

Serving the needs of society with a cross-border real estate and geodetic data management

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Abstract

Development and integration processes in the European territory require adaptation and accelerated activities in geodetic and real estate professional environment. Key European development frameworks are tracing the way ahead and the professional society is challenged by activities related to the proposed directive INSPIRE, projects on land information systems, the development of mortgage markets and others. A lot of examples of European projects and good practice are already in place.

1. Introduction

It is the ambition of the member states of the European Union to turn the European Union into the most competitive economic region in the world in the coming years and for that purpose individual member states as well as other European countries are striving to boost their economic growth. The countries are revising their visions for development in order to tackle their development problems more rapidly and to improve their global competitiveness. Greater emphasis is being put on knowledge, innovation and optimal use of human capital. Physical space, playing an important role in ensuring economic, social and territorial cohesion, is also gaining in importance.

The role and use of geodetic, cartographic and real estate professional bases in national and economic development differs from country to country. Well-organised, accessible and linked records enable effective implementation of the instruments of spatial, financial, fiscal, housing, agricultural and land policies, or at least some of them.

2. Key European development frameworks in the geodetic and real estate field

With increasing economic and social integration in the European territory, the integration processes are concurrently taking place or are beginning to develop in certain professional fields which are given context by the spatial data. Spatial data and information play an important role in many economic, social and environmental decisions.

Geodetic, cartographic, topographic and real estate fields are not directly and comprehensively covered by the EU regulations. On one hand such freedom has a beneficial effect on the development of professional achievements in individual countries, but on the other hand it can also pose a hindrance in achieving more rapid modern results and effects. At any rate, it hinders harmonised cross-border cooperation, makes it more difficult to develop multi-national databases and the users have more problems in accessing the same type of information form different countries.

Much effort, harmonisation and many expectations are connected with the development of a European Spatial Data Infrastructure to support environmental policies or activities which may have a direct or indirect impact on the environment. The proposed INSPIRE [7] directive will provide unified answers to metadata, spatial data themes and services, technology, policy arrangements, coordination and monitoring procedures not only for environmental purposes but also for numerous sectors within the Geographical information community across Europe. In the event of the adoption of the directive within acceptable terms, the directive will decisively influence the provision and creation of Spatial Data Infrastructures at local, regional and national levels. New legislation will support coordinated information management with the aim of increasing economic benefits of data sharing and data integration supporting sustainable development. In the broader geodetic and real estate field it will be possible to be involved in a more coordinated way in the implementation of the directive with: coordinate reference systems, geographical grid systems, geographical names, administrative units, transport networks, hydrography, cadastral parcels, addresses, elevation, land cover, orthoimagery, buildings, land use and other spatial data themes. In addition to the effects of standardization, providing optimal quality and interoperability, the data laid down in the Directive will be, through national access points, provided

for a geo-portal for INSPIRE at Community level and thus for a European user. The main objective will be to first organize data and services at a national level and simultaneously satisfy the needs at the level of national use through the common access point, and in the next phase the data can be submitted to the European integration processes.

Even in the event that the directive, as a consequence of some differing points of view at present, is not adopted in due course, the development in the field of cross-border linking of spatial data will proceed with the certain degree of national intersectoral support. To an even greater extent, since the implementation of INSPIRE is just a part of a broader context of two other initiatives: Global monitoring for environment and security, GMES [4], and the initiative of the international Group on earth observations, GEO [8].

In cross-border linking in a particular expert field it is not only spatial and geographic data which are important but also data on real estate because European integration has been increasing the number of cross-border real estate transactions. Exceptional achievement in the field of linking national Land Registers (eight founding partners) was accomplished within the project European Union Land Information System, EU-LIS[1]. The main objective of this continuing project is to provide easy world-wide access to European electronic land and property information in order to promote and underpin a single European property market. In practical terms it means that the users have ready access to information about individual properties and to all necessary reference information on the land and property registration service provided throughout the territories of the project partner countries; all European land and property registration service will be readily accessible through a single portal. The EULIS project with good management and infrastructure is being upgraded with content, new partners and the creation of a formal organisation for system administration. Providing on-line information on real estate on the basis of the data from national registers and the implementation of real estate transactions regardless of national borders is a challenge to which national real estate institutions will have to rise: they will either enter the EULIS project system, if it continues to follow its planned course of development, which is legally not binding, and thus enable more transparent operation of the national real estate markets, or they will develop their own solution or wait for other projects, which

will service the needs of an increasing number of modern European users with their data and services. It is a fact that the establishment of a joint European service will make it easier for national real estate institutions to provide information on the international market. The proposed solution to set up regulation framework enabling licensed users in one country to access information from other countries and creating security and billing routines in the EULIS service may also make it easier to the national agencies to get the customers abroad.

In the most optimistic scenario, when the adopted INSPIRE directive, which includes cadastral parcels and addresses among its data, begins to be implemented, and if the EULIS project exists in its full form, appropriate synchronisation will have to be achieved for the same data.

An important area, which is closely linked to the functioning of financial markets, is mortgages, which are a complex subject, involving many areas of law and policy. The Commission of the European Communities published a Green Paper on Mortgage Credit in the EU in 2005 [9]. This Green Paper is the central part of the process to assess the merits of the Commission intervention in the EU residential mortgage credit markets and to bring the benefits of the internal market in financial services to EU customers. The Green Paper explores, among other things, ways in which lenders based in one Member State, can access information on potential borrowers and properties in other Member States, to encourage them to undertake mortgage business across borders, thereby increasing choice and competition in the EU mortgage market. The idea of Euromortgage was introduced with the attempt to create an EU-wide instrument for securing loans on properties, that is, for the mortgage collateral. The EU mortgage credit markets constitute a crucial aspect of the overall economy of all EU Member States. At the end of 2004, the value of outstanding residential mortgage loans represented about 40% of the EU GDP what means that the issues are worthy of a more engaged treatment. The role of land registers or other unified registers that record legal property ownership rights is increasing. Its content, operations and easy access to data is crucial for the cross-border mortgage credit activity of any kind. Again, projects like initial EULIS could serve the customer society in the best profitable way.

As lacking of the European regulations for geographical and land information it is the European real estate associations which ensure the transfer of best practices and drafting of unbinding European guidelines. An important document, which in the real estate field represents an upgrading of the Land Administration Guidelines and which was drafted within the Economic Commission for Europe/United Nations, is Land Administration in the UNECE Region – Development trends and principles[3]. The document provides practical advice for the maintenance of a good land administration system in the substantive, legal, administrative, organizational, information and technical field.

3. European projects and good practice

In the European territory there are several organizations which implement certain assignments and projects as partners and/or members. EuroGeographics with nearly 50 members from more than 40 European countries has been traditionally active and successful in the geodetic, cartographic and lately also in the field of land registries and cadastres. Among the organizations/associations UN/ECE Working Party on Land Administration, International Federation of Survevors. FIG (Commission 7 - Cadastre Spatial Information Management), have been active in this field, in addition Permanent Committee on Cadastres in the European Union, PCC, European Land Registry Association, ELRA and others. Interests of geodetic profession in private sector are mostly shared in the Council of European Geodetic Surveyors, CLGE and in Geometer Europas, GE. Different documents (declarations, statements, guidelines, principles) were issued on different real estate topics by different organizations and associations and different events were organized by them. The common aim is to trace the development, exchange information and share best practices.

EuroGeographics's activity in the field of provision of reference information is gradually, as a priority, being transferred from creating products to interoperability. National mapping and cadastral agencies, in cooperation and partnership manage SABE (Seamless Administrative Boundaries of Europe), ERM (EuroRegionalMap), EGM (EuroGlobalMap), EuroMapFinder (metadata service of EuroGeographics). EuroGeographics' newly established Expert Group on Cadastre and Land Registry is a fairly new key player in the field of European real estate management. Firstly, its ambitions are to prepare

a new vision statement on cadastre and land registry, to develop an information resource for cadastre and land registry for the purpose of benchmarking and to define the role of cadastral parcel in INSPIRE and national SDIs with impacts on cadastre and land registry operations. In addition, the expert group is providing a platform for information exchange and synchronization with cadastre and land registry key players in Europe.

Cross-border cooperation is essential for a balanced development of activities on both sides of the state border and it needs to be stimulated. The professional geodetic cooperation between Austria and Slovenia, especially in the domain of public sector, dates back many years. The relations are traditionally very good. The cooperation includes best practice exchange in different areas of work (basic geodetic system, topography, cartography), exchange of cartographic and topographic materials along the state border (Agreement BEV-Geodetska uprava, signed in 1997), permanent GPS-stations data exchange – APOS - SIGNAL (agreement in final tuning), linkages of height systems, cooperative work on the state boundary and recording the border line.

4. Conclusion

The need for consistent geographic and land information across national borders is becoming more and more a daily requirement. Real estate and geodetic data, products and services need to be delivered according to customer needs. In front of the geodetic professional society, involving public-public and public-private cooperation, lies a significant task to fulfil the requirements at national and international level. It is the profession's responsibility and an opportunity to do away with the barriers and to contribute to a more sustainable development and a better governance.

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