

**Hellenic Presidency of the Permanent Committee on Cadastre in the E.U. (PCC)
Conference & Plenary Meeting, 23rd – 25th June 2014**

ABSTRACTS

CONFERENCE DAY 1: MONDAY, JUNE 23RD 2014 (VENUE: THE ZAPPEION MEGARON)

SESSION I.

**LATEST DEVELOPMENTS IN EUROPEAN CADASTRAL SYSTEMS I:
AN OVERVIEW AND AN EVALUATION OF THE HELLENIC CADASTRE SYSTEM: NEXT STEPS**



Current Status of the Hellenic Cadastre

Elias Liakopoulos, Chairman of the BoD & Managing Director, NCMA S.A., GREECE

The Hellenic Cadastral Project, combining Cadastre and Land Register, initiated in the mid 1990's aiming to replace the existing system of Registrations and Mortgages.

Building on the experiences acquired through the first generation cadastral projects (1996-2008), resulting in delays and budget overruns, the second generation (2008-2011) cadastral projects focused on achieving economies of scale, effective management, use of advanced technology and quality issues that provided remarkable overall results on the smooth continuation of the Hellenic Cadastral Project.

In the period (2004-2008) a series of spatial data infrastructure projects, co-financed by the EU and indispensable for the establishment of the Cadastre, were successfully implemented.

The third (2011-2013) and fourth (2013 – Rest of the country) generation cadastral projects remain in the tendering phase.

Capitalizing on the staff's capacity built, on the assistance from the Task Force and on the political support through the recent legal reform, the Hellenic Cadastral Project is in a better position for achieving its goals both from the technical and managerial point of view.



The Hellenic Cadastre Project towards 2020: Planning the future

Dimitris Rokos, Director of Planning and Investment Programmes, NCMA S.A., GREECE

The presentation provides an overall picture of the current status of the Hellenic Cadastre Project and looks into the future setting the strategic, medium and short term goals of the National Cadastre and Mapping Agency S.A, as the civilian NMCA of the country according the recent legal reform.

Cadastre has reached operational status for 20% of real rights through 103 Registry Offices, cadastral surveying is under development for another 20% of real rights while for the rest 40% of them tendering procedures are running. IT infrastructure is in place following a major project co-financed by the E.C.

National coverage of cadastral map and register, including public and forest lands, established decentralized structure of the operational cadastre and provision of a full range of e-services constitute the strategic goals.

With the technical assistance of Task Force Greece, the Agency is in a better position for achieving its short and medium term goals, including management and institutional capacity, securing steady-state operation of the cadastre, developing a strategy for cartography and mapping and linking Cadastre with other key registers of the Greek State administration.

Financing of the Project together with other institutional and organizational reforms will secure its successful and timely completion.



Serving users needs for appropriate cadastral information – The Austrian approach

Julius Ernst, Deputy Director of Division for Verification and Cadastral Offices, BEV-Federal Office for Metrology and Surveying, AUSTRIA

The Austrian Real Estate Database (GDB) links the data of the cadastre and the land registry. The GDB includes information on more than ten million parcels and about three million property units with more than six million owners. More than ten million changes per year are done by the cadastral offices, and the land registry needs to take this into account in order to provide up-to-date information.

The Federal Office for Metrology and Surveying (BEV) and the Federal Ministry of Justice jointly launched the completely renewed Real Estate Database (GDB) as the result of a joint project. The main improvement in the GDB is the creation of a fully digital communication process between cadastral offices and land registry offices, as well as between the licensed surveyors as clients and the cadastral offices. The applications from the surveyors are entered into the system of the cadastre electronically via the BEV web portal. A validation process checks the format of the digital documents and adds an electronic time-stamp. The cadastral processing is based on a fully digital process management system.

When a new surveying document is submitted, it is checked for technical and legal consistency by the cadastral office. Changes to parcels are implemented in a new pre-layer of the Digital Cadastral Map. Afterwards, a message is sent to the land registry system, which automatically sends data to be incorporated into a new legal layer in the cadastre. This digital process guarantees a significant reduction of cadastre updates, from 3 weeks to 1 day. All documents are digitally stored in the central archive register of the BEV and outputs to the user are digitally signed.

To better serve the user and to meet expectations for authentic and up-to-date information in Austria, users have direct access to the information in the GDB, including cadastral and land registry information. The web-portal of the BEV, eGeodata Austria, offers various services and products to update cadastral information and combines the different datasets provided by BEV in a single logical database. The integrated e-commerce system ensures that the rules and rights of the user are respected when cadastral changes are made.

High-quality and standardised data is demanded and expected by users of the cadastre and is a prerequisite for supporting the National Spatial Data Infrastructure (NSDI). Important public services and products, based on cadastral data, have been developed by various public administration agencies. These include municipal zoning and development plans and soil evaluation maps, which are a basis for the taxation of agricultural property and for agricultural subsidies.

Austria and the BEV support the principles of the European Union's digital agenda for Europe, which include "...simplifying the access to cadastral and land registry data for professionals and citizens...", and the role of the cadastre as an essential part of the NSDI.



Upgrading the Cyprus integrated Land Information System

Neoclis Neocleous, Senior Land Officer/LIS Manager, Department of Lands & Surveys, CYPRUS

The strategic advantage of an Integrated Land Information System is its ability to combine different sources of information and provide managers with the necessary Business Intelligence tools in order to enhance decision making; the Cyprus Integrated Land Information System (CILIS) incorporates this vision to the maximum.

The Department of Lands and Surveys of Cyprus through CILIS has managed to adhere to strict timelines posed by the Troika in order to complete two very large scale projects, while working on the completion of a third one. The two large scale projects completed within only a year, are the establishment of an inventory of State Land and the Revaluation of the whole Cyprus, using automated mass valuation procedures. Both projects have been fully supported by IT Technology and especially GIS.

The continuous need of updating CILIS has led DLS to the strategic decision of upgrading the whole IT infrastructure. Different tenders have been published, including the implementation of a large scale GIS project, the "DLS Portal" and the Upgrading of the CILIS System itself. Based on the later, DLS has initialised a task of re-engineering processes, moving towards end-to-end processes in order to achieve the smoothest transition possible. Corporate and IT Governance will need to establish a brand new IT Strategy; a transformation approach to change will be required; IT by itself will not enforce change; top management support and commitment is needed throughout the process.



The Estonian Cadastre in the digital era

Priit Kuus, Deputy Head of Department of Land Cadastre, Estonian LandBoard, **ESTONIA**

During the last two decades Estonian cadastre fulfilled several development activities for building up a sophisticated land information system. The presentation provides an overview of challenges to develop better data management, distribution services and exchange systems. It is proud to introduce new-built Estonian e-Cadastre and our expectations for the future.



Recent developments and trends in the German cadastre

Marcus Wandinger, Secretary General, Working Committee of the Surveying Authorities of the Länder of the Federal Republic of Germany (AdV), **GERMANY**

Germany presents information on the organisation of the cadastre in its 16 Laender and provides an update on the implementation of ALKIS. Different approaches of the 16 Laender to a sound institutional framework, including the involvement of licensed ('publicly appointed') surveyors in field survey works for the real estate cadastre, are outlined. In addition, information will be provided on institutional arrangements that ensure smooth collaboration between cadastre and land registry authorities.

SESSION III.

LATEST DEVELOPMENTS IN EUROPEAN CADASTRAL SYSTEMS III



Provision of Electronic Cadastral Data for the Administration of Municipalities

Rimantas Ramanauskas, Deputy Director General, State Enterprise Centre of Registers, **LITHUANIA**

Municipalities play an important role in local administration and are the main contact point for individuals and businesses to settle different matters, such as legal regulation, utilities, transport services, education, etc. To ensure effective local services municipalities need official, quick, comprehensive and easy to use information. State Enterprise Centre of Registers being the keeper of 3 main registers (Register of Real Property, of Addresses and of Legal Entities) and the holder of geographical cadastral information offered a handy tool for municipalities – REGIA.

Regional geo-information environment service for citizens, business and government - REGIA - is a powerful and handy tool specifically developed for local authorities. It creates favourable conditions for geography-based decision-making and facilitates the exchange of information between local authorities: their people, civil servants and therein operating businesses.

Implemented by the Centre of Registers, REGIA is based on the cadastral map, with a possibility to built-in different registers data.

REGIA operates on the cloud principle: all information created by a user, data recorded, uploaded documents are accumulated and stored in the REGIA servers and are accessible from any computer.

All REGIA services are managed through the web browser. REGIA administrators can create and manage their own data layers, create and provide services based on geo-referenced data and decide whether data layer is publicly visible and who is entitled to use it.

REGIA services in the review mode are publicly accessible www.regia.lt.

At present 58 municipalities out of 60 have signed contracts for the use of REGIA service.



Two new important procedures in the Spanish Cadastre

Amalia Velasco, International Affairs Coordinator, Spanish Directorate General for Cadastre, **SPAIN**

The Spanish Directorate General for Cadastre (SDGC) has launched two important activities to improve the quality of the data base and to collaborate with the Spanish Government in its policies to recover from the economic crisis

- Cadastral Regularization Procedure.
- New Coordination Procedure with Land Registry.

Following the strategic policy of the Ministry of Finance and Public Administration, SDGC in 2013 has started a new activity aiming to combat real estate tax fraud and to boost local finance : the Cadastral Regularization Procedure 2013-2016.

This procedure, for which the necessary modifications of the legal regulations have been made, has the objective to incorporate to the cadastre the omitted construction and undeclared alterations (extensions, reforms and renovations), and to assign them their corresponding cadastral value, so that the owner pays the tax in concordance with the reality and that the municipalities can obtain the correct amount of real estate taxation.

Cadastral regularization will be held directly by the General Directorate for Cadastre within four years. The works will be staggered until 2017 and local authorities will not have any cost during the process.

To get this objective, for each of these years, the Ministry of Finance has allocated 40 million Euros to the Spanish Cadastre budget that they will be recovered through a cadastral regulation tax that will be charged to taxpayers who are regulated by this proceeding.

Municipalities revenues from property tax will be raised by the increase of values of the real estates built or modified.

The Spanish Cadastral employees and partners administrations are putting all their efforts in this ambitious plan that will boost the economy and move towards transparency and elimination of tax fraud.

In relation with the new coordination procedure with the Land Registry the aim is to coordinate both institutions in a way that cadastral parcel could be the graphic support to the land Registry

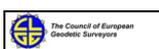
Currently, in Spain, the Cadastre and the Land Register are two independent but closely related organisations. The Directorate General for Cadastre, dependent on the Finance Ministry, possesses physical and economic data on real estate together with the identification of the cadastral title holder. It also features graphical databases allowing the location and identification of real estates and assignation of a cadastral reference. The Land Register depends on the Department of Justice and constitutes a legal register of rights that ensures a high degree of legal security in real estate transactions and also acts as a freely accessible public information service.

While the Cadastre uses the cadastral parcel and urban unit as the basic entity, and cartography as the essential territorial support, the Register stores titles and deeds. The Spanish Cadastre is compulsory by law, the Land Register is not. These facts have made difficult to coordinate both institutions.

Today, the Cadastre and the Register are related systems which use the same Cadastral reference as the key to identification of real estate. The Cadastre provides to the Land Registry before the title inscription, all the information about the real estate properties. The notaries and Land Registry have the legal obligation to use the cadastral reference in the deed and they are also obliged to submit, via Cadastral Virtual Office, to the Cadastre all the information concerning the documents that they have authorised or registered.

Nevertheless there are still some bottlenecks that prevent to use the Cadastral Graphic representation as a base of the Land Registry inscriptions.

The new law will establish the procedure to overcome these problems and will define the obligation to include the cadastral graphic certificate in the deed, and with it, improving the coordination between both organizations and the legal security in the real estates rights and transactions.



The role of publicly appointed surveyors in the European Cadastral Systems

Clemens Kiepke, Publicly appointed Surveyor from Germany, The Council of European Geodetic Surveyors, CLGE

The Public appointment: Liberal professionals acting on behalf of the state or for the state

Ownership protection systems differ extremely worldwide and in Europe. Existing systems are traditionally implemented in society and legal systems. In many countries the work on this system is a sovereign duty. There is no doubt, that ownership protection is a kernel point for a prospering country. To achieve this goal some points have to be recognised. The technical accuracy, the completeness and the legal correctness are belonging to them. Experts, who are fulfilling these demands, need an education in technical and legal topics. The presentation will explain the situation of the publicly appointed surveying engineers in Germany and the CLGE view of a European wide education model for surveyors who are busy in ownership affairs.



Reorganizing the National Cadastral Agency to Achieve a Better Effect in the Society

Pekka Halme, Director of Strategic Development, National Land Survey of Finland, FINLAND

No abstract received.



The Cadastral Template with Web 2.0 Technology

Daniel Steudler, Swiss Delegate to FIG-Commission 7, Chair of FIG-TF "Spatially Enabled Society", FIG

No abstract received.

SESSION IV.

THE ROLE OF MULTIPURPOSE CADASTRES, GEOINFORMATION SYSTEMS & NSDI IN MARITIME POLICIES AND BLUE GROWTH



The Directive on Maritime Spatial Planning: A support for Blue Growth and sustainability
Sylvain Gambert, Policy Officer, Directorate-General for Maritime Affairs and Fisheries Maritime Policy Baltic and North Sea – Maritime Spatial Planning, EUROPEAN COMMISSION

No abstract received.



Seabed Information Systems: Presentation of the project of a coastal and maritime portal in France

Nicolas Smith, Géomètre-Expert, OGE, The Council of European Geodetic Surveyors, CLGE

After the implementation of the TERIA GNSS network, in the framework of the modernization of its land and technical missions, OGE launched July 1st, 2010 its GEOLAND portal for the use of land surveyors who could thus use a modern tool for the acquisition, the sharing and the diffusion of land and geographical data. This extranet tool is also open to the general public and offers to every public user and professional dynamic interfaces for the sharing of data.

In parallel to this project, OGE has taken part in different researches about the coastline and the sea, and more specifically on the space distribution of uses, activities and conflicts of uses.

Following a request from the Water Agency of the PACA region (Southern France along the Mediterranean Sea), and from the International Centre for research on environmental issues (ICREI), to index and list on a 3D cartography the different practices and uses in the Mediterranean sea, OGE is currently working on the development of a coastal and maritime portal based on Geoland tool. The Geoland portal will thus become a unique 3D display portal of land, coastal and maritime data.

To test this project, two experimental areas were defined in the regions of Sète and Marseille.

The project, which started in November 2012, will last until December 2014 with the demonstration of the functionalities of the portal on the two experimental areas during the 42nd congress of the Order of licensed surveyors which will take place from September 9th until September 11th in Montpellier and which will be dedicated to the risks.



Design and Implementation of the Marine Cadastre in Greece

Apostolos Arvanitis & Ioanna Parri, Department of Cadastre, Photogrammetry and Cartography, School of Rural and Surveying Engineering, Aristotle University of Thessaloniki (AUTH), GREECE

The establishment of a Marine Cadastre will be the vessel that will lead us towards the development of the Blue Growth and the Maritime Spatial Planning, with the main target remaining the best use of the marine and coastal resources. The aim of this paper is the design of a Marine Cadastre and its implementation for a selected area of study. There will be a reference of some attempts made in other countries for building such a system and specifically the aim is the use of a GIS. The content of this system is the entirety of the rights to be exercised and the area of application, which will then be organized by their characteristics and will form the layers in the GIS. Simultaneously with this descriptive data base a spatial one will be developed, where, on a properly formed background, the rights to be exercised will be digitized and visualized, as well as any other physical spatial characteristic. Next, the reference unit of the marine parcel and the system of geodetic reference will be defined. In accordance to these pre-requisites, the information that is gathered, is then archived in the system and digitized, forming a prototype marine cadastral system for the area of study. The results of the completion of this marine cadastre will re-define the everyday activities and the lives of the people, as well as the organization of the exercised government policy, in regard to the marine sector.



SAME SEAS, DIFFERENT COASTLINES: Disparities in the national demarcations of coastlines across the EU and their legal and policy implications.

Rachelle Alterman, Professor, Technion Institute of Technology, Initiator and Head of the EU-Med strategic project "Mare Nostrum", ISRAEL

The Mare Nostrum project financed by the EU is designed to identify the legal-institutional gaps in the implementation of international and EU laws and policies about coastline management. One of the problems identified by this project is the existence of major disparities among the Mediterranean countries in the legal (and probably cadastral) rules about defining the coastlines. These differences have many implications for the capacity of the different countries to implement the internationally-binding treaty – the Barcelona Convention and its Protocol on Integrated Coastal Zone management in the Mediterranean. The differences in demarcation criteria for the coastline have immense implications for key policies in the Protocol, such as the definition of a public property zone along the coast, the prohibition of construction, the control of planning and development, and environmental controls. The purpose of the talk is to expose this issue to the cadastral experts of the various countries and obtain their feedback. This initiative, we hope, will be a first step towards greater legal-cadastral coordination among EU countries with respect to coastline issues.

SESSION V.

FROM "CADASTRE 2014" TO "CADASTRE 2034"



Status of the Swedish cadastre in relation to "Cadastre 2014"

Kristin Land, Cadastral Services Division, Lantmäteriet – the Swedish mapping, cadastral and land registration authority, SWEDEN

In 1998, FIG launched "Cadastre 2014 – a vision for a future cadastral system". The vision's six statements were to serve as a generalized road map for (developed) countries all over the world in modernizing their cadastres. The statements touched upon various holistic approaches related to cadastre and land registration. In Sweden, a comprehensive modernization has been going on during the last decades. The digital Real Property Register is the core of the system. This joint cadastre and land register, including a Cadastral Index Map, is maintained by one State authority, Lantmäteriet. Much of the information is complete and of high quality, although there are missing or incorrect data due mainly to historical reasons. These aspects give Sweden rather high "scores" in regard to some Cadastre 2014 statements. However, as for the involvement of the private sector there is a zero, as all procedures are carried out by public officers.



From Cadastre 2014 to Cadastre 2034: The Slovak Republic perspective

Matúš Fojtl, International Relations Department Officer, Geodesy, Cartography and Cadastre Authority of the Slovak Republic, SLOVAK REPUBLIC

The assessment of achieved level of the cadastral system in Slovakia in terms of the 'Cadastre 2014' document. Concretization of the statute vision of the future cadastral system in Slovakia in the time horizon till the year 2034. The development of real estate cadastre concept as an important element of the harmonious progress of this sector. The necessity of continuous updating of already adopted concept. Vision of the future cadastral system is analyzed from two perspectives: Europe-wide perspective, integrative, expecting cross-border completion of all tasks and services of cadastral systems of the Member States of the European Union and national perspective, taking into account the specific, particular, traditional, material, financial, legislative, personal, organizational and other national conditions.

This paper has as a main objective to assess the degree to which the Hellenic National Cadastre meets the six main statements of 'Cadastre 2014' and, in addition, anticipate future developments that are likely to take place in that domain in Greece in the future. The benchmarking of the Hellenic Cadastre with respect to 'Cadastre 2014' is interesting because the establishment of the system started in the mid 1990's, that is, at the time when the 'Cadastre 2014' was conceptualized. Thus, the system, established in the country from the scratch and having had a completion time the year 2014, had the best prospects to become a model for satisfying 'Cadastre 2014' visions and aspirations. The international attention that the Hellenic Cadastre attracted at that time, primarily due to its magnitude (approximately €1.0-€1.5 billion budget), its social, political and economic framework (a system developed in a democratic EU country), and its way of financing (part of the start-up cost was to be co-financed by the Greek Government and the European Union and the remaining part was to be self-financed through fees), was very high and quite influential because it brought the notions of 'Cadastre 2014' on how a modern cadastral system should be built and operate into the central design scene of the new system. Today, 20 years later, it is time to assess the degree to which those anticipations and aspirations have been fulfilled. This paper attempts to make such an assessment using, primarily, responses provided by experienced cadastral personnel in Greece through the questionnaire that was sent to PCC delegates and observers.



Cadastre 2014: A successful story in Switzerland

Daniel Steudler, Licensed Cadastral Land Surveyor, Swiss Federal Office of Topography,
Federal Directorate for Cadastral Surveying, **SWITZERLAND**

"Cadastre 2014" is not only a vision for Switzerland. Most of the statements have now been realized and, in this "jubilee" year, it's time to have a look back and show how and why it has been a successful story in Switzerland. I will insist on the two or three most important statements, which make the rest possible: standardized data modelling; common geodetic reference framework; common data integration concept. And I will present our last realization: The Cadastre of Public Law Restrictions on Landownership that has been introduced in January 2014 in the five first cantons (according to the statement 1 on "Cadastre 2014").

But it's also time to look forward, and I will inform you about our new vision for the future of the cadastre. We have established a think tank (named "Dimension Cadastre") in 2013 and a first paper will be published in May 2014: "Beyond Limits – Reflections, visions and expectations regarding a dynamic cadastre for the future". The PCC Meeting in Athens will be a good opportunity for presenting these reflections.

SESSION VI.

FROM "CADASTRE 2014" TO "CADASTRE 2034"



Further steps of development to Cadastre 2034

Jürg Kaufmann, Co-author of "Cadastre 2014"

During the XX. FIG Congress 1994 in Melbourne, Australia the FIG Commission 7 mandated a working group with the task to reflect on the developments in the field of modern cadastres and to imagine 'How the cadastre would look like in 20 years'. Jürg Kaufmann was the chair and with his Secretary, Daniel Steudler, he established a concept of how to tackle the task together with FIG delegates, which numbered about 40 people participating in at least one annual meeting.

The issue was discussed at four annual meetings of Commission 7: 1994 in Fredericton, Canada; 1995 in Delft, The Netherlands; 1996 in Budapest, Hungary; and 1997 in Penang, Malaysia. A one-day seminar on 'Modern Cadastres and Cadastral Innovations' was organized during the Delft meeting.

Already in this seminar the six statements on the future cadastral systems were presented as:

- (1) Cadastre 2014 will show the complete legal situation of land, including public rights and restrictions!
- (2) The separation between 'maps' and 'registers' will be abolished!
- (3) The Cadastral mapping will be dead! Long live modelling!
- (4) 'Paper and pencil - cadastre' will have gone!
- (5) Cadastre 2014 will be highly privatized! Public and private sector are working closely together!
- (6) Cadastre 2014 will be cost recovering!

In addition 7 principles emerged from the work:

- 1) Identical Procedures for Private and Public Land Objects
- 2) Title Registration
- 3) No Change in Land Tenure
- 4) Respect for the Four Principles for Land Registration
- 5) Respect of the Principle of Legal Independence
- 6) Fixed Boundary System
- 7) Location of Land Objects in a Common Reference System

The topic was increasingly refined until the results were published during the XXI. FIG Congress held in Brighton, UK in 1998 in the brochure 'Cadastre 2014'. Since that time, many colleagues translated the booklet in their languages and Cadastre 2014 began to affect the thinking of the professionals and the politicians in many countries. The latest known translation dates from 2013 - 15 years after the initial publication.

The brochure was also presented to the "First Congress on Cadastre in the European Union" held in May 2002 under the auspices of the Programme of Activities of the Spanish Presidency of the EU. This Congress finally proposed the creation and start-up of the "Permanent Committee on Cadastre in the European Union".

The implementation of the statements differs from country to country and the intensity of work on this issue is diverging. While some visionary ideas became quickly reality due to the general development, others needed more effort because mental or legal changes were to take place before the conditions were ready for action. It proved that the principles stated in the brochure are still highly valid and respected in the follow-up work as development of NSDI and the Spatially Enabled Society.

2011 the discussion on a further development of cadastral systems was launched under the title 'Cadastre 2034' with 6 further directions of development to:

- (1) Survey-Accurate Cadastres
- (2) Object-Oriented Cadastres
- (3) 3D/4D Cadastres
- (4) Real-Time Cadastres
- (5) Global Cadastres
- (6) Organic Cadastres

This presentation shows how the Cadastre 2014 statements influenced the development of cadastral systems. It shows that the principles are still valid and comments the Cadastre 2034 ideas.



Towards Cadastre 2034: Challenges and opportunities

Martin Salzmann, *Director of Strategy and Policy, Cadastre, Land Registry and Mapping Agency of the Netherlands (Kadaster), NETHERLANDS*

The coming years will bring a lot of challenges and opportunities for the cadastre of the future. In the presentation we will discuss issues that we will encounter in the years to come. The presentation will give an overview of the issues we will encounter. In particular we will look into issues of personal data protection, formal vs. informal data, RRR (rights, restrictions and responsibilities), 3D, interoperability, big data and/or linked data, iGovernment, open data, harmonisation and increasing users' participation. We will give a brief overview and will discuss how these issues might influence our position as cadastre.

Authors: *Potsiou, C., Mourafetis, G., Apostolopoulos, C.*

The potential of introducing new mobile technologies (m-gov) in Land Administration procedures is investigated in this paper. The first results of this research are presented here, showing that the derived results are of acceptable accuracies while there is a considerable decrease of the required time and costs in the collection of the cadastral data for the compilation of draft cadastral maps.

The derived accuracies mainly depend on the type of basemaps used for collecting the data. As most of gross errors in the location of properties in the rural areas are due to the inability of property owners to identify their properties on the airphotos, authors believe that the introduction of new m-technologies and new optional procedures in the collection phase of the cadastral data will also decrease the gross errors significantly.

Using the proposed method the collection procedure will be faster, cheaper, more accurate and complete. The proposed procedure needs to be advertised among property owners for its potential benefits so that property owners will be willing to participate. Municipalities and young volunteers may also play a role to support property owners with the use of new technologies.



Prior cadastral identification in the Kingdom of Belgium and the use of the reference of a boundary delimitation map

Marc Vanderschueren, Advisor/Surveyor, Directorate of the Cell of the International Affairs of the General Administration of the Patrimonial Documentation, BELGIUM

The Royal Decree

Royal Decree supplementing the rules for identification of buildings in a deed or document subject to mortgage advertising and organizing the prior deposit of a plan for The General Administration of the Patrimonial Documentation (Cadastre) and issued by a new identifier.

When a deed concerns a new parcel of land to create, the identification of this parcel in the deed is supplemented by:

- the reference of a delimitation plan;
- the new parcel identifier reserved for this parcel.

This reference and the new reserved parcel identifier must be requested from the General Administration of the Patrimonial Documentation (Cadastre).

The ministerial Decree implementing the relevant royal Decree

- content of a delimitation plan of a new parcel of land which has to be created, other than a private lot created under sections 577-2 and 577-3 of the Civil Code (building);
- content of a delimitation plan for the creation of private lots under sections 577-2 and 577-3 of the Civil Code;
- modality of presentation of a plan for the General Administration of the Patrimonial Documentation (Cadastre);
- communication from the new parcel identifiers.

Two phases

- first phase (1 January 2014)
Mention of the reference of the delimitation plan in the deed or in the paper submitted to the mortgage advertising
- 2nd phase
Mention of new parcel identifiers reserved for these parcels in the deed or document submitted to the mortgage advertising

Deposit and Communication

Deposit of a plan to the General Administration of the Patrimonial Documentation (Cadastre)

- from the service plan of the regional direction within the jurisdiction of which lie the parcels subject to the plan
- preferably via mail
- in one of the following formats: paper, PDF, DXF or SHP

Communication of the reference and new parcel identifiers by the General Administration of the Patrimonial Documentation (Cadastre) within twenty calendar days.



Overview of the status of Cadastral Systems with respect to Cadastre 2014 and visions for future Cadastres

Panos Lolonis, Deputy Chair of the Committee of the Hellenic Presidency of the PCC

This paper presents the status of cadastral systems in Europe with respect to the six main statements that are defined in one of the most notable publications of the cadastral domain during the past 20 years, namely the “Cadastre 2014. A vision for a future cadastral system”. In addition, it presents a summary of the visions that European experts have about the status of cadastres in 2034. To achieve this task, the Hellenic Presidency of the PCC sent a questionnaire to all PCC representatives, representatives of observer organizations/countries, and experts in the cadastral domain requesting from each of them to express his/her opinion about how much the cadastral system of his/her country fulfils each of the six statements of ‘Cadastre 2014’. In addition, it has requested them to provide, based on their experiences, an anticipation about how cadastral systems would evolve in the next 20 years. The questionnaire was sent out to experts and representatives from the 28 European Union countries, as well as, to experts from Norway and Switzerland. In this call, there have been responses from 24 different countries (22 from European Union countries and two from Norway and Switzerland). The data which was provided in the questionnaires was analysed statistically and the results will be presented and discussed in the PCC Conference in Athens, in June 2014. It is envisaged that the outcomes of this work, which has been possible thanks to the contribution of the cadastral domain personnel of the vast majority of the European countries, would provide a firm basis for further, continuous and longer term, discussion in the PCC in order to form the long term visions for cadastral systems in Europe and establish an agenda towards the cohesion of the European Union with respect to the cadastral domain.

SESSION VII.

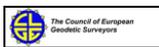
COOPERATION AMONG EUROPEAN INSTITUTIONS: CURRENT PROJECTS



A Vision for Land Governance and Cooperation in Europe

Elshad Khanalibayli, Chair of UNECE Working Party on Land Administration, UNECE WPLA

No abstract received.



BlueParking.eu, a project by European Surveyors for the Society

Maurice Barbieri, Chair of IG-PARLS, Board Member of The Council of European Geodetic Surveyors, CLGE

Parking spaces for disabled persons are not shown in the majority of information systems and on other local or regional maps. The reason for this is the fact that those parking spaces have not been systematically mapped. However, certain platforms containing such information exist, but they are often deficient, which implies tedious research for the users. Despite progress made in new construction and the development of specific planning in recent years, mobility is still problematic for people with disabilities. This is why CLGE has initiated the BlueParking.eu project and a technical and financial solution was found (the project is supported by Leica Geosystems).

The European Geodetic Surveyors are ideal partners for an efficient data capture and management - in both quantitative and qualitative terms. As traditional managers of the official cadastral surveying data and geo-information, the surveyors have the asset of an efficient organization granting a complete acquisition of the required information throughout the national territory.

CLGE considers that the project will promote the positive image of our profession. The surveyors who are CLGE members are therefore asked to collect this information free of charge, in a spirit of solidarity with disabled people. CLGE represents the civil servants too. This could be a wonderful PPP project.



Making the EULIS-platform more attractive

Rik Wouters, Managing Director, EULIS

Over the past 10 years the EULIS-platform has been developed into a user-friendly service, serving professionals to get cross border, land information from 6 connected countries. For potential clients, mostly professional users, it is important to find as many as countries connection. Another important selling point is the information available in the portal: in other words does it meet the needs of the client?

The presentation will explain what activities are carried out and what projects are running to further develop the portal and to stimulate land registry and cadastre agency connecting to the EULIS-portal.



The European Land Registry Association – Current Projects

Alasdair Lewis, President, European Land Registry Association, ELRA

Established in Lisbon in 2004, ELRA is a non-profit European association seated in Brussels. It is made up of 30 organizations representing the land registries of 23 European Member States and is continuing process of enlargement.

The primary purpose of ELRA may be described as the development and understanding of the role of land registration in real property and capital markets.

In addition to the ELRA regular activities, the European Land Registry Network (ELRN) and the development of the CROBECO project are the two main actions implemented by the Association nowadays.

The aim of the CROss Border Electronic CONveyancing (CROBECO) project is to increase the confidence of buyers of real estate located in foreign EU Member States. With this purpose, a Common Frame of Reference (CCRF) for cross-border e-conveyancing provides buyers of foreign real estate with a legal status more or less equal to that provided in their home Member State.

Now the CROBECO project is focused on the helpdesk which supports foreign notaries and buyers with a repository of clauses provides examples of clauses in contracts of sale that were accepted by the Registrar in the country of the plot.

In addition, the European Land Registry Network (ELRN), made up by 26 Land Registry associations, was created in 2010 in order to facilitate mutual cooperation and a friendly access of the Land Registry services in EU level. It is currently developing the IMOLA project which stands by Interoperability Model of Land Registrars.

A model for standardized land registry output will be produced, connected to explanatory material, in order to provide training to improve understanding of the different legal systems involved.



A global initiative for a transparent and efficient property market: IPMS-C

Ken Creighton, RICS Director of Professional Standards, IPMSC Chair, IPMS-C

ABOUT IPMS AND IPMSC

The International Property Measurement Standards Coalition (IPMSC) is a group of professional and not-for-profit organisations from around the world, committed to the development and implementation of an international standard for property measurement.

At present, the way property assets – such as homes, office buildings or shopping centres – are measured varies dramatically from one market to the next. For example, in some markets it is established practice to include common space (lift shafts; communal hallways etc) in floor area measurements; in others, off-site parking might be included or even swimming pools.

With so many different methods of measurement in use, it makes it difficult for global investors, occupiers and tenants to accurately compare space. Research by global property firm Jones Lang LaSalle suggests that, depending on the method used, a property's floor area measurement can deviate by as much as 24%.

The International Property Measurement Standards Coalition (IPMSC) is an international group of professional and not-for-profit organisations working together to develop and embed a single property measurement standard.

An International Property Measurement Standard (IPMS) will ensure that property assets are measured in a consistent way, creating a more transparent marketplace, greater public trust, stronger investor confidence, and increased market stability.

SESSION VIII. EXPLORING THE FUTURE OF THE CADASTRE IN THE EU



Inspired cadastre - progress and challenges

Robert Konrad, Head of Unit Governance, Information and Reporting from Directorate General of Environment, **EUROPEAN COMMISSION**

No abstract received.



Land Registers Interconnection

Karina Chamakhova, IT Project Manager - European e-Justice Portal, Unit B2 (Criminal Law), DG Justice, **EUROPEAN COMMISSION**

No abstract received.



A European perspective in Cadastre – are we prepared?

Julius Ernst, Chair of the Cadastre and Land Registry Knowledge Exchange Network, **EUROGEOGRAPHICS**

Cadastral and Land Registry information and services are an integral part of national e-Government infrastructures. Cadastral data are more and more used and needed in combination with other data sources as a basic resource for various purposes. Modern Cadastres deliver an essential basic resource to build an infrastructure and to meet the needs of our economy and society.

Connecting and combining the available national information sources will create added value beyond borders. Visualisation in layers can inform stakeholders depending on their demand and expectation. Acting as a liaison between different sources of content, data with sufficient quality and in a standardised format can support society's objectives even more.

The cadastral parcel, as a spatial object, has for a long time been one of the core elements in land administration and taxation. Within the INSPIRE Directive the cadastral parcel has been elevated to a higher, multi-purpose level and has become recognised as a core element in National and European Spatial Data Infrastructures (NSDI and ESDI). We mostly discuss the issues related to cadastral data itself on a national level, but we have to see and use them in a broader and European context. This relates to interoperability issues (technical, organizational) and to actual use of cadastral data in combination with our data (topography, buildings, addresses, (public) restrictions) and provides a natural link with themes of INSPIRE, ELF (European Location Framework) and also to open data questions.

National cadastral registers generally contain more data and we must know the needs of other users and other 3rd parties to be able to offer more added value: statistical data, official land use, official value on cadastral parcel, etc. Many of us consider rights, restrictions, owners, values, uses, public properties and many other data suitable to be part of the European SDI in the future.



The Common Vision on Cadastre & Land Registry in Europe: Next Steps

HELLENIC PRESIDENCY OF THE PCC

In 2012, four (4) European organizations (PCC, EUROGEOGRAPHICS, ELRA, EULIS) have stated the importance of Cadastral and Land Registry information and services in Europe as fundamental for its sustainable, economic and environmental development. This statement, along with the recognition of the necessity of constant innovation of the competent Cadastral & LR Institutions/Authorities in order to meet the needs for land development functions on both National and European level, was commonly agreed and formulated the so called 'Common Vision' on Cadastre and Land Registry in Europe. In October 2013 the Council of European Geodetic Surveyors (CLGE) entered into this cooperation agreement.

This presentation aims at identifying any progress that has been made since 2012 towards the materialization of the Common Vision on Cadastre and Land Registry Issues in Europe, tracing any tangible intentions about the next steps after its adoption as well as proposing possible common initiatives for future cooperation.