 4 December 2008), stipulating the obligatory content and deadlines for establishing metadata on spatial data and associated services.

The Surveying and Mapping Authority is aware of the obligations for member states, which are enforced by the INSPIRE Directive. Geodetic data are the fundamental reference data and provide spatial location for all other objects, which is why the majority of provisions, which can be found in Appendix 1 of the Directive, represent a top priority in the process of ensuring access to data and associated services. In the process of introducing the directive, the Surveying and Mapping Authority is registered, and operates, as a Legally Mandated Organisation (LMO), which means that it participates in the preparation of implementing rules.

At the beginning of 2008, the Geodesy Office took the initiative, at the Surveying and Mapping Authority, to react in an organised way to the introduction of the INSPIRE directive. At the Surveying and Mapping Authority, a group for introducing the provisions of the INSPIRE directive was formed. The group is led by the representative of the Geodesy Office, and composed of representatives of the sections for information technology and data issuing, topographic and cartographic systems, national geodetic system, Land Cadastre, Cadastre of Buildings, Real Estate Cadastre, and Real estate mass-appraisal office. The group's function is mainly to monitor the process of adopting the implementing rules, and prepare measures for the Surveying and Mapping Authority, which are necessary to enforce the rules. The group on the INSPIRE directive discussed drafts of implementing rules, and co-operated in the translation of adopted implementing rules from English to Slovenian. Apart from this, in the process of preparing the implementing rules, the Surveying and Mapping Authority, through the group on INSPIRE, and on the request of the competent authorities of the European Commission, prepared various materials and explanations, completed questionnaires related to the implementing rules, participated in the evaluation of the draft implementing rules when necessary, etc.

In 2008, The Geodesy Office prepared the so-called correlation table, indicating the articles of the directive that need to be transposed into the Slovenian legal system, and prepared the first draft of the content for the new regulation governing the transposition of the directive.

The group prepared a list of first measures to be taken in view of implementing the INSPIRE directive; some of them have already been included in the geodetic service work programme for 2009.

The Geodesy Office also informed the broad geodetic and other public about these activities on the expert meeting entitled 'The 38<sup>th</sup> Geodesy Day', which included the workshop on 'The new coordinate system in the geodetic practice', where experiences with launching the new coordinate system in the Land Cadastre and the Cadastre of Buildings were introduced. The public was also informed about the results of geodetic measurement control, performed by the Surveying and Mapping Authority, opinion of the group for monitoring the introduction of the new national coordinate system, and services and performance of the GPS service. The presentations were followed by a discussion regarding accuracy, efficiency, and currency of geodetic measurements and procedures pertaining to the Land Cadastre and the Cadastre of Buildings, in relation to the new coordinate system. The expert meeting was attended by over 300 participants, among whom were also the representatives of the Kingdom of Norway.



Picture 36: The participants of the 38<sup>th</sup> Geodesy Day



Picture 37: The participants of workshop »The new coordinate system in the geodetic practice«

#### **4.1 Main and strategic facilities of the Surveying and Mapping Authority of the Republic of Slovenia**

The national surveying and mapping authority is responsible for maintaining basic data on physical space and the real estate (stored in orderly databases), and providing services pertaining to the registration of changes introduced in physical space and the real estate. Furthermore, it acts as a co-ordinator in the field of the real estate system and spatial data infrastructure, performs real estate mass-evaluation, and provides data for facilities and comprehensive real estate tax assessment and improvement of real estate market performance. It provides the conditions for implementing land-surveys and ensures compliance of the national coordinate system with the European coordinate system.

Strategic objectives support the development of a comprehensive real estate system and national spatial-data infrastructure in view of providing basic and implemented data and services to all users, and especially to support the implementation of the spatial planning policy, agricultural and land policies, and efficient management of the real estate.



## **The Real Estate Office**

### **In the field of real estate registration we wish to**

- Improve the quality of data regarding real estate;
- Simplify the procedures, arrange and update data on all real estate in the Land Cadastre and the Building Cadastre, and data on the actual state of the real estate in the Real Estate Register;
- Co-operate in the process of ensuring the conditions for the fulfilment of requirements of the EU 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 the real estate data in core databases (visiting data), or entering new data by linking data from other databases to the core databases (linked data).



Picture 38: Salt plant



By achieving strategic objectives in real estate registration, we will fulfil the requirements for greater legal security of real estate owners, greater security of real estate investments and real estate-related investments; enable more efficient performance of the real estate market and fair and efficient real estate taxation; create the first conditions for adopting a more appropriate land and housing policy; plan activities affecting the physical environment; quickly detect and register all unauthorised activities in the physical environment; and effectively perform activities for the protection and rescue services.

### **The Co-ordinator role in the real estate system**

- Coordinate linking of real estate records and registration of real estate data.

Reaching the strategic objectives in the coordination role in the real estate system will ensure coordinated and sensible real estate data registration without unnecessary duplication, which will enable a comprehensive administration and management of real estate.

## **The Mass Real Estate Valuation Office**

### **In the field of mass real estate valuation we wish to**

- Develop, establish, administer and maintain an objective mass real estate valuation system for the purpose of real estate taxation and other public purposes;
- Develop and upgrade the real estate mass appraisal system for other public and business purposes, as the system aims:
  - (i) to monitor real estate portfolio credit risk, and as a starting point in the mortgage credit value methodology within mortgage banking,
  - (ii) at real estate valuating for buy-offs or expropriation when building public infrastructure and other public surfaces,
  - (iii) at valuating and assessing economic interference into space,
  - (iv) to support all administrative and court procedures related with real estate (taxes, auctions, immovable property, merging or splitting, and land consolidation);
- Develop and upgrade real estate market record with the data on new buildings and the data on real estate renting market in Slovenia;
- Record quality data on the real estate market situations;
- Establish and administer data on generalised market values of real estate;
- Efficiently adjust the mass real estate valuation system to situations on the real estate market.

Reaching the strategic objectives in mass real estate valuation will provide conditions for transparent performance of the real estate market, data on actual prices and rents in the real estate market, possibilities of conducting market and statistical research and trend analyses, and data on generalised market value of all real estate in Slovenia for the purpose of enabling objective real estate taxation, and applying the social, housing and spatial planning policies.



Picture 39: Salt plant

## **The Geodesy Office**

### **In the field of the national geodetic and topographic system we wish to**

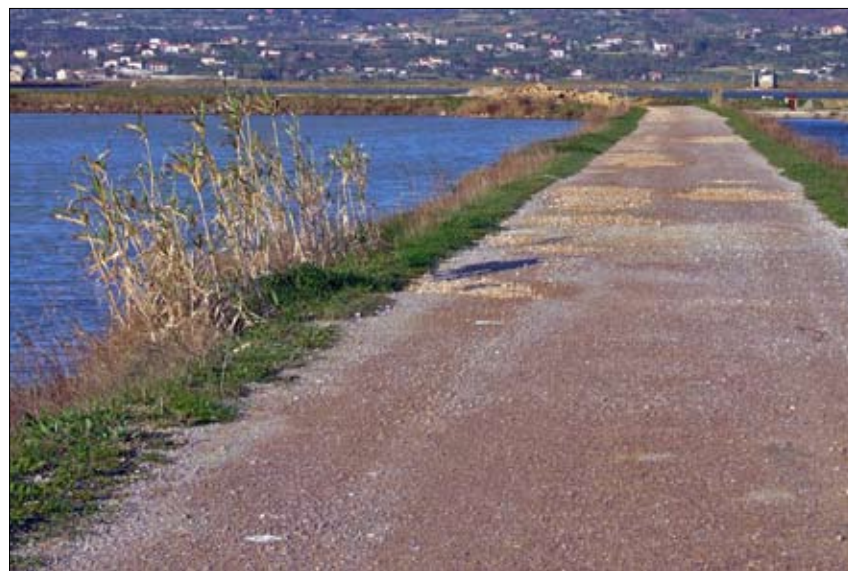
- Provide a quality mathematical basis and a modern national coordinate system as part of the European coordinate system,
- Provide conditions for conducting geodetic surveys of users in the ETRS 89 coordinate system, ensure the function of the national network of permanent GNSS stations (Global Navigation Satellite System) and the GPS service for the purposes of controlling the network functioning, communication of data to users in geodetic surveys, navigation and other geo-referencing of spatial planning data, situations and events,
- Set up a horizontal dimension of the new national coordinate system by 2011 and enable the conversion of coordinates in all databases, in accordance with the EU INSPIRE Directive,
- Set up the altitude and gravimetric dimensions of the new national coordinate system by 2020,
- Establish and record data about the surface and objects in topographic databases,
- Carry out colour digital air photographing of 40% of the Slovenian territory and, based on aerial photographs, produce colour orthophotos as well as the new digital relief, with 5 x 5 m cells,
- Provide national maps created in line with international standards.

Reaching the strategic objectives in the above mentioned areas will provide more efficient data necessary to maintain and update geodetic and spatial records, as well as to geolocate data and events in ESRS, which will simplify networking, data exchange and co-operation on international projects. National topographic data, cumulative economic infrastructure data and state maps will be an expert base in spatial/environmental planning and management and thus serve as a basis for the production of various topical maps or displays for navigation.

**In the field of recording economic infrastructure**

- ensure conditions for the functioning of the system for recording economic infrastructure;
- record and maintain quality data about the economic infrastructure in the cumulative economic infrastructure cadastre;
- ensure conditions for recording real estate rights over economic infrastructure and setting up a system for economic infrastructure protection.

Reaching the strategic objectives in the field of recording economic infrastructure will enable better planning, safer interventions into the environment, and a more economical treatment of economic infrastructure. Recording real estate rights over the economic infrastructure will increase the legal protection of economic infrastructure owners.



Picture 40: Salt plant



**When introducing the INSPIRE Directive the Survey and Mapping Authority of the Republic of Slovenia wishes to**

- Co-operate with the European Commission in the process of preparation and validation of implementation rules of the INSPIRE Directive, as an authorised organization (LMO – Legally Mandated Organisation);
- Provide conditions for meeting the requirements of the EU INSPIRE Directive in the field of geodetic databases;
- Ensure access to geodetic data and metadata in accordance with the requirements of the INSPIRE Directive;
- Co-operate in establishing a national spatial planning data infrastructure, in compliance with the provisions of the EU INSPIRE Directive.

Reaching these strategic objectives will ensure geodetic data infrastructure, which represents a geo-referential frame for locating and linking all spatial data. This will lay the foundations for a comprehensive data infrastructure at the national level. The data infrastructure for geodetic data will be compliant with the provisions of the EU INSPIRE Directive.

Reaching the strategic objectives in the above mentioned areas will enable uncomplicated, accurate and quick data capturing in view of updating geodetic and spatial records, geo-referencing of data and events within a uniform European reference system, which will simplify data exchange and co-operation in international projects.

## **The Main Office**

### **In the field of issuing geodetic data we wish to**

- Include the most extensive collection of real estate and spatial data possible in a uniform distribution system for all users (public and private sector, citizens);
- Ensure all users with a simple and quick access to data, mainly through applying e-commerce, in the form of a one-stop-shop (an online gateway);
- Inform the expert and general public about geodetic and other spatial data, possibilities of using them, and services and activities of the land-survey department;
- Introduce regular and systematic surveys of user satisfaction and expectations, and ensure feedback to administrators of spatial and real estate data on users' needs and requirements and data errors;
- Adopt a new national coordinate system;
- Preserve cultural and technical heritage in the field of geodesy;
- Ensure access to data in compliance with the EU INSPIRE Directive.

Reaching the strategic objectives in data communication will enable providing optimal information to users of spatial data and geodetic products on their availability, and safe, quick, and uncomplicated access to data, products, or services for using geodetic data.



Picture 41: Theodolites Neuhofer & Sohn, Wien in Gebrüder Frome

**In the field of international cooperation we wish to**

- Implement European guidelines in the field of recording real estate, mapping, and geoinformatics;
- Cooperate in operative European and multinational projects;
- Cooperate in establishing European and cross-border data sets, taking into account the interoperability of spatial and real estate data and services, and their incorporation in the development of the Slovenian e-government project;
- Actively participate in the Slovenian e-government projects;
- In cooperation with the Ministry of Defence, apply the NATO guidelines, taking into account the interoperability in the preparation of topographic and cartographic products;
- Professionally help other countries both in cooperation with the private sector and independently;
- Encourage and support the private sector entities in penetrating and establishing themselves in foreign markets.

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

**In the field of informatics we wish to**

- Ensure an information environment for implementing legally prescribed tasks;
- Provide opportunities for more efficient work by applying modern technologies and IT resources;
- Introduce standardised interoperable solutions supporting e-commerce;
- Ensure quality spatial data, information and services;
- Introduce integrated service and process management in informatics.

Reaching strategic objectives in informatics will enable an efficient, controllable, stable and user-friendly information environment, steered towards supporting legally prescribed activities, the business policy of the land-survey department, and enabling quality management and linking of real estate and spatial data.

**In the field of organisational structure we wish to**

- Develop an optimal organisation of the national land-survey service as part of public administration, in connection with other institutions in the field of real estate and spatial data recording;
- Establish regional technical and operative centres enabling local performance of the land-survey service;
- Establish organisational structure that will allow efficient communication of data, performance of services, and provision of information to users.

Reaching the strategic objectives in the organisation of operations will streamline the task performance of the national land-survey department and improve the quality of services offered to users.

**In the field of education and training we wish to**

- Ensure the appropriate level of education and competence acquisition of experts in view of effective and efficient task performance of the land-survey department;
- Develop and upgrade required staff competences in the area of interpersonal relations and leadership;
- Extend users' knowledge of possibilities of using real estate and spatial data.

Reaching the strategic objectives in education and training will ensure the appropriate level of education and competence of our employees, authorised contractors, and users, required to implement assignments.



## 4.2 Projects planned for the coming years

This year and the following years will be marked by activities aimed at **switching to a new coordinate system**. The conversion of topographic system databases into the new coordinate system will be executed gradually. The national topographic map at the 1 : 50,000 scale will be updated, capturing topographic data of the precision and accuracy of the 1 : 5,000 scale. The strategy of topographic system will be formed and the Geographical Names Act will be prepared.

The Surveying and Mapping Authority is going to start with **the conversion of all data into the new coordinate system**. The process is going to be carried out in a way that will not represent any inconvenience for data users, which means that for a certain period of time data is going to be available in both coordinate systems, the current (D48/GK) and the new (D96/TM) system. Thanks to the experience acquired by the Surveying and Mapping Authority, we are also going to advise and assist other users in integrating new geodetic data and converting their own data into the new system.

In 2009 the Surveying and Mapping Authority is going to take even more initiative in the process of adopting **implementation rules of the INSPIRE Directive**, help with the translation of the implementing rules into Slovene, thus introducing the geoinformatics terminology into our language, compare existing solutions in the field of spatial-data infrastructure with the adopted implementing rules, and prepare measures and projects to ensure the corresponding provision of data. We will also strive to acquire appropriate financial funds from EU and other possible foreign sources.

By preparing a new legislative act, the Surveying and Mapping Authority will, in 2009, **take care of recording economic infrastructure**. Cumulative economic infrastructure cadastre will, by law, enable the entry of ownership rights, as well as other real estate rights connected with economic infrastructure, which will increase legal security of the owners of economic infrastructure. We also wish to set up a system for protecting economic infrastructure entitled “Call before you dig”, which will contribute to reducing the number of damages to economic infrastructure.

**The system of real estate mass appraisal** is a multi-purpose system, which is why we plan to develop various online services and applications, adjusted for various profiles of users, such as municipalities, state system users, banks, and insurance companies. We also plan real estate market analyses for various purposes. Similarly, we plan to upgrade the existing or develop new models of real estate mass appraisal for special types of real estate, such as hotels and restaurants. All development assignments will be integrated in the procedures of real estate overall appraisal and implemented in the future.

In the next two years we would like to direct our activities in the field of **real estate recording** into three different groups of tasks:

- **Modernising real estate recording**, by replacing the manual system of data exchange between the land cadastre, building cadastre and land register that has been used so far, with a new electronic system, thus starting the IT renewal of the real estate record.
- **Improving the quality the real estate data** – this can be achieved by supplementing the data about the number of apartments in the building cadastre and by entering the apartment numbers into the central register of inhabitants, as well as in the register of permanent residents; by optimising technological and procedural modules of repairing the data registered in the land cadastre, improving the data recorded in the building cadastre, and simplifying procedures, thus rationalising the operations of the land cadastre and the building cadastre in line with the Real Estate Recording Act.
- **Performing the planned activities in connection with the state border**, which means managing and maintaining border documentation, managing and supporting mixed committees for the maintenance of state borders, as well as performing periodical controls at the Slovene-Austrian and Slovene-Hungarian border in 2009 and 2010.

### 4.3 Projects of preparing regulations

- **The Act on the State Land Survey Reference System**

The scope of activities of the Surveying and Mapping Authority of RS will be legally supported. So far it has been partly dealt with by the Act on Basic Land Survey Measurements (1974). This act is out of date for several reasons – expert reasons, outdated social relationships and ownership relationships. A new legal definition is important as Slovenia is adopting the new coordinate system, which could, without clear legal grounds, cause confusion among the producers and users of spatial data. The new national coordinate system and the unified topographic system will enable a link between spatial data and other resources, as well as with the statistical data in the spatial monitoring system, as defined by the Strategy of spatial development of the Republic of Slovenia.

- **The Geographical Names Act**

Through the co-operation with the Committee for the Standardisation of Geographical Names, we have produced an expert basis for drafting a legislative act on geographical names, which includes analyses of the current situation regarding geographical names in Slovenia. It also displays examples of best practices from some European countries and international orientations thus forming a starting point for the basic premises of the new act. The Geographical Names Act will define competences and the procedure for forming new, as well as changing existing geographical names, the procedure for standardising geographical names, and for the protection of geographical names in terms of cultural heritage and the Slovene language.

- **Infrastructure for Spatial Information Act**

The Surveying and Mapping Authority of RS has been entrusted with the drafting of new legislative act on the infrastructure for spatial information. A special inter-departmental committee chaired by the Surveying and Mapping Authority of RS has been set up for this purpose. By drafting the aforementioned Act the legal system of the Republic of Slovenia aims to transpose the European Parliament and Council Directive 2007/2/EC for establishing infrastructure for spatial information in the European Community (INSPIRE) (Official Gazette of RS, No. 108 of 25 April 2007). The Directive defines a legal framework for establishing infrastructure for spatial information in the European Community with the primary purpose of supporting the formation, implementation, monitoring and assessment of Community's policies related to the spatial issues and the environment. The European infrastructure for spatial information will be based on compatible national infrastructures for spatial information. Member states are responsible for establishing the infrastructures. Among other issues, the Act will prescribe measures for ensuring and smooth functioning of individual parts of the infrastructure (metadata, unified spatial details, electronic services for data access, data availability, etc.) in accordance with the Directive. It will also define competent bodies, deadlines and the methods for financing the above measures.

- **Act on Recording Economic Infrastructure**

The Act is aimed at determining the economic infrastructure recording in Slovenia in a comprehensive manner. It will define the recording of public and private economic infrastructure, and set up a cumulative cadastre in the form of a real estate record, which will enable entries of ownership right and other rights over economic infrastructure.

- **Decree on determining models for real estate appraisal**

In the process of the trial real estate value calculation that the Surveying and Mapping Authority of RS is going to carry out in compliance with the Real Estate Mass-Appraisal Act, [Official Gazette of RS, No. 50/2006], the Surveying and Mapping Authority is going to coordinate proposals for models with municipalities and discuss all comments, proposals and initiatives, submitted by real estate owners. All real estate owners, who will submit initiatives, proposals or comments, will be notified by the Surveying and Mapping Authority on considering or non-considering their comments, proposals and initiatives, and on the final value of their real estate. When the process of checking and coordinating real estate valuation models is over, the Government of the Republic of Slovenia is going to lay down the valuation models for the real estate mass appraisal.

- **Decree on the Designation of Subgroups within Individual Groups of Cognate Real Property and on Data for the Attribution of Values by Real Property Subgroups**

Based on the recently adopted Decree on the Designation of Subgroups within Individual Groups of Cognate Real Estate and on Data for the Attribution of Values by Real Estate Subgroups [Official Gazette of RS, No. 59/07], the procedure of checking and calibrating models of the real estate mass appraisal has been carried out within the procedure of the overall real estate appraisal. This was done separately for certain subgroups of cognate real estate, based on the real estate data, as stipulated by this decree. The checking procedure, the use of real estate market data, and analyses have shown that the subgroups of cognate real estate and the real estate data used for calculating general market values should partly be changed, so that the appraisal methods match the market supply and demand of the real estate type in question.



- **Land Survey Service Act**

Changes in the Land Surveying Act are needed because of the implementation of the Directive on services on the internal market (the deadline was set for 29 December 2009) and the Directive concerning the mutual recognition of qualifications. The Land Surveying Act needs to be supplemented with a more detailed definition of presenting work experience and conditions when a foreign citizen has to pass the land surveying exam with the Slovenian Chamber of Engineers, and with a definition of conditions for performing overseas services. Provisions on land surveying service tariffs and the conditions about space and technical equipment, which enable the performance of the activities, will also have to be changed.

- **Real Estate Recording Act**

The changes in the Real Estate Recording Act are needed in order to define procedural rules of recording land subdivision – mergers or splits of real estate, harmonisation of all administrative acts produced for recording cadastral data, as well as eliminating drawbacks of the present setup of recording real estate and the procedures for defining and changing data and entering real estate data in public records.

- **Rules on amending the rules on entries into the building cadastre**

The present Rules on amending the rules on entries into the building cadastre (Official Gazette of RS, No. 22/07) need to be changed, or amended, because there is a need for a more accurate definition of recording the coordinate of the plans' points, which are, due to the linking of recording procedures, defined in the same coordinate and vertical system as prescribed in the land cadastre. Suggested changes and amendments will include solutions, which have proven useful in practice when producing building cadastre elaborates so far. The rules will simplify procedures for changing the actual usage and for defining the surface of a building, or parts of a building

- **Rules on amending the rules on types and contents of certificates from geodetic databases and on the manner of data designation**

Rules on amending the rules on types and contents of certificates from geodetic databases and on the manner of data designation (Official Gazette of RS, No. 22/07), issued by the Ministry of the Environment and Spatial Planning, will need to be changed and harmonised, in terms of terminology, with the "Protocol for exchanging information between the land register, land cadastre and building cadastre", which defines records of identification marks in documents and is used in all official extracts, certificates and insights in the land register, land cadastre and building cadastre. The planned changes and amendments will also include solutions which have been found useful in practice so far.

## 5.1 Acts and regulations currently used to perform land survey activity

### ACTS

Land Cadastre Act (Official Gazette of SRS, No., 16/1974, 42/1986; Official Gazette of RS, No. 17/1991, 52/2000 and 47/2006)

Basic Geodetic Measurements Act (Official Gazette of SRS, No. 16/1974 and 42/1986; Official Gazette of RS, No. 17/1991)

Land Survey Service Act (Official Gazette of RS, No. 8/2000, 110/2002 – ZGO-1, 47/2006 – ZEN in 45/2008)

Law of property code (Official Gazette of RS, No. 87/2002)

Spatial Planning Act (Official Gazette of RS, No. 110/2002 and 8/2003-corrig., 58/2003 and 33/2007)

Agricultural Land Act (Official Gazette of RS, No. 55/2003 – u.p.b.)

Land Registry Act (Official Gazette of RS, No. 58/2003, 37/2008 – ZST-1 and 28/2009)

Housing Act (Official Gazette of RS, No. št. 69/2003, 18/2004 – ZVKSES, 47/2006 – ZEN, 9/2007- decision of the Constitutional Court of RS 45/2008 – ZVEtL in 57/2008)

Construction Act (Official Gazette of RS, No. 102/2004 – u.p.b., 92/2005, 93/2005, 111/2005 - decision of the Constitutional Court of RS and 120/2006 - decision of the Constitutional Court of RS and – 126/2007)

General Administrative Procedure Act (Official Gazette of RS, No. 24/2006 – u.p.b. and 105/2006 and 126/2007 and 65/2008)

Real property Recording Act – (Official Gazette of RS, No. 47/2006 and 65/2007 – decision of the Constitutional Court of RS)

Real Property Mass-Appraisal Act (Official Gazette of RS, No. 50/2006)

Act on the Access to Information of Public Character (Official Gazette of RS, No. 51/2006 – u.p.b. and 117/2006 – ZDavP-2)

Electronic Communications Act –(Official Gazette of RS, No. 13/2007 – u.p.b. in 102/2007 - ZDRad)

Spatial Planning Act – (Official Gazette of RS, No. 33/2007 and 70/2008-ZVO-1B)

Administrative Fees Act – (Official Gazette of RS, No. 42/2007 – u.p.b. and 126/2007)

Civil Servants Act (Official Gazette of RS, No. 63/2007 – u.p.b., 65/2008, 69/2008-ZTFI-A in 69/2008-ZZavar-E)

Act on designating areas and naming and marking settlements, streets and buildings (Official Gazette of RS, No. 25/2008)

## Implementing regulations

### REGULATIONS ISSUED ON THE BASIS OF LAND CADASTRE ACT

Manual of Instructions Concerning Location and Marking-Out of Land Property Boundaries (Official Gazette of SRS, No. 2/1976 and 6/1987; Official Gazette of RS, No. 52/2000 and 47/2006)

Rules for Cadastral Classification of Land Properties (Official Gazette of SRS, No. 28/1979 and 35/1983; Official Gazette of RS, No. 52/2000 and 47/2006)

Rules on Maintaining the Types of Use of Land Properties in the Land Cadastre (Official Gazette of SRS, No. 41/1982; Official Gazette of RS, No. 52/2000 and 47/2006)

Rules for Evaluation of Soil in Identifying the Production Capability of Pilot Land Parcels (Official Gazette of SRS, No. 36/1984; Official Gazette of RS, No. 52/2000 and 47/2006)

Manual of Instructions Concerning the Beginning of the Official Use of the Digital Cadastral Map (Official Gazette of RS, No. 57/1999, 52/2000 and 47/2006)

### REGULATIONS ISSUED ON THE BASIS OF THE BASIC GEODETIC MEASUREMENT ACT

Manual of Instructions Concerning the Archiving and Copying of Reduced Format Data of the Basic Geodetic Measurement (Official Gazette of SRS, No. 3/1976)

Decree on the Use of Geographical Names on Maps in Multinational Areas in the SR of Slovenia (Official Gazette of RS, No. 11/1980)

Rules on the Technical Standards for Networks of Basic Geodetic Points (Official Gazette of SRS, No. 18/1981)

Rules on the Designations Used on Basic Topographic Maps (Official Gazette of SRS, No. 29/1982; Official Gazette of RS, No. 40/2004)

Manual of Instructions Concerning the Current Harmonisation of Basic Topographic Maps at scales of 1:5000 and 1:10000 (Official Gazette of SRS, No. 30/1983)

Rules on the Use of the Gauss-Krueger Projection in Producing the National Topographic Maps at 1:25000 Scale and Dividing it into Sheets (Official Gazette of RS, No. 36/1998)

## REGULATIONS ISSUED ON THE BASIS OF THE LAND SURVEY SERVICE ACT

Rules on Conditions Relative to the Premises and Technical Equipment of Surveying and Mapping Companies (Official Gazette of RS, No. 67/2000)

Decision on the Status Transformation of the Institute of Geodesy and Photogrammetry of the Faculty of Civil Engineering and Geodesy into the Geodetic Institute of Slovenia (Official Gazette of RS, No. 84/2000 and 26/2003)

Rules on the Program of the Special Certification Examination Required for Performing Land Survey Services and on the Mode of Testing the Knowledge of the Slovenian Language (Official Gazette of RS, No. 105/2000 and 108/2000-corrig. and 65/2007)

Rules on the Geodetic Card, Procedure for its Issue and Mode of Use (Official Gazette of RS, No. 113/2000)

List of Works the Implementation of Which Affects or Might Affect the Safety and Health of People (Official Gazette of RS, No. 23/2004)

Rules on the program and method of taking an exam in land surveying (Official Gazette of RS, No. 110/2007) (Official Gazette of RS, No. 110/2007)

## REGULATIONS ISSUED ON THE BASIS OF THE SPATIAL PLANNING ACT

Rules on the Content and the Methods of Administering the Actual Use of the Physical Space Databases (Official Gazette of RS, No. 9/2004 and 33/2007)

Rules on the Implementation of the Land Consolidation in the Municipal Location Plan (Official Gazette of RS, No. 21/2004 and 33/2007)

The Rules on Land Survey Maps (Official Gazette of RS, No. 40/2004 and 33/2007) Topographic key for creating and displaying land survey plans was passed on its basis

Rules on the Contents of Land Register Concerning the Economic Public Infrastructure in the Area of Electronic Communications (Official Gazette of RS, No. 56/2005, 64/2005 – corrig. and 33/2007)

Rules on drinking water supply (Official Gazette of RS, No. 35/2006 in 33/2007 and 41/2008)

**REGULATIONS ISSUED ON THE BASIS OF THE LAND REGISTRY ACT**

Rules on the forms of land registry proposals (Official Gazette of RS, No. 109/2003)

Rules on electronic access to the main electronic register (Official Gazette of RS, No. 16/2004, 91/2005 – ZUT-E and 115/2008)

**REGULATIONS ISSUED ON THE BASIS OF THE HOUSING ACT**

Decree on the Marking of Apartments and Business Premises (Official Gazette of RS, No. 63/2006)

**REGULATIONS ISSUED ON THE BASIS OF THE CONSTRUCTION ACT**

Regulation on classification of construction with regard to their complexity (Official Gazette of RS, No. 37/2008 and 99/2008)

The Rules on Land Survey Maps (Official Gazette of RS, No. 40/2004 and 33/2007) Topographic key for creating and displaying land survey plans was passed on its basis

Rules on the form and content of identity card and uniform stamp of certified engineers (Official Gazette of RS, No. 51/2004, 60/2005 and 73/2005)

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 RS, No. 114/2004 and 53/2005)

**REGULATIONS ISSUED ON THE BASIS OF GENERAL ADMINISTRATIVE PROCEDURE ACT**

Decree on administrative operations (Official Gazette of RS, No. 20/2005, 106/2005, 30/2006, 86/2006, 32/2007, 63/2007, 115/2007, 122/2007 – corrig. and 31/2008)

Decree on the education requirements for employees to head and decide in the framework of administrative procedure and on the professional examination on general administrative procedure (Official Gazette of RS, No. 29/2000, 66/2004 and 17/2006)



## REGULATIONS ISSUED ON THE BASIS OF THE RECORDING OF REAL ESTATE ACT

Decree on the Marking of Apartments and Business Premises [Official Gazette of RS, No. 63/2006]

Decree on Cadastral Area Territories and Names [Official Gazette of RS, No. 100/2006]

Rules on the Register of the State Border [Official Gazette of RS, No. 118/2006].

Rules on the Contents and Method of Administration of the Register of Spatial Units [Official Gazette of RS, No. 118/2006]

Decree on the Registration of Administrators of State-Owned Real Estate into the Land Cadastre and Building Cadastre [Official Gazette of RS, No. 121/2006]

Rules on Boundary Settlement and Changing and Recording Data in the Land Cadastre [Official Gazette of RS, No. 8/2007 and 26/2007]

Regulation on Building Cadastre Registration [Official Gazette of RS, No. 22/2007 and 33/2009]

Rules on the Types and Contents of Certificates Issued from Geodetic Data Records and on the Method of representing the Data [Official Gazette of RS, No. 22/2007 and 33/2009]

Rules on the Property Rating Examination and the Rating License [Official Gazette of RS, No. 29/2007]

Decree on the Designation of Subgroups within Individual Groups of Cognate Real Property and on Data for the Attribution of Values by Real Property Subgroups [Official Gazette of RS, No. 59/2007]

Rules on the terms and methods of computer access to data from geodetic data records and data bases [Official Gazette of RS, No. 25/2008]

Rules on establishing land rating [Official Gazette of RS, No. 35/2008]

Rules on determining and administering land rating [Official Gazette of RS, No. 47/2008]

## REGULATIONS ISSUED ON THE BASIS OF REAL PROPERTY MASS-APPRAISAL ACT

Rules on managing and updating the real estate market register and on the method and deadlines for sending data [Official Gazette of RS, No. 134/2006]

Decree on the Designation of Subgroups within Individual Groups of Cognate Real Property and on Data for the Attribution of Values by Real Property Subgroups [Official Gazette of RS, No. 59/2007]

Rules on ways of calculating annual indexes of real estate prices and determining indexes of real estate value [Official Gazette of RS, No. 79/2008]

Rules on criteria of real property mass valuation [Official Gazette of RS, No. 94/2008]

## REGULATIONS ISSUED ON THE BASIS OF ACT ON DESIGNATING AREAS AND NAMING AND MARKING SETTLEMENTS, STREETS AND BUILDINGS

Rules on designating areas and naming and marking settlements, streets and buildings (Official Gazette of RS, No. 76/2008)

Regulation on terms and ways to determinate an official short name of settlement and official short name of street (Official Gazette of RS, No. 78/2008)

## REGULATIONS ISSUED ON THE BASIS ACT ON THE ACCESS TO INFORMATION OF PUBLIC CHARACTER

Decree on communication and re-use of information of public character (Official Gazette of RS, No. 76/2005 and 119/2007)

## REGULATIONS ISSUED ON THE BASIS OF SPATIAL PLANNING ACT

Decree on the content and management of spatial data system (Official Gazette of RS, No. 119/2007)

## REGULATIONS ISSUED ON THE BASIS OF CIVIL SERVANTS ACT

Rules on a Particular Part of Exam for Inspectors in the Fields of Environment and Nature, Construction, Mining, Land Survey and Housing (Official Gazette of RS, No. 125/2004 in 62/2006)

## Regulations issued on the basis of other legal grounds

### REGULATIONS ISSUED ON THE BASIS OF WATER ACT

Rules laying down water infrastructure (Official Gazette of RS, No. 46/2005)

### REGULATIONS ISSUED ON THE BASIS OF RECORDING OF REAL ESTATE, STATE BORDER AND SPATIAL UNITS ACT

Rules on the content and method of keeping a database on actual land use (Official Gazette of RS, No. 9/2004 in 33/2007)

### REGULATIONS ISSUED ON THE BASIS OF LAND REGISTRY ACT

Decree on loading and keeping of land-register by application of computer technology and on harmonisation of data with the land cadastre data (Official Gazette of RS, No. 42/2001)

## 6.1 Addresses of surveying and mapping administrative bodies

### REPUBLIC OF SLOVENIA

#### MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING

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

Zemljemerska ulica 12, 1000 Ljubljana

t: 01 478 48 00

f: 01 478 48 34

e: [pisarna.gu@gov.si](mailto:pisarna.gu@gov.si)

i: [www.gu.gov.si](http://www.gu.gov.si)

### REGIONAL GEODETIC ADMINISTRATIONS

#### CELJE REGIONAL SURVEYING AND MAPPING AUTHORITY

Mariborska cesta 88, 3000 Celje

t: 03 428 13 50

f: 03 428 13 60

e: [ogu.guce@gov.si](mailto:ogu.guce@gov.si)

#### KOPER REGIONAL SURVEYING AND MAPPING AUTHORITY

Cankarjeva ulica 1, 6000 Koper

t: 05 663 59 50

f: 05 663 59 52

e: [ogu.gukp@gov.si](mailto:ogu.gukp@gov.si)

#### KRANJ REGIONAL SURVEYING AND MAPPING AUTHORITY

Slovenski trg 2, 4000 Kranj

t: 04 201 80 58

f: 04 201 80 71

e: [ogu.gukr@gov.si](mailto:ogu.gukr@gov.si)

#### LJUBLJANA REGIONAL SURVEYING AND MAPPING AUTHORITY

Cankarjeva cesta 1, 1000 Ljubljana

t: 01 241 78 00

f: 01 241 78 20

e: [ogu.gulj@gov.si](mailto:ogu.gulj@gov.si)

**MARIBOR REGIONAL SURVEYING AND MAPPING  
AUTHORITY**

Ulica heroja Tomšiča 2, 2000 Maribor

t: 02 220 16 03

f: 02 252 64 57

e: ogu.gumb@gov.si

**MURSKA SOBOTA REGIONAL SURVEYING AND  
MAPPING AUTHORITY**

Slomškova ulica 19, 9000 Murska Sobota

t: 02 535 15 70

f: 02 532 10 63

e: ogu.gums@gov.si

**NOVA GORICA REGIONAL SURVEYING AND MAPPING  
AUTHORITY**

Rejčeva ulica 7, 5000 Nova Gorica

t: 05 330 45 50

f: 05 330 45 71

e: ogu.gunogo@gov.si

**NOVO MESTO REGIONAL SURVEYING AND MAPPING  
AUTHORITY**

Ljubljanska cesta 26, 8000 Novo mesto

t: 07 393 10 10

f: 07 393 10 20

e: ogu.gunome@gov.si

**PTUJ REGIONAL SURVEYING AND MAPPING  
AUTHORITY**

Krempljeva ulica 2, 2250 Ptuj

t: 02 748 26 20

f: 02 748 26 39

e: ogu.gupt@gov.si

**SEVNICA REGIONAL SURVEYING AND MAPPING  
AUTHORITY**

Glavni trg 24, 8290 Sevnica

t: 07 816 35 70

f: 07 816 35 88

e: ogu.gusevn@gov.si

**SLOVENJ GRADEC REGIONAL SURVEYING AND  
MAPPING AUTHORITY**

Francetova cesta 7, 2380 Slovenj Gradec

t: 02 881 23 60

f: 02 881 23 73

e: ogu.guslgr@gov.si

**VELENJE REGIONAL SURVEYING AND MAPPING  
AUTHORITY**

Prešernova cesta 1, 3320 Velenje

t: 03 898 27 00

f: 03 587 14 04

e: ogu.guve@gov.si

## 7.1 Slovenia 2008 in numbers

Surface area of the Republic of Slovenia	20.273 km <sup>2</sup>
Population	2.010.377

Geographical Coordinates of Extreme Points		
	Latitude	Longitude
North	46°53´	16°14´
South	45°25´	15°10´
East	46°28´	16°36´
West	46°17´	13°23´
GEOSS*	46°07´	14°49´

GEOSS\* — Geometrical Centre of the Republic of Slovenia

Length of the State border	
Austria	318 km
Croatia*	670 km
Italy	280 km
Hungary	102 km
TOTAL	1,370 km
dolžina morske obale **	46.6 km

\* Border not marked on land; the border length was calculated on the basis of the borders of the cadastral areas.

\*\* The length of the sea 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)
Largest Karst intermittent lake	Lake Cerknica (24 km <sup>2</sup> )
Largest natural lake	Lake Bohinj (3.28 km <sup>2</sup> )
Longest river	The Sava (947 km, of which 221 km in Slovenia)

House numbers	526.,29
Buildings	1,32.,84
Municipalities	210
Settlements	6,023
Number of streets	10,085
Cadastral areas	2,698
parcele	5,299,531

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**Prepared by:**

Erika Mlakar, Jana Mlakar, Eva Mužar, Mateja Omejc, Kristina Perko, Tomaž Petek, Franc Ravnihar, Jurij Režek and Martin Smodiš with colleagues

**Edited by:**

Kristina Perko

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- Slovene text proofreading: Elizabeta Vovko Ozimek
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