

## Future Trends in Hungarian Land Administration

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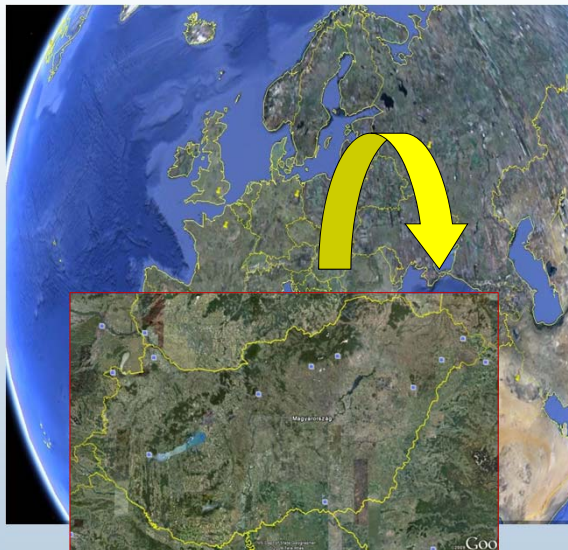
Institute of Geodesy, Cartography and Remote Sensing (FÖMI), Hungary

FIG Working Week, 2011.

Bridging the Gap between Cultures

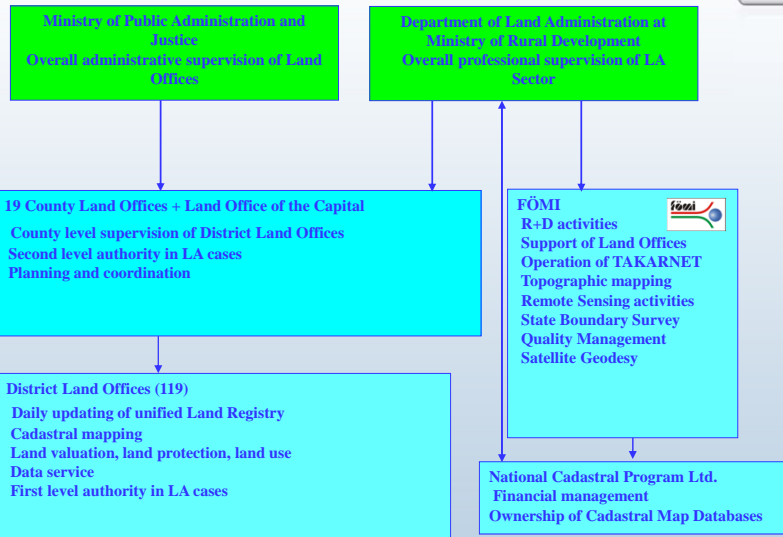
Marrakech, Morocco, 18-22 May, 2011.

## Hungary



- **Area: 93 000 sqkm**
- **Population: 10 million**
- **Economy: (GDP based)**
  - Services (62%)
  - Industry (27 %)
  - Agriculture (5%)
- **GDP: 9 800 Euro/Capita**
- **Cadastre&Land Registry:**
  - No. Of Parcels: 7,6 million
  - No. Of Properties: 10 million
  - No. Of Transactions via on-line Land Registry Services:
    - 4,2 million (2010)

## Hungarian Land Administration



## The Unified Hungarian Land Registry



- In Unified Land Registry Cadastral Mapping and Registration of Lands (Properties) belongs to the same organization: Land Office Network
- Unified Hungarian Land Registry has been operating since 1972
- Unified Hungarian Land Registry is a Title Registry, all registered rights are guaranteed by the State

## DATR, IT system for Unified Land Registry



- DATR is an object-oriented integrated information system for the unified registry (both cadastral maps and legal part)
- DATR is working at 120 District Land Offices (except the Capitol, Budapest)
- DATR has developed by FÖMI en bloc (both professional and informatic side)
- DATR has open APIs for customization of the system
- DATR has interfaces for ORACLE and MySQL RDBMSs
- Customization of the system is very easy to any legal and technical environment
- International version of the system will be published
- DATR data model acts as a country profile for ISO LADM

## Central Unified Land Registry Database



- **Including:**
  - Cadastral Parcels, and subparcels
  - Land use
  - Buildings
  - Land Values (for cultivated lands)
  - Administrative Units and Subunits (built-up and rural areas)
  - Land records (descriptive data, ownership, mortgages, easements, usufructs, restrictions)
  - Land user data

## Legal Framework on Land Registry



- **Two main Acts influence deeply Land Registry:**

- Act on Surveying and Mapping Activities from 1996
- Act on Land Registry from 1997

- **Reasons for change:**

- Both Acts deal with the circumstances 15 years before, during this period of time a lot of changes has happened, mainly on technical fields
- No maps are exiting anymore, databases received their functions
- There is a great need for a real 3D Cadastre
- New databases, datatypes came to the front
- New technologies (e.g. remote sensing) has a great influence in determination of LR feature at present and in the future
- International regulations (e.g. INSPIRE directive) deeply affect Hungarian Land Registry Activities
- Land Administration should inspire land and mortgage market more effectively

## Present Situation



### Land Registry



## New proposal



Based on the definition of Cadastral Parcel:

- „Single areas on Earth surface, which are not cut off by administrative or built-up area boundary, under unique or homogenous ownership or trusteeship rights.”

A new definition for other properties:

- „All properties, which are under or above the ground under unique or homogenous ownership or trusteeship rights”



## Demarcation of Cadastral Parcels



- Unified Hungarian Land Registry is a Title Registry, therefore all cadastral boundaries are fixed boundaries, derived from a strict demarcation procedure



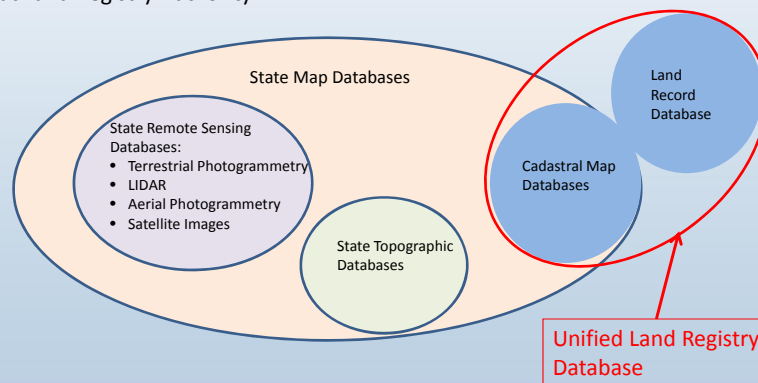
- New proposal allows the usage photogrammetric materials (e.g. orthophotos, stereophotogrammetric measurements) for demarcation procedure in the office



## From Maps to Databases



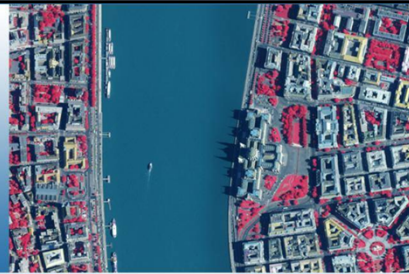
- No maps are existing anymore, long live Databases (see Cadastre 2014!)
- In Hungary all map data are available in RDBMS format, therefore no regulation is needed for traditional maps
- Because of Unified Land Registry there is an overlap between Map and Land Registry Database
- All Map Databases, which act in an Public Administration Procedure, must have a copy at Land Registry Authority



## Conclusions



- Hungarian Unified Land Registry is a good system for managing a modern Land Administration
- FÖMI has an important role in development both professional and informatic side of the system
- FÖMI's development, DATR, showed that a well-operating Land Administration IT system can be developed with inner-sources
- New, proposed development in legal environment, follows to a more effective and economy-friendly Land Administration



Thank you for your attention

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