

Development and Implementation of the Real Estate Mass Valuation System in Slovenia

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Key words: real estate mass valuation system, valuation models, multipurpose valuation system

SUMMARY

The article describes development and implementation of the real estate mass valuation system in the Republic of Slovenia. The main driving force at the political level for its development was the need to reform the current property taxation system. At the development stage the main objective was to develop the mass valuation system based on the market value for the property taxation. Later decision was to develop the multipurpose valuation system that could be used for different kind of public tasks and needs. Within general real estate valuation procedure Surveying and Mapping Authority of the Republic of Slovenia performed valuation model's specification and calibration in many iterations, adjusted draft proposal of the valuation models with municipalities in 2009 and executed trial value determination in 2010. Property owners were informed about trial value determination of their properties and real estate data used for that. The final proposal of the valuation models was prepared on the basis of a study of property owners complains about trial value determination according to the mass valuation standards. The Government of the Republic of Slovenia passed the regulation on defining the 21 valuation models on the basis of the final proposal. This is the final step in the general real estate valuation procedure. Data on generalized market value could be used from January 1st 2012 for all regulated uses. According to the Mass Real Estate Valuation Act Surveying and Mapping Authority of the Republic of Slovenia will check valuation models and test their adequacy to the supply and demand in the real estate market at least every four years. In the mean time generalized market values will be adjusted to the situation on the real estate market through valuation indexes, if their variation will be higher than ± 10 percent. The mass valuation system is fully implemented in Slovenia and has been already used for the social matters. The new property taxation law based on the new mass valuation system is still waiting for the politicians.

POVZETEK

Članek opisuje razvoj in uvedbo sistema množičnega vrednotenja nepremičnin v Republiki Sloveniji. Potreba po reformi in posodobitvi obstoječega davčnega sistema je bila glavna gonilna sila za začetek razvoja sistema množičnega vrednotenja nepremičnin. Na začetku je bil razvoju osredotočen na tržno ocenjevanje vrednosti nepremičnin. V zaključni fazi razvoja sistema pa je bil poudarek na zasnovi večnamenskega sistema množičnega vrednotenja nepremičnin za različne javne in tudi zasebne namene. V postopku generalnega vrednotenja nepremičnin je Geodetska uprava Republike Slovenije izvedla več iteracij opredelitve in

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umerjanja modelov vrednotenja nepremičnin, da je pripravila osnutek predloga modelov vrednotenja nepremičnin, ki je bil v letu 2009 usklajen s slovenskimi občinami. V letu 2010 je bil na podlagi usklajenih modelov vrednotenja nepremičnin z občinami izveden poskusni izračun vrednosti nepremičnin. Lastniki nepremičnin so bili obveščeni o poskusno izračunani vrednosti nepremičnin in podatkih o nepremičninah, ki so bili pri tem uporabljeni. Končni predlog modelov vrednotenja nepremičnin je bil oblikovan na podlagi upoštevanja pripomb lastnikov nepremičnin na poskusno izračunano vrednost nepremičnin v skladu s predpisanimi merili množičnega vrednotenja nepremičnin. Uredba o določitvi modelov vrednotenja nepremičnin, ki določa 21 modelov vrednotenja nepremičnin, je zadnji izmed podzakonskih predpisov Zakona o množičnem vrednotenju nepremičnin. S tem je sistem množičnega vrednotenja nepremičnin v Republiki Sloveniji vzpostavljen in uveden. Določitev modelov vrednotenja nepremičnin omogoča zaključek postopka generalnega vrednotenja nepremičnin in prvi pripis posplošene tržne vrednosti vsem nepremičninam, evidentiranim v registru nepremičnin. Podatke o posplošeni tržni vrednosti nepremičnin, določene z množičnim vrednotenjem nepremičnin, se lahko uradno uporablja s 1. januarjem 2012 v skladu s predpisi na posameznem področju. V skladu z določili Zakona o množičnem vrednotenju nepremičnin bo Geodetska uprava Republike Slovenije najmanj vsakih 4 leta preverila modele vrednotenja nepremičnin in preizkusila ali ustrezajo ponudbi in povpraševanju na trgu nepremičnin, ter jih ustrezno spreminjala. V vmesnem obdobju bodo posplošene tržne vrednosti nepremičnin prilagojene dogajanjem na trgu nepremičnin prek indeksov vrednosti nepremičnin, ko bo njihova sprememba večja od $\pm 10\%$. Sistem množičnega vrednotenja nepremičnin je vzpostavljen in vzdrževan. Sprejem novega Zakona o davku na nepremičnine, ki določa posplošeno tržno vrednost nepremičnine kot davčno osnovo, še čaka na odločitev politikov.

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1. INTRODUCTION

Within the tax reforms in the late nineties the Government of the Republic of Slovenia decided to develop the new tax base for the improved property tax system. At that time Slovenian government and the World Bank were preparing the financial construction for the Real Estate Modernization Registration Project in Slovenia. So the new subproject with the title “Development of Property Taxation and Valuation Systems” was prepared to be incorporated into that overall project. The project had been implementing from 2000 till 2005 by several responsible agencies. On the basis of the project results two laws were approved by the Government of the Republic of Slovenia and passed in the Parliament, namely Real Estate Recording Act and Real Property Mass Appraisal Act. At the Surveying and Mapping Authority of the Republic of Slovenia the Mass Real Estate Valuation Office was established in 2007. Implementation phase of the mass valuation system started with establishment of the Sales Prices Register which has been developed into Real Estate Market Register. Within general real estate valuation procedure Surveying and Mapping Authority of the Republic of Slovenia performed valuation model’s specification and calibration in many iterations, adjusted draft proposal of the valuation models with municipalities in 2009 and executed trial value determination in 2010. Property owners were informed about trial value determination of their properties and real estate data used for that. The final proposal of the valuation models was prepared on the basis of a study of property owners complains about trial value determination according to the mass valuation standards. The Government of the Republic of Slovenia passed the regulation on defining the 21 valuation models on the basis of that proposal. The first general real estate valuation procedure was finished with that. Market value on the basis of mass valuation system was assigning to all 6.5 million real estate properties registered in the Real Estate Register.

2. DEVELOPMENT OF THE MASS VALUATION SYSTEM

Slovenian government issued the first draft property taxation law already in 1996. At that time experts and politicians at the Ministry of Finance recognized that the real property market is still not developed enough to establish the mass valuation system based on market values. The property market was growing rapidly in late nineties. Therefore there were created conditions for the start of mass valuation system development. Supported with the World Bank loan real estate mass valuation system development was initiated in 2000 as the subproject of the Real Estate Modernization Registration Project. Ministry of Finance was the leading institution at the beginning stage of the mass valuation system development. There were relatively quickly raised awareness of the need for multi-disciplinary skills like economics, geodesy, GIS systems, statistics and construction by participating staff in the project. Ministry of Finance formally invited Surveying and Mapping Authority of the Republic of Slovenia (SMA) into

the project. Surveying and Mapping Authority's staff actively participated in the development stage of the subproject, executed some pilot projects with the objective to test the valuation concepts in practice and carried out needed analysis.

2.1 Property registration system before 2005

Slovenian property registration system is represented by three main pillars, land cadastre, building cadastre and land register. Surveying and Mapping Authority of the Republic of Slovenia is responsible agency for land cadastre and building cadastre. Land register is in the court jurisdiction. Land cadastre is established for the whole country. It is digitally maintained. Building cadastre establishment was beginning in 2000. There were registered only approximately 20 % of buildings and parts of buildings in building cadastre till 2005 and even those without all needed data demanded by the valuation models at that time. It was a huge problem, because the new property valuation system objective was and still is to value all properties in Slovenia. The same is valid for property taxation. The objective is to tax all properties in Slovenia. At the time of Real Estate Modernization Registration Project we were conscious of that problem, so within the project all buildings in Slovenia were identified with unique identifier and some general data like location, roof's size, building's height and similar were collected for each building. This data was the base for collection of more detail data about buildings and parts of buildings in the year 2007 with field inspection and fulfilling the questionnaires in the spot within the Property Data Collecting Project. This action could not be initiated without strong support of the Ministry of Finance. There was strong demand to develop sound valuation system based on property market. It was impossible task without collection of needed data. The state and the municipalities have not shown any true interest or action to collect data about buildings and parts of buildings in a systematic manner before that. The property owners, especially owners of apartments and condominiums, were also ignorant regarding property registration in the building cadastre and after that in the land register to protect their ownership rights. Beside the valuation for property taxation demand for detailed data about buildings and parts of buildings there were strong pursue from Statistical Office, too. Their main goal was to capture needed data for register based census in 2012. Result of those demands and needs was Real Estate Recording Act change at the time of its processing in the Parliament. There had been included regulation on the project for collection of detailed data for buildings and parts of buildings in the law. There was very comprehensive discussion about privacy protection point of view prior the law was passed in 2006. It was legal basis for collection of more detail data about buildings and parts of buildings in the year 2007 with field inspection.

2.2 Property Market

Property market in Slovenia started to grow in late nineties. The main start of increased activities on the property market was identified in 2003 when over 20,000 sales occurred on the market. At that time only Taxation Authority collected data about property sales. The legal basis for that was the Property Transaction Law. Data and the information about property transactions were "taxation secret". Surveying and Mapping Authority of the Republic of Slovenia and Taxation Authority made an agreement which enabled analysing

data about property sales from 1999 till 2003 for valuation models development. There were no possibilities for quality analyses of the property market, because property register were not established at that time yet, so there were not available any detail data about property characteristics. Data from a lot of sales were not useful at all. So we started to communicate with the Taxation Authority to define some measures to improve the quality of sales data. Result was development of a new questionnaire that Taxation Authority was using in the seller's declaration at the property transaction tax process. Surveying and Mapping Authority of the Republic of Slovenia collected all detailed data about property characteristics through the questionnaire from the Taxation Authority until the establishment of the Real Estate Register. So all property market analyses were based on data we received from Taxation Authority.

2.3 Key Problems Identified

To develop the mass valuation system that works effective and efficient with the help of computers, all data about the properties must be in a digital form with the appropriate quality level. Quality of available sales data must fulfil the minimum statistical standards to develop the valuation models.

The quality of the valuation system therefore can be measured through the quality of the assessed market values calculated on the base of the property data and valuation models.

As it was mentioned before there were not available many data about buildings and parts of buildings like their type, size, year of construction, quality, maintenance and similar data at the beginning stage of valuation system development.

It could be said that the valuation system development became an important driving force to collect property data that today support processes of many other state institutions for different kind of public needs and tasks.

The Real Property Mass Appraisal Act defines that for all properties registered in the Real Property Register must be assessed value. It means that many valuation models should be developed because of the variety of properties types (apartments, offices, churches, libraries, cinemas, barns, farms and so one). Of course for some types of properties simplified valuation models were developed.

The education about property valuation at the universities in Slovenia was not represented enough (still even today). Therefore establishment of the Valuation Office with the adequate experts was not an easy task. More or less the knowledge on the mass valuation issues was gathered through the international support and consultancy and with "learning by doing" approach.

3. IMPLEMENTATION OF THE MASS VALUATION SYSTEM

Ministry of Finance and Surveying and Mapping Authority of the Republic of Slovenia

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prepared new drafts for Real Estate Mass Valuation Act and Real Property Registration Act after the conclusion of the first stage of the property valuation system development.

The main changes in Real Property Registration Act were in the field of collection detail data about buildings and parts of buildings characteristics. It enabled collection of data on the field. Complex and quite expensive Property Data Collection Project was launched after that. The Real Property Registration Act exactly defines property data which must be measured and confirmed by the licensed surveyor and data which could be collected and maintained by the questionnaires on the other hand.

The Real Estate Mass Valuation Act defines all key elements of the valuation system, like who is responsible for valuation, valuation standards, properties that must be valued, establishment of the sales price register and establishment of the valuation models register, general valuation process, assessment process, indexation processes and so one.

Generally the implementation of the real estate valuation system on the operational level has officially started in May 2006 when previously mentioned laws were passed in the Parliament.

3.1 Property Data Collection Project

Property Data Collection Project started in 2007. Its start could not be earlier because Real Property Registration Act was as the project legal basis was passed in the Parliament in May 2006. The main objective of the project was to revise and collect needed data about buildings and parts of buildings characteristics. On the basis of all identified buildings (aerial inventory), data from land cadastre and building cadastre and other public registers, documents and questionnaires were prepared for the field inspection of each building (and all of its parts) in Slovenia. It took one year of the field work to collect the data. It took another year to process collected data in order to establish Real Property Register. The project costs were approximately 11 million EUR provided by the state budget.

The Real Property Register (RPR) was established in 2008 based on land cadastre data, building cadastre data, land register data and collected data on the field. Since then all property data in the Real Property Register have been managed in a digital form according to the prescribed procedures. There are approximately 6,5 million properties registered at the moment. The property type structure is: 540.000 houses, 330.000 apartments, 130.000 garages, 30.000 industrial properties, 40.000 business premises, 40.000 offices, 3.000.000 agriculture land, 450.000 agriculture objects, 1.500.000 forest land and approximately 440.000 other types of properties.

The register's data are available on the internet free of charge. All daily changes of data in the register production are migrated to the distribution environment over the night.

3.2 Valuation Office

The Valuation Office at Surveying and Mapping Authority of the Republic of Slovenia was established at the end of 2006 on the basis of the Real Property Mass Appraisal Act. Its assignments are preparation of criteria for mass real estate valuation, preparation of draft proposals, proposals and final proposals of valuation models, drafting of proposals of Government regulations in the field of general real estate valuation, determination of real estate value indexes, informing real estate owners about the trial determination of the value real estate properties, setup, administration and updating of the real estate valuation database, specifying the knowledge and skills of mass real estate valuation, research and analyses of the real estate market, production of statistical reports on real estate properties, real estate market and real estate values, assigning value to real estate properties, obtaining data on real estate properties for the purpose of assigning value and setup, administration and updating of the Real Estate Market Register. The Valuation Office has 24 employees today, 12 experts at the central level and 12 experts at the regional level.

3.3 Sales Price Register – Real Estate Market Register

Beside the establishment of the Valuation Office at the Surveying and Mapping Authority of the Republic of Slovenia the Sales Price Register was bringing into the force on January 2007 as the second very important element of the valuation system. From that date on all sales data are available on the internet free of charge.

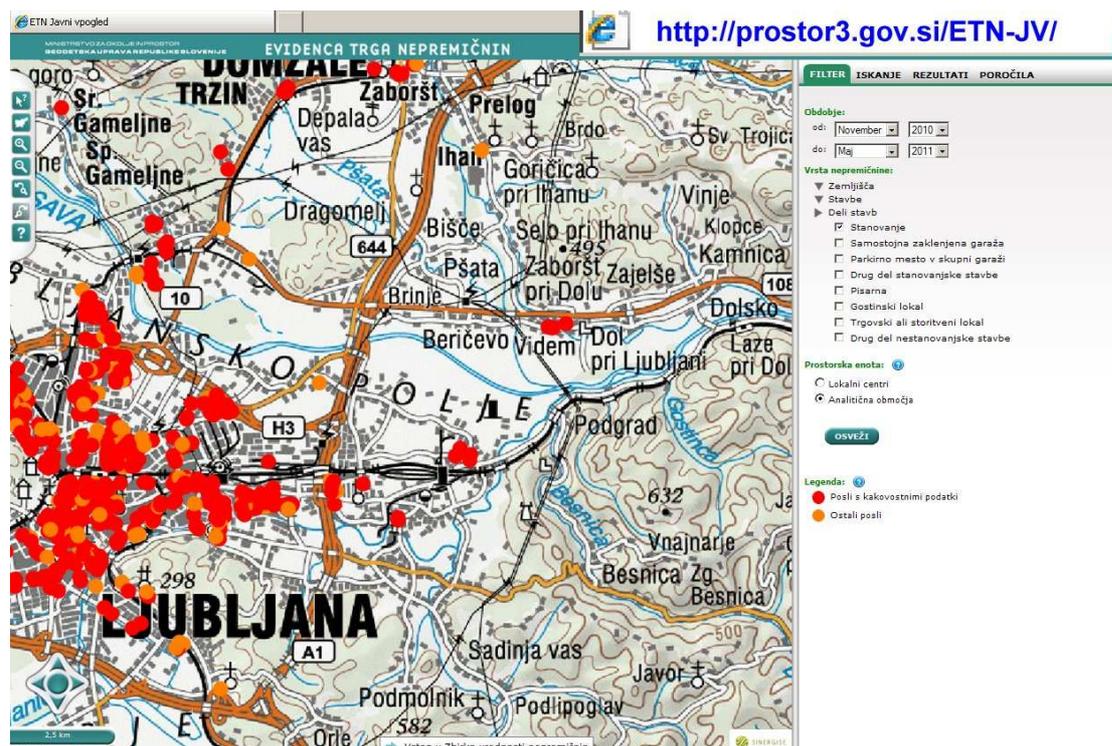


Figure 1. Public access to the Sales Price Register

Due to establishment of the Sales Price Register and easy access to sales data property market

started to become much more transparent which was also recognised through the sales analyses in the sense of better quality of sales data. Data about the property sales from the Sales Price Register are nowadays very important for many property stakeholders in the society like all governmental institutions, private valuers, banks, investors, real estate agencies and so on. Of course the register is used for analysing the property market, preparing reports for different kind of users, calculating the indexes and developing and calibrating the valuation models.

Real Property Mass Appraisal Act changes in 2011 enabled systematic and comprehensive collection of all sales data and all data about residential and business rents. Because of that the Sales Price Register is gradually upgrading towards the Real Estate Market Register.

3.4 The Valuation Models Development

At the early development stage 9 valuation models were initially designed in 2004. The valuation models development concepts were based on the availability and the quality of the sales data and data about property characteristics at the time when the property market was growing (changing). After the Sales Price Register establishment in 2007 the focus has changed to property market analyses for different type of properties. The results of the property market analyses were in conflict and not supported the initially developed valuation models any more. Therefore there had to be introduced changes and valuation models improvements. In 2006 it was decided by the law that market value on the basis of mass valuation system should be assigned to all real estate properties registered in the Real Estate Register. That decision significantly increased the volume and diversity of properties to be valued. Therefore the number of valuation models needed to be developed also increased. Between 2008 and 2009 many iterations of developing and calibrating various valuation models were performed. Within general real estate valuation procedure Surveying and Mapping Authority of the Republic of Slovenia adjusted draft proposal of the valuation models with municipalities in 2009 and executed trial value determination in 2010. Property owners were informed about trial value determination of their properties and real estate data used for that. Approximately 1,2 million notices to owner and co-owners for around 6,5 million properties were issued. About 400.000 properties were complained by the property owners and co-owners from which 45% on agriculture land, 25% on forest land, 10% on houses, 10% on apartments and 10% on other types of properties. The final proposal of the valuation models was prepared on the basis of a study of property owners complains about trial value determination according to the mass valuation standards. Twenty-one (21) valuation models were determined by the government.

The valuation models are kept and maintained in the Real Estate Valuation Database. The database is available on the internet free of charge.

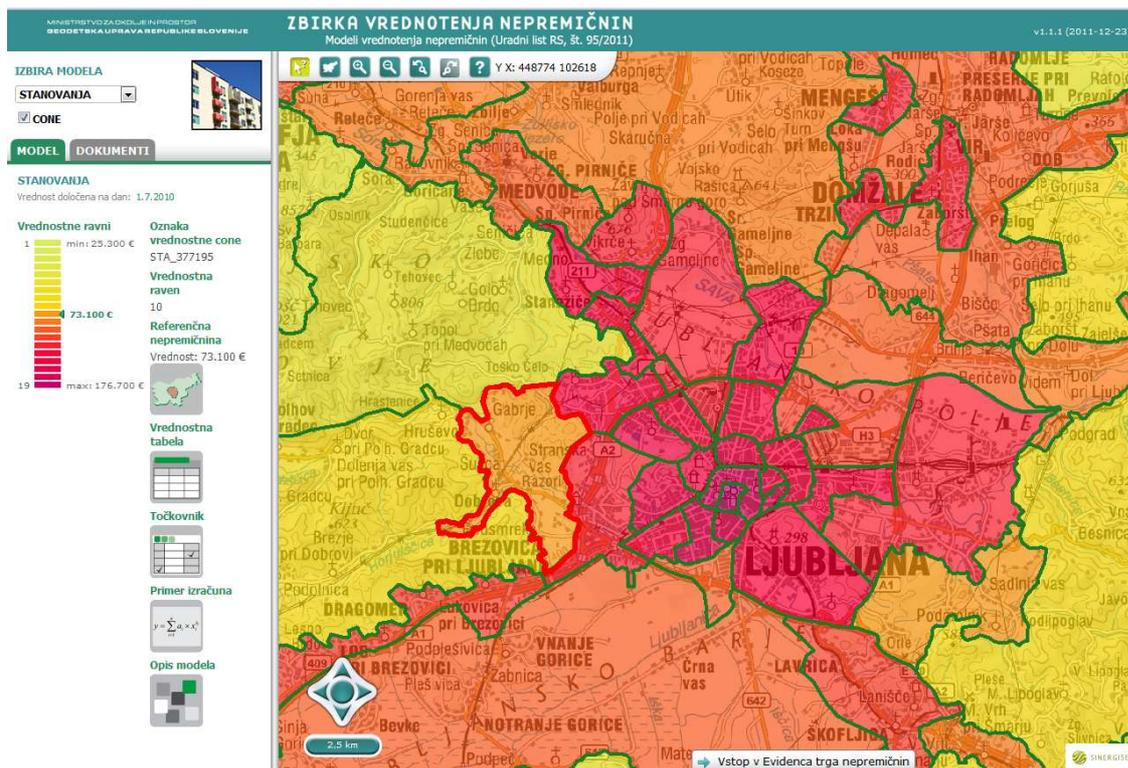


Figure 2. Public access to the Real Estate Valuation Database

3.5 The Valuation System Formal Introduction

The Governmental decree on valuation models determination is the final regulation of Mass Real Estate Valuation Act which enforced the mass valuation system in the Republic of Slovenia. Valuation models determination enables the first value assigning for all real estates in the Real Estate Register. This is the final step in the general real estate valuation procedure. Data on generalized market value could be used from January 1st 2012 for all regulated uses. The mass valuation system is fully implemented in Slovenia and has been already used to estimate the property asset of the applicant for the social aid (scholarship, kindergarten and other subsidies in social matters).

The property taxation law which was the “driving force” for the development and enforcement of the mass valuation system in Slovenia is still not introduced and is still waiting for the politician consciousness.

According to the Mass Real Estate Valuation Act Surveying and Mapping Authority of the Republic of Slovenia will check valuation models and test their adequacy to the supply and demand in the real estate market at least every four years. In the mean time generalized market values will be adjusted to the situation on the real estate market through valuation indexes, if their variation will be higher than ± 10 percent.

It is designed as a multipurpose system.

4. CONCLUSION

Development and implementation of the real estate mass valuation system is a long term process timely very depending on the current situation in the property databases and other public registers regarding data about property characteristics. Development stage of the property market is important to develop quality valuation model that met demand and supply forces on the property market, where the quality of the sales (and other market data) is the most important. A lot can be done with the simulation methods when designing the valuation models at the areas and market segments where there are no enough available quality sales data or rents. The decision to develop the multi – purpose valuation system as good bases for different kind of public use, tasks and processes proved to be the most important and correct. It is a hard work but it is worth doing.

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