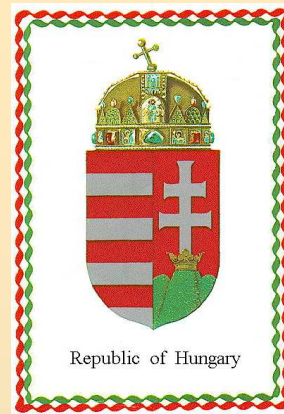


Country report, HUNGARY



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HUNGARY**

**FIG Commission 7 Annual Meeting 2009
12-16 October, 2009, Kuala Lumpur, Malaysia**

Republic of 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:
 - 4,5 million (2008)

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**

Structure of LA in Hungary

Department of Lands and Geoinformation at Ministry of
Agriculture and Rural Development

Overall supervision of LA Sector

19 County Land Offices + Land Office of the Capital

- County level supervision of District Land Offices
- Second level authority in LA cases
- Planning and coordination

District Land Offices (121)

- Daily updating of unified Land Registry
- Cadastral mapping
- Land valuation, land protection, land use
- Data service
- First level authority in LA cases

FÖMI



- R+D activities
- Support of Land Offices
- Operation of TAKARNET
- Topographic mapping
- Remote Sensing activities
- State Boundary Survey
- Quality Management
- Cosmic Geodesy

National Cadastral Program

- Huge cadastral mapping projects



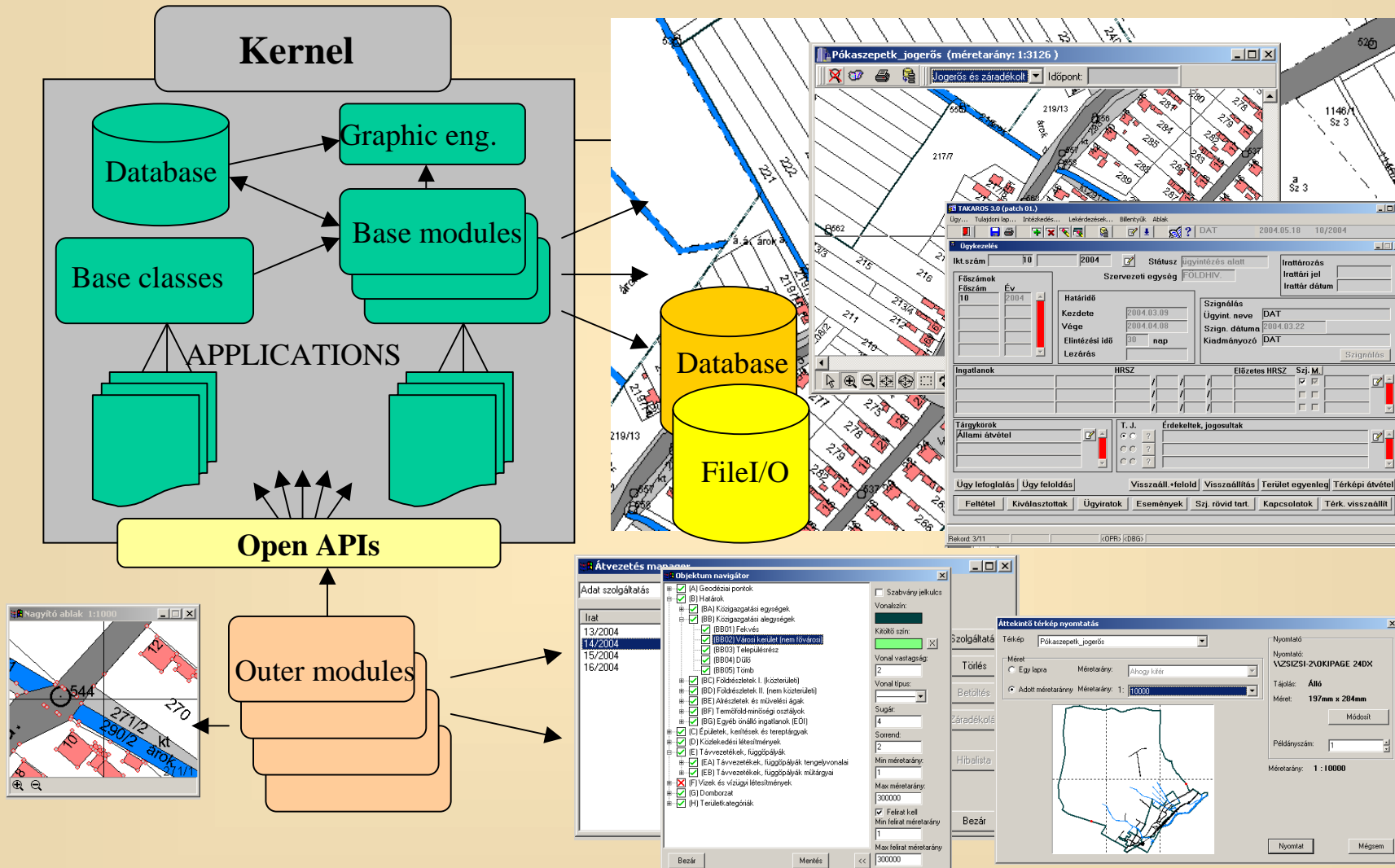
Unified Hungarian Land Registry, present situation

- Since 1997 all legal part 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 Unified Land Registry

- **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 (legal part)**

DATR Architecture



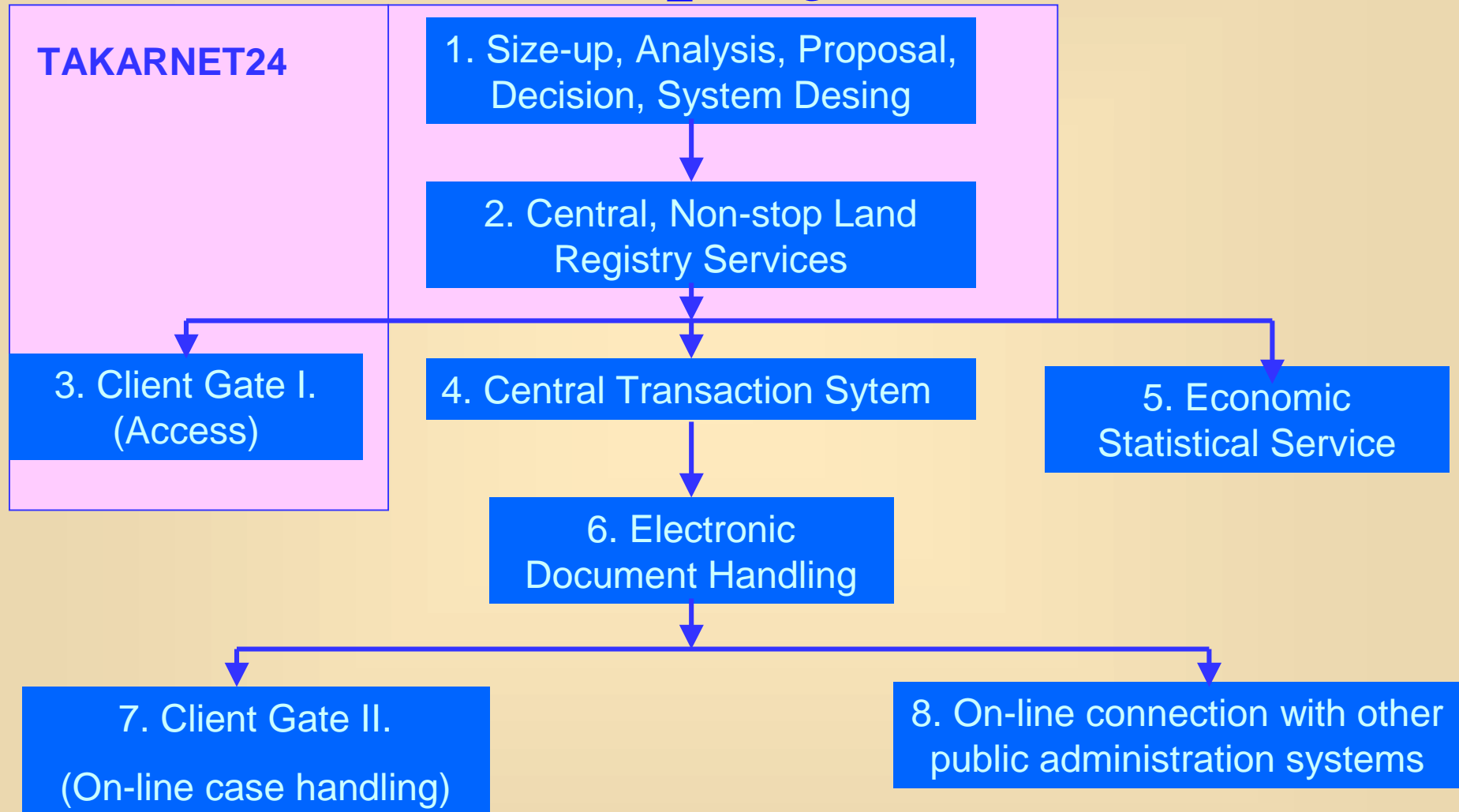
On-going projects in LA I.

- **Implementation of DATR**
 - At the beginning of 2009 Ministry of Agriculture and Rural Development decided that DATR should be the official IT system of countryside Land Offices (after a strict testing of the system)
 - Uploading of existing vector data into the system and integrating them with the legal part has started in May, 2009 in 118 District Land Offices
 - Estimated finish of implementation is the end of 2009

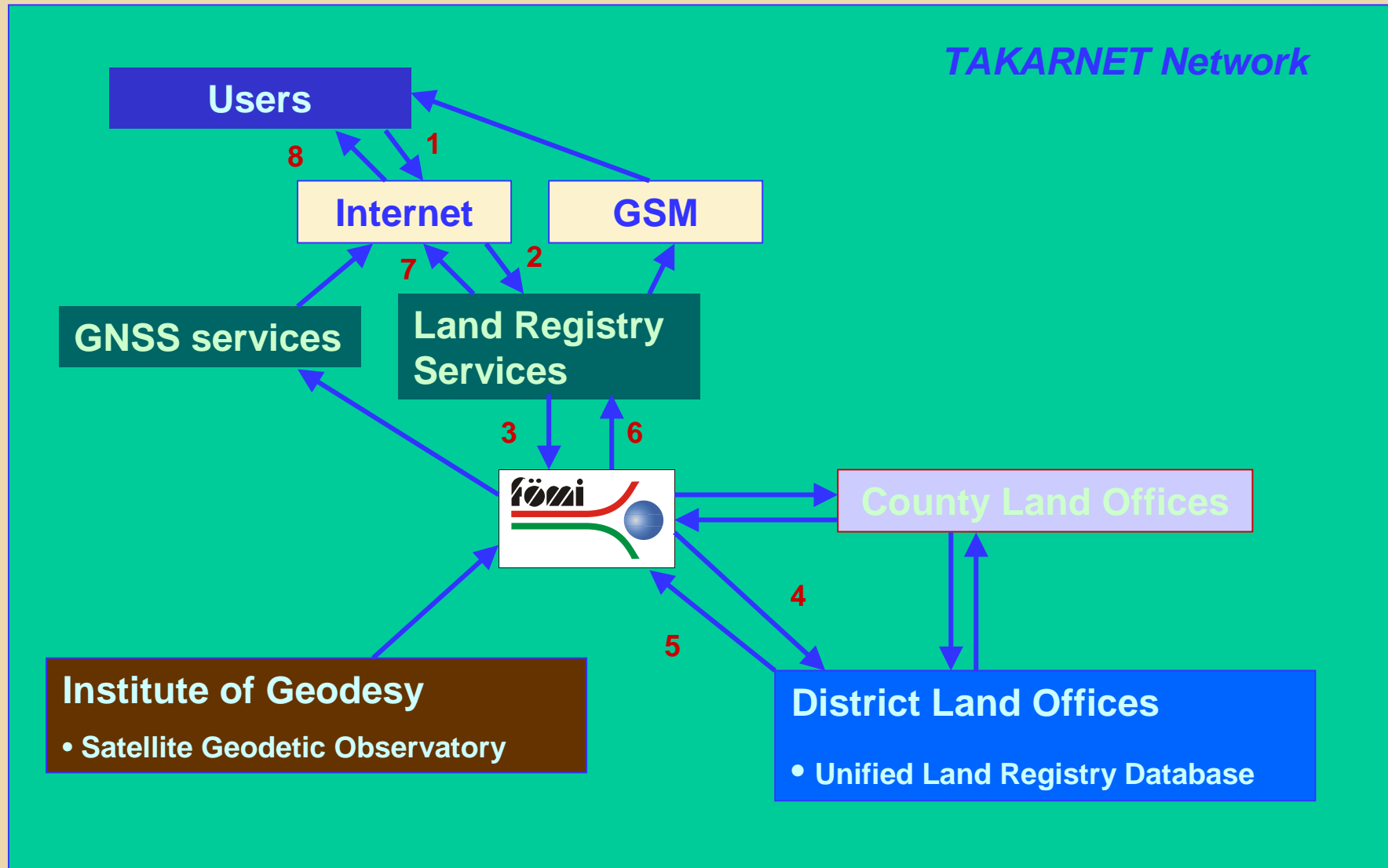
On-going projects in LA II.

- **Problems to be solved:**
 - Former IT systems on cadastral maps used non-topological data model (spaghetti or topology without faces)
 - Integrating of map data with the legal part sometimes is very hard (e.g. area differences between legal part and the map, different status)
 - Case handling (former systems can handle cases alone, without the legal part)
 - Multiple status objects (because of the wrong former topological model and tools)

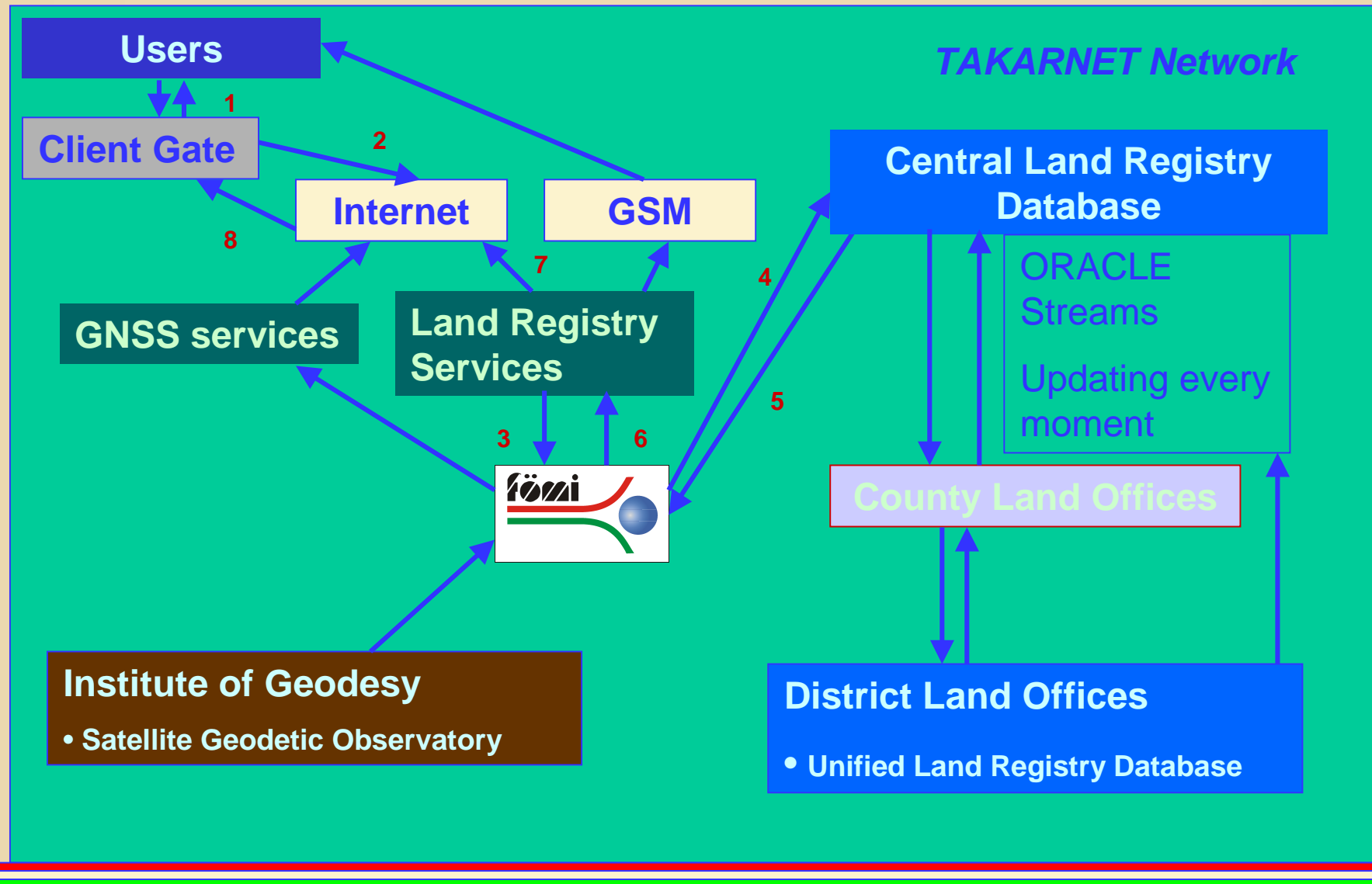
TAKARNET24 project



Present Situation



TAKARNET24 solution



Important products of the project

- Unified codes countrywide, central registration and maintenance of codes
- Countrywide Map browser based on orthophotos and cadastral maps
- Connection to Client Gate (operated by the Government)
- Connection to Central on-line Payment System
- Property Change monitoring
- Data warehouse functions:
 - Data mining
 - Statistics

Core of TAKARNET24-DATR

- **DATR is an object-oriented integrated information system for the unified registry (both cadastral maps and legal part)**
- **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**

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

Conclusions

- After a long time conciliation DATR has become the core IT system of the Unified Hungarian Land Registry
- Digital Land Office concept has defines the further development directions of Land Registry Services in Hungary
- Implementation of the firts three steps are going on
- Economic crisis strongly influence the execution of ideas
- TAKARNET24 project will be finished in time, September 2010
- DATR development has shown that the cooperation of land professionals and IT specialists results the best solutions

Thanks for your attention

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See you at:

<http://www.fomi.hu>

