THE HUNGARIAN SDI STRATEGY

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General Aspects of SDI (1)

- Players of GI
- Data
- Sw/Hw/Networks
- Data Exchange
- Data policy
  - Availability
  - Interoperability
  - Data integration
  - Data cooperation
  - Data price
- Standards
- Legistlative background
- Public-Private partnership

General Aspects of SDI (2)

Spatial data groups

- Principle spatial data
  - Spatial data for common spatial referencing
  - Principle thematic spatial data
- Spatial data of applied interest (social, technical, business, economy, political, etc.)

General Aspects of SDI (3)

- Spatial data for common spatial referencing
  - Spatial referencing framework data
    - Coordinate reference systems
    - Geographical grid systems (projection systems)
    - GNSS (GPS) infrastructure/Geodetic networks
  - Spatial referencing map data
    - Topographic maps
    - Cadastre system (legally referencing spatial data)
      - Maps of cadastral parcels
      - Identifiers of properties (real estate registration)
      - Administrative units
    - Georelated remote sensing data (orthoimagery)

General Aspects of SDI (4)

Principle spatial data (2)

- Principle thematic spatial data
  - Transport network
  - Hydrography
  - Environmental data
  - Land cover data
  - Statistical data
  - Regional development data
  - Agricultural data (e.g. LPIS)
  - Land use data
  - Land tenure data

General Aspects of SDI (5)

SDI Goals in General

- Enabling sustainable development
- Giving better information to support policies
- Improving access and use of GI data
- Improving the flow and sharing information
- Enabling the functioning of information society

General Aspects of SDI (6)

SDI Operation in General

- Provides spatial information services
  - From a wide ranges of sources
  - From local to global
  - In interoperable way
- Target users includes policy makers, planners and managers
- Addresses both technical non-technical issues

General Aspects of SDI (7)

SDI Levels

Geographical/Managerial/Functional/Resolutional

- Global, e.g. GSDI, UNSDI
- Regional, e.g. the European INSPIRE
- National, e.g. Hungarian NSDI
- Local SDI-s

Hungary on the Globe

REPUBLIC OF HUNGARY

Area: 93 033 km²

Population: 10 million

Member State of European Union

Capital: Budapest

7 Statistical Regions

19 Cunties

3244 Settlements

Superposition: TAKARNET Connecting The Land Offices and FÖMI

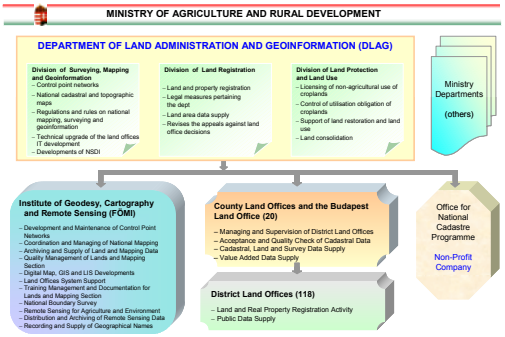
On Recent SDI Status in Hungary (1)

Features of the SDI in Hungary

- Well functioning institutional framework for principle spatial referencing
- HUNAGI – an ambrella association for GI interest community in Hungary
- Strategic Integrator of Surveying Services in Hungary: Hungarian Association for Surveying, Mapping and Remote Sensing
- Well functioning spatial reference base
- Intranet connected Two-level Land Office Network (TAKARNET)
- Integrated Cadastre Map and Legal Immovable Property Registration
- Legistlation framework
- CEN/ISO standards in use:
  - Standard on Cadastre System
  - Standard on Digital Topographic Maps
- Operational use in agriculture and environment
- Territorial information System in physical planning

On Recent SDI Status in Hungary (2)

Institutional framework for principle spatial referencing data



On Recent SDI Status in Hungary (3)

Legistlation framework for spatial referencing

- Act 1996 LXXVI OF THE HUNGARIAN PARLIAMENT on the surveying and mapping (under revision) +the respective ministerial derectives)
- Act 1977 CXLI OF THE HUNGARIAN PARLIAMENT on the real estate registry (+ the respective ministerial directives)
- Act on Land Parcel Identification System
- Act on the Hungarian Lands
- Acts of different sectors of the Hungarian economy and society
- Act on Territorial Information System in Physical Planning
- Governmental document of the Hungarian National Spatial Data Infrastructure Strategy (NTIS) – under preparation

On Recent SDI Status in Hungary (4)

Information Society and e-Govermnent

Legistlation framework

- Hungarian Constitution, Act 1949.XX
- Act 2005 XC OF THE HUNGARIAN PARLIAMENT of July 2005 on the free flow of e-information
- Act 2004 CXL OF THE HUNGARIAN PARLIAMENT on The Public Administration procedure
- Directive 1044/2005 (V.11) OF THE HUNGARIAN GOVERNMENT on The Actual e-Government Duties of Modernizing the Public Administration

On Recent SDI Status in Hungary (5)

Availability of Data for Common Spatial Referencing

- Well maintained geodetic control network
- Digital Immovable Property Registry data, full coverage, 1-day actual
- Digital Vectorised Cadastral Data, full coverage, 1-day actual
- Digital Topo Map 1:50k, full coverage
- Digital Topo Map 1:10k, full coverage
- Digital orthophoto (2000, 2005), full coverage
- Rich aerospace imagery achive
- Land cover database (1:100k two epocks, 1:50k), full coverage
- Nation-wide Land use data base
- Land Parcel Idenfitication System, full coverage
- Vinegard Registration, full coverage
- Active GNSS Network recentrly introduced + EUPOS cooperation
- All NUTS Administrative boundaries database, Bomonth-actualization

The Hungarian National Spatial Data Insfrastructure Strategy, the „NTIS" is part of the Hungarian Information Society Strategy (MITS)

- 1992-2004: Different promotions for SDI, with partial results
- 2004-2006: An NTIS subcommission formed and functioned in the frame of Interministerial Information Committee, MITS
- October 2006: The Hungarian SDI Strategy (NTIS) elaborated
- May 2007: The INSPIRE Directive of EU come into force and therefore the NTIS document submitted to bring out as a government decree.

The SDI Strategy (Future) in Hungary (1)

- Vision
- Elements of the Strategy
- Organizational Framework for Realization
- The Program of Realization of NSDI
  - Main fields of program intervensions
  - Objectives in figures
- Milestones of the Strategy

The SDI Strategy (Future) in Hungary (2)

Vision: The Hungarian NSDI will be

- Providing tool for public administration, self-government and state government
  - To enable sustainable development/envoronment
  - To improve quality of citizens life
- Providing coordinated, cooperating and costefficient creation, acquisition, access and usage fo GI data (view, interactive use, download)
- Improving the flow and sharing the information by improved and coordinated/cooperating data policy (financing, pricing, balancing)
- Promoting to decrease the State's role in financing the matter and to grow the income of the SDI-players
- Being effective actor, engine and resource of the information society

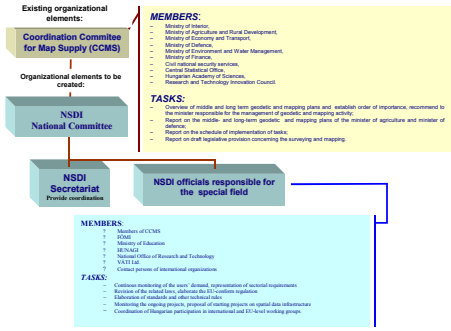
The SDI Strategy (Future) in Hungary (3)

Elements of the Strategy

- Establishing the organizational framework for creation and operation of the Hungarian NSDI
- Revision of legal background and data policy
- Harmonization of Spatial data standards and data base specifications with the EU ones
- Creation and maintenance of the data spatially referencing the geographic information as needed for operating the Hungarian NSDI
- Metadata services and access to spatial data
- Knowledge based GI applications and GI tools for education
- Cooperation with EU institutions and working groups of relevance.

The SDI Strategy (Future) in Hungary (4)

Organizational Framework



The SDI Strategy (Future) in Hungary (5)

Main fields of interventions in an NSDI realization program

- Assessment of the legal background and existing GIS
- Elaboration of the principles of operating the NSDI, elaboration of alternative ways. Making the decision.
- Spatial data standardization
- Elaboration, enforcing and implementing a commonly usable data policy
- Modification of the respective elements of the legal background
- Correct specification of informatical architectures and tools
- Designing the roles of procedure in SDI
- Designing and completing the application software
- Designing and/or adapting the publis administration GIS
- Creation and/or harmonization of the respective e-content
- Purchasing and installing the hw/sw and other tools
- Training and aducation.

The SDI Strategy (Future) in Hungary (6)

Objectives of the NSDI Realization Program expressed in figures

Objectives	Year of comparison 2005	Year of performance 2013
Existance level of Organizational Framework	10 %	100 %
Readiness of the legal backround and data policy	10 %	100 %
Readiness of spatial data standards	20 %	100 %
Readiness and currency of the spatial referencing and the thematic databases	20 %	100 %
Readiness of metadata	30 %	100 %
Readiness of training and education knowledge	30 %	100 %
Number of institutions involved into the NSDI in a regulated way	??	Owners of principle spatial data
Satisfaction of users of GI public services	30 %	80 %

The SDI Strategy (Future) in Hungary (7)

Milestones of the Strategy

Deadline	Milestones of EU	National milestones
May 15. 2007	The INSPIRE directive of EU coming into force	Lunch of Governmental Decree on Hungarian NSDI Strategy
2007 + 3 months	Establischment of the INSPIRE Committee	Representation in the EU INSPIRE Committee
2007	Acceptance of the introduction rules	
2007-2008		National acceptance of the introduction rules. Preparation of the necessary rules of law
2007-2014		Development of spatial datasets in the frame of Hungarian National Development Agency
2009	Nomination of officials responsible for spatial datasets	
2007		INSPIRE Directive put into force nationwide
2009	The monitoring system is ready for services	
2009	Network services are operated	
2010	Metadata of spatial reference core data are accessible	
2011	The datasets of spatial reference core data renewed according to the harmonised data specification are available	
2012	Acceptance of the harmonised data specifications for spatial reference core data and thematic spatial datasets	
2013	Metadata of thematic spatial datasets are accessibl	
2014	The datasets of thematic spatial datasets renewed according to the harmonised data specification are available	
2014	Report of the Committee for submission th the Parliament of EU	Report to Hungarian Government and Parliament

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