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Real Estate Cadastre Development in Serbia

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ABSTRACT. This paper provides an overview development and the real estate cadastre maintenance in the Republic of Serbia. The State has recognized that an effective national property rights system is prerequisite for economic growth and broadening economic prosperity through the land and housing development, wise stewardship of national resources, increased use of property, increased property tax collection and efficient land markets. The State and International Development Association concluded the Development Credit for the Real Estate Cadastre and Registration Project in Serbia signing it in 2004.

This paper also provides an overview of the existing records of real estates. It points out the advantages of the Real Estate Cadastre as the unified records of real estates and presents the current situation in the creation of the Real Estate Cadastre in Serbia.

Keywords: real estate cadastre, state survey, organization, record, development, projects.

1. Introduction

Adopting the Law on State Survey and Cadastre and Registration of Real Property Rights (1988), the Republic of Serbia decided back in 1988 to establish the cadastre in the entire territory of Serbia, i.e. to establish a new unified records of real estates and real property rights, which would unify all the existing records of real estates – namely Land Cadastre and Land Book.

As defined by the changes of Law on State Survey and Cadastre and Registration of Real Property Rights (2002) real estates include the following: land, buildings,

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apartments and business facilities as buildings sub-parts and other construction objects (Aleksic et al. 2006).

The significance of the good quality records of real estates for any European country can be seen through conditions for joining the European Union, as follows (Roic et al. 2008):

- 1. a country needs to have a transparent and prosperous real estate market and
- 2. physical and legal entities must be provided with secure and guarantied ownership rights over real estates.

2. Organization of the State Geodetic Authority

The State Geodetic Authority (SGA) is a special organization of the Republic of Serbia with its scope of activities defined by the Law on Ministries (Fig. 1). Provisions of the article of the Law on Ministries state that SGA is in charge of technical and administration works related to the following:

- state survey and cadastre and registration of real property right, their updating and maintenance,
- · basic geodetic works,
- · creation of a basic national map,
- maintenance of a register of spatial units,
- determination of house numbers, designation of buildings with numerals and name designation of populated areas, streets and squares,
- land fertility classification,

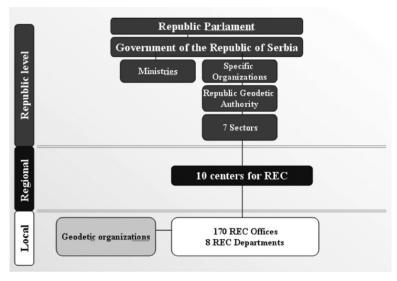


Fig. 1. Organization scheme of the State Geodetic Authority.

- definition of cadastral income,
- land consolidation,
- linking the geodetic networks and exchange of geodetic and cartographic data with the neighboring countries,
- · creation and development of geodetic information systems,
- maintenance of the archive of technical documentation related to national survey, maps and plans,
- other activities, as defined by the Law.

The following basic internal sectors are formed within the Authority:

- 1. Basic geodetic works sector,
- 2. Technical and administrative supervision sector,
- 3. Real estate cadastre sector,
- 4. Real estate survey sector,
- 5. Information and communications sector,
- 6. Legal affairs sector,
- 7. Financial affairs sector.

3. Existing records on Real Estates

Following records of real estates exist in Serbia:

- Land Cadastre (Wessely et al. 2003)
- Land Book and Book of Deeds (Slijepcevic and Babic 2005)
- Real Estate Cadastre (REC) (Wessely et al. 2003).

Land Cadastre contains the data on parcels and objects built on the land with respect to their position, shape, area, type of land, land fertility, class, cadastral income and users. Such data are established, processed and recorded with respect to the cadastral parcel designated with number and name of cadastral municipality to which it is affiliated to. Position and shape of all cadastral parcels and objects built on them are drawn on maps, while all the other data are recorded in the cadastral records.

Land Cadastre:

- established for the entire territory of Serbia;
- forms the base for establishment of Land Book:
- not containing any data on real right over real estates.

Land Book is a public record registering real estates (land and buildings) and real rights, encumbrances and limitations related to such real estates.

There are three types or models of Land Book internationally:

- Austrian-German;
- French and
- Australian type of Land Book.

Republic of Serbia applies the Austro-German type of Land Book based on the data from survey and cadastre.

Land Book is comprised of the main book and the list of documents. Collections of cadastral maps, real and personal registers and auxiliary records are used as additional records.

Types of registrations in Land Book are as follows:

- registration;
- pre-annotation and
- annotation.

Data in Land Cadastre and in Land Book, according to the Law, supposed to be regularly harmonized and that harmonization to be full and complete in the part that relates to the use of land, areas and cadastre parcels' IDs. However, the situation in practice is different and therefore there is a significant incoherence between the data registered in Land Cadastre and Land Book.

Book of Deeds is a public register of the land ownership. Upon request of an owner, a deed is issued as the evidence that the person-entity designated as the owner is the actual owner of the land. In Serbia, the deed system is rarely used in practice, only in areas where there is no Land Book and where the Real Estate Cadastre has not been established.

By adopting the Law on State Survey, Cadastre and Registration of Property Rights (1988), the Republic of Serbia decided way back in 1988 to establish the Real Estate Cadastre on the entire territory of Serbia, i.e. to create a new unified records on real estates and real property rights, that would unify the existing records on real estates – Land Cadastre and Land Book.

According to the Law on State Survey, Cadastre and Registration of Property Rights, real properties are the following: land, buildings, apartments and business facilities as individual sub parts of buildings and other construction objects (Kaufmann and Steudler 1998).

The Real Estate Cadastre contains the data on real estates, their shape and position, surface area, form of use, land fertility, cadastral income, real rights and rights holders, as well as data on encumbrances and limitations.

The Real Estate Cadastre applies the principles of priority, legality, constitutionality, public availability, reliability, unification and mandatory inscription and as the public record, consists of the map work original, collection of documents and cadastral records.

4. Development of the Real Estate Cadastre

The International Geodetic Federation (FIG) in its 19th Congress in Brighton (United Kingdom) in 1998 adopted the document named CADASTRE 2014 that provided bases for future development and vision of the cadastre by the year 2014. According to that document, the Cadastre is "a methodically produced public inventory of data that relates to all legal real estates in one country based on the survey of its boundaries. Real estates are systematically designated with special designations. They are defined by law. Boundaries, identifier, together with the description data, can be displayed for any real estate, type, size, value and legal rights or encumbrances relating to that specific real estate. Apart from this descriptive information defining a real estate, Cadastre 2014 contains the official data on real estate rights. Cadastre 2014 can provide answers to questions WHERE and HOW MUCH and WHO and HOW" (Kaufmann and Steudler 1998).

Cadastre 2014 shall replace the traditional concepts of the cadastre and land registers, as it represents a comprehensive system of records on real estates.

The Real Estate Cadastre, as the unified record on real estates, enables the recording of all data on land, buildings and other construction objects, property rights and rights holders, encumbrances and limitations in one place i.e. in one national government institution. The data are entered into the cadastral records database, which enables far higher work efficiency, cost effectiveness, reliability and security of registration.

In the process of REC creation, all residential, residential-office and business facilities are registered ex officio, including both those with construction permit and usage license and those without them. According to the Law, buildings built without the required licenses, can not be registered in the REC as the ownership. They are recorded as rights of hold by the entities that in the registration process provided evidence proving that they are the illegal builders of the subject real estate. Explicitly, in this process all buildings-objects are recorded, but with a legal status relevant for the provided documents. This represents a significant difference compared to Land Book registration.

The registration procedures in the process of REC establishment are conducted by the commission consisting of a graduate lawyer with judicial exam, a geodetic expert and a civil representative, thus providing quality and reliability of registration. The same procedure is applied when it comes to registration of apartments and business facilities in the REC. Such registration is highly significant in the legalization procedure of illegal objects, as the data on buildings are determined and registered in a legal procedure, together with the data on ownership, title holders and holders.

Whereas the Real Estate Cadastre contains all the relevant data on illegal objects, the pre conditions for their registration and that of its sub parts are thus provided, enabling the legalization to go through in a more efficient and cost effective way and to be methodical.

REC, as the unified records on real estates and real estate rights represents the base for the development of the spatial information system both in the local and national level.

The REC establishment is in accordance with the reform of the cadastral system and will enable the following:

- more efficient privatization,
- security of ownership and real estate rights,
- mortgage registration (mortgage loans),
- real estate valuation,
- functional space management.

In 2003, the Government of the Republic of Serbia adopted for the first time the Mid Term Program of activities of the State Geodetic Authority for the period 2004-2008 thus putting the main accent to the establishment of the unified ownership records, i.e. the establishment of the Real Estate Cadastre in the remaining part of the territory of Serbia (Fig. 2).

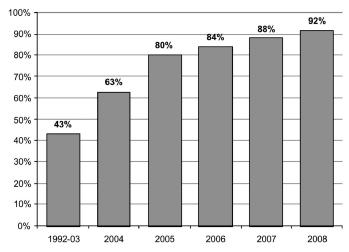


Fig. 2. Mid Term Program of Activities – REC establishment.

The World Bank Mission that visited Serbia in 2003 gave the following assessment (Aleksic et al. 2006):

- There are valid preconditions for realization of the Real Estate Cadastre and Registration Project in Serbia with the support from the WB and potential donors;
- Real Estate Cadastre, as the unified record on real estates and real property rights was supported as the quality solution and was assessed as the best records that the Mission had the opportunity to analyze in the transition countries over the past ten years;
- the existing legislation is flexible enough;
- realization of the WB project will enable a more efficient REC establishment and at the same time will equip the REC offices with new technologies;

• •the quality of services will be improved and the REC establishment in rural areas will be accelerated.

After successful negotiations, in May 2004 the Development Credit Agreement was signed with the International Development Association, and as of October 2004, the realization of the Real Estate Cadastre and Registration Project officially started.

5. Current situation in Real Estate Cadastre establishment

Real Estate Cadastre establishment is conducted in accordance with the annual program of activities of RGA, and with the Project Solutions for realization of geodetic technical works in the process of REC establishment and the planned dynamics.

Percentage of ownership records in Serbia in November 2008 is shown in Figure 3.

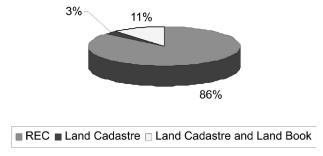


Fig. 3. Graphic display of ownership records in Serbia.

By November 6, 2008 the REC had been established in 3990 cadastral municipalities which amount to 86% of the total number of cadastral municipalities in Serbia (Fig. 4).

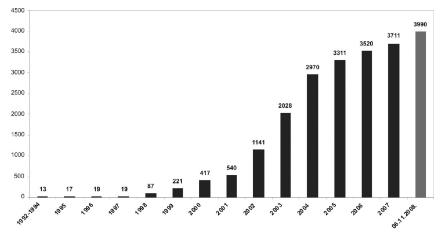


Fig. 4. REC establishment from 1992 to 2008.

6. The Real Estate Cadastre and Registration Project

Serbia and the International Development Association concluded the Development Credit Agreement for the Real Estate Cadastre and Registration Project on June 9, 2004. The ultimate objective of the Project is to support the development and general promotion of the real estate market in the complete territory of Serbia, through the formation of REC as the unified record on real estates and property rights (Aleksic et al. 2005).

The project consists of two components:

Technical-Operational development and support aiming to support SGA in accelerating the creation and maintenance of REC. The World Bank will thus support REC creation in urban municipalities included in the Project, as well as further development of the existing system of registration by elevating the level of services for end users.

The component A will consume 85% of the total credit funds. Particular tasks that will be undertaken shall be as follows:

- Improvement of the geodetic reference base, through the network of permanent GPS stations Production of digital cadastral maps;
- Establishment of REC;
- Focused support to REC creation for Belgrade area;
- Enhancement of system of secondary transactions through REC maintenance;
- Realization of real estate transfers and registration of mortgages;
- Reconstruction of business facilities and procurement of the office equipment in selected REC offices;
- Modernization of ICT system.
- 2. Institutional development and capacity building (Component B) aiming to support the institutional development and capacity building in SGA, through the promotion and modernization of business processes, improvement of legislative framework, training and development of human resources, provision of quality services to clients. This component also includes the public awareness campaign for target groups: REC experts-professionals, real estate title holders, citizens, legal entities.

Component B will consume 15% of the credit funds. Particular tasks will include:

- Establishment of an adequate business strategy and development of a business plan;
- Improvement of strategic and business plan including the cost recovery strategy and promotion of business processes;
- Training and human resources development;
- Completion of legislative framework;
- Development and implementation of ICT strategy;
- Monitoring and evaluation, user polls and development of special studies;
- Public awareness campaign and public information.

7. Possible further development

After the successful implementation of a unified cadastre system in Serbia, work must go on. With the new real estate cadastre system, the requirements of the land market can be fulfilled much better then. But cadastres play an important role in fields besides the land market as well (Kaufmann 2008). So by tradition cadastres served as a data provider for land use planning, construction management, environment protection, land tax management, land consolidation, land management, and in a lot of activities, where land and the property rights are involved. The important role of the cadastre as a base for Geoinformation Infrastructures is manifested by the INSPIRE-guideline of the EU. All the items foreseen to be prepared in the first priority are parts provided by cadastre systems. So a first field of future activities is the development of the National Space Data Infrastructure of Serbia. Another field of action can be identified by comparing the statements of Cadastre 2014 with the Serbian reaction reality after implementation of the aforementioned development work.

Num ber	Statement	Reality in Serbia after implementa- tion of the REC system
1	Cadastre 2014 will show the complete legal situation of land, including public rights and restrictions!	The new Serbian Real Estate Cadastre documents only the land objects being subjects of property rights.
2	The separation between 'maps' and 'registers' will be abolished!	Serbia will have a unified system with the 'maps' and the 'registers under the same responsibility (SGA)
3	The cadastral mapping will be dead! Long live modeling!	SGA's new system works consequently with data models. Maps are produced as excerpts of the model.
4	'Paper and pencil-cadastre' will be gone!	SGA's new system is fully digital.
5	Cadastre 2014 will be highly privatized! Public and private sectors are working closely together!	The public private partnership development is an important part of the World Bank project.
6	Cadastre 2014 will be cost recovery!	At least for the running cost recovery is foreseen and implemented.

While statements 2 to 6 are fully respected by the unified Real Estate Cadastre system, statement 1 remains open. The new Law on Public Survey and the Real Estate Cadastre concentrates on the land objects which are subject to private property. The opening of the cadastre in direction of a reliable documentation of restrictions concerning the property rights, which are created by decisions in the framework of different regulations of land use and protection have not been taken into consideration yet. The approach of statement 1 would enlarge the content of the cadastre significantly and it offers a solution for the problem of the so called 'illegal constructions', which means buildings constructed without the necessary permissions demanded by the respective legal framework. Serbia's land

market is heavily suffering from the huge amount of these buildings, which cannot be used as collateral for mortgages as long the legal conditions remain unclear. To solve this problem, an unambiguous documentation of the legal situation of these buildings is needed. On the basis of this documentation which would be the enlarged cadastre according to the rules of statement 1, the best way to convert the 'illegal' situation into the one corresponding to the valid laws can be determined and implemented. This conversion work needs new land management methods, tools and procedures as land consolidation, land allocation and re-allocation, land right restoration, etc.

In view of the facts that the traditional cadastres all over the world will be developed in the direction of Cadastre 2014 and that Serbia urgently needs better solutions for clarifying the legal situation of land and real estates, the University of Belgrade intends to set up special studies in the fields of enlargement of the cadastre and the development of land management tools and procedures for the resolution of the serious land matters burdening Serbia up to now.

8. Conclusion

Experience in REC maintenance since 1992, when this type of records was produced for the first time in the territory of Serbia, has shown that REC stands for reliable records and that over the 16 years period of its maintenance, the clients haven't had any significant complaints.

By the end of 2010, the REC will be established for 100% of the cadastral municipalities in Serbia.

The advantages of REC, as modern and unified records on real estates and real property rights can be defined as follows:

- fully automated cadastral records, i.e. cadastral records database in digital form, according to European standards and as such it forms a highly suitable base for development of spatial information systems;
- registration of all buildings in the REC with their legal status harmonized with the existing documentation;
- absolute reliability and full legal security of registration is guaranteed by the Law;
- efficient and financially sustainable service for clients, as the registration is done in one government institution, in one place.

Aiming to obtain better quality public records on the real estates, in the coming period the State Geodetic Authority will undertake the following activities:

- adoption of a new Law on National Survey and REC,
- promotion of SGA organization in accordance with the European standards and transition to self financing.
- continuation of the realization of the WB project,

- accelerated establishment of REC,
- better cooperation with the local self government bodies that will acknowledge its own interests through the REC establishment procedure,
- transfer of cadastral maps into digital form and formation of a modern cadastre on GIS bases.

Through intensification of works on REC establishment and with the help of WB expert team, donors and users of cadastral data, the SGA hopes to provide Serbia with a modern system of records on the real estates and property rights by the end of the first decade of this century.

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Razvoj katastra nekretnina u Srbiji

SAŽETAK. U ovom radu dan je pregled izrade i vođenja katastra nekretnina u Republici Srbiji. Država je prepoznala da je učinkoviti nacionalni sustav uknjižbe vlasničkih prava preduvjet za ekonomski rast i širenje gospodarskog prosperiteta kroz razvoj zemljišta i stanovanja, mudro upravljanje nacionalnim resursima, veće korištenje nekretnina, veće prikupljanje poreza na nekretnine te učinkovitije tržište nekretnina. Država i Međunarodna udruga za razvoj su 2004. godine potpisale ugovor o kreditu za Projekt izrade katastra nekretnina i uknjižbe u Srbiji.

Ovaj rad također daje pregled postojećeg registra nekretnina, u kojem se ističu prednosti katastra nekretnina kao objedinjenog registra nekretnina te se opisuje postojeća situacija u procesu izrade katastra nekretnina u Srbiji.

Ključne riječi: katastar nekretnina, državna izmjera, organizacija, registar, razvoj, projekti.

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