

 Republic of Croatia
State Geodetic Administration

FIG Working Week 2012
Knowing to manage the territory, protect the environment, evaluate the cultural heritage
Rome, Italy, 6-10 May 2012



Cooperation between Municipality and Cadastre on Land and Housing Policy

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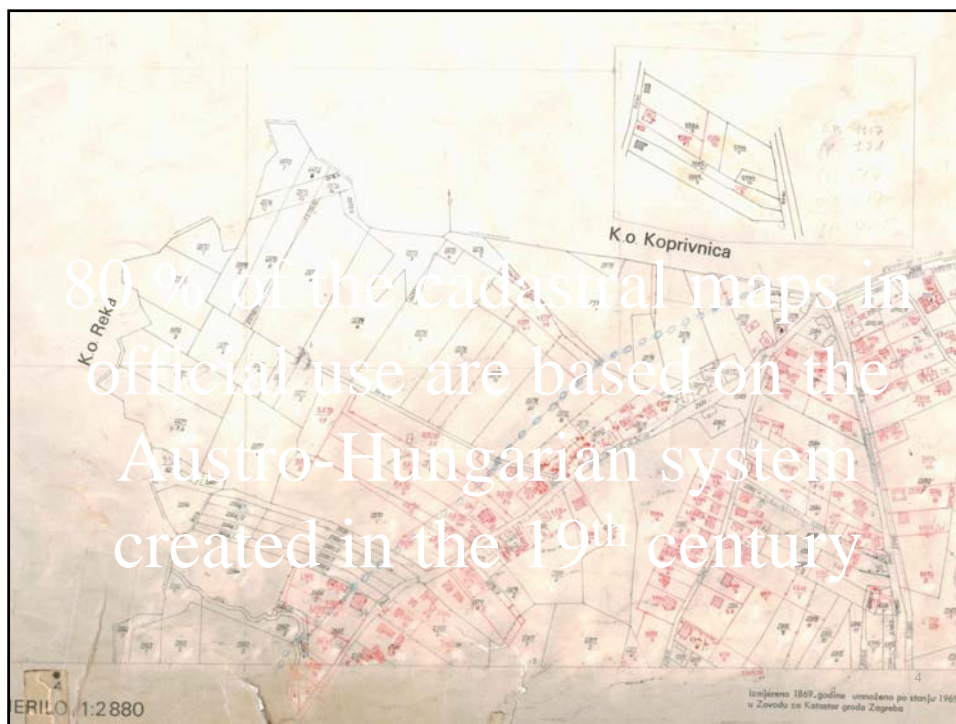
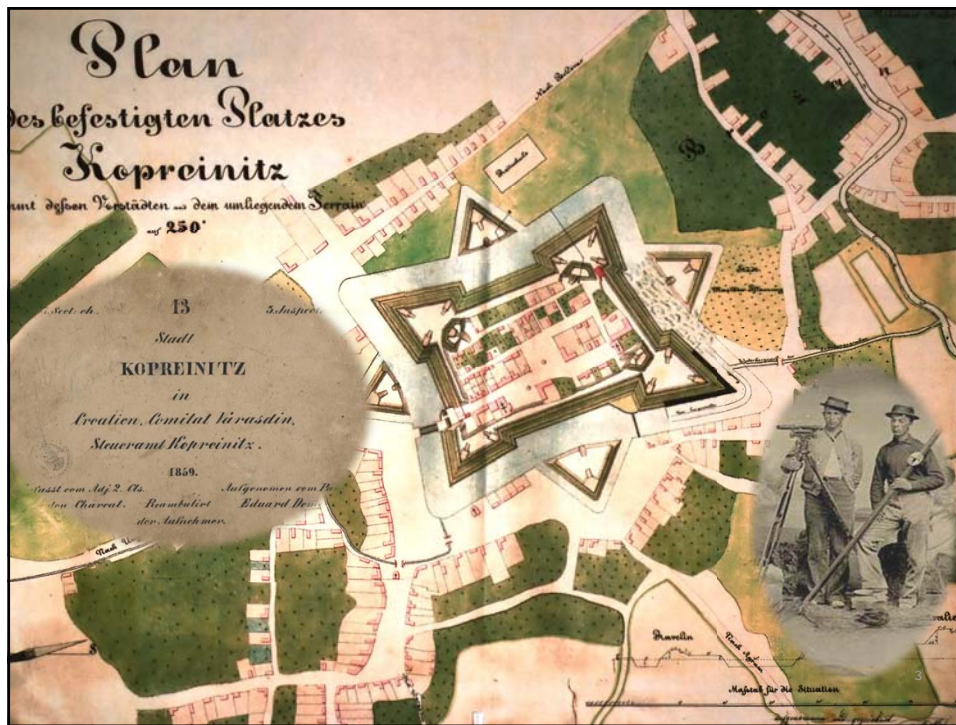
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Town of Koprivnica







80 % of the cadastral maps in official use are based on the Austro-Hungarian system created in the 19th century

- in the new social, economic and political system in Croatia at the beginning of the 90^s, private ownership and spatial data has become very important and the number of users of cadastral data has been continually increasing

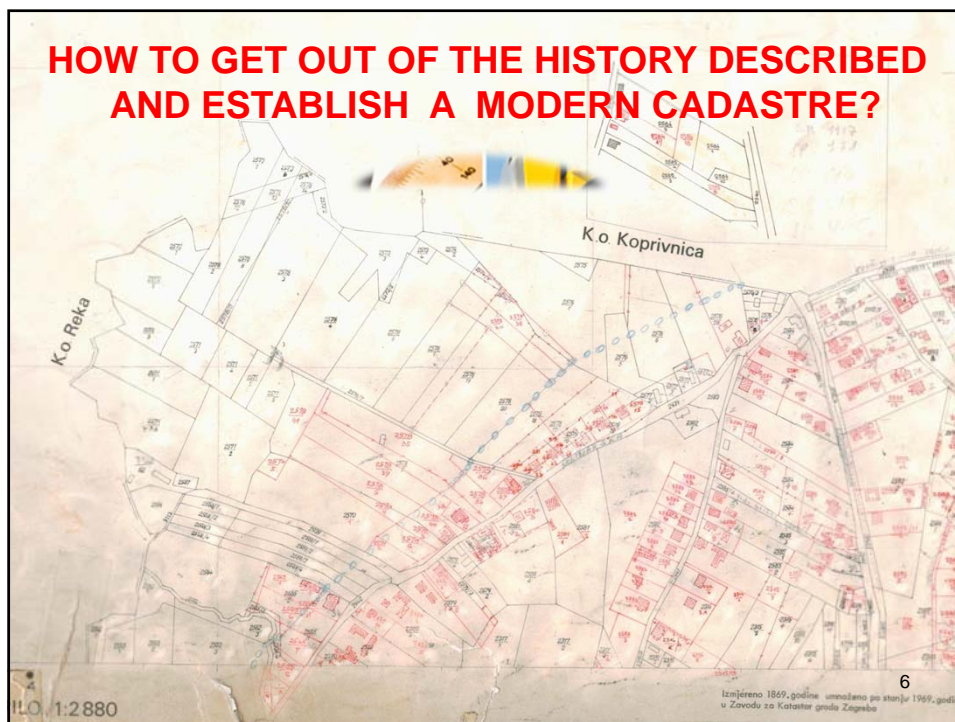


- cadastre has become an unavoidable foundation for the records in land registers, for physical planning, agriculture, statistic, environmental and nature protection and many other fields of human activities
- since Croatia has inherited obsolete, outdated, destroyed and not efficient cadastre it has been inevitable to establish modern, complete and multi-purpose cadastre



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HOW TO GET OUT OF THE HISTORY DESCRIBED AND ESTABLISH A MODERN CADASTRE?



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- depending on their legacy and the support and understanding of the local government units and other stakeholders at the local level, cadastres have tried to find their own solutions to improve the data, introduce the modern technology and generally to develop the entire system and service
- legal cadastral reform started with the Law of State Survey and Real Estate Cadastre (official gazette no. 128/99.) which came into force on the 1st of March 2000. and with the Programme for the State Survey and Real Estate Cadastre for the 2001-2005. period (Official gazette no. 64/01.)
- in 2003 the State officiated a long-term project - The Reform of the Land Registers and the Cadastre, based on cooperation between two leading organizations in the land administration sector, financed from World Bank Loan



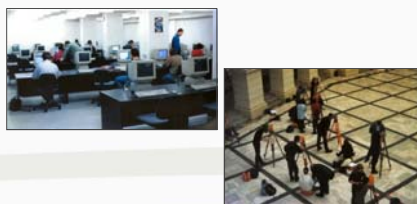
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Important factors in the development

1. Human resources



2. Education and publicity



3. Space and equipment



4. Implementation of the projects



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GIS for the town of Koprivnica

- by the agreement signed at the end of 1997 between the State Geodetic Administration, Koprivnica-križevci County and the Municipality of Koprivnica
- at the time when there were only a few pilot projects in the number of big cities fully supported by State Geodetic Administration
- no one has come up with the idea of GIS based on graphical cadastral data
- today, this system is jointly used by the cadastre, town of Koprivnica, County Physical Planning Institute, electrical and utility companies of the town



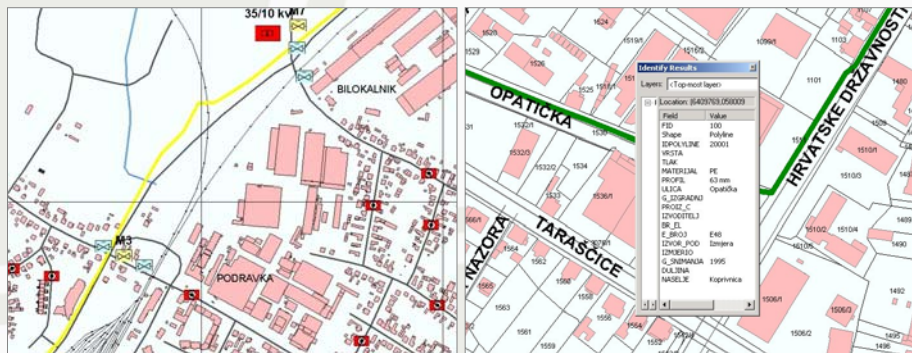
GIS for the town of Koprivnica

- old cadastral maps were replaced with the new digital ones in state co-ordinate system
- Cadastre was technologically upgraded to operate and maintain the new data
- all involved in the project were supplied with the new HW; SW and other equipments to use the system - new applications have been introduced
- appropriate staff training in the cadastre and in other places where system is used was carried out
- better and more efficient spatial data management has been enabled



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GIS for the town of Koprivnica



Fire protection plan

Data and positions of the pipelines



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GIS for the town of Koprivnica



Parcels owned by the city that are for sale

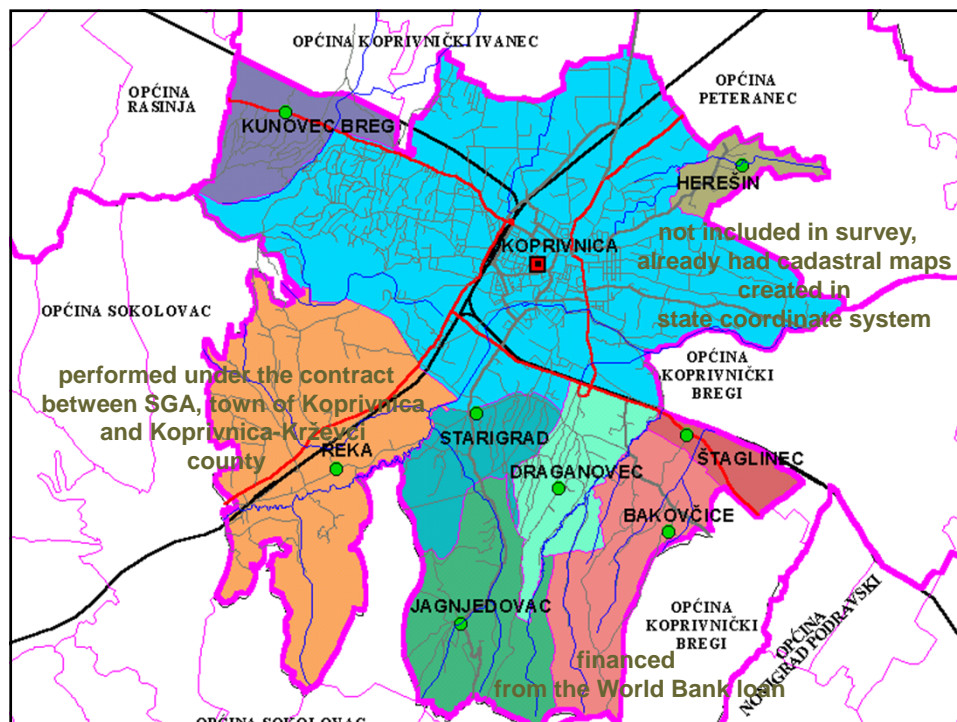
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Cadastral surveys in area of the town

- cadastral surveys in Croatia are, as a rule, carried out in the areas with over 30 % of the cadastre and land registry data mismatching and not reflecting status in the field
- cadastral survey project in the area of the town of Koprivnica has encompassed all cadastral maps created on the basis of graphical surveys regardless of that percentage
- new boundaries of cadastral municipalities have been determined and are now conformant with the border of the town of Koprivnica



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Cadastral surveys in area of the town

- provide a complete renewal of cadastre and land registers
- people get a digital portrayal of what they own
- property is clear/accurate records of the real property
- all buildings are charted on a particular part of the land
- data in the Cadastre and Land books is fully compliant



Cadastral surveys in area of the town

- the number of the cadastral parcels /fragmentation of the land/ were reduced but the number of the registered buildings/security in land transaction/ increased

CADASTRAL MUNICIPALITY	AREA (ha)	The number of cadastral plots before survey	The number of cadastral plots after survey	The number of recorded buildings before survey	The number of recorded buildings after survey
Jagnjedovec-grad	1373	5953	3053	940	2600
Reka	1826	5251	2540	971	1921
Kunovec Breg	474	4067	2500	762	1510

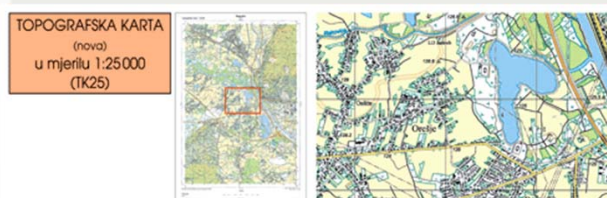


Official datasets of the SGA

- Topographical map in scale 1:100,000



- Detailed topographical map in scale 1:25,000



- Digital Orthophoto map in scale 1:5,000



- Croatian Base Map in scale 1:5,000



- Digital cadastral map in raster and vector format



- digital ortophoto map in colour produced in 2011 for the purpose of enforcing the Law on Treating Illegally Built Construction



- town of Koprivnica began to fund production of official datasets of SGA in 1999 and now has a topographic database for the entire area under its jurisdiction granting its sustainable planning



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Physical plans development

- due to the projects in which town of Koprivnica has participated for a number of years with the cadastre it was well prepared for the adoption of its physical plans because it had relevant dataset
- all local and regional government units (counties, towns and municipalities) bear the obligation of developing the physical plans
- plans must be also in digital form, which enables the uploading of the data into the information system of spatial data and protected areas
- the graphical part of physical plans is produced by using official datasets of the SGA



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The Law on Treating Illegally Built Construction

- the issue of illegally built construction is linked with the renewal of land administration
- by adopting the Law on Treating Illegally Built Construction the Government has tackled that unpopular issue that has remained to be solved
- the law opened up the possibility to legalize illegally built construction existed prior to 21 June 2011
- a significant role in the application in the Law has been assigned to the SGA and all local government bodies



The Law on Treating Illegally Built Construction

- SGA had to produce digital orthophoto map in colour for the purpose of enforcing the Law, of checking if the illegally built construction existed on the field prior to 21 June 2011
- the Law interlink the activities of the cadastre and the town professional services - the procedure to legalize the building is initiated by a request that a party submits to the body in charge of urban planning, supplemented by a geodetic report recording the data on the building



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The Law on Treating Illegally Built Construction

- geodetic reports for the purpose of obtaining the as-built decision for the illegally built construction produce private licenced surveyors
- the technical accuracy of these reports is reviewed and confirmed by an authorized officer in the cadastral office
- It is very required and extensive job - it is estimated that the number of illegal constructions in the Republic of Croatia totals more over 150,000



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The Law on Treating Illegally Built Construction

- the Law has a lot of gaps and the new one is the procedure to be adopted
- there are a lot of problems in the law enforcement, even with passed procedural guidelines for the bodies in charge of the cadastre and urban planning but it is encouraging that today we do not need to convince anyone in Croatia in necessity of completely removing the illegal construction from the social practices as we didn't have to in investing in the regulation of land registers



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CONCLUSION

- the example of a small town community, such as town of Koprivnica, illustrates that the selected development pattern, based on high quality spatial data maintained by an efficient and modern land administration, is the best foundation for the overall town economic development and that investments in the regulation of land registers represent a profitable move
- the future goal of SGA is to update, merge and standardize topographic and cadastral data and extend the availability of its services, in cooperation with the local and regional government units, taking into account that cadastre and geodetic data and works are alpha and omega of every spatial development and progress



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