



# Serbian SDI status and development

Republic Geodetic Authority



**INSPIRATION** – Spatial Data Infrastructure in the Western Balkans  
1st Regional **INSPIRATION** forum

Zagreb, 27<sup>th</sup> September 2012





## Institutional framework

- ✓ 2009: The **Law** on State Survey and Cadastre – Legal basic for NSDI establishment
- ✓ 2010: SDI **Strategy** of Serbia, 2010 – 2012
- ✓ 2010: NSDI **Council** is appointed by The Serbian Government
- ✓ 2011: Decision on the establishment, jurisdictions and selection of members of NSDI working groups is taken by NSDI Council
  - **Working group for cooperation** [19 members]
  - **Working group for legal framework** [10 members]
  - **Working group for technical framework** [23 members]
- ✓ 2011: **Medium term program** for NSDI, 2011 – 2015



## Technical framework

- ✓ 2009: Initial **Geoportal** [www.geosrbija.rs](http://www.geosrbija.rs) is launched
- ✓ 2010: **Metadata** – Proposal of metadata profile for geodata
- ✓ 2011: **Metadata** – Metadata Editor  
[INSPIRE + ISO 19115 + ISO 19139]
- ✓ 2009 – 2012: Data conversion and WMS services creation for **data publishing** via the geoportal  
(ortophoto, cadastral parcels, addresses, administrative units, topographic and thematic maps, stakeholders/sector spatial data and etc.)





## 2012: Ongoing Activities

### → **Technical Infrastructure development**

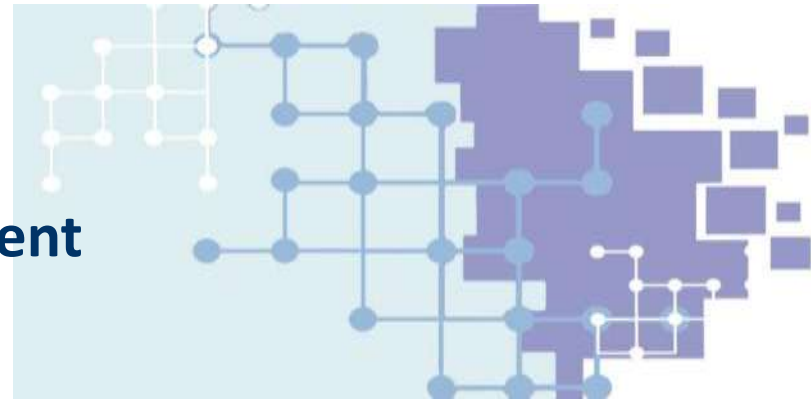
- ⇒ Development strategy
- ⇒ Metadata Catalogue service
- ⇒ Geoportal improvements (new realise and enhanced search function)
- ⇒ New web portals (IGIS project: METIS, INSPIRE compatible, DataDoors/WebBoutique)

### → **Technical Framework Document [draft]**

Core standards for data and services

### → **Institutional framework: Cooperation**

- ⇒ Analysis of current situation of regulation in geoinformation area
- ⇒ Survey of geo-sector status: Analyse of current status and needs
- ⇒ Geodata sharing policy: Recommendation for cooperation model



## Short-term activities

- ★ NSDI **Strategy** for the next period
- ★ Transposition of **INSPIRE** directive
- ★ Draft cooperation **agreement**
- ★ Discussion and adoption of **Technical Framework Document**
- ★ **Geoportal improvements** implementation
- ★ **Technical Infrastructure Development** (new web portals from the IGIS project implementation)
- ★ Available **data** and **services** enchantment

## **Med-term activities: Institutional framework**

- ★ Determination of responsible public entities for INSPIRE themes
- ★ Transposition of INSPIRE implementation rules in national regulation
- ★ Development of financing model for NSDI development
- ★ Entering into agreements among stakeholders
- ★ Cooperation model development
- ★ Cost-benefit analyses of INSPIRE implementation
- ★ Capacity building of employees in geosector
- ★ Education program adaption to achieve SDI requirements
- ★ Reporting and monitoring of NSDI progress



## Med-term activities: Technical framework

- ★ Collection and maintenance of metadata for INSPIRE themes
- ★ Stimulation of geodata sharing via services based on web mapping technology (WMS, WFS, WCS, CSW etc.)
- ★ Existing data model comparison with INSPIRE data specifications
- ★ Follow-up and implementation of INSPIRE technical recommendation and requirements for discovery and view service
- ★ Technical infrastructure development and maintenance
- ★ INSPIRE data specification implementation for some themes from Annex I for newly collected data (the IGIS project products specifications)

# Challenges and obstacles



## Obstacles and solutions



### **Pricing and licensing**

Obstacle: Existing different business models for public entities operation (funded by government, commercial and others somewhere in between), complex legal framework

Solution: Developing and agreeing common pricing and licensing models for access to key geoinformation



### **Partnerships and willingness for cooperation**

Obstacle: Diverse range of development, needs and awareness among involved parties

Solution: Create a climate that enables collaboration by respect for all parties; to encourage spirit of cooperation and willingness to respond by realisation of realistic and useful goals (step by step approach)



### **Data quality**

Obstacle: No digital geodata, data not updated, incompleteness, incompatible formats

Solution: Data conversion to digital form, metadata tools development, standards for interoperability use



# Challenges and obstacles



## Challenges



### **Cooperation on national level**

- Good atmosphere among stakeholders created through active participation in the working groups
- Exchange of different attitudes and respect of specific working conditions
- Understanding how a user want/need/can access to geoinformation
- Increase of understanding of NSDI benefits
- Awareness of necessity for closer cooperation by working together toward a common purpose



### **Cooperation on regional level**

- Similar historical and cultural background
- Use of close technical methodology and tools for cadastre and mapping
- Exchange of experience and good practise
- Building-up ground for respond in cross-border an emergency cases
- Balanced level of NSDI development in the region

# Challenges and obstacles



## ! Human

Human resource stability and development based on team work  
Nothing was gained by pessimism – doing nothing is not option!

## ! Data

Any data is better than no data  
Public availability of data – risk/doubt of data opening

## ! Organisation

Step-wise approach with visible results  
More of a focus should be given to the institutional rather than technical challenges  
SDI must be easy to operate/ user friendly, be adaptable to the changing needs of society and organizations, and be flexible to adjust to advance technology

## ! Others

Rapidly development of new technologies  
Political (is it possible to overcome it?)  
Long-term vision

[www.rgz.gov.rs](http://www.rgz.gov.rs)

[www.geosrbija.rs](http://www.geosrbija.rs)

