

***e*-Land Administration: An International Seminar in Innsbruck**

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SUMMARY

Electronic lodging and electronic conveyancing are two emerging technologies that enable land administration organisations to speed up the process of registration which is beneficial for society, e.g. coping with the fast moving property market (e.g. Netherlands), with the 'chain of titles' (in e.g. England) or meeting general demands of the introduction of e-government procedures (e.g. Austria). During an international symposium in Innsbruck (2-4 June 2004) leading experts from over the world addressed the issue, lessons learned and critical successfactors.

Proceedings of this seminar are available at gerda.schennach@bev.gv.at.

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1. INTRODUCTION

FIG Commission 7, Cadastre and Land Management, has organised a successful international seminar on e-Land Administration from 2 to 4 June 2004 in Innsbruck, Austria, in close cooperation with the Austrian Society for Surveying and Geoinformation. The intention of FIG Commission 7 for the international seminar on e-Land Administration is mainly to be seen in the establishment of links between different interest groups inside and outside the related professions and to raise awareness for an increasing market developing from the necessary involvement of land administration data into e-government procedures.

Cadastral data as part of geographic information have developed to a new tool for decision making and are crucial for political, economic and legal decisions. But there is still a lack of awareness on the importance of digital cadastral data. Cadastral data provide a number of advantages when used for administrative processes, the most important are:

- Guarantee for permanent maintenance of property information
- Legal liability of property information
- Authentic information about boundaries
- Possibility to integrate administrative data into a geographical reference system
- High accuracy of geographic location
- Umbrella for specific related data in case of centrally regulated cadastral systems
- Addresses for administrative purposes included
- Economical procedures with high content liability by competent governmental institutions

e-Government has become an issue in all fields of public administration. It is very often misunderstood in its ambition to reduce administrative procedures to a minimum level which is still transparent for the citizen and which includes all the departments of public services in a rather economical way without being visible for the users. e-Government requires a new organisational setting, optimising the links between public agencies and public structures. e-Government needs to transform the procedures behind the surface to models which are able to create simple solutions for the client as a product of different contents on different quality levels and without showing any unique standards. These requirements consequently ask for a new definition of competences of all public institutions acting in a network.

Public administrations as well as joint activities between public and private sector have become the most important driving forces for e-Government solutions.

e-Land Administration is a major part of e-Government and can be considered as a strong fundament for legal, administrative and technical structures for the entire public

administration. Land administration data are indicators for a wide range of related information and are essential for creating value added data for e-Government.

2. PRESENTED PAPERS

An audience of 115 participants from more than 35 countries all over the world listened to and discussed with 20 speakers. Various aspects came at stake. Daniel Steudler (Switzerland) reported about international trends in general, Udo Linauer (Austria) about the progress on e-government in Austria. Martin Fornefeld (Germany) reported about the potential of the GI market if well accessible. Günther Pichler (Germany) reported about the current work of the OpenGIS consortium. Donald Grant (New Zealand) discussed the approach on cadastral automation and e-government in New Zealand, and Mary Ogilvy (Canada) about the e-land administration in New Brunswick. Arvo Kokkonen (Finland) explained the necessity of base registers for a well working SDI, Don Grant (Australia) the general aspects of e-government, while Gunther Rabl (Austria) elaborated on the use of georeferenced addresses for e-Government. Kestutis Sabaliauskas (Lithuania) addressed the decisions made in Lithuania about e-land administration and the concentration of base registers in one single organisation, Andrzej Sambura (Poland) talked about the experiences in Poland in creating an infrastructure that could facilitate e-land administration. Piroska Zalaba (Hungary) discussed similar developments in Hungary. Kevin Daugherty (USA) explained experiences and directions in national portals, Heinz Brüggemann (Germany) the GDI of North-Rhine Westfalia. Ulrica Ollson (Sweden) the pricing policy in the *e*-environment. Ted Beardsall (UK) highlighted the advances in the *e*-conveyancing at HMLR to respond to the need of the 'chain of titles', Wim Louwman and Peter Stolk (Netherlands) spoke about the electronic lodgement of deeds and about the use of smartcards for identification and the e-signature, Hansjörg Brunner (Austria) talked about digital archiving of documents and Theo Koetter about the links between land administration and disaster management.

More details can be found in the proceedings, which are available at gerda-schennach@bev.gv.at.

3. DISCUSSIONS

During the discussions there has been a lot of attention to the conditions for successful e-Land Administration, from context perspective (legal framework, mandates public administration), organisational perspective (strategy, workflows and skills) with attention to standardisation and data sharing. The cost-benefit of e-Land Administration have been discussed in relation to the need for e-Land Administration, its economic justification and customer satisfaction. During the discussions the Land Administration data have been considered as a core of Geo-Spatial Data Information Systems.

The importance of data acquisition is a forgotten component, in many countries there is a need for unconventional approaches in data acquisition to make the geo-data available as soon as possible. Also in so called developed countries there is a need for data sharing because of cuts in budgets. Technology in itself is not the problem anymore, there is a need for more integrated work processes and services, eventual leading to more integrated

organisations, supporting automated transactions. The professionals should not ask politicians for departments to be merged but should tell them to do so. The same is valid for political support in *e*-signatures. Politicians are expected to take over those proposals because they have an instinct what people want: good service for low prices. It is one step too far to provide products for free, at least the production costs have to be covered. Products free of charge could result in an unlimited demand.

Main obstacles for change are the organisations and employees themselves, being afraid to lose power and giving up old traditions.

Furthermore there was attention to secure access of data, reliability of data and developments related to EU legislation, e.g. on *e*-signature, databank protection and *e*-content.

4. OBSERVATIONS

The following observations have been made. There is a value paradox: the basic cadastral and topographic data represent high production costs, but the market value is low. Costs for value added products based on those data are low, and the value of these products is high. The private sector should be involved to get access to the market, public-private partnerships are only successful in case of win-win situations. It has been recognised that people don't buy IT, they buy services. One observation is that the time for vision is over, it is time now to make something work. The benefits of standards, with *interoperability* as keyword for the future, are that they increase the value of investments. There should be attention here to convince users that they benefit from e-Land Administration in their decision making processes. Internet will be dominant for citizens to access the government, a single window improves customer satisfaction. Electronic access and transaction processing increase revenues. It is wise to introduce something new to the customer every six months. Base registers are of vital importance to the information for the information society, it should be remembered here that e-Government is more about 'Government' than about 'e'. *e*-Land Administration combined with *e*-Governance contribute to good governance, the *e*-Citizen has to be prepared for this. In relation to this it has been observed that technology is not the problem, but legislation is.

Furthermore it has been observed that Spatial Data Infrastructure (SDI) without cadastral and land registry data don't make sense. What counts is location and proximity. Worldwide substantial efforts have to be made in data acquisition.

5. CONCLUSIONS

At the *output* side of Cadastre and Land Registry organisations *e*-Land Administration contributes to better transparency in the real estate market. It improves B2B activities, mainly between organisations and professionals, it improves efficiency and could decrease transaction-costs representing an economic value. E-Land Administration, as core of SDI supports in easy access to data, increasing use of the data and thus generating more revenues. It attracts new services and new registrations. A single window contributes to improved customer satisfaction, the same is valid for value added products. For this purpose new business models and pricing models have to be developed in close co-operation with the private sector.

In relation to *throughput* it provides opportunities for the introduction of Workflow Management. For example in the Netherlands Cadastre the workloads in regional branches do not always match with the available human resources. This implies that parts of the work to be done in offices with higher workloads are moved to offices with a lower workload. Furthermore an easy access can be given to digital archives with deed, title and other legal documents. One more opportunity is in the future development of fully automated updating by customers or professionals.

On the *input* side various forms of e-Land Administration have been recognised: *e-conveyancing*, *e-registration* and *e-lodgement*. This enhances transaction procedures in the land market and (again) makes this market more transparent, it resolves chain of titles and allows a quicker transfer of purchase prices.

The *link* between e-Land Administration and SDI is a prerequisite to implement the single window policy. The single window increases customer satisfaction. This link will offer a good opportunity for value added products where the private sector opens the market, on the basis of a public-private partnership or (better) a public-private co-operation. It might be possible that citizens themselves integrate data. The link between SDI and e-Land Administration increases the use of data and so increases return on investments. For this purpose the mechanisms of data-sharing based on standards have to be enhanced. SDI with integrated land registry and cadastre may flourish well as base registers as part of a governmental policy, where guaranteed quality in relation to the registers is an item. Apart from parcels the addresses are key to access the information. New business models and new pricing models/policies have to be worked out. The involvement of the private sector could be improved by small subsidies, this will give a boost. The digital divide is an important point of attention.

e-Land Administration involves *stakeholders*. The development of e-Land Administration can not be done in isolation, consultation and communication with stakeholders are a condition. This development is a good opportunity for better cooperation and a good opportunity to show leadership. Both bottom up and top down approaches are needed. e-Land Administration and technology: technology is not a restriction. A good cooperation with IT industry is required, one example here are the efforts being made in core cadastral domain modelling. In relation to interoperability data-software the semantics is in aspect which requires further research.

e-Land Administration and *political support*. e-Land Administration is only possible with political support and a context of national information policy resulting in new laws (legal framework) and arrangements of the public administration. Evidence has to be given of the benefits in terms of economic justification and customer satisfaction.

e-Land Administration and impact on *organisations* is expected to be substantial: re-engineering IT and workflows, this goes with re-structuring of the organisation and re-skilling of the employees, less staff is needed because the labour productivity will increase. New networks have to be developed.

BIOGRAPHICAL NOTES

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Prof. **Paul Van der Molen** is visiting professor in land administration and cadastre at the International Institute of Geo-information Science and Earth Observation ITC, director of the International Department of the Dutch Cadastre, Land Registry and Mapping Agency, and Chairman of FIG Commission 7 (Cadastre and Land Management) 2002-2006.

Dipl.-Ing. **Gerda Schennach** has a baccalaureat and a Diploma of the Commercial College Innsbruck/Austria. She studied Geodesy at the University Innsbruck 1975-1977 and at the Vienna Institute of Technology, 1977-1980. Graduated in 1980. Professional career started in 1978 at the Vienna Institute of Technology/Dept. Mathematics and since 1981 in the Austrian Federal Office of Metrology and Surveying (BEV) as head of a regional cadastre office from 1983-1997, since 1998 consultant for GI affairs of the EC and for international affairs at the headquarters of BEV. She is the Austrian delegate to FIG Commission 7.

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