



# Land Governance in an Interconnected World

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY  
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## IMPROVING LAND ADMINISTRATION – STRATEGICAL OUTLOOK

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## **Abstract**

In many countries around the world, the trend of building and maintaining efficient land administration and spatial data infrastructures has expanded rapidly in the last couple of decades. Efficient land administration depends on the efficient response of land administration organizations, transparent procedures and information technologies supporting the keeping, maintaining, archiving, and disseminating of data and information.

Three different land administration systems (Bosnia and Herzegovina, Croatia, Slovenia) in Central and Southeastern Europe are briefly presented, together with strategical orientation to execute the primary function of efficient land administration as well as to deal with challenges and changes.

All three of these counties have made remarkable progress towards meeting the national and citizens' needs and requirements, which in the long term will be demonstrated by achieving sustainable land administration development.

## **Key Words:**

cadastre, Central and Southeastern Europe, land administration, land register, strategy



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## Introduction

In Central and Southeastern Europe and in many countries around the world, the trend of building and maintaining efficient land administration and spatial data infrastructures has expanded rapidly in the last couple of decades. According to the United Nations Economic Commission for Europe – UNECE (UNECE, 1996), land administration is the process of determining, recording and disseminating information about the ownership, value, and use of land and its associated resources, when implementing land policies. Land administration system provides a basic foundation for the spatial enablement of a society and is considered to include land registration, cadastral surveying and mapping, fiscal, legal and multi-purpose cadastres and land information systems (Rajabifard, 2007). Efficient land administration depends on the efficient response of land administration organizations, transparent procedures and information technologies supporting the keeping, maintaining, archiving, and disseminating of data and information.

The European Union (EU) drafted Vision for public services aims to outline the long-term vision for a modern and open public sector and the way public services may be delivered in an open government setting (enabled by information communication infrastructure), i.e. how public services may be created and delivered seamlessly to any citizen and business at any moment of time (EC, 2013). Such an open government model builds on open data, open services and open decisions, and the provision of public services results in the creation of public value. In accordance with the general policy on e-government and public administration reforms, all information concerning real estate are expected to be in digital form and made available to potential users via the Internet or other public networks in a transparent and user-friendly manner, in line with the law. Making improvements to the service provision process implies enhancing management, improving access to data, defining service standards and establishing monitoring and evaluating the system.

The availability of organized and quality cadastral and registration data can facilitate the creation of new services, stimulate real estate markets and new investments, open new professional and business opportunities, and improve the reliability and quality of decision-making. Nowadays, the scope of land administration has grown beyond its core understanding. Despite all the progress made, it is important to strategically look further for ways and methods to improve land administration systems, taking into account the national and international needs of the public and private sectors, and the citizens they serve.



In this paper, three different land administration systems from countries in Central and Southeastern Europe are briefly presented, together with strategical orientation to enable setting-up and functioning of efficient land administration as well as to deal with challenges and changes.

## **Bosnia and Herzegovina's Development Challenges**

Bosnia and Herzegovina (BiH) is a decentralized country in Southeastern Europe and comprises two autonomous entities, the Federation of Bosnia and Herzegovina (FBiH) and Republic Srpska (RS), with a third region, the Brcko District, governed under local government. The territory of the state comprises about 51,000 square kilometers, with a population of 3.5 million inhabitants. The country is a potential candidate for membership to the EU since 2003, and has submitted its application to join the EU in 2016. According to the European Commission (EC) Enlargement Strategy Report (EC, 2015), and the EC Communication on EU Enlargement Policy Report (EC, 2016), among others, the country is at an early stage of developing a functioning market economy, and at an early stage of public administration reform, with poor service delivery, and significant efforts are needed in most policy areas for the country to further align with the EU *acquis*. Both reports also noted that the land registration systems need to be harmonized country-wide, and that land management must be strengthened.

The long-term objective for BiH is to facilitate economic development and good governance by having clear records of all real estate easily accessible to users through electronic media in an automated system as well as having sound policies addressing related land administration and revenue-generation issues. BiH is successfully implementing internationally recognized best practices in land administration and building up spatial data infrastructures. There is a need to develop a fit-for-purpose and sustainable land administration system within a short time frame and at an affordable cost (Obradovic et al., 2016).

## **Land Administration Reform in Bosnia and Herzegovina on the Way**

In the FBiH, real estate ownership and related rights are registered in the local courts, and cadastre data is kept and maintained in the municipalities. The Federal Administration for Geodetic and Real Property Affairs (FGA) is responsible for coordination and supervision (FGA, 2018). In the RS (RGA, 2018), the land register and cadastre are unified within a single record, the real estate cadastre managed



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by the Republic Administration for Geodetic and Property Affairs (RGA). The FGA and RGA are intensively involved in implementation of the World Bank Real Estate Registration Project (RERP) with land register and cadastre data harmonization on land, buildings and rights (World Bank, 2012). The objective is to establish up-to-date and interlinked land register and cadastre databases (in the FBiH) and integrated databases of the real estate cadastre (in the RS).

Capacity Building for Improvement of Land Administration and Procedures (CILAP) in BiH technical assistance through a twinning project between the FGA, RGA and Lantmaeteriet, Sweden is supporting the RERP implementation (2013 – 2018) in two 3-year phases (CILAP, 2018). The project's overall development objective is to contribute to economic and social development, through an efficient land administration, a viable land market, sustainable land use, and EU accession. The Public Services for the Real Estate Market and European Integration Project (Statens Kartvek, 2018), financed by donations from Norway, is under implementation as well, with the aim to improve the capacities of the FGA and RGA.

In the FBiH, the Federal Ministry of Justice (FMoJ) and the FGA, drafted a joint Strategy for the Land Administration Sector in the FBiH for the Period 2016 – 2020 (FMoJ, FGA, 2016). The objective of the reform for responsible institutions is to ensure an orderly land registry and cadastre system, i.e. to enhance the quality, efficiency and effectiveness of real estate registration services through development of a transparent real estate market. In the RS, the RGA drafted a RGA Strategy for the Period 2016 – 2025 (RGA, 2016). The main long-term strategic objective is to establish a single record of real estate cadastre in urban and semi-urban areas at mass scale. The establishment of the real estate cadastre and the formation of accurate and up to date records on real estate and related rights is foreseen to be achieved over a five-year period. The strategy was upgraded to the ambitious Program of Survey and Establishment of the Real Estate Cadastre 2016 – 2020 (RGA, 2015), which is expected to establish the preconditions for an efficient real estate market and mass valuation of real estate.

In this demanding and developing environment of BiH, the FGA and RGA with their future-oriented management and dedicated staff are very well aware of their role, challenges, and international trends in the land administration field. With the support of international partners (World Bank, Sweden, Norway-based), they are constantly improving ways of availability, accessibility, efficiency and effectiveness of the service delivery to the public, professional users and government organizations. The



provision of ever more improved, accurate, and reliable real estate data with a high quality, timely, and easy-to-use customer service is evidence of the sound development of land administration in the decentralized country to support the reform of public institutions and EU aspirations (Obradovic et al. 2016).

### **Croatia's Steady Improvements to its Land Administration System**

The Republic of Croatia was the last of the countries, the 28<sup>th</sup>, to join the EU in 2013. The territory of the state comprises about 88,000 square kilometers, with a land surface of about 57,000 square kilometers; populated by 4.5 million inhabitants. Croatia, similar to other EU countries, is implementing key strategic EU documents such as Europe 2020 Strategy (EC, 2010), to promote a smart, sustainable and inclusive growth, and to improve competitiveness and productivity to underpin a sustainable social market economy. Growth of the real estate market in the developing countries and economic needs for land necessary for development have caused significant pressure on the land governance system in the Republic of Croatia. Radical changes to the legislation after the country's independence in 1991 have posed new demands on the cadastre and the land register as the key parts of the land governance system (UZ, 2016).

In Croatia, the management of real estate data is based on a dual system, with the cadastre as a separate entity from the land registry. The main institutions responsible for data set-up and maintenance are the State Geodetic Authority (SGA) with its regional and branch offices (DGU, 2018), the Cadastral Office of the City of Zagreb (Zagreb, 2018) and the Ministry of Justice (MoJ) overseeing the municipal courts and land registries (MoJ, 2018). The physical description of land and property is historically recorded and maintained in the cadastre, and specifically defines the dimensions and location of a piece of land, a parcel, while data relating to property rights, especially ownership rights, are recorded and maintained in the land register. Providing a high quality, timely, and responsive customer service is considered to be one of the core tasks of all institutions involved in real estate registration in the country (Markovinovic et al., 2015).

The dual record approach and past data maintenance in paper form resulted in a discrepancy between the cadastral and land registry data and even a discrepancy between the graphical and attribute parts of cadastral data. All of the institutions involved in recording and registering real estate data have a



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huge challenge ahead of them to update and harmonize the cadastre and land registry data (Markovinovic et al., 2015). Data quality improvements in cadastral map renewal (homogenization) and cadastre and land register sporadic and systematic data harmonization programs have been piloted and agreed, and are planned to be rolled out countrywide, in order to be completed in the next five years.

The World Bank Croatia Policy Notes 2016 on the Restoring Macro Stability, Competitiveness and Inclusive Growth (World Bank Group, 2016) addresses an urgent need to strengthen real estate registration because it is limiting Croatia's economic development, in part due to weakness in the current governance framework, which hinders the delivery of public services, increases the workload for courts and undermines the development of a modern property tax. The proposed key actions are to create a new, independent real estate registration agency from the merger of the land registry offices and the cadastre of the SGA; provide a self-financing business model for the agency; and to implement a two-tier board system of the new agency.

## **Changing the Course of Croatia' Land Administration Reform**

Since 2003, the Government of the Republic of Croatia, through the MoJ and the SGA, has been implementing the National Real Property Registration and Cadastre Program, known as "Organized Land". By streamlining both systems (the cadastre and the land registry) the registration of real property and its titles has been accelerated and simplified (Uredjena zemlja, 2018). Among several projects implemented in the area of land administration and spatial data infrastructure, the ongoing World Bank Integrated Land Administration System (ILAS) Project plays an important role. One of the biggest achievements of the ILAS Project is the development of a unified information system across the country for cadastral and land registry records, a Joint Information System (JIS). The JIS created a single database of cadastre and registry information and integrated business processes bringing the two entities, the SGA and Land Registries together in one single land administration system (World Bank, 2011).

The Government of the Republic of Croatia as well as the judiciary strongly support improvements to and the development of public institutions so as to ensure the responsive and sustainable development of the land administration system. Several improvements have been successfully realized in the past years, including: cadastral and land registry legislation was amended, strategic plans were adopted, organizational culture and practice were changed, working conditions for staff in the respective



institutions were improved, records and maps were digitized, information technologies supported solutions were developed, archives were partially digitized, free web browsers for cadastre and land registry data were introduced, etc. (Markovinovic et al., 2015).

The Government 2016 and 2017 National Reform Programs (RC, 2016, Vlada, 2017) have envisaged that cadastral and land registration system will continue to be improved by revising the legislation, further digitization of cadastral and land registry data and reorganization of work with special emphasis on the functional integration of the existing registers and institutions. This measure was planned to be implemented in several phases in the period between 2016 and 2020, concluding with a physical integration of the cadastre and land registry departments by December 2020. The functional integration of cadastre and land registry departments in a new institution in particular implied to a significant reduction in the number of procedures, the reduction of double implementations arising from the currently applicable regulations, and the transfer of certain authority to non-institutional persons in cadastral and land registry procedures.

However, the recent 2018 Government orientation seems not to be proceeding with the establishment of a new, single agency for cadastre and land registration, but instead enabling a better linking of procedures, business processes and institutions. The new approach to reforms in this field is expected to be reflected in a new, 2018 National Reform Program, and in a joint cadastre and land registration strategy, planned to be drafted in 2018 under the ILAS Project. The focus of the strategy will be on institutional linking of the SGA's cadastral offices and the municipal courts' land registries, which will further trace the development of land administration in the country.

### **Slovenia's Upgrade of its 20 Years of Organized and Respected Land Administration Activities by Efficient Interaction With Related Sectors**

The third country, the Central European state of Slovenia, gained its EU membership status in 2004. It is a rather small country, with an area of about 20,000 square kilometers and a population of about 2 million of inhabitants. National, sectoral and cross-sectoral reform programs follow the main initiatives of the EU 2020 Strategy for achieving smart, inclusive and sustainable growth (EC, 2010), while taking account of the values contributing to the development of Slovene society.



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A dual registration system is traditionally in place, originating from the Austro-Hungarian period. Land and building cadastres are managed by the Surveying and Mapping Authority of the Republic of Slovenia, with its regional and branch offices, and land registers are managed by the relevant district courts, e.g. land registries, supported by the Supreme Court. The Slovene beneficiaries (four Ministries – Justice, Finance, Agriculture, Spatial planning, and the Supreme Court) successfully implemented the World Bank supported Real Estate Registration Modernization Project in the period 2000 – 2005.

The Justice 2020 Strategy has redefined the development in the judicial branch of power in different fields, including the area of computerization of the judicial system ensuring the efficiency, economy and cost-efficiency of operations. The Surveying and Mapping Authority has started preparation of a draft Strategy of State Geodetic Service where part of strategic guidance is dealing with real estate records management.

The strategic goals of the State Geodetic Service, based on the Strategy's design for the period 2015-2025 (UL, 2015), and referring to land administration, were most recent updated in the Government-adopted State Geodetic Service Workplan for 2018 (Vlada, 2018). The State Geodetic Service provides basic information on land surface, facilities and real estate in regulated databases, provides services related to the recording of changes in real estate, performs a coordination role in the real estate system and spatial data infrastructure, performs mass valuation of real estate, and provides data to improve the efficiency of the real estate market, and some other information. The vision of the Surveying and Mapping Authority is to become a reference organization in the field of official spatial data infrastructure and the cadastral reorganization of territory in the Republic of Slovenia, which will promote the sustainable development of society and place Slovenia among the advanced spatially enabled societies, where all important decisions will be taken on the basis of efficient services within the public spatial data infrastructure and land administration using official quality data on space and real estate.

The strategic goals of the State Geodetic Service support the development of a comprehensive real estate system and national spatial data infrastructure with the aim of providing basic and derived data and services to all users, in particular to support the implementation of spatial and environmental policy, land and agricultural policy, and efficient real estate management. The strategic goals are (Vlada, 2018):

- The realization of a quality reference geodetic coordinate system, which will enable unique positioning in the terrain regardless of the methodology and technology used;



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- Provision of services (Continuously Operating Reference Stations – CORS network) for quality real-time location determination and for post-processing of observations for all users;
- The establishment of a three-dimensional (3D) multi-purpose real estate cadastre, which will enable the qualitative recording of the boundaries of property and servitude rights, as well as the physical characteristics and market values of real estate;
- Modernization of cadastral land rearrangement procedures taking into account relevant spatial planning documents;
- Establishment of quality and standardized solutions for the connection and interoperability of the databases of the national spatial data infrastructure.

The last milestone in the successful development of the land administration system in the country, with its basic components on cadastre and land registration, was intensive cooperation with different sectors, especially of spatial planning and building construction. A joint and compromised approach from the public and private sectors in architecture, building, spatial planning and geodesy resulted in promising achievements. The legal framework was adapted recently to support improved real estate management in the function of implementing spatial, construction and land management policies. And the most important, more linked projects, integrated under eProstor, are being implemented in the 5-year program period, well-supported financially by the EU funds.

The strategic goals in the field of the quality and completeness of data and the harmonization of the linking of real estate records will, in conjunction with the appropriate information infrastructure, be achieved in the context of the implementation of the eProstor Project Program. It is included in the framework of the Financial Perspective 2014–2020, in the Operational Program of the European Cohesion Policy for the programming period 2014-2020. The main objective of the programme is to facilitate and improve spatial planning processes, construction of buildings and real estate management, all of which can be achieved with linkable, easily accessible and reliable spatial databases.

## **Conclusions**

The implementation of reforms and on-going development of activities in cadastre and land registration has been extremely challenging over the years. Access to urban and rural land and security of land-related rights has been ever more recognized as the basis of economic and social life and prosperity,



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and a source of all wealth. Land administration is more and more understood as a long-term investment therefore the national government and its policy makers cannot expect immediate benefits. As demonstrated in selected countries with different cultures and environments, efficient real estate registration and land administration depends on the efficient response of land administration organizations, transparent procedures and information technologies supporting the keeping, maintaining and disseminating of data and information.

All three of these counties have made remarkable progress towards meeting the national and citizens' needs and requirements, which in the long term of implementing the reform agenda, will be demonstrated by achieving sustainable land administration development. All the activities presented above aim to support the more effective and efficient development of the land administration system and improvements in cadastral and land registry data quality and data usability.

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