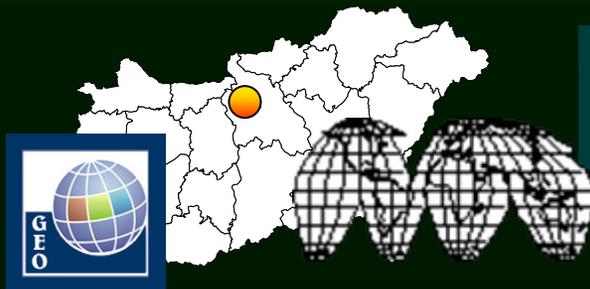


Cadastral Land Administration Systems and e-Government FIG, Commission 7 contribution

ANDRÁS OSSKÓ

FIG Commission 2, 3, 7, Workshop on e-Governance
Knowledge Management and e-Learning



27-29 April 2006
Budapest, Hungary

Introduction

- ✎ The development of Information Technology is extremely fast world wide
- ✎ The wide range of applications of the IT follow the fast development on the technical field
- ✎ Applications of IT in governmental, public institutions are far behind possibilities
- ✎ To introduce and operate e-Government is an increasing important, interest and in the same time very strong need by the society in many countries

In developed countries governments responsibility to develop e- Government system

In many less developed countries, especially in Asia, Latin America, IT is in advanced stage but other conditions (legal, institutional) are poor or missing to introduce e-Government

Requirements, conditions to develop operational e-Governments

- 1, legal changes, new laws
- 2, fully operational IT systems
- 3, harmonisation of spatial and other data
- 4, integration of different public databases
- 5, institutional conditions
- 6, acceptance of e-Government and administration by the entire society

REQUIREMENTS TO DEVELOP and operate e-Government

1, Legal changes, new laws

- ◆ the development of the IT is extremely fast the legal changes don't follow the changes in technology
- ◆ States, governments don't benefit enough from the advantages of using IT
- ◆ The changes in law, supporting the introduction of e-Government is very slow

- ◆ Introduction of e-documents, transactions can improve the transparency of administration
- ◆ Legal changes are not always the interest of the legal profession
- ◆ General public still attached to paper documents, personal presence in offices, etc.
- ◆ Countries with long time of democratic traditions the development and introduction of e-Government is in more advanced stage
- ◆ Scandinavian countries, The Netherlands, UK, etc.

Wide range of legal changes are needed



e- signature



e- documents



e- conveyancing

Copy right

- ◆ Different state, public organisations holding, maintaining data, register changes, providing services for external users
- ◆ Many public institutions have monopoly to own and sell data, services
- ◆ Part of their financial sources

2, Fully operational IT system

- ◆ To introduce and operate e-Government the existence of fully operational, countrywide IT system is needed
- ◆ State responsibilities to finance and build up technical conditions and infrastructure
 - ◆ big capacity of telecommunication lines covering the entire country, for citizens equal possibilities to access e-Government services
 - ◆ digital public databases
 - ◆ cadastre, land registry, company registry, building registry, tax authorities, local governments, etc.

The development of National Spatial Data Infrastructure

“The NSDI is about to change our lives by documenting the real world and integrating that information into our real lifestyle. The citizens will find Location Based Services and geographical information widely distributed on the Web and routinely integrated into most applications and services” (“Geographical information and value for society” Knut O Flathen, Director General, Norwegian Mapping and Cadastre Authority)

3, Harmonisation of public database

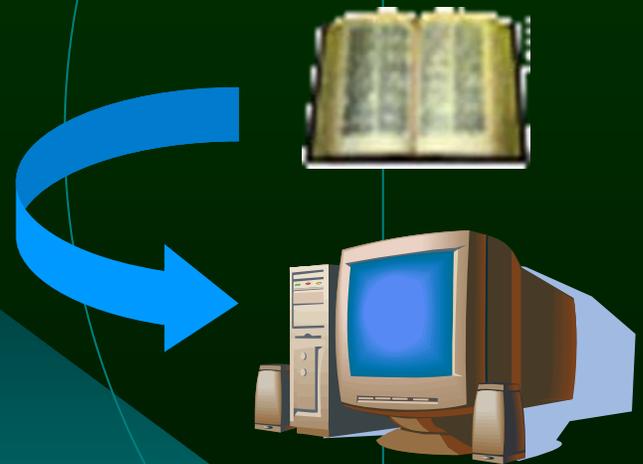
- ◆ during the last 10-15 years different public institutions, private firms developed spatial databases
- ◆ these databases haven't been harmonised
- ◆ To avoid multiplied, duplicated databases in future harmonisation of databases is important
- ◆ Economic and cheapest solution the compulsory use of basic digital cadastral, topographic maps, national spatial database

4, Integration of different public databases

- ◆ World wide trend to integrate different public databases, especially, land and property related data
- ◆ Change from sector oriented service to an integrated approach
- ◆ Recognition the advantages of integration of land and property related activities and data
- ◆ Integration of Cadastre and Land registry on legal basis and institutional level

Advantages to integrate different databases

- ◆ cadastre
- ◆ land registry
- ◆ company registry
- ◆ building registry
- ◆ address registry



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good for public institutions, good for external users

5, Institutional aspects

- ◆ To operate e-Government, administration, operational institutional framework is needed
- ◆ Integrated approach- one institutional network can co-ordinate e-Government services
- ◆ Development of e-Government is in advanced stage, Cadastre organisation, Mapping Authority or Unified system is responsible to co-ordinate the development, operation of e-Government

Some example

- ◆ Denmark Danish Cadastre
- ◆ Norway Norwegian Mapping and Cadastre Authority
- ◆ Sweden Land survey, Cadastre (Lantmateriat)

WHAT ARE THE REASONS



a.) owner and provider of digital cadastral and other mapping data, spatial information

In case of Unified system, the owner and provider of legal data as well

Maintaining legal and mapping database, register changes

◆ **Legal information:**

Ownership right, public rights, restrictions, easements, mortgage right and others

◆ **Mapping information:**

Descriptive part of land and property related data.

ID number, address, building information, land use, value of land, area of parcels, boundary information, spatial information

The aim of e-Government to provide services to citizens and other users

Land and property related data are the most important and frequently used by citizens, local governments, municipalities and other governmental institutions

- ◆ Town planning
- ◆ Land use plan
- ◆ Building administration
- ◆ Traffic control
- ◆ Ambulance service
- ◆ Disaster management
- ◆ Property management

b.) country wide institution

- ◆ Cadastre , Unified Land registry country wide institutional network
- ◆ Easy access to services by citizens even databases are not in the Internet

C.) Sufficient number of educated staff

- ◆ In cadastre, unified organisations there are sufficient number of educated staff, land surveyors, legal professionals, IT staff, marketing experts
- ◆ No other public organisations with the same capacity, professional knowledge
- ◆ The importance of permanent, lifelong education

6, Acceptance of e-Government and administration by the entire society

- ◆ To introduce and use of e-Government services also depends on the acceptance by the users and society
- ◆ During the development of e-Governance two kind of “barriers”, formal and informal, hindering the introduction of e-Government
- ◆ “formal” slow process of legal changes
- ◆ “informal” traditions, different views by the general public and also traditional institutions

FIG, COMMISSION 7. ROLE in SUPPORTING THE DEVELOPMENT OF E- GOVERNMENT

- ◆ FIG, Commission 7- Cadastre, land administration- is the flagship and active commission of FIG
- ◆ FIG achieves its goals through commissions and commissions achieve their plan through working groups
- ◆ 2002-2006 Work plan ,Commission 7. Working group 3. “*Advances in Modern Land administration*” dealt with, among others, e-Government matters
- ◆ Support the development of e-Government, focusing on issues e-conveyancing, e-submission of documents, e-signature, Internet distribution channel, standards

The Commission, based on international experience, try to develop guidelines and identify good practices

Commission 7 annual meeting in each year. 1-2 days open symposium on important topic, relevant to Commission 7

- ◆ 2002 Krakow, Poland
- ◆ 2003 Madison, USA

Other events co-organised by Commission 7

Austrian Cadastre and Mapping Authority, BEV, “*Seminar on e-Land administration*” Innsbruck, Austria 2-4 June 2004.
100 participants from many countries

e-Land administration is part of e-Government and should be the co-ordinator of e-Government

Enschede, The Netherlands 8-9 May. 2003

“Symposium on IT Renewal for land registry and cadastre”

Bamberg, Germany 9-10 December. 2004

“Workshop on Standardisation in the Cadastral Domain”

The goals of this workshop was to bring together disciplines: legal specialists, survey knowledge engineers, ICT experts from different organisations

Standards, harmonisation, integration of data is important to develop e-Government

Many professions-legal, land surveying, ICT- contributions are needed for the successful development of e-Government

Commission 7 continues to support e-Government matters through working groups based on Commission 7 Work plan 2007-2010

Some of the topics :

Cadastral- good governance

National and international data infrastructure initiatives : SDI, NGDI, INSPIRE e- documents, e-conveyancing, e-signature, etc.

Cadastral Domain Model

Following FIG general strategy, Commission 7 continues its efforts focusing on countries in Asia, Africa, Latin America, Middle-East

In some of these countries the development of e-Government is also an issue due to the advanced IT

Difficulties with legal and institutional framework, which are the barriers to introduce e-Government

Lack of financial sources also one of the major problems

Low cost solutions should be the first step for further development of e-matters



Commission 7 Work plan 2007-2010 will support the development of e-Government world wide

Co-organising workshops, seminars on e-Government, providing meeting place to exchange information, develop guidelines, identify good practises



THANK YOU FOR
YOUR ATTENTION !

