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# Cadastre and Land Registry Organizations are Scheduling its Future to Best Fit the Requirements of the Society

### Bozena LIPEJ, Slovenia

**Key words**: cadastre, EuroGeographics' Cadastre and land registry group, land registry, mortgage credit market, real property market, spatial data infrastructures

### **SUMMARY**

Europe is modernizing itself to meet the challenges facing it in the 21<sup>st</sup> century. Besides the global scale of its drivers, a certain role is played by the envisioned set-up of a single European market with functioning financial and capital markets. Cadastre and land registry organizations are certainly not major players in the processes but without doubt they play a significant role in supporting processes. Ahead of all cadastre and land registry organizations there are many reforms and changes that need to be implemented in a short period of time. For better operation efficient, reliable, accessible, cost acceptable and user friendly procedures and services need to be introduced. Many international and European guidelines in the field of land administration and land management suggest the way ahead (World Bank, UNECE Working party on land administration, FIG, others).

Nowadays, one of the most active European associations in the field is EuroGeographics with its Cadastre and land registry group. Among many of the activities and results the most important result of the group is a widely adopted new Vision statement for cadastre and land registration in Europe by 2012. The mission is to provide state of the art services to the real property market and market for land information integrated within e-government and cooperating in building the national and European spatial data infrastructures. Two main directions are suggested where cadastre and land registry organizations need to be pro-active and need to provide good support to operations on a larger scale. The two directions are building of the national and European spatial data infrastructures and taking a more active role in the functioning of real property markets. The INSPIRE directive on establishing an infrastructure for spatial information in the European community as well as the White paper on the integration of European Union mortgage credit markets, which were both adopted last year, are the drivers the professional organizations need to respect. The road to better prosperity of cadastre and land registry organizations in the European society is open and it is their choice either to turn the situation to advantage or to remain on the level of limited technical performance of works.

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### Cadastre and Land Registry Organizations are Scheduling its Future to Best Fit the Requirements of the Society

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### 1. INTRODUCTION

Europe is challenged by changes taking it into 21st century. In a constantly changing world Europe is confronted with issues and drivers at a global and local scale. The main global requirements are in the field of economy, competition, demography, climate, sustainability and others. At the edge of activities for creating a more globally oriented and competitive Europe, addressing the challenges for a foreseeable future, more and more attention is dedicated to a foreseen set-up of a single European market with functioning financial and capital markets. Not only is Europe in the process of change, but all its building blocks should be arranged in a wave going in the same direction to achieve more dynamic, innovative and attractive Europe. Cadastre and land registry organizations are certainly not major players in the processes but without doubt they play a significant role in supporting processes. In many countries, the cadastre and land registry organizations have a long history behind them and a lot of tasks are traditional and in some aspects irreplaceable. Due to new society and customer's requirements, new technological and information achievements, new roles and functions in the professional environment, the performance of works and behavior of cadastre and land registry organizations need to be or, at least, should be reconsidered. Ahead of all cadastre and land registry organizations there are many reforms and changes that need to be implemented in a short period of time.

### 2. EUROPEAN AND WIDER-SCOPE DEVELOPMENTS AND TRENDS

Worldwide, several reports, studies and investigations are tackling different aspects of land registration, land administration and land management. There is no European regulation covering the entire professional field of work, which might be an advantage or a disadvantage for the development and prosperity of the area. Therefore, the work and results of European and worldwide institutions, international associations and organizations is much appreciated and mean an important guidance in the development of activities at the national level. Some major guiding principles for the development are further presented.

One of the reputable annual reports, Doing Business, produced by the staff of the World Bank in close cooperation with thousands of professionals around the world, now has a five-year tradition. Doing Business 2008 (World Bank, 2007) presents quantitative indicators on business regulations and the protection of property rights that can be compared across nearly 200 economies over time. The report states that countries that make property registration simple, fast and cheap have more properties registered formally, which leads to greater access to finance and greater opportunities to invest. With formal property titles, entrepreneurs can obtain mortgages on their land or homes and start a business. Many changes and reforms are

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on the way to make it easier to register a property. The report underlines the five most effective reforms:

- simplify and lower fees,
- introduce fast-track procedures,
- make the registry electronic,
- take registration out of courts,
- make the use of notaries optional.

The first three reforms are quite natural and proved in many countries nearly without resistance. The fees are constantly monitored and the level of fees has been already reduced in many countries. Procedures in support of better efficiency and security of processes are under investigation or, in even more country cases, introduced into daily operations. Organizations are increasingly involved in electronic data processing. The general aim is to provide easy and reliable public access to data about ownership, value and use of land.

The measure of taking the registration out of courts and making it administrative has earned a lot of opponents, especially from the courts, even in well-developed European countries. The World Bank report estimates that in countries where courts are involved in registering property, the process takes on average 70% longer. Taking registration out of courts means that it can be easily linked to the agency responsible for the cadastre. That makes it easier to detect overlapping and duplicate titles, thus improving the security of property rights. The option of the removal of certain non-judicial functions was made already by the Council of Europe's Recommendation No. R (86) 12 of 16 September 1986, titled Measures to prevent and reduce the excessive workload in the courts. It specifically identified the land registry as a function that could be, according to the particular circumstances of each country, turned over to other bodies and allow courts to focus on their core function.

The World Bank report concludes that functions of notaries in property registration are irrelevant in countries where registry officials perform the same tasks. And in countries, where notaries are responsible for registration, the costs are 33% higher than on average. Three out of four countries manage property registration without mandating the use of notaries. Property rights are no less secure and efficiency is greater.

Another important achievement, as a follow-up to the successful Land administration guidelines (UNECE, 1996), a new land administration perspective document Land administration in the ECE region – Development trends and main principles, was published in 2005. It states (UNECE, 2005) that a good land administration system will guarantee ownership and security of tenure, support land and property taxation, provide security for credit, develop and monitor land markets, protect land resources and support environmental monitoring, facilitate the management of state-owned land, reduce land disputes, facilitate rural land reform, improve urban planning and infrastructure development, and provide statistical data in support of good governance. It should be affordable and open to everyone, meeting the needs of all its users, and must be sustainable. The cadastre and the land registers provide a framework for sustainable development by acquiring, validating and making

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available crucial information about the land and its attributes. Present land administration systems need re-engineering, they must continuously evolve to cope with the ongoing developments. To ensure that land administration and land management decisions are consistent with sustainable development principles, land information systems must integrate a wider range of data, information and knowledge.

The next important and relevant organization in the field is the International association of surveyors (FIG). It has a long professional tradition and many valuable and respected results were produced in the area of cadastre and land management. Among the future-oriented documents, the document Cadastre 2014 (Kaufmann, Steudler, 1998), prepared by the FIG Commission 7, is nowadays still relevant in most of its guidance. At that time, the major purpose of the reforms in the cadastre sector, in progress or planned, was aiming to improve the customer service, the quality, timeliness and accuracy of data, the efficiency of the cadastre system and the aspect of a multipurpose cadastre. Most of the trends in the technical domain were in system automation, scanning, digitizing, and in networking and linking of different systems. The legislative trend was in setting-up a multi-purpose cadastre. The organizational trend was in the integration of land administration organizations and in the deregulation of public structures. Based on the above-mentioned foundations, a vision for the Cadastre 2014 was proposed and elaborated. The six simple statements on different cadastre aspects were proposed and arguments were put forward (regarding recording public rights and restrictions, abolishing the separation between maps and registers, phasing out of cadastral mapping and advancement of modelling, etc.).

In this domain, many other statements and documents were prepared and many European and worldwide organizations put efforts in leading the way ahead for their members or on a larger scale. In Europe, besides UNECE Working party on land administration, the organizations or project associations like the European umbrella organization for geographic information (EUROGI), the Permanent committee on cadastre in the European Union (PCC), the European land registry association (ELRA), the European land information service (EULIS), and in the last few years also EuroGeographics with its Cadastre and land registry group try to be a visible and usable partner in the field of real estate management.

## 3. CADASTRE AND LAND REGISTRY GROUP OF EUROGEOGRAPHICS ENVISIONING FUTURE DEVELOPMENTS

EuroGeographics is the umbrella association and the official voice for the European national mapping and cadastral agencies (NMCA). Currently, it brings together 50 members from 46 countries across Europe - from Portugal to Ukraine, and Iceland to Turkey.

The vision of the association is to achieve interoperability of the members' national land and geographic information assets to provide Europe with an information asset that will support its goal to become the most competitive and sustainable economy in the world. With geographical information playing a key role in successful business and effective government, as well as in everyday life, its seamless availability across national borders is crucial to building a well-governed, competitive and sustainable European economy which benefits all

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citizens (EuroGeographics, 2008b). The association focuses, among others, on the creation of a transparent and safe real estate market in Europe, implementation of the EU's eEurope vision and delivery of better electronic services to the European citizen through better egovernance and on a more cost effective management of agricultural subsidies.

The mission of the association is to further the development of the European spatial data infrastructure through collaboration in the area of geographical information, including topographic information, cadastre and land information. The aim is to deliver the definitive pan-European location framework for a wide range of users.

In 2005, within the EuroGeographics, a newly established Cadastre and land registry group started its activities. The group was established because more than half of EuroGeographics' members deal with cadastre and/or land registry operations and because the issues of interest to members were not covered satisfactorily with the activities of the operating international organizations in the field of cadastre and land registration. The group supports the strategic goals of EuroGeographics to become the leading supplier of cross-border reference information (topography, cadastre) and to establish effective partnerships with bodies in the European geographic and land information market. The aim of the group is to contribute to the establishment of national spatial data infrastructures, national and international financial and land markets, supporting sustainable development and good governance.

The Cadastre and land registry group is challenged by many professional activities in the field of real estate management and would like to make good use of exchange of best practices and strategies at the European level. The group works on encouraging sharing visions and agreements on operational activities with other key real estate players in Europe. The Cadastre and land registry group does not hide the ambition to become, in the coming future, a driving force in the European real estate field of work by means of relevant and reliable results, value-added non-competitive cooperation, lobbying at the European level, raising profile and awareness.

There are many areas of cadastre and land registry activities that were covered by the Cadastre and land registry group in order to be able to position member organizations towards current and foreseen developments in the field. The group has delivered good advice to member organizations in the period of three years of its operations. In different European countries several discussion meetings and workshops were held with the exchange of best practices on topics of cadastre maintenance by land surveyors, synchronization of cadastres and land registries in the European Union; quality and efficiency in cadastre and land registry, and relevance and impact of data access on cadastre, land registry and mapping. The processes of the adoption of the relevant European directives and documents were monitored and commented on and the information and advice was given to the NMCAs.

The most important finalized activity of the group is the development of a new Vision statement for cadastre and land registration in Europe by 2012 (EuroGeographics, 2007a). The document was widely discussed in many meetings and was adopted in 2007. The PCC also approved the document at its plenary meeting in June 2007.

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The Vision statement suggests that the cadastre and land registry organizations will work for the following mission: "providing state of the art services to the real property market and market for land information integrated within e-government and co-operating in building the National and European spatial data infrastructures". In implementing this mission, the cadastre and land registry organizations have identified and outlined the services which they should be able to provide by 2012. For some organizations the focus will be more on the land market, for other organizations on building the national spatial data infrastructure.

The Vision statement predicts that by 2012 cadastre and land registry organizations in Europe will:

- provide state of the art services to the real property market and market for land information,
- co-operate in building the National and European spatial data infrastructure,
- support the European policies,
- build an efficient and effective organization,
- assist cadastre and land registry organizations in developing countries and transition economies.

Several more detailed activities are listed in the document to demonstrate practical goals for achieving the vision proposed. Some of the trends presented below are suggested in the direction of:

- ensuring that cadastral and real property data are part of the development of national spatial data infrastructures to ensure harmonization and interoperability of data, metadata and services on different levels and between different sectors;
- supporting the implementation of legislation and technical solutions which facilitate secured mortgage lending across national borders;
- establishing one-stop service portal that allows actors in the real property market to be able to find all information and government services that can be relevant for a regular real property transaction in electronic form;
- ensuring that the time and costs for registration procedures are reduced to the minimum;
- having in place measurable performance indicators, including regular user satisfaction surveys.

Besides the Vision statement for cadastre and land registration in Europe by 2012, the main Cadastre and land registry group documents and inventories were elaborated in the field of:

- European requirements toward cadastral surveyor activities.
- Cadastral parcel in NSDIs and INSPIRE,
- Cadastre and land registry information resource.

The project report on European requirements toward cadastral surveyor activities (EuroGeographics, 2007b) was prepared in collaboration with professionals from The Council of European geodetic surveyors (CLGE) and Geometer Europas (GE). It is based on replies on questionnaires to EuroGeographics' member organizations - NMCAs and on the project

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team members' exchange of views. The project team investigated legal, operational and market driven matters related to cadastral surveyor activities in Europe.

The report states that European cadastral surveyors operate in environment of limited national markets. Laws and regulations that describe state surveying and cadastral activities define scope and requirements of their activities. NMCAs are usually in charge of assuring and supervising the proper implementation and securing the requirements stipulated by the laws, so collaboration and interactions between cadastral surveyors and NMCAs are inevitable. However, European Union internal market is moving toward liberalization and globalization. The Directive on services in the internal market

(http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0123:EN:NOT) is an important document stipulating general requirements for liberalization of European market, which accordingly might affect cadastral surveyor activities in the near future. Another important document stating some general requirements on the qualification of professions in Europe, including cadastral surveyor activities is the Directive on Professional qualification on the recognition of professional qualifications

(http://ec.europa.eu/internal\_market/qualifications/future\_en.htm).

The project report on European requirements toward cadastral surveyor activities concludes with trends and recommendations in relation to the performance of cadastral surveyors. Some of them:

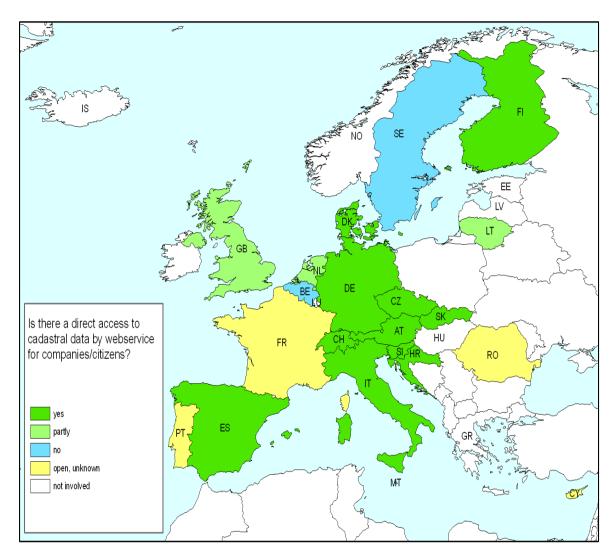
- The European Union internal market is moving toward liberalization and consolidation, therefore the surveyor market cannot remain isolated. However, a network of European Union national coordinating bodies is a precondition for cross-border surveyor activities. Each country defines national requirements for surveyor activities, but the requirements should be fair and transparent.
- Public Private Partnership and sharing best practices within activities of cadastral surveying (both nationally and internationally) leads to improvement of legal frameworks; very frequent impact on or consequences to technical, business and organizational progress.
- Development of information technologies (GPS, GIS, computer science) influences a new way of working in preparation of cadastral information.

The project report on The cadastral parcel in NSDIs and in INSPIRE (EuroGeographics, 2007c) was prepared in collaboration with professionals from the PCC. It is based on replies to NMCA questionnaires and on the project team members' exchange of views. The INSPIRE directive on establishing an infrastructure for spatial information in the European community entered into force in 2007 (Inspire, 2007). In the Annex I of the directive, the cadastral parcel is listed as an important spatial data theme. The five general cadastral parcel key elements were defined in the report: unique identifier, area, cadastral boundaries, geo-reference, origin and history. Other elements of the cadastral parcel were also under the investigation (ownership, rights and use). It is explained that the cadastral parcel can be used as a locator. In spite of differences among countries in cadastral parcel definition, coverage and quality, it is basically the smallest spatial object that is widely used across Europe for numerous applications. The cadastral parcel is an important component in national and European spatial data infrastructures. In order to create effective infrastructures and promote efficiency, a focus

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on data and services interoperability is recommended. Improvements in data standardization and data and information accessibility are potentially the main topics for the near future operations. Due to developments in data concentration, electronic access is technically possible country-wide (portal and/or web-oriented). A focus on promoting the improvements of open access to cadastral information is recommended.



**Figure 1**: Cadastral information web-service access for private companies and/or citizens (EuroGeographics, 2007c)

In general, the project report concluded that cadastral parcels are commonly used as an information object in important aspects of the real property markets (conveyance of property, mortgaging, easements and real estate taxation). In many countries a cadastral parcel is used for spatial planning purposes, environmental monitoring, agricultural subsidy programmes, infrastructure management, public restrictions, public safety, geo-marketing and socio-economic analysis.

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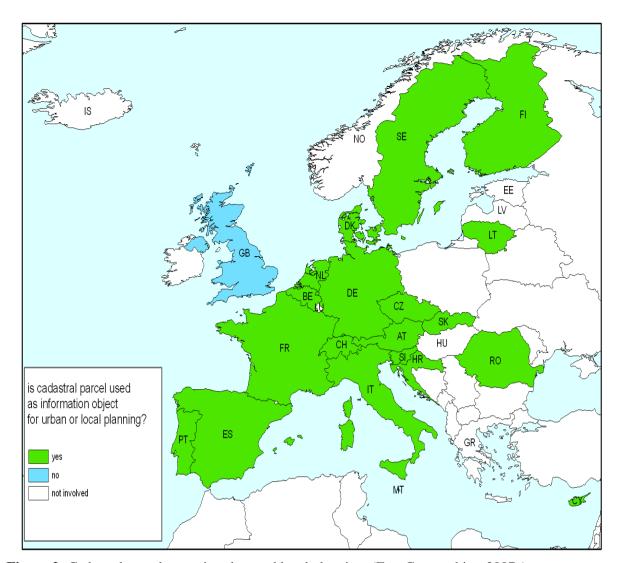
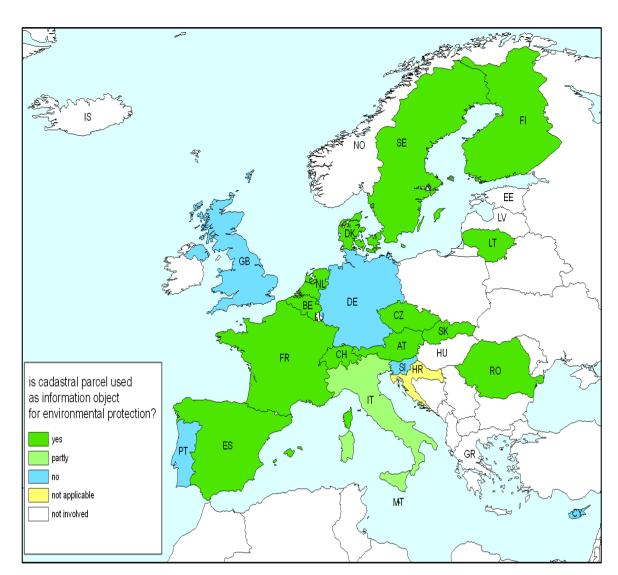


Figure 2: Cadastral parcel usage in urban and local planning (EuroGeographics, 2007c)



**Figure 3:** Cadastral parcel usage in environmental protection (EuroGeographics, 2007c)

The project report on the Cadastre and land registries, Source of information (EuroGeographics, 2008a) was prepared in a project team based on replies to the NMCA questionnaires and on the project team members' exchange of views. The investigation and the final project report used the Vision statement on Cadastre and land registration in Europe 2012 of EuroGeographics' as a reference, and an inventory was made regarding available information in NMCAs. It was discovered that, in nearly all institutions involved in the survey, cadastre and land registry information as well as products and services are available on line. Integration of different types of information is taking place. The developments in relation to the requirements show that integration of data combined with access to that data are key topics for the near future. Cadastre and land registry information is widely available for producing value-added services.

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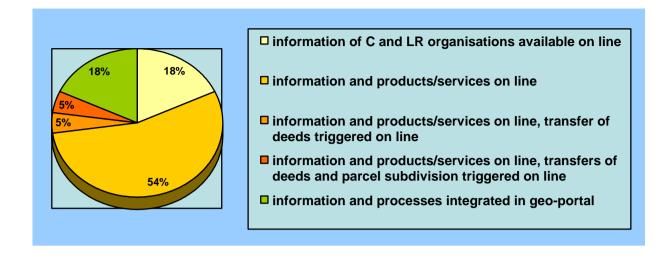


Figure 4: E-government principles applied to cadastres and/or land registries (EuroGeographics, 2008a)

The review shows that in many cases a leading role or a combined leading and coordinating role in national spatial data infrastructures belongs to NMCAs. It is interesting that only a small majority of countries (especially North-European) is participating in the EULIS project or is willing to participate in the future. Most countries that are at this stage not taking part in the project do not plan to cooperate in the near future either. In the area of building an effective and efficient organization the important, central key processes differ considerably in time and costs. Performance indicators are usually in place, although the numbers of applied indicators might vary between the NMCAs. In NMCAs customer demands are under investigation and the frequency of investigations differs.

The main general conclusion of the report states that the NMCAs work actively in line with the Vision statement on Cadastre and land registration in Europe 2012. In the future, the developments and trends in NMCAs' operations need to be regularly monitored (most probably on a yearly basis) and appropriate assistance and knowledge transfer in the framework of EuroGeographics need to be provided to the NMCAs that will hardly find a way to follow the same cadastre and land registration vision direction.

### 4. THE CHALLENGES OF MORTGAGE CREDIT AND REAL PROPERTY **MARKETS**

The cornerstones of the single market are the four freedoms: the free movement of people, goods, services and capital. The single market means bringing down barriers and simplifying existing rules to enable everyone in the European Union to make the most of the opportunities by having direct access to 27 countries and 480 million people. A well functioning single market is recognised as a crucial element for Europe's competitiveness which is a key element of the Lisbon strategy.

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**Integrating Generations** FIG Working Week 2008 Stockholm, Sweden 14-19 June 2008 European Commission's policy on the integration of financial services in general and retail financial services in particular is linked to the consideration of intervention in the European Union mortgage credit markets (Commission, 2005). The Commission's concern is that national markets are not integrated and the full range of mortgage products is not available in each member state. Consequently, consumers may face a reduced choice of products or even be excluded from their national mortgage market altogether. A more efficient and competitive mortgage credit market that could result through greater integration could contribute to the growth of European Union economy. It has the potential to facilitate labour mobility and to enable European Union consumers to maximize their ability to tap into their housing assets, where appropriate, and to facilitate future long term security in the face of an increasingly ageing population. The European Union mortgage credit markets constitute a crucial aspect of the overall economy of all European Union member states. At the end of 2004, the value of outstanding residential mortgage loans represented about 40% of the European Union GDP.

The European Commission published its White paper on the integration of European Union mortgage credit markets at the end of 2007 (Commission, 2007). With the announced package of proportionate measures on the cross-border supply and funding of mortgage credit, which increase the diversity of products, improve consumer confidence and promote customer mobility, the Commission believes that they will contribute to the greater integration, competitiveness and efficiency of European Union mortgage credit markets.

The European Commission considers that member states should improve the efficiency of land registration procedures. This factor raises the cost of doing business for mortgage lenders and increases uncertainty for investors. The Commission will publish regularly updated scoreboards, presenting objective information on the cost and duration of land registration in all member states. In addition, it is planned that in 2008 the Commission will present a Recommendation that would in particular:

- invite member states to ensure their land registers are available online,
- encourage member states to adhere to the EULIS (European land information service),
- invite member states to introduce more transparency and reliability into their land registers, in particular with regard to hidden charges,
- invite member states to facilitate the use of foreign valuation reports, and promote the development and use of reliable valuation standards.

The European Commission realized that land registers are directly related to the mortgage credit markets and that the evident problems in the accessibility of land registers, high costs and long duration of land registration procedures and lack of completeness of registers due to hidden charges should be overcome in a reasonable period of time.

Real property markets exist in a number of forms, some formal and subject to the procedures laid down by the state, and some informal and unstructured, as is often the case in less developed economies (UNECE, 2005). The real property market must operate on a legal basis so that all dealings are safe and secure. An efficient market involves regulating institutions that ensure a stable and transparent framework within which transactions take place. It should provide easy access to the market for all participants including landowners, tenants and

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corporate bodies such as banks and lending institutions, and representatives of those with third party and minority rights. There must be clearly defined goods and services such as land, buildings and mechanisms whereby these can be offered for sale or lease; mortgage facilities; stable tax regimes; access to credit; and a framework of clear, consistent and environmentally sustainable land policies.

In a market economy it is the participants in the market that play the main role. The task of the public administration, including SMCAs, is to remove market imperfections, redistribute resources, and to put in place a framework to regulate the market's behaviour through laws and regulations. At present the regulatory processes in each country differ in the extent to which they support the market; how they encourage investments, especially foreign investments, and how quickly they are removing barriers and restrictions, thereby stimulating economic growth; and how much they encourage the development of public private partnerships and private finance initiatives. The regulatory processes involve rules about annual reporting, insider trading, property formation, mortgaging real estate, development permits, purchase of real estate, etc.

The real property market needs access to common basic information. This is of the utmost importance. For the market to be successful there needs to be transparency, guarantees to the title to real estate, and efficient and effective cadastre and land registration systems that provide speedy and reliable access by the public to real estate information.

### 5. CONCLUSIONS

All European states are creating or have created and put into operation systems for managing real estate. The core of the systems are the cadastre and the land register, with their basic function to ensure ownership and security of real estate, organized in different organizational schemes. They have different roles in different states, like they provide the basis for the valuation and taxation of real estate, for secure loans, they provide access to a housing fund through mortgage banking, underpin urban and spatial planning, land management and the development of infrastructure. They enable environmental management and provide statistical data which serve as a basis for social and economic development.

In the area of cadastre and land registration there is, on the top of described, in progress a dynamic process of change required by the European Commission, the society and various customers. Many aspects of the proposed reforms and developments, pertaining to cadastre and land registry organizations are nowadays impacting their daily operations and influencing the planning of their future strategies. EuroGeographics, as a trusted European professional association, is directing its member organizations towards achieving their specific mission and supporting them with the Europe-wide guidance.

Taking into account the vision and the strategy of EuroGeographics, the vision of its Cadastre and land registry group and other relevant European professional guidance, there are two main directions where cadastre and land registry organizations need to be pro-active and need to provide a good support to operations at a larger scale. The two directions are:

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- building the national and European spatial data infrastructures and
- taking a more active role in the functioning of mortgage credit and real estate markets.

The INSPIRE directive on establishing an infrastructure for spatial information in the European community as well as the White paper on the integration of the European Union mortgage credit markets, which were both adopted last year, are the drivers the cadastre and land registry organizations need to respect. In addition, the professional organizations need to take into account the guidelines and recommendations prepared by the leading European real estate organizations and associations due to a lack of European Union regulations. It is a matter of national policy to ensure the efficient, cost-effective and sustainable real estate development by using appropriate measures and instruments.

The road to better prosperity of cadastre and land registry organizations in the European society is open and it is their choice either to turn the situation to advantage or to remain on the level of limited technical performance of works. A challenge and a great responsibility.

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### **BIOGRAPHICAL NOTES**

**Dr. Bozena Lipej** is a Deputy Director General at the Surveying and mapping authority of the Republic of Slovenia. She has managed several activities and projects in the field of cartography, real estate and geodesy. In the 2000-2005 period she was an Executive director and project manager of the Real estate registration modernization project in Slovenia that was nationwide the biggest interdisciplinary real estate project with partners from four ministries, the supreme court, the World bank and the European Union. She chaired the UNECE Working party on land administration and was the working party bureau member in the period 2001-2005. Since 2005 she has been chairing the EuroGeographics' Cadastre and land registry group. She is the co-author of actual European real estate statements and documents and the author of more than 100 professional articles.

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