A Complete, Free Solution for Cadastral Map Management

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Integrating Generations, FIG Working Week

14-19 June 2008., Stockholm, SWEDEN

Unified Hungarian Land Registry, present situation

- **Unified Land Registry was established in 1972**
- **Land registry and Cadastral Mapping integrated in the same organization: Land Office Network**
- **Since 1997 all land registry data available in digital form**
- **From 2008 all cadastral maps are available in vector form in the same projection system**
- **IT developments of Land Office Network was started in the mid of 90's**
    - **TAKAROS (Land Registry IT system) (fin. 2000)**
    - **TAKARNET (Network of Land Offices) (fin. 2002)**
    - **Integrated Land Information Services for registered users (from 2003) via Internet**
- **All IT developments and support in LO Network is the responsibility of FÖMI**

DATR, FÖMI's solution for cadastral map management

- **Basis: MSZ 7772-1 Standard (Digital Base Map – Conceptual Model) in Cadastral Domain since 1996 and DAT Instructions since 1997**
- **Visions:**
  - **Map all the principles of Unified Land Registry**
  - **Compatible with the Standardized Domain**
  - **Authentic updating of legal and geometry part of Unified Land Registry**
  - **Independency from any commercial GIS solutions**
 - **Full integration with existing TAKAROS system (Land registry)**

DATR, Characteristics

- **Providing authenticity**
  - **No map editor capacity**
  - **Map updating only via database transactions (in standardized environment)**
- **Uniform database structure**
  - **Enforcing database integrity**
- **Real-time queries via Internet**
  - **Integrated search with Land registry part**
  - **Real-time map generating**
  - **Minimizing network weighting**
- **Modular self-calibrating architecture**
  - **All functions are in modules**
  - **No client-side configuration is needed to insert any new module**
- **Easy customizable**
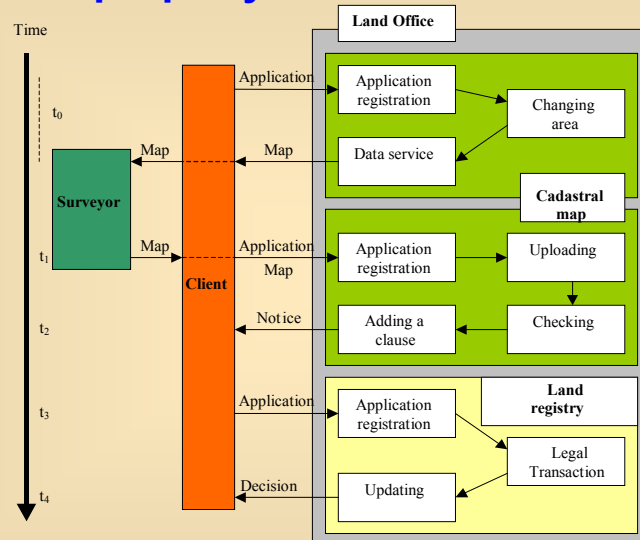 - **Uniform calling interface and protocol**
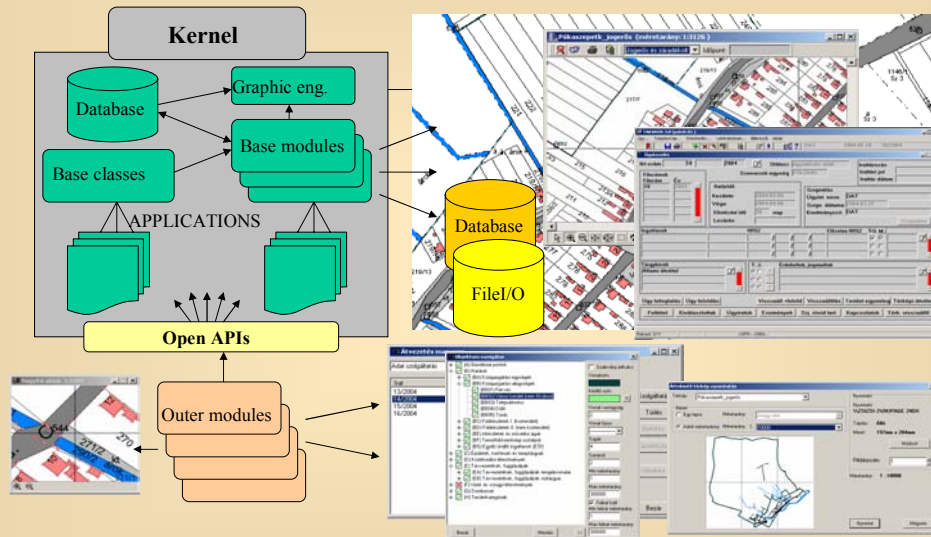 - **Opened module API**

DATR, Core Data Model

This Core Data Model is compatible with ISO Land Administration Domain Model standard proposal (by our Dutch Colleagues)
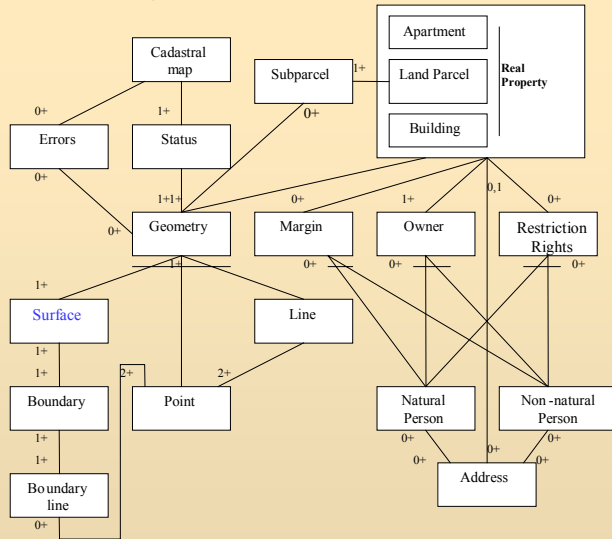
Real property transactions in DATR

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DATR Architecture

DATR, International Version

- **Because of the flexibility of the system, FÖMI decided to share this software with the land administration community**
- **All modules have a lingual description in XML format. Therefore customization is very easy**
- **By the use of open APIs the system can be modified to any legal and technical environment**
- **New interface to Open source MySQL RDBMS (beside the existing ORACLE interface)**
- **If client needs any SQL based interface can be developed**
- **Full technical and professional (not only IT, but LA) support and guidance**

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Conclusions

- **DATR is an object-oriented approach and a flexible solution for authentic unified land registry management**
- **DATR International version will be published as a freeware software, only registration needed**
- **FÖMI's capacity both in IT and land administration professionals guarantees the long-term maintenance and support of the system**
- **Customization of the system is very easy via linguistic descriptions**
- **Open APIs help anyone to customize the system into his legal and technical environment**
- **FÖMI is ready to undertake the task of customization and/or professional guidance for the users of DATR, as well**

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Thanks for your attention

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