

Development of Cadastre and Land Management in Kosovo

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Key words:

SUMMARY

Land Cadastre data in Kosovo are managed and maintained by Municipal Cadastre Offices (MCO), controlled by Kosovo Cadastral Agency (KCA), within the frame of Ministry of Public Services. KCA collects all databases of Land Cadastre where after vectorization and check control, the data will be delivered to all the MCO-s including guidelines for maintenance. Kosovo area is 10 897 km², where 57% of the area is private ownership, 43% social ownership, 30 Municipalities with 1301 Cadastral Zones, about 2 million parcels, 350 000 owners.

Land Cadastre data cover complete territory of Kosovo. The process of establishment of the digital cadastre is based on:

- Scanning of analogue maps and then factorizing each parcel boundary.
- Parcel attributes
- Other relevant data

The parcels are the basic unit in land cadastre. A land parcel is a piece of land with defined boundaries, which can be divided into parts of parcel with different land use. That occurs often in Kosovo. Every parcel shall have a definitive property right of a private owner or a legal entity. Each parcel is closed polygon with parcel number. Attributes and other data on parcels are entered in a table with collected data on the area, type of land, use of land, production capacity of land and owner for each parcel.

Kosovo Cadastral Agency has drafted relevant laws by legal content of a right or restriction and the boundaries, which demarcate where the right or restriction applies, related to cadastral activities in Kosovo. The Law on Establishment of an Immovable Property Right Register (IPRR) has been promulgated, that is Regulation no. 2002/5 and Law on amendments and additions to Law 202/13 on the establishment of an IPRR. The Law on Cadastre is . Development project for electronic IPRR is a part of digital cadastre where are included: Property Rights, Actors (Persons / Legal Entities), Buildings, Apartments, Textual Land Cadastre, Graphical Land Cadastre, an infrastructure of all land cadastre data sets. These will be distributed and accessed through Internet. These data should be implemented from the beginning of 2004 as the Unified Register of Kosovo.

This paper will describe the cadastre development in Kosovo, with analysis of the present coordination and cooperation in practice. The paper also will present the planned arrangements for the future, laws and overall development of the Kosovo Digital Cadastre.

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1. SOME FACTS ABOUT KOSOVO

Kosovo has an area of 10,89 square km, approx. 2.2 million inhabitants. There are 30 political municipalities, each of them with the Municipal Assembly as the highest authority of political and social organization. Cadastral activities are performed by the Directorates for Geodesy, Cadastre and Property, existing in almost all of municipalities, except two of them, hence there are 28 Directorates for Geodesy, cadastre and property, supervised by Kosovo Cadastral Agency, as a higher authority for geodesy, cadastre and property.

Previously Kosovo has been an integral part of the ex-Yugoslav Federation, and after the cancellation of the autonomy and the constitutional component, the discontent was expressed by Kosovar Albanians because Serbia began a total discrimination of Kosovar Albanians on all aspects, including the work and the organization of the cadastre in Kosovo. All these problems were overthrown with the Kosovo war in 1999, where after 77 days of aerial campaigns by NATO on the Serb uniforms, Serbia withdrawn its forces from Kosovo, leaving it with considerable damage, killed victims, looted houses and dwellings, and above all these took war hostages and documentation with a capital value, including cadastral documentation.

After the end of the war, Kosovo started the cadastre reconstruction, with the help provided by the Support Programme, funded by donating countries as Switzerland, Norway and Sweden, and with the support by UNMIK and UN-HABITAT.

Firstly, the existing data were acquired and analysed, and then there was a cadastre reconstruction plan for the period 1999-2003, implemented by international and local experts.

Today, there are 26 Directorates for Geodesy, Cadastre and Property in Kosovo, equipped with modern computers, digital cadastre databases and the necessary staff for carrying respective duties. These Directorates carry the regular registration of different land transactions as required by citizen, geodetic measurements and issue necessary documents for all client requirements in relation to cadastral data.

The table below presents the general data on the area, number of cadastral zones, number of possession lists, number of owners, number of parcels with agricultural types, divided by Kosovo Municipalities.

Nr	MUNICIPALITY	Cadastral Area in ha	Nr of cad.Zone	Nr of parcels	Nr of Agricultural Land parcels
1	Deçani	37175	33	37,094	25,956
2	Dragashi	42667	40	58,213	45,638
3	Ferizaji	34468	45	68,810	52,732
4	Fushë Kosova	9529	16	18,008	16,119
5	Gjakova	58763	70	72,190	44,449
6	Gjilani	51497	54	127,813	92,989
7	Gllgovci	27564	35	48,516	34,610
8	Istogu	45385	46	53,539	42,159
9	Kaçaniku	29083	40	42,195	28,105
10	Kamenica	52263	76	140,905	108,942
11	Klina	30903	43	42,907	33,201
12	Leposaviqi	53905	47	101,942	76,124
13	Lipjani	40105	66	69,364	58,496
14	Malisheva	30641	39	62,800	45,427
15	Mitrovica	33618	38	52,133	32,001
16	Novo Berda	8123	10	21,302	16,872
17	Obiliqi	10483	18	20,451	18,895
18	Peja	60291	70	61,675	44,246
19	Podujeva	63259	78	110,588	86,715
20	Prishtina	57196	47	95,509	64,903
21	Prizreni	63493	73	140,713	97,609
22	Rahoveci	27608	34	61,556	51,839
23	Shterpca	24762	15	39,032	31,809
24	Shtime	13444	21	22,946	16,482
25	Skenderaji	37441	52	62,380	45,078
26	Suhareka	36099	42	76,293	53,202
27	Vitia	29337	42	65,783	57,641
28	Vushtrria	34482	65	69,867	52,384
29	Zubin Potoku	33337	28	48,887	30,045
30	Zveqani	12299	18	23,375	15,443
	Total:	1089221	1,301	1,916,786	1,420,111

2. THE KOSOVO CADASTRE

2.1 Land Data Register

In Kosovo currently, there are cadastral data on land only. The main unit is the cadastral parcel number, which takes a fraction with the sub-division of the parcel, having the possession list as the main document on land. The possession list contains these data: Political Municipality, Cadastral Zone Name, Cadastral Zone Number, Possession List Number, property type (private or socially-owned), name of owner, owner's dwelling, fraction of property, time of update, number of parcel, plan and sketch, parcel location (name of place), culture, class, area and time of update of parcel. The Possession list number begins with 1 for every cadastral zone, and also the parcel number. The buildings are presented as "Culture: Object" or house, depending of its destination with a specified area on the soil.

There are other documents issued by cadastre offices for client needs, such as copies of the plan, certificates for persons owning or not owning property, etc.

All changes made in the cadastre registers have to be registered into respective cadastre books, and the changes made in the field have to be registered in cadastral plans.

Changes made by owners have to go through the Court and after they are validated by the court, the same are included in cadastre books of changes. All Directorates keep the books of changes for every cadastral zone, and then the data are entered into the digital cadastre database, deliberately named as KCID (Kosovo Cadastral Interim Database).

2.2 The Kosovo Cadastre Support Programme

The Kosovo Cadastre Support Programme started its activity in October 1999, with a three-year mandate and having the reconstruction of the cadastre in Kosovo as a main objective. Other goals were the establishment of the Kosovo Cadastral Agency and equipping the Municipal Directorates with means of work, local staff trainings and its advancement for a future work. During this period, the local KCA staff has been trained professionally, experiences which are being transferred to Municipal Directorates. Many meetings have been attended with the aim of experience exchange with local and international cadastre experts, like international congresses for geodesy and cadastre, workshops, etc. The KCA experts have participated and presented their work.

2.3 Kosovo Cadastre Reconstruction

After the war in Kosovo, the 1999 June started a comprehensive reconstruction of Kosovo territory. The cadastre was damaged largely, both by the conflict and a decade of impulsive measures imposed by Serbia. That established an immediate need for a cadastre reconstruction.

The first days of the entry of NATO forces, staff members that previously worked in the cadastre started reorganizing their own ways. In the beginning, that seemed impossible,

considering the large damage of cadastral documentation by the Serbian authorities, and the considerable lack of documentation, stolen and taken to Serbia. An other problem was the huge funding needed for a reconstruction, knowing that even the most elementary means of work were stolen.

With the establishment of UNMIK Administration in Kosovo, there were discussions of how the cadastre could be reconstructed and who could help this. Within the frame of UN-Habitat, a group was established, a group who would organize this reconstruction in the future. A group of experts traveled to Sweden, Norway and Finland to meet potential donors and discuss the organization of the work.

The work started with the registration of existing documents. The general opinion was a total lack, but after initial inquiries it was understood that there are elements which could be helpful in cadastre reconstruction. These inquiries proved the existence of following data: cadastral plans for all Kosovo territory – the situation of 1961 aerial photogrammetry, and some municipalities disposed of original plans with updated situation, there was a cadastral textual database – Electronic Data Processing Center, update of 1985, while some municipalities had updates of 1997. These data were insufficient to Kosovo needs, because there was a huge time gap, but since there was no better way to deal with it, these data would be the establishment of the Kosovo cadastre.

Planning and work started with donor support. A small group was elected to be trained on measurement instrument use, precisely for GPS instruments' use, because there was an urgent need to spread a trigonometric first order network, since there were no note of field geodetic points. At the same time, the scanning of cadastral plans started, establishing a basis for a future vectorization.

In October of 2000, UNMIK issued an Administrative Direction by which the Kosovo Cadastral Agency was established, with the main aim of Kosovo cadastre reconstruction. The KCA was entirely dependent on the Kosovo Cadastre Support Programme, funded by donating governments of Sweden, Norway and Switzerland. The main goal of this Programme was the financial and the professional support for the Kosovo Cadastre.

A specific problem, and hence an immediate need was the ownership. The people required data on their properties, requiring documents on their properties' status, their areas, etc. The KCA took over the issue, selecting the people to do something, namely to provide the people with the required document, called the Possession list.

As by the situation of 1983-1988 Kosovo has 22 Municipal Directorates, compared with 28 of today. Prishtina has been divided in 4 offices: Fushë-Kosova, Obiliq and Novoberda, Ferizaj produced Shtimje dhe Shterpce, Malisheva was a new office, while Mitrovica produced Zvecan and Zubin-Potok. It must be mentioned that the Novoberda Office is still administered by the Prishtina office, while Zvecani Office is administered by the Mitrovica one.

Data acquired from the EDPK was decoded, and a read-only Access database was constructed. The KCID software contained situations of 1983-1988, different for different Municipalities.

KCA established a team for training the municipal operators of the software, than there was an instruction drafted on the use of it. In February 2001 the installation and distribution started with a computer and a printer for each municipality.

After a short period, problems with data were discovered, gaps which will be filled in the future.

All Municipal Directorates today carry the updates on different transactions, in books and computers. In our records, there are 30 cadastral databases constructed, containing textual records on parcels, possessors (owners), area, culture, cadastral zone, municipality, etc. Since then, we have achieved to update the data considerably, using different data sources, such as:

- Data on magnetic tapes, stored by EDPK for the situation of 1983-1988. These are the main initial source.
- BORMEN system data, which were saved by many Municipal Directorates. These data were processed in MS-DOS system, and the KCA transformed them into KCID.
- Books of changes, which contained changes made until the war started.
- Data on transactions made after 1999. All documents validated by courts have been registered by DGCP-s into KCID. This update is still on-going in all Directorates

Records acquired from DGCP-s around Kosovo state this situation:

- 17 DGCP-s have updated textual databases. These Directorates are: DEÇANI, DRAGASH, GJAKOVA, ISTOG, KAÇANIK, KAMENICA, KLINA, LIPJAN, MALISHEVA, NOVO-BERDA, OBILIQ, PEJA, PRISHTINA, PRIZREN, RAHOVEC, SKENDERAJ.
- 2 DGCP-s are equipped with data acquired from EDPK with the situation of 1985, and other newer data from other sources on some Cadastral zones. These are GJILAN and MITROVICA.
- 8 DGCP-s have only the 1985 situation from EDPK, these being: FERIZAJ, FUSHË-KOSOVA, GLLOGOC, PODUJEVA, SHTERPCE, SHTIME, VITIA and VUSHTRRI.
- 2 DGCP-s do not have regular contacts with KCA, LEPOSAVIQ and ZUBIN-POTOK.

The result of this work is that today all the DGCP-s in Kosovo update all valid documents arriving from competent authorities, i.e. Courts.

This means that there has been a plausible update of the textual database, which will serve as an stable establishment for constructing the Immoveable Property rights Register in Kosovo. Since 2000, Kosovo has registered over 75262 matters of different content, such as Sales, heritages, givings, etc.

3. LEGAL ISSUES

3.1 Problems and Difficulties with the Lack of Laws in Initial Phases of KCA

The establishment of the UN Mission in Kosovo in June 1999, has also started the establishment of Kosovar institutions responsible for respective portfolios.

The Kosovo Cadastral Agency has been established by the UNMIK Administrative Direction No 2000/14, as the responsible cadastre authority in Kosovo.

In the beginning, Kosovo was in a situation of uncertainty in relation to laws in force and their implementation. Different laws from different sources were implemented initially. According to a Regulation by UNMIK (1999/24), Laws promulgated in Kosovo until the March of 1989 were still to be enforced. Also, there were some other UNMIK Regulations to be enforced.

But, the enforcement of two different types of law created many problems and uncertainties:

- The existing Laws are from a previous social and political system that existed previously, and at this time they have lost their meaning and value,
- A new system has been established in Kosovo, stressing the necessity of a new legal regulation by contemporary standards.
- Also, UNMIK regulations provided on some issues previously dealt by existing applied Laws. These Laws were not entirely superseded which created doubled provisions.
- Such a doubled provision of law has created much uncertainty and problems in relation to competences between central and local institutions

3.2 Activities on Drafting new Legislation in the Cadastre Aspect

Recognizing the problems in the implementation of different legal sources for regulating the cadastre field, property registration and other, local and international KCA experts started drafting laws necessary for a functioning cadastre and registration institution.

Immoveable property rights registration is made on public books, or Land Books that have functioned and are functioning in many countries and in many forms. Kosovo and other parts of ex-Yugoslavia did not have any land books. The only cadastre registers were registers of property evidences.

With the aim of eliminating these gaps and creating a public register, a *Law on Establishing an Immoveable Property Rights Register* was approved by the number 2002/5 and 2003/13. This Law, approved by the Kosovo Assembly and promulgated by UNMIK is a modern law, which establishes the Immoveable property rights register. This Law enables the registration of the rights as follows:

- Ownership (on land, buildings, parts of buildings – apartments and commercial premises)
- Mortgages
- Servitudes

- Use-rights.

These immovable property rights shall be registered by the Cadastre, the KCA having the authority and the responsibility on that.

The importance of this register is great, being a public (official) register, unique for all the Kosovo territory, having the government as a guarantee for the accuracy and validity of all rights registered. This has an important effect on the country's economy development.

For the first time in Kosovo, the Law on Mortgages has been drafted and approved by number 2002/4. This Law provides on the manner of establishing, registering, executing and erasing the mortgages. The KCA, through MCO-s shall be the competent institution for the registration of mortgages into the IPRR.

The Law on Cadastre, No 2003/25 has also been approved with the aim of regulating the cadastre field. This Law contains many positive provisions and it will help on realizing functions and responsibilities of institutions of cadastre. This Law paves the way for licensing private surveying companies and private surveyors.

On the successful implementation of these Laws, the Ministry and the KCA have issued some administrative instructions.

Laws and instructions approved until now have contributed in solving the case of administrative organization, defining the roles of KCA and the MCO-s. The Agency nowadays has the authority to decide on complaints and remarks on MCO-s work.

3.3 The Current Organization of the Kosovo Cadastre

During the establishment of local and central level institutions, there hasn't been a thorough analysis of all circumstances of functioning of these institutions. The Municipal Cadastre Offices (Directorates for Geodesy, Cadastre and Property) are still under authority of municipal entities. This is creating difficulties in the function and implementation of obligations of KCA and MCO-s. Currently, an initiative for changing this organizational form has been taken. This initiative has the idea of having the KCA as a unique and sole responsible authority on property registration and cadastral activities. MCO-s shall be included within KCA. This will contribute on the efficiency of cadastral authorities, at the same time implementing a solution similar to almost all European and regional countries.

3.4 Problems and Difficulties on the Job

Kosovo has survived a social, political and economic system which enforced some discriminating laws after 1945, and many owners have been denied the right of use and ownership. Some laws institutionalized agricultural reforms, confiscations, nationalizations and partially expropriations. This especially has relation with the case of creating the socially- and state-owned trusts of land from private properties of owners. For these issues, many owners turn to cadastral authorities for help, thinking they are competent and can help.

Countries with similar systems have begun resolving these issues. It is well known that this is an issue of a political nature and of highest institutions in Kosovo, and UNMIK-s in our case.

For this reason, there are too many claims to ownership rights for many properties. Failure to offer solutions to these issues will create uncertainty and decline of confidence on many subjects. This is being discovered presently, with the case of privatization of socially, state and public enterprises, including their properties. This has created fear on the side of ex-owners, fear of remaining property-less, and it has created an unreliable environment for investment.

3.5 Cadastre Digitization

Cadastral data in digital form have been integrated through MS Access within KCID, making them easy to integrate in other more advanced software, with IPRR as the final objective. Analogue cadastral plans have been scanned and vectorized lately. Digitized cadastre plans will be distributed to all Cadastre Offices, each their own territory, including maintenance instructions and additional exercises on their use.

Considering that the cadastral plans present an older field situation (newer ones have been stolen by Serb authorities with their withdrawal), the KCA has drafted and implemented a pilot-project in Dobrashec, a village in Glllogoc Municipality. In relation to cadastre reconstruction, this project included sketching of the actual condition and updating them into the textual database. After research made during the project, the KCA decided to continue the Kosovo Cadastre reconstruction through a new process of aerial photogrammetry, a project currently in its initial stage. The Kosovo Cadastral Agency has orthophotomaps on all Kosovo territory, made in 2000.

Besides MCO-s, the cadastral data are also use by other Kosovo institutions and organizations, such as:

- The Ministry of Environment and Spatial Planning
- The Ministry of Agriculture, forestry and Rural Development,
- The Ministry of Economy and Finances, for need of property taxes
- Directorates for Urbanism and Planning
- Educative, educational and scientific institutions
- The Kosovo Trust Agency
- KFOR, UNMIK, OSCE, etc.

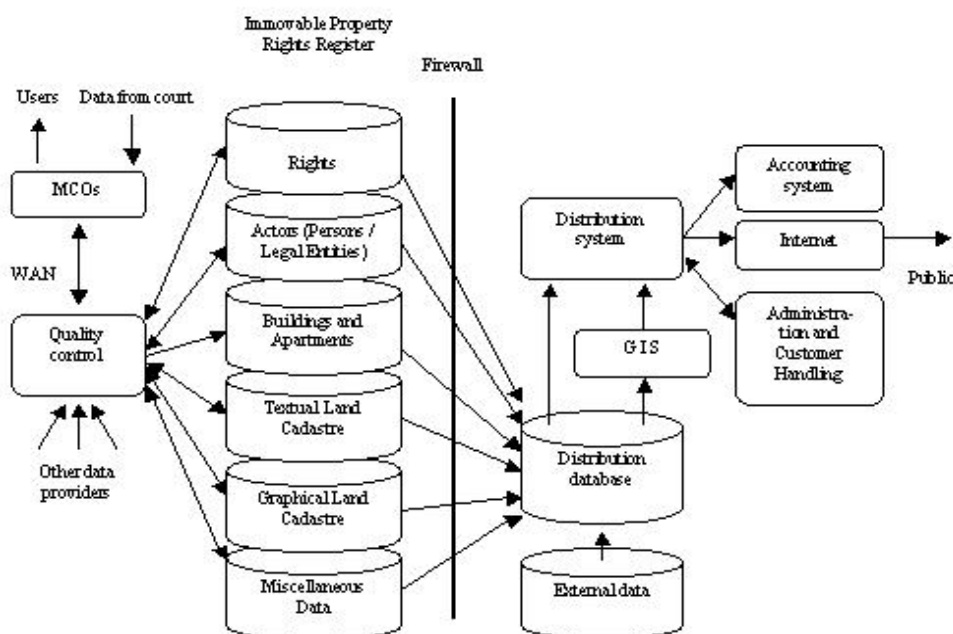
3.6 The Immoveable Property Rights Register

This system is the final goal, which will be created step by step. The first step was development of KCID (the textual land cadastre), where information delivered by court is updated by MCO-c (Municipal Cadastre Offices). The next step was the Property Tax Register linked to KCID and updated by municipal fiscal authorities. From this register, and other available registers, we will extract data on actors, buildings and apartments. Kosovo is now developing the Immovable Property Right Register (IPRR), which will include:

- Real Property Rights - records on ownership, mortgages and servitudes on land, buildings and apartments. This is a legal register
- Actors - records on private persons and legal entities (ID number, name, address, type of actor - owner, possessor etc). These actors will be linked to legal land, buildings or apartments in the Real Property Rights Register
- Buildings and apartments - records on buildings (ID number, Address, type of building, construction year, number of floors, area, etc.) and apartments (ID number location in building, number of rooms, area, etc.)
- Textual land cadastre - records on land parcels (Id number, type of land, area, etc.)
- Graphical land Cadastre - records on vector data (cadastre plans with parcel borders, roads, rivers, etc) and raster data (orthophoto, digital terrain models etc.)
- Miscellaneous registers, which will store data delivered by different data providers. The model for these registers will be determined in cooperation with the providers, with the inclusion of data within the unified register

MCO-s will carry the updates and receive data through a closed Wide Area Network. Data from other providers can also be controlled and stored in the Unified Register. Both textual and graphical cadastre information is stored in this database. This information is protected by a firewall and replicated to a separate distribution database. Information from the distribution database and other external databases will be accessible to public on Internet through the distribution system.

The Immovable Property Rights Register (IPRR) will be prioritized in the development of KCLIS.



REFERENCES

- Anderson B. and Meha M. : Land Administration in Kosovo-Practice in Cooperation 2003. Coordination. UN/ECE-WPLA and FIGCom3&Com7 Workshop on Spatial Information, Management (SIM) for Sustainable Real Estate Market-Best Practice Guidelines on Nation-wide Land Administration. Athens, Greece, May 28-31,2003
- Kaufman J.: Cadastre 2014.A vision for a future Cadastre System with the Steudrer D. 1998: Working Group 1 of FIG Commission 7 July 1998.
- Meha M.: 1999. Geodetic base for realizing land activities and land improvements of Glogoc. Geodetic newspaper. Body of Albanian Geodetic Society 1/99 Tiranë.
- Meha M.: 2000. Cartography, University Book.FSHMN University of Prishtina, Kosova.
- Meha M.: The Future and development challenges of sustainable cadastre and digital cadastre of Kosovo
- Dale P. F.: 2002. Land administration Policy in Kosovo-Institution Arrangement.
- Plantinga P.: 2002. Financial and Management Issues
- Eidensted L.: 2002 LGAL framework

BIOGRAPHICAL NOTES

Prof. Dr. sc. Murat Meha is the Chief Executive Officer of Kosovo Cadastral Agency, at the same time lecturing as a professor in Prishtina University and Tetova University. He has published many papers in prestigious publications, participated in many symposiums, congresses etc., with scientific and professional presentations.

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