

STATE GEODETIC ADMINISTRATION

Activities on Croatian National  
Spatial Data Infrastructure  
Establishment

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# STRUCTURE

- Milestones of NSDI establishment
  - Legal framework
  - Institutional framework
- Activities planned in 2009

# 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

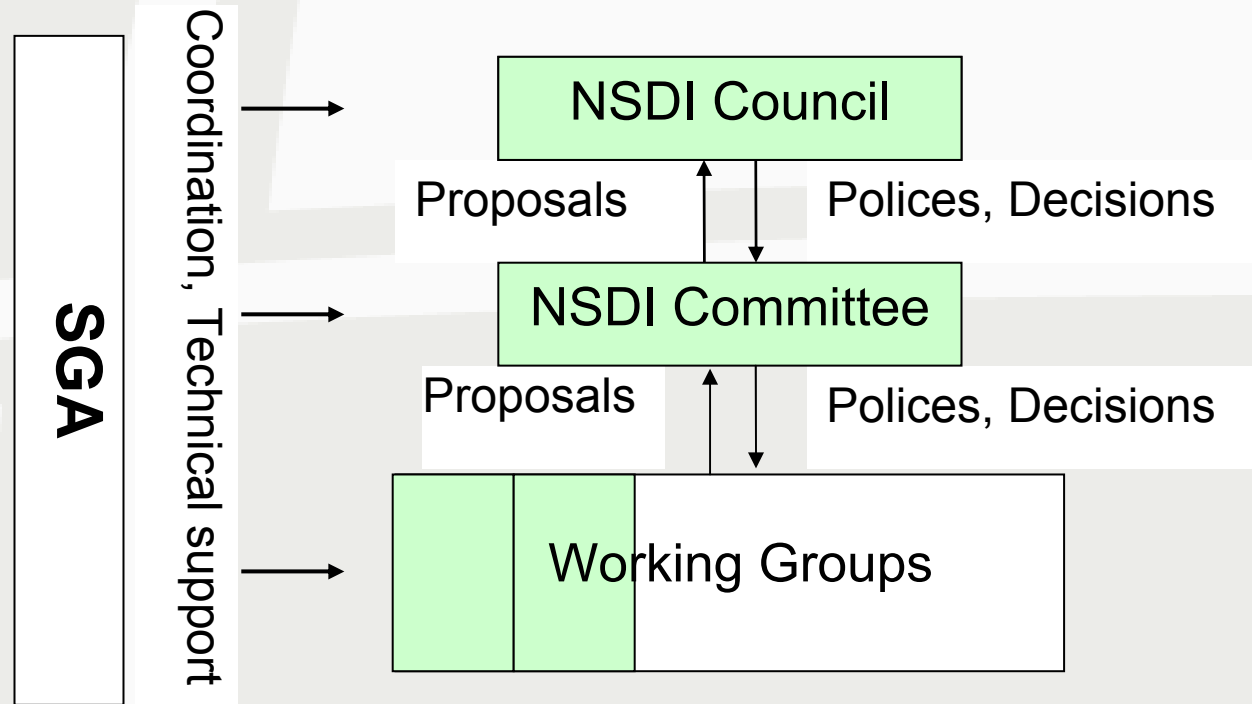
- Law on State Survey and Real Estate Cadastre (02/2007) – **the first regulation on NSDI - 11 articles**
- Definition of NSDI, its stakeholders and data involved, rules about metadata and services – **all in line with INSPIRE**
- Plan and Program of Inspire transposition into national regulation – not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

# LEGAL 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



# INSTITUTIONAL FRAMEWORK



# MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

- **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...

- **3<sup>st</sup> July 2008** – 2<sup>nd</sup> constitution of NSDI Council (1<sup>st</sup> NSDI Council was founded on 31<sup>st</sup> May 2007, but never become operational)
- **4<sup>th</sup> September 2008** – 1<sup>st</sup> 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 TECHNICAL STANDARDS

- **WHAT IS DONE?**

- a chair and a members of the group are elected
- statute and working plan for 12 months is agreed
- WG meets regularly on a monthly basis
- analyzing of Croatian and Inspire standards and norms

- **WHAT IS NEXT?**

- producing of final draft of metadata specification
- producing of final draft of metadata services specification
- defining of frame for testing, verifying and maturing as necessary the technical specifications provided by INSPIRE Implementing Rules and Guidance Documents



# 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



# WORKING GROUP ON DATA SHARING cont ...

- **WHAT IS DONE?**
  - a chair and a members of the group are elected
  - statute and working plan for 12 months is agreed
  - WG meets regularly on a monthly basis
  - EU and Croatian legal context is presented
  - draft agreement for discussion is created
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- **WHAT IS NEXT?**
  - continuously monitoring of international development regarding INSPIRE implementing rules and other activities
  - publishing a first draft of the agreement by the end of the year
  - promoting the activities within all NSDI subjects



# MILESTONES OF CROATIAN SDI ESTABLISHMENT cont...

- **September - December 2008** – Inspire directive was included in the National Programme for joining EU for the year 2009
- **27<sup>th</sup> 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**

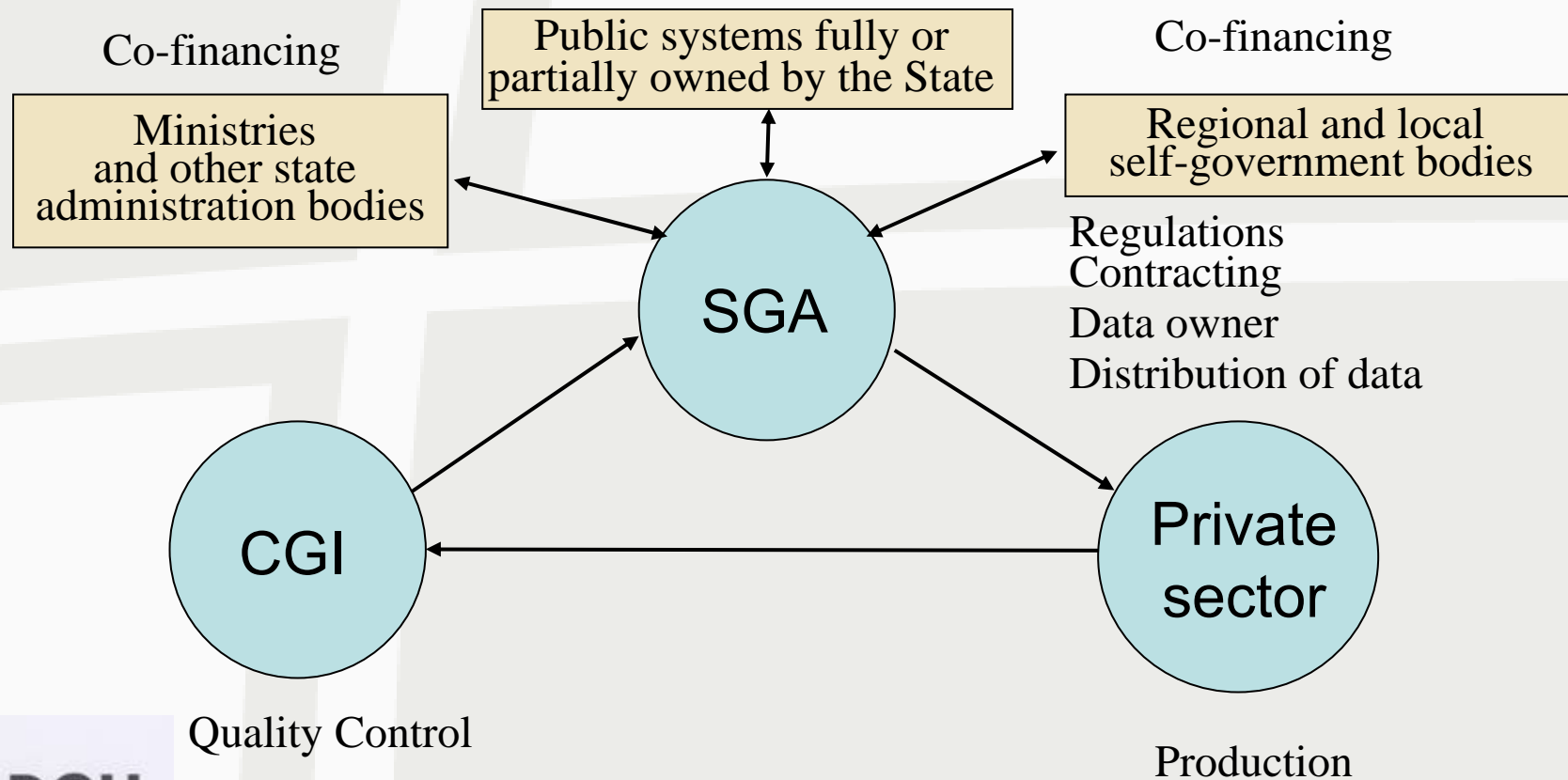


# Supported activities – SDI tools

- CROPOS – December 2008
  - CROatian POsitioning System – network of 30 permanent GNSS stations
  - EU Phare 2005 supported
- E-cadaastre - 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 interestbased voluntary platform):
- orthophoto production (partly produced trough 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)

# SGA PRICING POLICY

- Regulated through bylaw about real costs and about administrative taxes.
- Strategic approach – SGA data are products and have value and price. Prices should be realistic and moderate fostering economical development.
- Example: CROPOS – moderate low prices, introduced annual prescription, resulting in 4 months of usage with 180 users with 300 receivers achieveing monthly 225.000 min. RTK and 114.000 min post processing usage (March 2009).

# 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

