

NOVEMBER 2013

## Sadržaj

### SGU in EU Parliament



Register of the NSDI subjects and Register of the NSDI resource of spatial data are published



Cadastral survey at the territory of Rakovica



130 years of cadastral office in Split



## State Geodetic Administration in EU Parliament

In the period from 03. until 05.12.2013, the promotion of European Location Framework (ELF) project was organised by EuroGeographics under the title Map for the future. The task of ELF project is to establish a European Infrastructure of Spatial Data that should be based on the data provided by the European Map Agencies for the purpose of better operability of spatial information and in order to rationalize the expenses.

The State Geodetic Administration of the Republic of Croatia as a new member of the European Union had a special honour to present its resources with the emphasis on risk management, e-cadastrre, and cartography in the situation of crisis. The event took place in the hall of the EU Parliament.

The task of a representative of each country, including the Croatian representative, was to talk and if necessary to present, answer the questions related to spatial data in their countries. The stand of SGA offered the presentation, and all interested parties could take brochures and topographic maps of the Croatian territory.

The central part of the presentation area was furnished with a floor map that included all countries participating in EG projects. Among numerous persons who visited our stand, I would like to mention the parliament representatives coming from Slovakia, the Czech Republic and Hungary.

Igor Vilus



## Register of the NSDI subjects and Register of the NSDI resource of spatial data are published

Registry of NSDI subjects and Registry of NSDI spatial data sources are published at the site of the NSDI ([www.nipp.hr](http://www.nipp.hr)). Pursuant to the NSDI Law (Official Gazette 56 /2013) National Contact Point shall establish and maintain the Registry of subjects and the Registry of NSDI spatial data sources. Working Group for spatial data produced a template for specified Registers which were adopted by the Council of NSDI in September 2013th (version 1.0) . After collecting information from the NSDI subjects National Contact Point made and published the first version of NSDI Registries on 12/02/2013. The above Registries are documents that will be systematically updated and amended . Already there are a number of potential NSDI subjects

which are going to enter into these Registers as a third party according to their sources of spatial data, upon the consent of the NSDI Council. The establishment and publication of these Registries for the first time in one place provided the information on the availability and accessibility of spatial data in the Republic of Croatia , which is one of the most important steps in the development of the NSDI and the inclusion of the European Spatial Data Infrastructure.

Registry of subjects are consists of the data about the NSDI subject: unique code of the NSDI subject, name and number, contact information , name of spatial data sources and subject to the jurisdiction of a single label spatial data sources (according to the Register of NSDI spatial data sources ), the date

when the subject became NSDI subject. Unique codes assigned to subjects are by National Contact Point .

Registry of NSDI data sources are consists of: unique code of the spatial data sources, spatial data source name, summary, source type, data format, address, name and NSDI subject's OIB (according to the Register of NSDI subjects), NIPP topics according to Art. 9th NSDI Law, geographic coverage of sources, limit access and use, date of source inclusion in NSDI, coupled source. Unique code for spatial data sources are allocated by National Contact Point.

Published Registers can be found in the official website of the NSDI in PDF format. For any questions we are available at [infonipp@dgu.hr](mailto:infonipp@dgu.hr).

Ljerka Marić

## Commencement of the works on cadastral survey at the territory of the municipality Rakovica

On 5. December 2013, the official commencement of works on the cadastral survey at the territory of the municipality Rakovica was marked by placing the signboards related to the site. The cadastral survey includes the parts of the cadastral municipality Rakovica, the cadastral municipality Drežnik and the cadastral municipality Sadilovac with the total area of about 3136 ha and as such it represents the continued efforts of the State Geodetic Administration to solve the problems related to the registration of real estates in the Republic of Croatia that has been performed in Croatia for more than 12 years already.

The area to be surveyed was vastly devastated during the war with many objects being completely or partly destroyed. These facts, as well as successfully reconstruction and the significance of this area as a service area for the NP Plitvice Lakes are the main reasons for the initiation of the new cadastral survey that was suggested by the Municipality Rakovica and accepted by the State Geodetic Administration. This project will provide the achievement of two main goals by the State Geodetic Administration within the frame of its tasks and competencies, and these are the establishment of accurate, reliable and updated cadastral records based on the real situation and synchronised with the land registry for the purpose of establishing legal security of properties and their transactions. The other, not less important goal refers to the production of accurate, updated and reliable official documents needed for efficient space management in the Municipality Rakovica and in the Republic of Croatia.

The tasks related to this cadastral survey were assigned to the company Geoprojekt d.d. from Zagreb, and the funds



are provided by the Municipality Rakovica in the amount of 65%, and by the State Geodetic Administration in the amount of 35%. The works have to be finished within the period of 2 years. The works were opened by the occasional speech of the deputy director MSc Blaženka Mičević and the mayor of the Municipality Rakovica, Franjo Franjković. The importance of this project for the citizens and the municipality Rakovica was later on pointed out in the conversation led also among the president of the Municipal Court Karlovac, Tomislav Maras, dipl. iur., the head of the Regional Cadastral Office, Marinko Bosiljevac, grad. eng., the director of the company Geoprojekt d.d. Ivan Vojnović, grad. eng. and the Head of the Division for Cadastral Surveys, Antonio Šustić, grad. eng.

Marinko Bosiljevac

## New strategy Digital Archives System for the State Geodetic Administration

At the 9. meeting of the Digital Archive Committee held on 13. November 2013 in Vinkovci, the new Strategy of Digital Archives System (SDA) for the State Geodetic Administration (SGA) was adopted.



Five years after the first Strategy of Digital Archives System for SG was created, it became necessary to create new Strategy of SDA that would encompass both previous and future development of SDA. In the part of the Strategy related to the previous development of SDA, the tasks carried out so far were presented, i.e. the degree of their implementation. The new tasks and goals related to the future development of SDA were defined arising from the experience gathered in connection with the results achieved so far, but also from the new needs caused by the development of other systems and the demands to use certain SDA data, as well as from the need to correct the deficiencies of the first Strategy, all in connection with the issues to be solved and that have been found significant for the implementation of SDA in the previous period.

The Strategy of SDA is the result of long-term work on creating a system



that would enable the conversion of documents from the existing archives of the State Geodetic Administration, quick access to digital archives data using the application eCKP, and the implementation of new digital documents resulting from business processes in a unique System of Digital Archives of SGA.

Since the archives of the State Geodetic Administration are often used in the procedures connected with the issuance of various certificates, updating and registration of changes on land, the digital archives will not only preserve the archived material, but also provide faster access to the needed data and facilitate the usage of these valuable documents. The importance of having only part of

the archived documents scanned and of being able to have insight in these documents by means of the application eCKP without visiting the archives can be confirmed by the employees of cadastral offices whose archived documents are contained in 439 703 scanned documents of the digital archives.

In the first part of the meeting, the members of the Committee discussed also the other problems: the preparation of draft scanning plan for the next period, the introduction of new operators into the process of scanning and organisation of work, about the future priority tasks resulting from the new Strategy, etc. In the second part of the meeting, the members of the Committee visited the newly built building of the Centre for Data Conversion that will start operating at the beginning of 2014.

Ljiljana Štefulić

## Drago Butorac: 130 years of cadastral office in Split

For decades, the term cadastre has been referred by the Dalmatian people to plots - »particele«, maps, domeštra or dome-tra, boundary, cadastral income, taxes and the Austrian emperor Franz Joseph I. The Dalmatian people believed that the cadastre was a „law“, and only the court could make different decisions.

However, in the 50-ties of the last century, new cadastral surveys were performed, and there were almost all towns in the coastal area surveyed until the end of the 80-ties, like Split, Solin, Kaštela, Imotski, Sinj and others. Since new cadastral plans were technically much more precise, the cadastral data started to be used more and more in regional planning, spatial management, and they influenced the decision important for communal infrastructure and construction in general. The computerization of cadastre that is completed in the Republic of Croatia, has provided final and efficient regulation of property issues, as well as the addresses of citizens, which is very important for the establishment of voters' lists and population census. It is actually

very difficult to find any activity in space that is not in some way connected with cadastre, speaking either of agriculture, traffic, construction, economy, forests and water bodies, maritime domain, mineral resources or some other issues. For example, the recent unavoidable activity of the cadastral service, when speaking of spatial development, was the legalization of illegally built object. More than 700 thousand applications were processed within the jurisdiction of cadastral offices all over Croatia, which was carried out without great fanfare, almost unnoticeably, but with great effort of cadastral employees.

When speaking about the cadastral office in Split, it is actually not quite clear whether the town Split and its citizens are aware of the efforts provided by the office for the its clients – the citizens, but also for many other subjects, as well as of how and when this office was founded. These and some other questions were answered by the head of the Regional Cadastral Office Split, graduate engineer of geodesy, Drago Butorac.

*This year, the Cadastral Office in Split celebrates the impressive 130th anniversary of its work. How and when was the Cadastral Office in Split actually founded?*

- The period of 130 years of, I emphasize, continuous work, during the First and the Second World War, but also during the Homeland War, of any institution, and in this case of the cadastral office in Split whose activities have been archived for the last 130 years, deserves due respect addressed to all previous generations of cadastral employees who have managed to preserve for the future generations numerous original cadastral documents, maps and sketches made in the 19. and 20. centuries.

*What preceded the establishment of the cadastral office in Split in Dalmatia of that time?*

-In 1797, Dalmatia came under the rule of the Austrian Empire that was interrupted for few years, 1806 -1813, by the French occupation. However, the establishment of the first stable cadastre for the entire Austrian Empire was initiated by the Decree of the Austrian Emperor in 1817. It was undoubtedly an incredible idea at that time regarding its financial, technical and time aspect. One of the important motives of the Austrian Court was surely the military component, because the territory of Dalmatia was surveyed at the same time for the purpose of making military maps. As we very well know, land surveying is made by surveyors, and it is the task of geodesy in most general sense to create plans and maps on the basis of surveying data. The surveyors of that time – the Austrians, Italians, Croats, and the Czechs... with the help of local population surveyed more than 2,3 million plots in less than 16 years. These plots are presented on 6725 cadastral maps. The detailed survey was made by means of so called plane table.

Dalmatia, with Boka Kotorska as its integral part as well, was divided into 744 cadastral tax municipalities. With interruptions, the land survey itself lasted until 1839, and the first cadastral survey of Dalmatia was completed until the end of 1845 with additional measurements, the production of cadastral documents for each cadastral municipality containing descriptions for each cadastral plot, and finally the quality assessment of arable plots. It is very difficult to understand that everything was done with measurement tools

and in conditions that are rather primitive in today's terms, and that we use the maps and documents made at that time, digitized today, in our daily work for more than 80% of the territory of Dalmatia.

It should certainly be mentioned that the cadastral maps of the Austrian survey were, apart from being visually attractive, made in an unusual scale of 1:2880, and the cadastral plans from the more recent period are made in the scale of 1:1000, which is technically convenient for many users. The scale of 1:2880 resulted from the regulation of the Central Cadastral Office according to which 1 Viennese inch on a map represents 40 fathoms in the nature. It is interesting, that the scale was actually imposed upon the Central Cadastral Office by the Austrian state printing plants that conditioned the scale with the paper format that was used to print the cadastral maps by means of lithographic process.

The scale of cadastral maps for the whole Austro-Hungarian Monarchy was 1:2880, except for the territory of Zadar, i.e. for the north-western Dalmatia for which the scale of 1:2904,17... was used.

This unusual scale resulted out of the error in geodetic works of high accuracy – triangulation that preceded a detailed survey of the terrain. Namely, during the Austrian triangulation, the Italian located without the knowledge of their Austrian colleagues their own pyramid with a signal in the vicinity of the Austrian pyramid on the island Lošinj that they used for their hydrographical observations. Performing the triangulation observations from the land, the Austrian officer, Captain Hahn sighted accidentally the Italian signal instead of the Austrian signal and thus miscalculated the baseline Rab – Lošinj, which caused the irreparable error in further triangulation works. The error was discovered only after the detailed survey of the Zadar environment had already been completed. Hence, the only thing to do was either to adjust the scale to the error or to repeat the triangulation and survey the whole area again. Being practical people, the Austrians chose the first solution, i.e. they calculated the adequate scale, and it was 1:2904,17...

Captain Hahn who was blamed for this error until his premature death was rehabilitated after persistent struggle of his widow.

You can read the whole interview on the portal of Dalmacija News ([www.dalmacijanews.com](http://www.dalmacijanews.com))

## 5th NSDI WORKSHOP

5th NSDI workshop was held on 25. November 2013 in the premises of the Ministry of Administration in Zagreb. There were 34 subjects of the National Spatial Data Infrastructure (NIPP) present at the workshop.

At the beginning, Mr. Dragan Divjak held a guest lecture titled "Adjustment of Spatial Data to the Requirements of INSPIRE". The lecture offered the overview of the methods used to adjust the data models with INSPIRE, and the subjects were acquainted with the problems through practical examples. The collected data of the Register of NSDI subjects and the Register of NSDI Spatial Data Sources were presented, as well as the data about each registered subject in the Register of NSDI subjects. The contents of the Register of NSDI Spatial Data Sources were presented to the

subjects. The subjects were given the possibility to make comments during the workshop referring to the data in the Registers. All concerns and problems related to the defining the subjects and sources were discussed.

The next main topic of the workshop was related to the NSDI metadata. On the web pages of NSDI (<http://www.nipp.hr>), the Specification of NSDI metadata (v. 2.0) is published in Croatian and English. New web pages of NSDI Metadata were presented that help in documenting the metadata. These web pages make it possible for NSDI

subjects to get acquainted with the details referring to the collection of each element of metadata with accompanying explanations and examples.

The workshop was, as well as the previous one, of practical character giving the subject the opportunity to solve practical problems that they are faced with in their work. As well as in earlier NSDI workshops, there was an interesting discussion developed in relation to certain issues initiated by the NSDI subjects.

Željko Hećimović,  
Petra Sajko Hlušička