

STATE GEODETIC ADMINISTRATION

Croatian SDI: a Tool for Accelerated Development of the Geo-Conscious Society

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STRUCTURE

- Structural reforms and need for the NSDI
- Milestones of NSDI establishment
 - Legal framework
 - Institutional framework
 - International cooperation
- Activities planned in 2009
- Stakeholders partnership



STRUCTURAL REFORMS AND NEED FOR SDI

- Country in transition – need for high-quality spatial information
- New legislation related to the ownership and other real rights, land register, state survey and real estate cadastre, physical planning and construction and agricultural land – framework for a comprehensive land administration reform
- Real Property Registration and Cadastre Project worth 47 mil. EUR
- All new laws concerning spatial information define obligation of establishment a GIS database whose platform are official spatial backgrounds



MILESTONES OF CROATIAN SDI ESTABLISHMENT

- **2001** - the European Commission launched the *Infrastructure for Spatial Information in Europe* (INSPIRE)
- **2001** – SGA’s study “Review of EU requirements for Geographic Information Infrastructure in Croatia”, Bloominfo, Denmark
- **2005** – SGA’s “Study on Development of National Spatial Data Infrastructure in Croatia”, Con Terra, Germany



MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

- **2006** – SGA's study "Croatia: National Spatial Data Infrastructure and Inspire" was produced by Geolink Consulting, UK
- **17th February 2007** - Law on State Survey and Real Estate Cadastre (02/2007) – **the first regulation on NSDI in Croatia entered into force.**
↑↓
- **15th May 2007** – Inspire Directive 2007/2/EC of the European Parliament and of the Council entered into force.

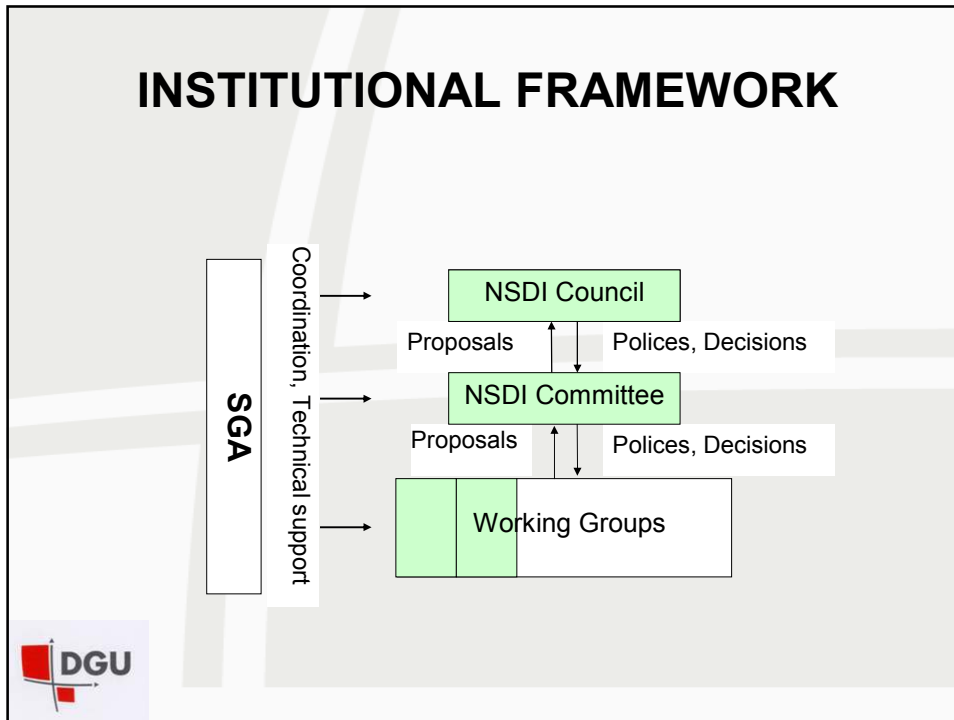


LEGAL FRAMEWORK

- Law on State Survey and Real Estate Cadastre (02/2007) – **the first regulation on NSDI** - 11 articles
- Definition of NSDI, its stakeholders and data involved, rules about metadata and services – **all in line with INSPIRE, but transposition of Inspire not completed**
- Plan and Program of Inspire transposition into national regulation – not yet defined, preparation of proposal submitting undergoing. Expected to define proposal in 2010.



INSTITUTIONAL FRAMEWORK



INSTITUTIONAL FRAMEWORK

- Three-level organisational structure: NSDI bodies, their tasks and rights are defined:
 - NSDI Council – 16 members (various ministries and agencies, representatives of GIS and IT employers), appointed by Government on 4 years mandate
 - NSDI Board – 3 members of Council, 2 members SGA, heads of working groups
 - Working groups – established for specific task or field of activity
- SGA is mandated for providing logistic and coordination support

MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

-SHARING OF BEST PRACTICES-

- **29th and 30th May 2007** - Workshops for political and operation level of GI community – sharing of best practices - National Land Survey of Sweden and Swedish Ministry of Environment
- **12th September 2007** - Workshop for operation level of GI community - Natural Resources Canada, GeoConnections Programme, Canadian GeoProject Centre
- **26th and 27th May 2008** - Workshops for political and operation level of GI community - sharing of best practices from Germany, GTZ and LGN Niedersachsen



MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

- **26th June 2008** – Study “National Spatial Data Infrastructure in Republic of Croatia” was promoted
 - 1000 copies in Croatian language



MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

- **3st July 2008** – 2nd constitution of NSDI Council (1st NSDI Council was founded on 31st May 2007, but never become operational)
- **4th September 2008** – 1st NSDI Council meeting
 - Statute of NSDI Council
 - Work Plan for 2008
 - Constitution of NSDI Committee
 - Constitution of two working groups – technical standards and data sharing



WORKING GROUP ON TECHNICAL STANDARDS

- **OBJECTIVES:**
- Test, verify and mature as necessary the technical specifications provided by INSPIRE Implementing Rules and Guidance Documents on Metadata and Network Services
- Provide feedback to the INSPIRE Drafting Teams
- Provide proposals to the NSDI Committee respectively the NSDI Council
- Provide best practices and other technology information developers need to create in-demand applications



WORKING GROUP ON DATA SHARING

- **OBJECTIVES:**
- to create and propose to NSDI bodies a template agreement on spatial data exchange, access and usage among all NSDI subjects
- to provide a harmonized template of rules and conditions for data and services access and re-use by third parties
- to cooperate with data providers of the public and private sector and helps to streamline the licensing process for data and services by encouraging the NSDI community to adopt a standard for issuing licenses
- the approach is in line with national legislation and INSPIRE



MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

- **September - December 2008** – Inspire directive was included in the National Programme for joining EU for the year 2009
- **27th February 2009** – 2nd NSDI Council meeting
 - Report for the year 2008.
 - Work plan for 2009.



WORK PLAN FOR 2009

- **Institutional framework**
 - Secretariat of NSDI in SGA – new department (new organizational chart of SGA should be adopted till July 2009)
 - Appointment of National Contact Point with EC for INSPIRE
 - Constitution of 3 new working groups in 2009
 - WG E-Government
 - WG Capacity Building
 - WG Business Models
- **Communication and promotion**
 - NSDI leaflet
 - Web page



WORK PLAN FOR 2009

- **Education**
 - NSDI and Inspire national day (November, 26 2009)
 - 4. NSDI workshop in cooperation with Norway-sharing of best practices
- **Standardization**
 - Producing i.e. accepting from Inspire proposed technical specification – WG on Technical Standards
 - Specification on metadata and metadata services
 - license model producing – WG on Data Sharing



WORK PLAN FOR 2009

Tools & services

- **Geoportal SGA – launching in May 2009**
 - Five SGA's data sets in 1st phase including web sales component
 - Metadata harmonized with ISO standards
 - Forerunner of national geoportal: "SGA is responsible for the establishment and maintenance of the metadata public service on the Internet (through a geoportal), in a way that enables NSDI subjects to interactively maintain the spatial data included in NSDI."
 - Metadata catalogue till 2010
- **NSDI web page**

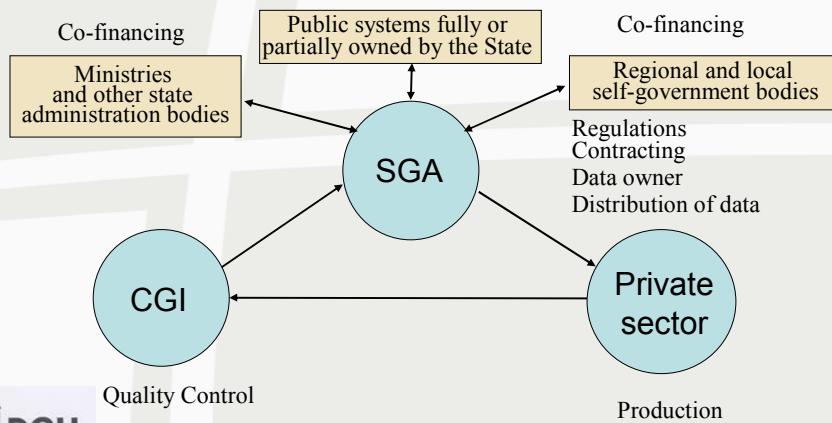


SUPPORTED ACTIVITIES – SDI TOOLS

- CROPOS – December 2008
 - CROatian POSitioning System – network of 30 permanent GNSS stations
 - EU Phare 2005 supported
- E-cadastre - November 2005, (e-land registry – May 2005)
 - Textual data (20-30 mil entries)
- Joint information system - 2010
 - Cadastre & land registry
 - Digital cadastral maps



CO-OPERATION MODEL



EXAMPLES ON CO-FINANCING

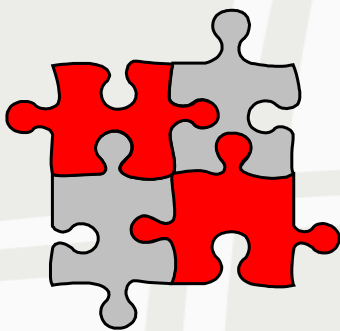
- Agreements on co-financing with public institutions and self-government bodies (all on interest-based voluntary platform):
 - orthophoto production (partly produced through 30 agreements with other subjects)
 - 18 (21) counties participated in production of topographic data
 - each cadastre resurvey cofinanced by local government in past 10 years (> than 200)

GIS BASED ON SGA'S DATA AND STANDARDS

- Ministry of Defence - VOGIS – Military GIS based on CROTIS (Croatian Topographic Information System) and SGA's topographic database data
- Ministry of Culture - GIS for National parks and protected areas based on topographic maps, orthophotos and cadastral maps
- Ministry of Agriculture, Fisheries and Rural Development - Land Parcel Identification System based on SGA's orthophotos and cadastral maps



CONCLUSION



- Croatia is a non-EU country, but on its way to join EU.
- Transposition of Inspire into national regulation has already started, even before Inspire was adapted.
- Basic preconditions for development of NSDI has been created.



Thank you for your attention!

Questions?



CROATIA – IDENTITY CARD

- Land area: 56.542 km²
- Territorial sea: 31.067 km²
- Population (census 2001): 4.437.460 inhabitants
- No. of islands, islets and reefs: 1185
- No of inhabited island: 47
- Capital: Zagreb with 779.145 inhabitants

