

VIZURA

INFORMATION LEAFLET OF THE STATE GEODETIC ADMINISTRATION

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Contents

Utility cadastre



INSPIRE



CROPOS



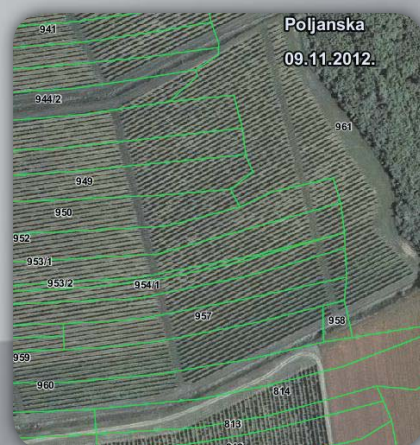
RCO Slavonski Brod



Survey of agricultural land

In the premises of Požeško-slavonska County, the contract was signed for the performance of geodetic and cadastral services needed for the survey of agricultural land owned by the Republic of Croatia at the territory of the town Pakrac and the municipality Velika.

The contract was signed by the deputy director MSc Blaženka Mičević on behalf of SGA, the prefect of Požeško-slavonska County Mr. Marijan Aladrović, the deputy mayor of the Town Pakrac Nikola Šimić, the head Vlado Boban on behalf of the municipality Velika, Ivan Vojnović on behalf of Geoprojekt, and Darko Car on behalf of Cadcom.



The agricultural land is located at the territory of the Town Pakrac, cadastral municipality Badljeva, Omanovac and Dereza with the area of about 568 ha, and at the territory of the municipality Velika, cadastral municipality Bratuljevci, Poljanska and Radovanci with the area of about 251 ha.

The value of the job is 330871.25 KN, and it will be financed mutually by the State Geodetic Administration, Požeško-slavonska County, and the Town Pakrac in equal amounts. At the territory of the Town Pakrac, the works will be performed by the company Geoprojekt, and at the territory of the municipality Velika by the company Cadcom. The works should be completed within 18 months from the day of signing the contract. The representatives of the local self-government have pointed out that these works are of

key importance for the development of agriculture. After signing the Contract, 4 Agreements about the performance of cadastral survey needed for the establishment of real estate cadastre at the territory of the Town Požega, the Town Pleternica, the Town Pakrac and the Municipality Brestovac for all cadastral municipalities signed at the end of the last and at the beginning of this year, were also discussed. The deputy director pointed out the importance of such project since the regulation of the property legal status is the basis for all investments, but the realization of the works depends on budgetary funds.



Josip Mikšik

The delivery of utility cadastre

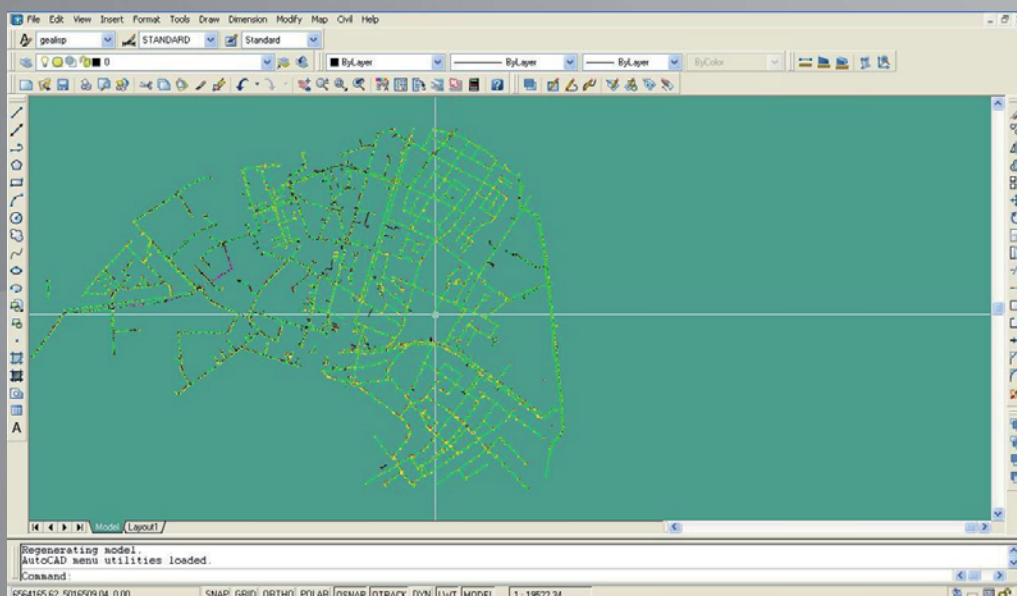
Pursuant to the article 126. of the Law on State Survey and Real Estate Cadastre (National Gazette 16/2007 and 124/2010), the State Geodetic Administration and the Town Vinkovci entered on 20.07.2012 into the Agreement about the performance of works on establishing and running the utility cadastre for the administrative area of the Town Vinkovci from 2012 until 2015.

The agreement results from a very good collaboration between the SGA and the Town Vinkovci, as well as from the mutual interest in working together on performing the jobs from the article 95. of the Law, i.e. on the establishment and running of utility cadastre for the administrative area of the Town Vinkovci, according to the regulation of the article 126. in the same Law. According to the Agreement, the SGA agrees to establish the utility cadastre for the territory of the Town Vinkovci in the Regional cadastral office Vukovar, the Department for Real Estate Vinkovci.

According to the Agreement, the Department for Real Estate Vinkovci shall deliver to the Town Vinkovci the initial data about the utility lines in digital form (CAD drawing), and the next deliveries shall be defined depending on the needs of the Town. Based on the Agreement, and pursuant to the article 127. of the Law, the Town Vinkovci shall cofinance the establishment and running of the utility cadastre in the specified period with 69.600,00 KN annually in monthly instalments. This is the first, and at the moment the only Agreement between the units of local self-government and the SGA that regulates the establishment and running of the utility cadastre in this way according to the regulation of the article 126 of the Law. The costs related to running of the utility cadastre that shall be cofinanced by the Town Vinkovci are defined according to the Regulations about the amount of the real costs related to the usage of state survey and real estate cadastre data according to the initial length of the lines, and to the ten years long average of the received geodetic documents of the utility cadastre. It is an acceptable way for other units of local self-government to meet their legal obligation in running the utility cadastre. The delivery of the initial data according to the Agreement has been made on 16.11.2012 by the head of the RCO Vukovar, Ivica Ivšić, grad. eng. of geodesy and the head of the Department for Real Estate Cadastre, Mrs. Ines Sukić-Majstorović, grad. eng. of geodesy which was accompanied by suitable presentation. The data were delivered in the form of AutoCAD drawings of all utility lines of specific type for each of 4 cadastral municipalities at the territory of the Town Vinkovci. Every drawing has a series of layers characteristic for a single type of lines, and there were also the possibilities of viewing and connecting the areas for all 4 cadastral municipalities presented, as well as the mutual presentation of various types of lines and their overlap with the digital cadastral plan.

Cadastral municipality	Power supply network	Sewer network	Oil pipelines	Gas pipelines	Telecommunication network	Water supply network	Heating pipeline
Vinkovci I	162 885.75	57 218.63	91.06	83 566.79	141 472.22	37 183.26	2 533.46
Vinkovci II	169 372.72	43 165.95	9 680.08	105 942.12	168 336.24	57 399.81	39.34
V. N. Selo	57 626.85	17 352.59	1 659.65	32 559.00	94 802.64	27 068.24	27.05
Mirkovci	22 043.46	6 191.41	15 719.32	35 367.12	42 561.50	14 303.10	0
Town Vinkovci (m)	411 928.78	123 928.58	27 150.65	257 435.03	447 172.60	135 954.41	2 599.85
Total:	1 406 169.90 m						

Underground and overhead lines of the cadastral municipalities Vinkovci I, Vinkovci II, Vinkovačko Novo Selo and Mirkovci



Gas pipelines at the territory of the c.m. Vinkovci I

According to the Agreement about cofinancing the production and updating of official state survey and real estate cadastre documents for the period between 2011 and 2014, the Town Vinkovci has at its disposal the digital cadastral plan, as well as other digital spatial data of the SGA. The digital data of the utility cadastre shall serve to the Town Vinkovci for the production of GIS-utility infrastructure and spatial management along with other digital spatial data. The present Department for Real Estate Vinkovci has been running the utility cadastre systematically since 1968 on the basis of the Decision of former Municipality Vinkovci. Ever since that time until today, there have been 3300 utility


documents received in the Department, and 1687 of them are related to the territory of the Town Vinkovci, i.e. the cadastral municipalities Vinkovci I, Vinkovci II, Vinkovačko Novo Selo and Mirkovci. There were also graphic presentations in digital form delivered for about 1406 km of all types of utility lines, as well as the data for each of the 1687 received documents presented in digital form since 1968 until today.

Ivica Ivšić

Workshop on INSPIRE Monitoring and Reporting, European Commission and 9th Meeting of the Committee Infrastructure for Spatial Information in the European Community (INSPIRE)

In Bruxelles (Belgium) the INSPIRE meetings of the European Commission *Workshop on INSPIRE Monitoring and Reporting, European Commission and 9th Meeting of the Committee Infrastructure for Spatial Information in the European Community (INSPIRE)* were held on 13. and 14. November 2012. Croatia was invited to these meetings in the capacity of an observer, and the State Geodetic Administration in the capacity of the INSPIRE national contact point.

The meeting *Workshop on INSPIRE Monitoring and Reporting*, held on 13.11.2012 had the goal to analyse the reporting and accompanying analysis of INSPIRE made so far, as well as the possibilities of improving and the development of INSPIRE through the experience of member countries and EU Commission. The experiences of the member countries were illustrated in the presentations of the Czech Republic, Denmark, Germany, France, Sweden and Finland, and narratively by some of the present INSPIRE countries. Several reports were submitted: monitoring and analyses of so far performed reporting, metadata data, services, about the held *Workshop Shared approaches to assess costs and benefits of INSPIRE* (15. and 16.10.2012 Ispra, Italy). In the discussions, the mutual problems were articulated, as for example the inconsistency of INSPIRE metadata with the data, different interpretations of data sets, intention and quality of INSPIRE geoportal and other topics. The *9th Meeting of the Committee Infrastructure for Spatial Information in the European Community (INSPIRE)* was held on 14.11.2012. This meeting gathers the representative of the member countries of the European Commission, and it is the mechanism used by the member countries and EU Commission to harmonize the development and the policy of INSPIRE. The main topics of this meeting were the implementation of the rule for the Annex II and III data topics, the amendment to invoke network services that will be used to expand and interpret the metadata for network services, the report about the INSPIRE geoportal that will be transferred from the test mode into the operative mode, and other topics. Each of these topics was discussed in constructive dialogues.


 Željko Hećimović

Costs and benefits of implementing the INSPIRE directive Workshop

Costs and benefits of implementing the INSPIRE Directive workshop was held from 15. till 16. October 2012 in the premises of *Joint Research Centre (JRC)* in Ispra (Italy). It was organised by the *European Commission, Joint Research Centre, Institute for Environment and Sustainability, Digital Earth and Reference Data*.

The goal of the workshop was to share the experience in the implementation of INSPIRE directive and consider the possibilities of creating mutual criteria for the comparison of various methods and results in estimating the costs and benefits of INSPIRE Directive implementation. The programme of the workshop included the following oral presentations and discussions: *Max Craglia (JRC): Review of the 2010 reports on implementing the INSPIRE Directive; Arnold Bregt (Univ. Wageningen): SDI Cost-benefit assessment analysis in perspective; Danny Vandenbroucke (Catholic University of Leuven): Reporting cost/benefits of INSPIRE; Vlado Cetl, Katalin Toth, Vanda Nunes de Lima (JRC): Cost benefit considerations INSPIRE Annex II and III Themes Testing; Ulla Kronborg Mazzoli (National Survey and Cadastre): Examples from Denmark; Jaana Mäkelä (Aalto University): Examples from Finland; Max Craglia (JRC): Lessons learned from JRC studies; Piergiorgio, Cipriano (JRC): Assessing the wider benefits: SMEspire; Discussion on possible common approaches and methods i Wrap up and Next Steps.*

The oral presentations were related to scientific assessment of relations between the investments and benefits of INSPIRE Directive implementation, the estimation of costs and benefits for INSPIRE Annex II and III data, up to the national examples of costs and benefits assessment. The oral presentation given by Mr. Arnold Bregt bringing up by means of a scientific approach the estimation that the benefits provided by INSPIRE will be 2-3 times larger, and not 7-8 times as estimated at the beginning of the INSPIRE Directive implementation. He also pointed out that implementation of INSPIRE has become so complex that it is difficult to define the objective indicators for the assessment and monitoring of the relation between investment and benefits. In the case of the Netherlands, he predicts the benefits to be larger than the investment in INSPIRE not earlier than in 2018. Mr. Danny Vandenbroucke presented in his report by means of a scientific approach the draft of the project for the standardisation of quantitative indicators for the estimation of using spatial data, and of the indicators for the estimation of INSPIRE investments and benefits. Vlado Cetl presented in his report the relation between investments and benefits for INSPIRE Annex II and III data. Among the presentations related to the national assessments of investments and benefits at national levels, the presentation from a colleague from Denmark was especially interesting, Denmark being a country that has recently offered its data to the public to be used free of charge. The oral presentations and more details about the workshop can be found on the web site <http://inspire-forum.jrc.ec.europa.eu/pg/pages/view/97730/cost-and-benefits-of-implementing-the-inspire-directive-workshop>. In this workshop, the employee of the SGA, Željko Hećimović, PhD, participated as well with a lot of ideas and creative discussion.

 Željko Hećimović

Establishment of the new CROPOS/EPN point at the Observatory Hvar

The long-time tradition of performing geodetic measurements and the significance of the Observatory Hvar has motivated the initiation of the activities needed to bring the Observatory Hvar back to the geodetic map of Europe. Hence, on 21. October 2012, the permanent CROPOS station was established by the State Geodetic Administration and the Faculty of Geodesy, University of Zagreb on the fortress Napoleon of the Observatory Hvar.



Trigonometric pillar 209/z

The astronomical observatory Hvar of the Faculty of Geodesy, University in Zagreb, was founded in 1972 for the purpose of performing various astrophysical researches. It has the instruments intended for the observation of the Sun and the stars. Within the frame of the project IDOC'82, the coordinates of the trigonometric pillar 209/z were determined for the first time at the Observatory in the world geocentric coordinate system WGS'72. The trigonometric point 209/z was later observed in a series of geodynamic campaigns and reconstructed in November this year, and there was the permanent CROPOS station established next to it that is planned to be included into EUREF EPN network as well. The new GNSS station on Hvar would thus contribute to the improvement of EPN network configuration along with another 4 GNSS permanent stations of CROPOS system (Čakovec, Poreč, Požega and Zadar), but it would also open the new possibilities for the continuation of geodynamic research of the Adriatic microplate.

For the purpose of determining and monitoring the tectonic movements of the Adriatic microplate by means of GNSS measuring method, a few geodynamic projects have been realized in the last twenty years: CERGOP, CRODYN/CROREF, and from the year 2005 also RETREAT project of geodynamic research.

Newly established permanent GNSS station on Hvar will contribute also to further geodynamic research along with the collection of observation data needed for the computation of network solution for the usage of CROPOS positioning service, and provide permanent monitoring of recent tectonic movements of the Adriatic microplate. Its establishment is therefore of extraordinary significance.

Margareta Premužić, Martina Ciprijan



CROPOS map (blue) and CROPOS/EPN (green) permanent stations



CROPOS GNSS antenna

RCO Slavonski Brod

Regional cadastral office Slavonski Brod initiated at the end of 2011 in collaboration with the Municipal Court in Slavonski Brod the activities related to the production of new cadastral documents and land registries. It was planned to renew the documents and establish new land registries in 5 cadastral municipalities within the five-year plan from 2010 - 2014 for which the surveys were performed immediately after the II. World War, and the land registries according to the cadastral documents of that time have not so far been updated. In December 2010, the public inspection of the existing cadastral documents in first cadastral municipality was completed and the land registry for the cadastral municipality Sredanci updated at the same time, and in February 2011, the new cadastral documents and land registry was put in use. In January 2012, all preparation activities were made for the exhibition of the existing cadastral documents of the following two cadastral municipalities - Jaruge in the Municipality Sikirevci and Zoljani in the Municipality Oprisavci. The exhibition committee with its member Ljubica Vranešević and Ferdo Marić started to work on 24. January 2012. The exhibition of the cadastral municipality Jaruge was completed on 24. May 2012 and in only 5 months, 1462 lots were exhibited with only 2% of complaints filed. The exhibition was made for both cadastral municipalities in the new premises of the Municipality Sikirevci. After the exhibition of the c.m. Jaruge, the exhibition of the small c.m. Zoljane was initiated and completed till the end of June. In the period of one month, there were 384 lots exhibited with 6 complaints filed, i.e. less than 1,5% of the total number of exhibited lots. It should be mentioned, that the cadastral documents were very well prepared, the lists of differences between the registry and graphic parts were reduced to minimum due to the previous production of large elaborates (the canal Dunav-Sava, the survey DPZ, Highway A3, the corridor 5C). The complaints referred mostly to the changes of land usage, which is understandable because the last revision was made in 1987, i.e. 1990. The RCO Slavonski Brod and the appointed Committee took the responsibility of producing such and other geodetic elaborates. In August, the land registry for the c.m. Jaruge and the c.m. Zoljani was opened by the Decision of the Minister of Justice, and the cadastral documents for the mentioned municipalities were put in use by the Decision of the director of SGA on 13. September 2012. The preparation for the remaining two cadastral municipalities are being performed, and we hope that the new documents and land registries for the cadastral municipalities Velika Kapanica and Klokočevik will be put in use in the next two years.

Ivica Stipetić