Implementation of Mass Valuation System in Slovenia and its Impact to the Land Administration System

Dušan MITROVIČ and Martin SMODIŠ, Slovenia

Key words: Mass Valuation System, Valuation Model, Real Estate Register, Multipurpose

SUMMARY

Mass valuation system (MVS) in Slovenia was implemented in 2012 on the base of the initiative of the WB funded project (2000 - 2005). The system represent the "multipurpose system" and is already widely used from the public and private users. The process of implementation of the MVS has have strong impact to many public property data stakeholders since the system is very data demanding, therefore many state and municipal property data holders were involved and effected with the development and implementation of the system. Today all property data stakeholders and public and private users are recognizing huge benefits from the project and the system.
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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 (REMR Project) in Slovenia. The project aimed to improve the efficiency and effectiveness of real estate administration systems 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 and work of professional staff 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 in the year 2006.

At the Surveying and Mapping Authority of the Republic of Slovenia (SMA) the Valuation Office was established in 2007. Implementation phase of the Mass Valuation System (MVS) started with establishment of the Sales Prices Register. Draft Valuation Models were prepared in 2009. Trial valuation was executed in 2010. The final proposal of the valuation models was prepared based on 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 based on that proposal. Market value was assigning to all 6.5 million real estate properties registered in the Real Estate Register (RER) at the end of 2011.

System was regularly maintained by SMA. There were two value indexation since that time to adjust values to the market conditions.

On 2014, a new real estate tax based on market value was introduced as an attempt to raise additional revenues in support of the fiscal consolidation program. For a variety of tax design reasons the new consolidated tax was annulled by the Constitutional Court later that year. There is a new Real Estate Mass Valuation Act in final preparation stage to meet constitutional principles. It is expected to be adopted this year. The main differences from the current law are introduction of the full appeal process in the mass valuation system and inclusion of detail valuation procedures that were previously defined in sub-law regulations.

Development and implementation of mass valuation system has been of enormous importance for land administration system for several reasons. It accelerated property data collection. It has also made demand for quality improvement for different databases and processes.

2. DEVELOPMENT AND IMPLEMENTATION OF THE MASS VALUATION SYSTEM (MVS)

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Current Slovenian MVS has gone through three main phases, namely:

- Development stage lasted from late nineties until the Real Property Mass Valuation Law was adopted in the Parliament in the year 2006.
- Implementation phase that finished at the end of the year 2011 when valuation models were adopted by the Government of the Republic of Slovenia and General Market Values were calculated in the Real Estate Register.
- Maintenance and improvement phase from the year 2012 on.

2.1 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 MVS based on market values. The property market was growing rapidly in late nineties. Therefore there were created conditions for the start of MVS development. Supported with the World Bank loan real estate mass valuation system development was initiated in 2000 as the subproject of the REMR Project. Ministry of Finance was the leading institution at the beginning stage of the MVS development. SMA was formally invited into the project. SMA’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.

To develop the MVS 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 fulfill the minimum statistical standards to develop the valuation models.

The quality of the valuation system lies in three main pillars, namely quality of sales data, valuation models quality and real estate data quality. It 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 in 2000.

We can say 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. Real Estate Recording Act was adopted in 2006 as result of that push. It has enabled collection of detail data about buildings and Real Estate Register (RER) establishment.

Development phase ended when the Parliament adopted Real Property Mass Valuation Act in the year 2006. The law 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.

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.

### 2.2 Implementation of the Mass Valuation System (MVS)

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.

Mass Valuation Office at SMA was formally established at the beginning of the year 2007. 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.

Mass valuation system was one of the key driving forces to collect detail data about buildings and parts of buildings (Property Data Collecting Project – PDC Project) in in the year 2007. Establishment of the Real Estate Register (RER) in 2008 based on PDC Project, building cadaster and land cadaster was important element in the process of MVS implementation. Detail data about land, buildings and parts of buildings are managed and maintained in the RER.

Base product of the General Valuation are models specified for each type of property. The Governmental decree on valuation models determination is the final regulation of Real Property Mass Valuation Act that enforced the MVS 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 MVS 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). It is daily used by banks for credit rating and mortgages and by private valuators. Statistical Office has been using RER and other data from MVS in registry census twice. This use only has generated more benefits than all investments cost in RER and MVS in ten years together. It was designed as a multipurpose system.

### 2.3 Maintenance and Mass Valuation System Improvement

General Market Values were calculated based on determined valuation models and property data that were registered in the Real Estate Register (RER). As from January 1st, 2012 there were daily maintained general market values of each real estate on the basis of the current property data and determined valuation models in the Real Estate Register.

Supply and demand for various types of real estate is constantly changing. Therefore, it is statutory that valuation models for each type of property due to changes in the real estate markets have to be reviewed at least every four years. In order to ensure updated values in the period between revaluations the generalized market value of real estate adapt with the indexes, which are determined based on analyzes of market forces and reflect changes in the value of certain types of property in a particular area. Indexes are published and used in attributing value only if the index
value for each group of the same type of property in a particular area changes by more than 10% since the last revision of the model or from the last publication of the indexed value.

Due to the changes in the property market first value indexation was executed in the year 2013 and second in the year 2015. After that property market in Slovenia sailed in more stable conditions.

On 2014, a new real estate tax based on market value was introduced as an attempt to raise additional revenues in support of the fiscal consolidation program. For a variety of tax design reasons the new consolidated tax was annulled by the Constitutional Court later that year. The key reasons was as follows:

- Setting the tax base as a General Market Value or appraisal value is deemed unconstitutional due to insufficient procedures in the Real Property Mass Valuation Act.
- The use of different rates for residential and unoccupied housing, for business real estate and energy plants, is inconsistent because rate differentiation breaches the nondiscrimination or equality provisions.
- The lack of a sufficient appeals procedure against the tax base determination constitutes the core constitutional violation since no possibility exist for lodging a complaint against all elements of the valuation.
- The 50:50 revenue sharing split of the property tax between the state and municipalities is unconstitutional. The tax should remain the exclusive revenue source for municipalities;
- The capping of municipalities’ autonomy to change rates by plus or minus 50 percent is unconstitutional as it restrains municipalities’ ability to raise sufficient revenues.

International Monetary Fund (IMF) evaluated proposed real estate tax based on market value as it was tried to implement. The report was prepared in January 2016. The vast majority of the comments concerned taxation.

Constitutional Court decision and IMF recommendations were taken into account in the new law preparation and planned MVS improvement.

3. IMPACT OF THE MASS VALUATION SYSTEM TO THE LAND ADMINISTRATION SYSTEM

United Nations Economic Commission for Europe (UNECE) in 1993 defined land administration as the process of determining, recording and disseminating information about ownership, value and use of land and its associated resources. These processes include the determination (sometimes called ‘adjudication’) of land rights and other attributes, surveying and describing these, their detailed documentation, and the provision of relevant information for supporting land markets. It should:

- Guarantee ownership and secure tenure
- Support the land and property tax system
- Constitute security for credit systems
- Develop and monitor land markets
- Protect State lands
- Reduce land disputes

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Facilitate land reform
Improve urban planning and infrastructure development
Support land management based on consideration for the environment
Produce statistical data

The process of implementation of the MVS has strong impact to many public property data stakeholders since the system is very data demanding. The key stakeholders are SMA, courts, Ministry of Finance, Ministry of the Environment and Spatial Planning, Ministry of Agriculture, Forestry and Food and municipalities. MVS especially tackled:
- Data about parcels, buildings and parts of buildings (Real Estate Register)
- Ownership (Land Registry)
- Data about actual land use (various databases and stakeholders)
- Data about planned land use (municipal spatial plans)

3.1 Real Estate Register (RER)

There are three main databases where are kept data about parcels and buildings:
- Land cadaster
- Building cadaster
- Real Estate Register

Land cadaster has been established for the whole country for so many years. Its digitalization finished in 2002. The efforts are focused into improvement of the positional accuracy and information modernization that is expected to be completed in the year 2020. MVS and transparent generalized market values are main driving forces for those efforts.

Building cadaster establishment was beginning in 2000. There were registered only approximately 20% of buildings and parts of buildings in building cadaster till 2005 and even those without all needed data demanded by the valuation models at that time. It was a huge problem. At the time of the REMR 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. 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 cadaster 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.
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 started in 2007. 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 cadaster and building cadaster 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 Estate Register (RER) was established in 2008 based on land cadaster data, building cadaster 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 now. 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.

The focus has been turned into quality of data. The best indicator that some property data in the Real Estate Register could not be correct is assessed value, because it is calculated on the base of the property data and valuation models. Furthermore register’s data are available on the internet free of charge, so it is very transparent to the public. It was found out that some owners did not reported correct data, especially regarded to the usable area of houses, in the Property Data Collection Project. It is also true that not all owners report about data changes concerning reconstructions and restorations of roof, facade, windows and installations.

Therefore there are changes in preparation in the legislation that enables data changes ex officio in case that it will be find out that there are some mistakes. Owner is supposed to still has right to change data any time with involvement of the licensed surveyor through administrative procedure. Data changes just with report and owner’s signature will not be possible anymore.

### 3.2 Ownership data (Land Registry)

Backlog mitigation in Land Registry was one of objectives of the REMR Project that started in the year 2000. At that time there were significant backlogs in registration of property rights that could exceed one year in some land registry courts, especially in Ljubljana. Much effort has been directed for land registry information and backlog mitigation for more than six years. It took additional couple of years to establish data transfer between Land Registry and geodetic databases. Data between Land Registry and Land Cadaster has been exchanged in a digital form automatically since 2009. The same is valid for data exchange between Land Registry and Building Cadaster. Land Registry computerization enabled the abolition of territorial jurisdiction in courts that was essential to help eliminating the backlogs. There are no backlogs in the land registry since that.

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Property Data Collecting Project in the year 2007 facilitated and accelerated condominium ownership right registration in the Land Registry and raised awareness of importance of registration property rights in the Land Registry.

Another important event was trial valuation in 2010. Property owners were informed about trial value determination of their properties and real estate data used for that. Many property owners are not even aware of what property they own, which are not even registered in the land register and the like. More than one third of all complains were connected to the ownership. Consequently, there was many applications for registration of ownership right to the land register.

The main problem of the Land Registry in Slovenia as is seen through the eyes of technical professionals that everything could be changed only at the request of the owner. This is also true for the elimination of errors. For example there are physical persons that was born in 1801 registered as owners in the Land Registry. Social, state and municipal property was registered under a different names. For example, only Slovenia or public good is registered with more than thousand different names. The reason lies in the manual management of the land register in the history. Additional reason for that is that Land Registry was not connected to the Population Register and Business Register until information was completed, so data about owners like address or surname in the event of marriage could not be updated on line.

It is believed that there should be make some action to improve the situation through some special project supported with legislation and exact rules and processes that maximum protect property rights.

3.3 Data about Land Use

Data about actual land use were collected by Ministry of Agriculture, Forestry and Food in from the orthophoto images according to the methodology developed within the RERM Project. Data about agricultural land and forest are regularly updated and used for agricultural policy and subsidies. Other land use types as build land and water land are just support for determination of agricultural land and forest for or the aforementioned purposes. All other stakeholders have not done anything worth mentioning within their domain. They all have been relied on the data about land use that Ministry of Agriculture, Forestry and Food produces.

Constitutional Court in 2014 decided that there should be possible complaint against all elements of the valuation. It meant not only against value but also all property data, needed for value calculation, could be challenged. That means the owners should have right to check and change the data in the responsible institution in accordance with the regulations. Ministry of Agriculture, Forestry and Food stated that it does not have jurisdiction to other land use data than data for agriculture and forest land. Only then have started serious activities to resolve the problem of other land use types, especially building land, in other institutions.

3.3.1 Build land

Already in the establishment phase of the Real Estate Register for each building has been
registered the footprint and linkage to parcels on which it stands. In the absence of available data on the built-up land belonging to a particular building (yard), models are taken into account twice the land under the building as build land. It is statistically sound and understandable assumption. However, it is still just an assumption. Therefore according to the Constitutional Court decision there should be no such assumption against owners could not complain.

This problem is in short term solved in a way that current proposal of the valuation models are taken into account only the land under the building as build land. That is quantifiable data. On the long term Ministry of Environment and Spatial Planning prepared the methodology to determine built-up land belonging to a particular building. Data capture has already begun. It is expected that project will be finished in five years.

In the area of built-up land a big problem are also roads. Many of them are not registered in the land cadaster, because investors did not do that, despite it is obligatory by the law. We are facing the problem that there is a public road in the nature, but there is no adequate parcels in the land cadaster. Data about road as build land are registered in Real Estate Register. It means that a farmer gets the value of a built land for a parcel it could not be used, because there is a public road there. This problem applies particularly to municipal roads (approximately 3.000 km of public roads are not properly registered in Slovenia).

This problem tried to be solved in 2014 in a way that all public roads gets 0 tax rate, so owner was not obliged to pay property tax. This is not comprehensive solution. Therefore Ministry for Infrastructure prepared methodology to capture data on public roads and their recording in databases. It is expected the project will be finished in the mid-2018 by the public roads managing institutions.

3.3.2 Water land

Water land is a public good in Slovenia. It should be registered as such in the Land Registry and Land Cadaster, but it is not due to various reasons. As Ministry of Agriculture, Forestry and Food took data from digital orthophoto there are spaces for water land where the water is not visible from the air. As it was mentioned before Ministry of Agriculture, Forestry and Food stated that has no jurisdiction over water land. On the other hand, need for those data for valuation and other needs is clear.

Ministry of Environment and Spatial Planning prepared short-term solution in a way that Directorate for Water registered water land to the first geomorphological fault. Capturing of those data was finished in 2017. It is worth to be mentioned that water land as it is defined in the law is not registered in Land Cadaster in a proper way that could enable water management in the terms of public good. This still have to be done in the future.

3.4 Data about planed land use (Municipal Spatial Plans)

There were only 25 % detail municipal plans adopted according to the law in 2006. Real Property Mass Valuation Act in the year 2006 resolve that problem in a way that parcels on which are the
building should be valued according to the actual land use. For the vacant land it was decided that agriculture and forest use prevails, except for the areas for which municipalities found that construction is allowed and actually possible. This land have the greatest potential and thus the highest values. Municipalities were not favorable for determining such land because they do not issue building permits. The data was not homogeneous and very different from municipality to municipality. This is causing problems, mainly due to inequality.

By the year 2017 only nine municipalities (less than 5 %) have not detail municipal plans. For majority of other municipalities plans were prepared with the support of the professionals through the public procurement system. Therefore, it was decided that for the new valuation models for land planned use prevail over actual land use that is also consistent with the valuation theory.

The problem of land potential for built land is planned to be solved parallel to determination of built-up land belonging to a particular building. It is expected to use land potential in the valuation models in the third valuation cycle.

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.

The process of implementation of the mass valuation system has have strong impact to many public property data stakeholders since the system is very data demanding, therefore many state and municipal property data holders were involved and effected with the development and implementation of the system. Many different problems are to be solved in the course of time. It takes resources and time.

It is a hard work but it is worth doing.

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FIG Working Week 2017
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BIOGRAPHICAL NOTES

Mr. Dušan Mitrović is a director of Valuation Office at Surveying and Mapping Authority of the Republic of Slovenia from its establishment in 2006. He has been involved in many national projects concerning the development and implementation of Land Administration Systems and fully in development and Implementation of Mass Valuation System in Slovenia from the year 2000 and on. Also has experience in international consultancy services on both field of work.

Mr. Martin Smodiš is head of General Real Estate Valuation Sector in Valuation Office at Surveying and Mapping Authority of the Republic of Slovenia. He has been professional involved with valuation models design and calibration for the past ten years. He was fully involved with Real Estate Modernization Project as head of one of the subprojects. He has been involved in many other projects in the field of land administration system in Slovenia and abroad. He has experiences also with international consultancy.

CONTACTS

Martin Smodiš
Surveying and Mapping Authority of the Republic of Slovenia
Zemljemerska ulica 12
Ljubljana
SLOVENIA
Tel. + 386 (1) 478 48 10
Fax + 386 (1) 478 48 25
Email: martin.smodis@gov.si
Web site: http://www.gu.gov.si/

Dušan Mitrović
Surveying and Mapping Authority of the Republic of Slovenia
Zemljemerska ulica 12
Ljubljana
SLOVENIA
Tel. + 386 (1) 478 49 70
Fax + 386 (1) 478 48 25
Email: dusan.mitrovic@gov.si
Web site: http://www.gu.gov.si/