NO 71 INFORMATION LEAFLET OF THE STATE GEODETIC ADMINISTRATION

APRIL 2013

Sadržaj

Law on National Spatial Data Infrastructure

The Act on Amendments to the Law on Performing Geodetic Activity

> 3rd CROPOS Conference



Usage of geospatial data of the SGA needed to meet the Nitrates Directive



Law on National Spatial Data Infrastructure

At its 8. meeting on 26. April 2013, the Croatian Parliament adopted unanimously the Law on Law on National Spatial Data Infrastructure (hereinafter referred to as NSDI).

Spatial information present in wider sense the data that can be connected directly or indirectly with some location. Almost 80% of all information contains a spatial component. In many areas of human activity, the spatial data present the basis on which new or added values are created. The problems related to availability, quality, organisation, accessibility and distribution of spatial data are common to all areas of human activity, and also in the system of state administration. The solution of these problems requires the introduction of measures that deal with the distribution, understanding and usage of spatial data. The same or similar spatial data are often collected and maintained at several various addresses in the system of state administration, which makes it impossible to use them in transparent manner and results in direct negative influence on state budget. The loss of time and funds in the process of searching the existing spatial data or in determining whether they can be used for specific purposes presents the main obstacle in full usability of available data.

Within the scope of the activities related to closing of the negotiations on accession to the European Union in the chapter 27. Environment, all for the purpose of the development and adjustment to the demands resulting from the Directive 2007/2/EZ of the European Parliament and Council that establishes the Infrastructure for Spatial Information in Europe (INfrastructure for SPatial InfoRmation in Europe, hereinafter referred to as: INSPIRE directive), the conditions have been provided for passing the Law on National Spatial Data Infrastructure (NSDI) that specifies the access, distribution, usage and updating of spatial information according to the principles of transparency, proportionality, economic efficiency and availability.

The Law provides the possibility of harmonisation with the European legislation, and Croatia has thus become a part of the spatial infrastructure for spatial information in the European Union defined by the INSPIRE directive. The Law shall also provide quicker and simpler access to the spatial information in the system of state administration, which will result in higher efficiency of state administration in the areas that are directly or indirectly connected with spatial information. The application of the principle of NSDI according to which the data are maintained at the most adequate level and the same or similar spatial data will not be created two or more times in various institutions, will result in direct, positive influence on the budget. Using the same principle, NSDI will prevent the usage of spatial information that is not official and reduce mistakes in administrative procedures.

This Law introduces transparency and order in the competence related to spatial information by implementing general provisions that define the subjects obliged to apply the Law – the subjects of NSDI – public authorities being competent, i.e. dealing with the maintenance or usage of spatial information, as well as other natural and legal persons who meet the conditions stipulated by the Law. There are also the topics of spatial information defined that the Law is applied to. Efficient application of infrastructure for spatial information requires the coordination of all who are interested in establishing such infrastructures, either being contributors or users. It is therefore necessary to organise adequate coordinating structures, NSDI bodies, at various authority levels, as well as to take the distribution of responsibilities among these bodies into consideration. In the period of establishing NSDI, the role of the State Geodetic Administration has been defined as the primary holder of this activity. According to this Law, the establishment, maintenance and development of spatial information infrastructure at the national level are the obligation of the National Contact Point, and the State Geodetic Administration has become the National Contact Point.

Tomislav Ciceli, Hećimović Željko, Ivana Medarić



The Act on Amendments to the Law on Performing Geodetic Activity

The Act on Amendments to the Law on Performing Geodetic Activity provides the harmonization of this Law with the acquis communautaire of EU, i.e. with the Directive on service in the internal market 2006/123/EC and the Directive on the recognition of professional qualifications 2005/36/EC.

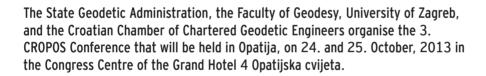
The harmonization with the acquis communautaire of the European Union has also implied the harmonization with the Croatian legislative, i.e. with the Act regulating the professions and recognition of foreign professional qualifications (National Gazette No. 124/2009 and 45/2011) primarily in the part related to obtaining the certificate issued by the Croatian Chamber of Chartered Engineers of Geodesy about the recognition of foreign professional qualification, and to the registration of foreign persons in adequate Chamber registers.

The mentioned proposal of the Law stipulates also the obligatory contents of the Approval register conducted by the State Geodetic Administration as official records, the manner of keeping, entering and deleting the data from the Approval register, the availability of data from the Approval register for individual users, and the mentioned Act is also harmonized with the Criminal Law (National Gazette No. 79/2012).

Ivana Medarić

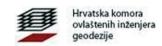
3rd CROPOS Conference

Congress Centre of Grand Hotel 4 Opatijska cvijeta, Opatija 24.-25. October 2013









he State Geodetic Administration made the service CROPOS – Croatian Positioning System effective on 9. December, 2008. During the last four and half years of the system operation, there were 568 companies registered and were thus given the possibility to use GNSS technology of measurement in simpler, more efficient and reliable way. The total number of user names that the companies use to connect with the system was 1413 on 31. March, 2013. Out of this number, 778 companies use the VPPS service (High Precision Positioning Service), 20 of them use DPS (Differential Positioning Service), and 615 the service of GPSS (Geodetic Precise Positioning Service). There are 43 reference GNSS stations (30 from Croatia, 7 from Slovenia, 4 from Hungary and 2 from Monte Negro) included into the networking solution of CROPOS system and the calculation of correction parameters, and it is planned to include the additional 3 reference GNSS station in Dubrovnik, Hvar



and Nova Gradiška, as well as 5 reference GNSS stations from Bosnia and Herzegovina within the frame of the signed Collaboration Agreement in the field of data exchange of permanent GNSS stations between the Republic of Croatia and Bosnia and Herzegovina.

Considering the statistical data related to the usage of the system from the day of its official putting into operation (22.725.987 minutes RTK, 1.725.402 VRS RINEX), it can be concluded that the surveyors have recognised the advantages of its usage, accepted it and introduced into their every day work, which made CROPOS an inevitable positioning service in the performance of daily tasks. The State Geodetic Administration invests systematic efforts in maintaining the system and its updating in order to provide higher reliability of system operation. It has resulted in 99,9% accessibility, ever since it was established until the present day.

The goal of the conference is to present to the participants the current status of the CROPOS system, the plans for its development and updating, and to exchange Croatian and international experiences related to the operation and usage of permanent GNSS networks for the purpose of improving the application of CROPOS in the performance of the largest possible number of daily tasks in geodesy.



Draft of the Conference programme

Thursday, 24. October 2013

13.30 - 15.00	Registration
15.00 - 17.00	Opening of the conference and plenary
	speaker presentations
17.00 - 17.30	Break
17.30 - 19.00	CROPOS – yesterday, today, tomorrow
19.00	Opening of the exhibition of measuring
	and other equipment

Friday, 25. October, 2013

9.00 - 10.30	GNSS networks in the neighbourhood
10.30 - 11.00	Break
11.00 - 13.00	Practical application of CROPOS system -
	user experiences
	Closing of the conference

The final programme of the conference will be given in the second announcement on **30. June, 2013**.

Call for Papers

The authors interested in participating at the conference are invited to submit the abstracts of their works related to the topic of CROPOS system and to the experiences of users until **25. May 2013 at the latest** to the e-mail **zso.cropos@hkoig.hr** in MS Word format.

Since the duration of the conference is limited in time, the Scientific and Professional Committee of the Conference will choose the papers to be included into the programme of the conference on the basis of the received abstracts, and all other papers will be published in the Proceedings of the 3. CROPOS Conference. The Scientific and Professional Committee of the Conference will inform the authors of the papers until **25. June, 2013** whether their works have been accepted and whether they have been chosen to be presented at the conference. Final and complete papers for the publication in the Proceedings should be delivered until **30. August 2013.** It is planned that each presentation at the conference should last 15 minutes, and the paper to be published in the Proceedings should not be longer than 8 pages.

A piece work agreement will be made with the selected authors. If a paper should have several authors, the agreement will be made with one of the authors who will be exempted from registration fee.

Registration and registration fee

The registration fee for the participation at the conference is 500,00 KN (+ VAT). The date of registration along with the information about the registration fee payment will be announced soon on web pages of the State Geodetic Administration, of the Faculty of Geodesy, University of Zagreb and of the Croatian Chamber of Chartered Geodetic Engineers.

The Conference will be included into the Programme of professional training of the chartered geodetic engineers for the year 2013. The final number of points will be defined in the decision of the Committee for life-long professional training of the Croatian Chamber of Chartered Geodetic Engineers after the final selection of presenters.

Additional information

For any related inquiry related to the 3. CROPOS Conference you may contact e-mail address marjanovic@dgu.hr.

President of the Organisational Committee of the 3. CROPOS Conference prof. Tomislav Bašić, PhD

Organisational Committee of the Conference

- prof. Tomislav Bašić, PhD, president
- Olga Bjelotomić, grad. eng. of geod.
- Vladimir Krupa, grad. eng. of geod.
- MSc Ivan Landek
- Marijan Marjanović, PhD

Associates

- Ivana Alerić
- Martina Ciprijan, grad. eng. of geod.
- Maša Ecimović, mag. junior researcher
- Ivana Miletić, grad. eng. of geod.
- Marko Pavasović, grad. eng. of geod.
- Marija Pejaković, grad. eng. of geod.
- MSc Margareta Premužić

Scientific and Professional Committee of the Conference

- prof. Tomislav Bašić, PhD, president
- Marijan Marjanović, PhD
- Danko Markovinović, PhD
- Assistant Professor Ivana Racetin, PhD
- Assistant Professor Milan Rezo, PhD



Usage of geospatial data of the State Geodetic Administration needed to meet the Nitrates Directive

In accordance with the Action programme of protection of waters against pollution caused by nitrates from agricultural sources (National Gazette No. 15/2013), and the EU Regulation 73/09, the Paying Agency for Agriculture, Fisheries and Rural Development (APPRRR) has the task within its jurisdiction to take care of respecting the regulations related to good agricultural and environmental conditions that include the application of water protection areas along the watercourses and the prohibition of fertilization in these areas from 1. July 2013.

According to the article 11. I. of the Action programme for protection of waters against pollution caused by nitrates from agricultural sources, the usage of fertilizers is prohibited in the following areas:

- in water-saturated soil,
- the soil covered with snow,
- frozen soil.
- flooded soil,
- farming land,
- at the distance of 20 m from the external edge of lake basin or some other stagnant water basin,
- at the distance of 3 m from the external edge of the watercourse bed 5 or more meters wide,
- at sloped terrains along the watercourse with the slope larger than 10% at the distance smaller than 10 m from the external basin edge,
- the areas containing waste oil,
- originating from the farms where the diseases have been discovered caused by the agents resistant to the conditions in fertilizer ditch.

The enforcement of the above mentioned regulation requires the delineation of the above mentioned zones, and such zones shall present the basis for the future application in ARKOD system. The basis for the determination of protection belts are vector topographic data of water courses and water areas, according to the experience of other countries that are members of the European Union.

Since the topographic data that are entered into the Fundamental topographic base (TTB) have been systematically

Fig. 1: The data of the object entity WATERS

ri-rohibi
ernal edge of lake asin, ernal edge of the de, rse with the slope

collected and topologically processed during the production of the topographic map at the scale of 1:25000 (TK25), the data of the object entity WATERS have been recognized as an ideal source of origin for the application of EU Nitrates Directive. The data of the object entity WATERS have been collected for the entire territory of the Republic of Croatia (Fig. 1).

In this way, the Republic of Croatia will have the opportunity to use the financial resources provided from the European funds intended for this purpose. The financial value that the Republic of Croatia will receive from using these resources is much higher than the value of the funds invested into the development of TTB.

Marjanović, M., Landek, I., Vilus, I.

