

# MORTGAGE MARKET IN THE REPUBLIC OF SERBIA: PRESENT SITUATION AND PROSPECTS

HIPOTEKARNI TRG V REPUBLIKI SRBIJI: TRENUTNO STANJE IN OBETI

*Zagorka Gospavić, Jelena Gučević, Olivera Vasović, Vladan Djokić*

UDK: 332.6:528.4:(497.11)

## ABSTRACT

*This paper discusses the development of mortgage loans market in the Republic of Serbia through development of the instruments for provision of legal security of investments – both to creditors and to debtors. It explains the process of establishment of Real Estate Cadastre as a prerequisite for registration of real estate mortgages. Creation of the Central Mortgage Register is an additional service that provides transparency of the procedures and mortgage market development. The entire procedure has been illustrated by the statistical data on the increase of the number of registered mortgages, starting from 1998 through the end of 2011. The impact of the global economic crisis on the moderate decrease of the number of new mortgages in the Republic of Serbia is quite evident.*

## KEY WORDS

**Real Estate Cadastre, mortgage loan, mortgage market, Central Mortgage Register, registration**

Article classification according to COBISS: 1.04

## IZVLEČEK

*Prispevek obravnava razvoj hipotekarnega trga posojil v Republiki Srbiji z razvojem instrumentov za zagotavljanje pravne varnosti naložb - tako za upnike kot za dolžnike. Obrazloži postopek ustanavljanja katastra nepremičnin, ki je predpogoj za registracijo hipotek na nepremičninah. Vzpostavitev centralnega hipotekarnega registra je dodatna storitev, ki zagotavlja preglednost postopkov in razvoja hipotekarnega trga. Celoten postopek je razviden iz statističnih podatkov o rasti števila registriranih hipotek, začeti z letom 1998 do konca leta 2011. Vpliv svetovne gospodarske krize na zmerno znižanje števila novih hipotek v Republiki Srbiji je dokaj očiten.*

## KLJUČNE BESEDE

**kataster nepremičnin, hipotekarni kredit, hipotekarni trg, centralni hipotekarni register, registracija**

## 1 INTRODUCTION

Historically observed, the establishment of mortgages, mortgage loans and the relevant market in the Republic of Serbia can be linked back to two important years in the distant history – 1830 when the Turkish Sultan first recognized Serbian autonomy in the form of „Sultan’s edict“ and 1836 when the head of the Serbian state at the time, Prince Milos Obrenovic, passed his decree which defined the minimum area of a household that could not be mortgaged. That was the base for establishment of Funds Administration in 1862, when the mortgage loans under the state guarantee were first instituted. After the World War I, the Funds Administration became the National Mortgage Bank of the Kingdom of Serbs, Croats and Slovenians, which after the World War II became „Investbanka“. Investbanka ceased to exist in 2001 following a decree passed by the National Bank of Yugoslavia.

In the recent history, several events took place that were relevant for the development of the mortgage market in Serbia: the establishment of the National Corporation for Insurance of Housing Loans in 2004 and the adoption of the Mortgage Law that came into force in 2006. The Mortgage Law defines the legal relations in case when a property is mortgaged in order to obtain a loan. The adoption of the Law helped promote the overall legal and economic climate in the country which led to the increase of domestic and international investments in all areas of economic and social life as well as the guaranteed legal security of creditors and debtors (Vasović, Gospavić, Ćirović, 2012).

## 2 METHODOLOGY OF THE STUDY

Research of mortgage market means becoming familiar with the laws and regulations pertaining to the real estate registration system, the laws governing mortgages on real estate, as well as with mechanisms of creation and maintenance of a mortgages digital database, in respect to today's technical and technological revolution (Wallace et al., 2006; Enemark et al., 2005)

In order to search and gather information about the mortgage market it is necessary to define a unique public central electronic database in which the data will be compiled from the real estate registers. At the state level, a competent authority is appointed for database management, responsible for the registration and enforcement supervision. In the process of creation of an electronic database, it is necessary to define the interest groups, users and data access. The search and data view application of the database, depending on the interest groups, should provide the following overviews:

- Subject of the mortgage,
- Search process, origin and type of mortgage,
- Mortgage contract,
- The rights and obligations of the real estate owner,
- The rights and obligations of the creditor,
- The right to settle the debt and
- Termination of mortgage.

Modern real estate register in the Republic of Serbia contains factual data about real estate, as well as information on the rights, encumbrances and restrictions on real estate, gathered in the unique database.

## 3 AREA OF STUDY

Republic of Serbia covers the area of 8.8 million hectares, with Belgrade as the capital, 23 towns and 150 political municipalities. The entire territory of the Republic has 4.522 cadastre municipalities with 18.748.699 cadastre lots (parcels). The institution in charge of establishment, maintenance and modernization of real estate databases, so called Real Estate Cadastre, is the Republic Geodetic Authority (RGA), with headquarters located in Belgrade. RGA provides services to economic institutions and citizens in the entire territory of the Republic of Serbia (Tesla, Popović, 2011).

## 4 DESCRIPTION OF THE SYSTEMS

In order to understand the present situation on the mortgage market in Serbia it is necessary to look into historic development of real estate registration, creation of a modern real estate cadastre and adoption of the laws and regulations that enabled development of a mortgage loans and registration of mortgages in a secured way.

### 4.1 Historical development of the real estate registers in the Republic of Serbia

Due to various social, political, economic and military factors, the Republic of Serbia, from historical point of view, has four systems of public real estate registers (Mihailović et al., 2011):

- Book of Deeds with In-tabulation Books,
- Land Books,
- Land Cadastre and
- Real Estate Cadastre.

Each of the above mentioned registers are regulated by relevant laws and by-laws listed under the Literature segment of this paper.

During the 1990s of the past century, the former Yugoslav republics passed the regulations that replaced the laws passed in 1931. (Cetl et al., 2012). The dissolution of Yugoslavia and the economic crisis limited the implementation of the planned reforms. The issue of cadastre in Serbia is particularly complex due to uneven situation in the field. The Land Book and the Book of Deeds were held separately from the Land Cadastre in special departments of Municipal Courts. The Land Book contained the records on real rights, property ownership and encumbrances. The Land Cadastre was a public record maintained by the geodetic administrations in municipalities. The Land Cadastre contained physical information on real estates: position, form, surface area, culture, class, cadastral income and user (Ferlan et al., 2011). Until the adoption of the Law on Survey and Cadastre and the Registration of Property Rights passed in 1988, the following was in use in the Republic of Serbia:

- Land Cadastre was based on the data available from the state survey:
  - Gaus-Krieger projection for 95% of cadastral municipalities (survey done in the periods 1926-1930 and 1945-1950),
  - Stereographic projection for 4% of cadastral municipalities (the end of 19th and the beginning of the 20th century)
  - Zoldner projection for 1% of cadastral municipalities (the end of 19th and the beginning of the 20th century).
- Land Book established for 1.287 cadastral municipalities or 28% of the total number,
- Book of Deeds existed in an insignificant number of municipalities in Serbia.

Registration of changes on real estate in the Land Cadastre was on voluntary bases, which led to incoherencies with the data available in the Land Books. It was clear that unification was

needed and creation of the unified register on real estates and property rights in the entire territory of the Republic of Serbia. The legal base for the start of creation of the unified register was incepted with the passing of the Law on Survey and Cadastre and Registration of Real Rights in 1988. The main reasons for the change of the existing system and mode of real estate registers functioning were the following:

- Factual situation with the existing real estate registers,
- The fact that two thirds of cadastral municipalities were without any property records,
- Inability to register property rights,
- Inability to register a larger number of properties and business facilities due to unregistered buildings,
- Inability to register mortgages and other encumbrances,
- Registration of the same real estate with two government bodies and at two different places,
- Data incoherency problems with the existing records,
- Incomplete and outdated real estate data registered in Land Books,
- Incomplete real estate data registered in Land Cadastre,
- Inability of efficient distribution of real estate data to end users.

The existence of separate property registers and records on property rights could not support and encourage the real estate market development, nor could they meet the growing demands of the clients. That is why an organized endeavour of establishing a Real Estate Cadastre was initiated, as a unified database putting together the information from Land Cadastre and Land Books.

The Law on State Survey and Cadastre (Official Bulletin of the Republic of Serbia nos. 72/09, 18/10) guarantees that the property rights are acquired, transferred, limited and cease to exist with the registration in the Real Estate Cadastre. When it comes to burdens and encumbrances, the Real Estate Cadastre contains: real encumbrances and limitations in real estate governing, real and personal official encumbrances, right of long term lease, mortgages and other encumbrances in accordance with the Law. The Real Estate Cadastre is established in an organized manner by cadastral municipalities. The work on the establishment of the Real Estate Cadastre in the Republic of Serbia is in its final stage. The final 30 cadastral municipalities are currently in the process of establishment, while 6 cadastral municipalities are undergoing land consolidation survey, meaning that in those municipalities both Land Cadastre and Land Book are still in use as separate registers, as shown in Fig. 1. Excluding the territory of Kosovo & Metohija, the blue colour denotes the territory where Real Estate Cadastre has been implemented, which is a mandatory prerequisite for development of secure system of mortgage market development.

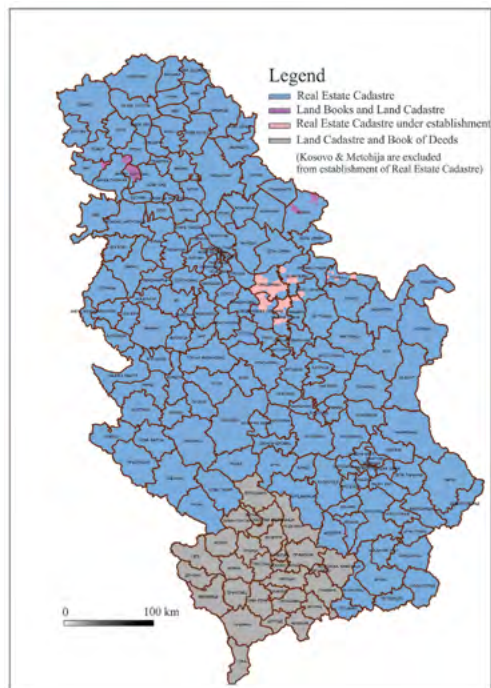


Figure 1: Real Estate Cadastre established up to May, 2012 (Popović, 2012)

#### 4.2 Legal base for creation of mortgages and Central Mortgage Register in the Republic of Serbia

Mortgage is defined as a pledge right over real estate that authorizes the creditor, if the debtor fails to repay the debt in due time, to demand compensation by the instruments of mortgage activation. The mortgage represents the way of pledging the real estate for the purpose of securing a mortgage loan. Mortgage is also defined as a loan for which the debtor pledges his/her own real estate through which a security is provided that the debt will be repaid. Mortgage loans are frequently the least expensive way of obtaining a loan (loans obtained by means of mortgage usually have the lowest interest rate and the longest repayment period). It is also favourable for the creditor because the value of pledged real estate is much higher than the loan amount, thus ensuring that the debt will be repaid with full interest (Stančić, 2006).

Mortgage loan is a type of long term credit that business banks grant to natural persons or legal entities for the purpose of acquiring real estate, where mortgage is an instrument of securing the loan which is pledged to the bank. In time, the debtor will repay the loan and interest in equal proportion, which results in full repayment of debt by due time. Housing mortgage loan is more favourable for clients than the classical cash loans because it is less risky for the bank and therefore the interest rates are lower.

Mortgage market is a market in which insured mortgages are traded with. This relates to standard mortgage loans, and even more to diverse secured forms of mortgage crediting, which usually

uses issuing security bonds insured by mortgages, such as stocks or notes. Security bonds issued based on mortgages enable the mortgage credit institutions to acquire funds in the capital markets (Stančić, 2006).

The legal foundation for regulating mortgages in the Republic of Serbia is the Mortgage Law (Official Bulletin of the Republic of Serbia, no. 115/05). With this Law coming into effect the provisions of articles 6., and 69., of the Law on Bases of Legal Property Relations (Official Gazette of the SFRY, no. 6/80, 36/90 and Official Bulletin of the Republic of Yugoslavia no. 29/69) that used to regulate mortgages, ceased to be valid. The objective of the Mortgage Law was to overcome the issues emerging from the incoherent provisions of the Law on the Bases of Legal Property Relations on one side and the provisions of the Law on Executive Procedures (Official Bulletin of the Republic of Serbia no. 125/04), that regulated the issue of realization of mortgage sale which was inefficient and complicated.

Registration of mortgages is also referred to in the Law on State Survey and Cadastre (Official Bulletin of the Republic of Serbia nos. 72/09, 18/10), while activation of mortgage - debt payment through activation of mortgage - is covered by the Law on General Administrative Procedure (Official Gazette of the FRY nos. 33/97 and 31/2001 and Official Bulletin of the Republic of Serbia no. 30/2010).

According to the Mortgage Law (Official Bulletin of the Republic of Serbia, no. 115/05), the mortgaged properties can include immovable property, parts of immovable properties, shared ownership over immovable property, separate part of building with title ownership, property rights on land that includes the right of free legal disposal or a property under construction. The mortgage covers all integral parts of a real estate, appertaining properties and all improvements and increase of the real estate value.

Mortgage in the Republic of Serbia is established through registration in real estate register. It can be Land Book or Real Estate Cadastre. Depending on the type of establishment, i.e. the base for registration, there are four types of mortgages: contractual, unilateral, legislative and court mortgages. The contractual mortgage is the most common type of mortgage in legal practice. It is due to the fact that mortgage is used for securing the credit emanating from loan or credit agreement. There are three important assumptions for establishing a contractual mortgage as follows: ownership, shared ownership or right of disposal of debtor over the pledged property; existence of legal document in respect to acquiring mortgage (mortgage agreement, executive agreement, etc.); registration or pre-registration subsequently justified in public register. Unilateral mortgage is established based on the pledge declaration which is a document drafted by the owner through which the owner unilaterally commits that, providing the debt is not paid in due time, the creditor can collect the debt from the value of the mortgaged property.

According to the form and contents, the pledge declaration is equal to mortgage agreement and the requirements for registration are identical to the requirements for contractual mortgage. Legislative mortgage is established when legal requirements for its establishment are met. The general rule is that it should not be registered in the public register, and its publicity is based on the assumption of legislation knowledge. Legislative mortgage has one advantage

compared to the contractual one because it falls in the group of privileged demands. One important characteristic of the legislative mortgage is that it is compulsory, because for it to be established the consent of the debtor or any formal request by the creditor is not required. It is established based on the Law on Executive Procedure (Official Bulletin of the Republic of Serbia, no. 125/04), as the court pledge over real estate or as a contractual pledge over movable and immovable property.

Registration of mortgage in public register requires a document that should contain the legal bases for registration of mortgage as an encumbrance on the subject real estate. This document should be legally valid. The pledge secured through mortgage must be specified when it comes to the mortgage amount. Apart from the legal base, the document should also contain the correct description of the real estate being mortgaged as well as a declaration by the real estate owner stating that the owner agrees to the registration of mortgage. Depending on whether the public register in question is the Land Book together with Land Cadastre or the Real Estate Cadastre, there are small variations when it comes to the registration of mortgage, and those variations will disappear with the establishment of Real Estate Cadastre in the entire territory of the Republic of Serbia. Mortgage can be registered on any registered real estate.

Cease of mortgage can be requested in the following cases: when the mortgage debtor pays the debt secured by mortgage, when the creditor renounces the mortgage through a written statement, when the creditor becomes the owner of the mortgaged property and with the destruction of the mortgaged property. Mortgage also ceases to exist following its deletion from the property register it was registered in. The cancellation of the mortgage can be done upon request of the debtor, the owner or the creditor, if the payment has been made in full. Along with the request for cancellation of mortgage, the debtor, i.e. the owner of the real estate has to submit a written statement made by the mortgage creditor agreeing to the cancellation of mortgage supported by a legal court decision confirming that the pledge ceased to exist.

In accordance with the Mortgage Law, the information on mortgages in the Republic of Serbia are incorporated in the unified public database called - Central Mortgage Register (CMR). CMR database is created by taking over the data from the Real Estate Cadastre and entering the data from Land Books and In-tabulation Books. The Central Mortgage Register is maintained by the Republic Geodetic Authority exofficio.

The applications that currently allow digital storage and processing of records in Real Estate Cadastre, which are used in the Republic Geodetic Authority, are: Jedinstvena Evidencija (Unique Records)-JE, (based on FoxPro 2.6 platform) and GeodIS-KN (MS Access database). The migration process data in MS SQL Server 2000, made it possible for the manipulation of data from these two sources and their NET applications to central Real Estate Cadastre Web SQL database.

The Web site of the Republic Geodetic Authority [www.rgz.gov.rs/ceh](http://www.rgz.gov.rs/ceh), contains a service (portal) called Central Mortgage Register which, apart from the basic data on real estate contains the data on mortgages for unregistered users, as well as supporting info available for registered users. The web page layout is shown in Fig. 2.

CMR is a system that is based on three subsystems: Intranet applications (Web applications for data maintenance in CMR), applications for the administration of data (which is used to take the data over from Local RGA Offices) and Internet applications (public Web application that is accessible to all users) (Živić, 2007). Windows 2003 Server, Internet Information Services, IIS 6.0 and SQL Server 2000 have been selected based technologies to support the CMR and its availability on the Web.

РЕПУБЛИКА СРБИЈА  
РЕПУБЛИЧКИ ГЕОДЕТСКИ ЗАВОД

Централна евиденција хипотека - ЦЕХ

Полазна страна      Хипотеке      Пријава

### Објекти

Претраживање објеката преко адресе, преглед података објеката и посебних делова.

Помоћ

Општина\*: ЗВЕЗДАРА      Кућни број: 324

Катастарска општина\*: ЗВЕЗДАРА

Улица: БУЛЕВАР КРАЉА АЛЕКСАНДРА

Прикажи    Поништи

#### Подаци о објектима

Адреса	Кућни број	Кућни подброј	Пов.м <sup>2</sup>	Начин коришћења
БУЛЕВАР КРАЉА АЛЕКСАНДРА	324			Породична стамбена зграда

#### Преглед посебних делова изабраног објекта

Број стана	Под.бр. стана	Бр. улаза	Пов.м <sup>2</sup>	Начин коришћења
14			28.00	Стан
17			69.00	Стан

Републички геодетски завод © 2005-2011

Figure 2: Web page layout and overview of CMR.

The insight into more detailed information on real estate, legal relations and supporting info on mortgages is made possible for the legal entities by signing formal contracts with the Republic Geodetic Authority.

## 5 RESULTS

Based on the data contained in the Central Mortgage Register (CMR) the histogram of frequencies of registrations is shown in Fig. 3. From the graph presented in Fig. 3. below, the following conclusions could be drawn:





service of mortgage registration in 43% of the cadastral offices is rendered in a day, 35% in 2 to 5 days, while in only 22% the clients have to wait for 6-7 days. The reasons for that may vary from the lack of registration of property being mortgaged to huge backlogs in cadastral offices located in larger cities, as illustrated in Table 1. (Popović, 2012).

No. of days for service rendering	No. of offices carrying out registration			
	Mortgage	%	Registration	%
1	68	43	47	30
2 to 5	54	35	37	24
6	24	15	2	1
7	11	7	13	8
8 to 10	0	0	58	37
Total	<b>157</b>	<b>100</b>	<b>157</b>	<b>100</b>

Table 1: Duration of procedure for registration of mortgage/real property rights in Real Estate Cadastre

The Central Mortgage Register is a unique public mortgages database recorded in the registers of real estate and its formation is within the jurisdiction of the Republic Geodetic Authority, in accordance with the Mortgage Law, adopted in 2005. It must be emphasized that the CMR practically collects data from the registers of real estate cadastre in a single database (Živić, 2007). Since the Real Estate Cadastre has been established almost on the whole territory of Serbia, CMR collects data from this register.

## 6 DISCUSSION AND CONCLUSION

In the period preceding 2005, the legal institute of mortgage in Serbia was totally neglected because the existing legislation did not allow for a comprehensive system of securing the pledges by real estate mortgaging. With the introduction of relevant legal mechanisms, the citizens of Serbia and its economy today are in a position to use mortgage loans to acquire funds for investments and spending, from banks and other financial institutions, both on the domestic and the international market.

The Mortgage Law has huge significance for private and legal entities in Serbia that require funds for investments. The Law regulates in details the procedure and conditions for securing the pledges, both on the existing real estate and the real estate under construction with the support of valid documentation. The field of work of the Central Mortgage Register maintained by the Republic Geodetic Authority has also been regulated, while the procedures had been standardized which all lead to quick and efficient mortgage registration. The central register provides unified, easily accessible and precise information on all mortgages which additionally promotes legal security and trust on the part of the investors. With the adoption of the said law the existing legal situation has fundamentally changed and a mortgage regime has been established in accordance with the requirements of modern economy, finance and needs of the citizens. The guarantee for collection of debt has been established, in a quick and secure way with full protection of the debtor and the owner of mortgaged property. Mortgaging of property under construction has also been made legally possible. This manner of loans securing has significantly improved

the credit rating capacity of the citizens and legal entities which in the period from 2005 to 2009 led to increase of domestic and international investments in the local economy, growth of construction and improvement of buying power on the part of the citizens (Mihajlov, 2012).

The year 2009 signified the onset of the world economic crisis which was reflected on the decline of mortgage loans and the decrease of the buying power of the citizens of Serbia. Nowadays, the demand in real estate in Serbia continues to grow. Government has been considering the measures, through adoption of a set of laws, which are aimed at supporting building industry and thereby the purchase of new housing units by the citizens. The said measures have achieved results as shown in Fig 3 through steady growth of registered mortgages in CMR. It can therefore be concluded that in a relatively short time period, Serbia has become the country with the regulated system of unified registration of real estate, property rights and transparent property market whereby Serbia aligned itself with the countries in which the investment of domestic and international capital has become attractive and legally secured.

### Literature and reference:

- Cetl, V., Roić, M., Mastelić Ivić, S. (2012). *Towards a real property cadastre in Croatia. Survey Review*, no. 44.
- Enemark, S., Williamson, I., Walance, J. (2005). *Building Modern Land Administration Systems in Developed Economies. Spatial Science*, 50(2), pp 51–68.
- Ferlan M., Šumrada R., Čeh M., Liseč A. (2011). *Načini vzpostavitve digitalnih katastrskih načrtov v primerljivih državah. Geodetski vestnik* 55/2, pp 235-256.
- Liseč A, Ferlan M., Šumrada R. (2007). *UML notation for the rural land transaction procedure. Geodetski vestnik* 51/–1
- Mihajlov V. (2012). *Architectural Design in a New Social Order: Re-Exploring the Reasons for Application of Spatial Standards. Serbian Architectural Journal Vol 4, No. 1*, pp 99-112.
- Mihailović R. and others (2011). *Cadastral Reforms in Serbia in comparison to Document Cadastre 2014, First Serbian Geodetic Congress, Belgrade: Republički geodetski zavod.*
- Popović D. (2012). *Real Estate Cadastre in the Republic of Serbia, Ending of project "Real estate cadastre and registration project for Republic Serbia", Belgrade.*
- Stančić P. (2006). *Savremeno upravljanje finansijama preduzeća, Ekonomski fakultet Univerziteta u Kragujevcu*
- Tesla N., Popović D. (2012). *Property Records in the Republic of Serbia, II Congress on cadastre in Bosnia & Herzegovina, Ilidža, B&H.*
- Živić P. (2007). *Centralna evidencija hipoteka kao podsistem katastra nepokretnosti, Geodetska služba* 107, pp 12-17.
- Wallace J., Enemark S. and Williamson I. (2006). *Building sustainability accounting in land administration systems in Australia. Sustainability and Land Administration Systems, Department of Geomatics, Melbourne.*
- Vasović O., Gospavić Z., Čirović G. (2012). *Institutional Framework for Development of Real Estate Market in the Republic of Serbia, FIG Working Week 2012, Rome.*
- Zakon o izdavanju tapija na području apelacionih sudova u Beogradu i Skoplju i Velikog suda u Podgorici ("Sl. novine Kraljevine Jugoslavije", br. 29 od 7. februara 1930. godine).*
- Zakon o zemljišnim knjigama ("Sl. novine Kraljevine Jugoslavije", br. 146/30 i 281/31).*
- Zakon o premeru i katastru i upisima prava na nepokretnostima ("Sl. list SFRJ", br. 17/88, 13/90 i "Sl. glasnik RS", br. 28/90).*
- Zakon o državnom premeru i katastru i upisima prava na nepokretnostima ("Sl. glasnik RS", br. 83/92, 53/93, 67/93, 48/94, 12/96 i 15/96, 34/01, 25/02 i 101/05).*
- Zakon o državnom premeru i katastru ("Sl. glasnik RS", br. 72/09 i 18/2010)*
- Zakon o hipoteci ("Sl. glasnik RS", br. 115/05).*
- Zakon o izvršnom postupku ("Sl. glasnik RS", br. 125/04)*

**Received for publication: 30 August 2012**

**Received by: 9 February 2013**

**Assoc. Prof. Dr. Zagorka Gospavić**

*University of Belgrade, The Faculty of Civil Engineering*

*Department Of Geodesy And Geoinformatics, Bulevar kralja Aleksandra 73, 11 000, Belgrade*

*e-mail: zaga@grf.bg.ac.rs*

**Assoc. Prof. Dr. Jelena Gučević**

*University of Belgrade, The Faculty of Civil Engineering*

*Department Of Geodesy And Geoinformatics, Bulevar kralja Aleksandra 73, 11 000, Belgrade*

*e-mail: jgucevic@grf.bg.ac.rs*

**MSc in Land Management and Geodesy, Olivera Vasović,**

*Belgrade University of Applied Sciences for Civil Engineering and Geodesy, Milana Rakića 42, 11 000, Belgrade*

*e-mail: oliveravasovic@vggs.rs*

**Prof. Dr. Vladan Djokić**

*University of Belgrade, The Faculty of Architecture, Bulevar kralja Aleksandra 73, 11 000, Belgrade*

*e-mail: vdjokic@arh.bg.ac.rs*