Discover, exchange and use the Romanian Geospatial Information Infrastructure
ESRI ROMANIA

Dr. Cristian Vasile, Director
cvasile@esriro.ro

Lucian Zavate, Web Application Manager
Izavate@esriro.ro

Dr. Cristina Oana, Technical Sales Director
cov_gps@geosystems.ro

ANCPI

Mihai Busuioc, General Director
mihai.busuioc@ancpi.ro

Victor Grigorescu, Deputy General Director
victor.grigorescu@ancpi.ro
Agenda

- National legal aspects
  - Functioning and coordination
  - INIS Council Roles
- General challenges
- Technical challenges
- Implementation status of Romanian GeoPortal
- Demo
NATIONAL LEGAL ASPECTS
Legal aspects

Romanian Geospatial Information Infrastructure

• The transposition into national legislation - OG 04/2010
  – Published in Romanian Official Journal on January 29th, 2010
  – Entry in force on February 2nd, 2010

• Has been set up an open and transparent process for the stakeholders participation

• Stakeholders are part of the INIS Council which is under coordination of ANCPI as a LMO in INSPIRE
  – INIS - National Infrastructure for Spatial Information in accordance to OG 04/2010, article 1, section 1

• INIS Council – 19 organizations
  – Technical Working Groups experts

ANCPI plays a central role in reviewing and testing the draft implementing rules and in assessing their potential impacts in respects to both costs and benefits.
Stakeholders – INIS Council

Romanian Geospatial Information Infrastructure

1. Ministry of Administration and Interior – ANCPI – President and LMO
2. Ministry of Environment and Forests- VicePresident
3. Ministry of National Defence
4. Ministry of Public Finance
5. Ministry of Agriculture and Rural Development – APIA
6. Ministry of Regional Development and Tourism
7. Ministry of Transportation and Infrastructure
8. Ministry of Economy, Trade and the Business Environment
9. Ministry of Education, Research, Youth and Sports
10. Ministry of Health
11. Ministry of Communication and Information Society
12. Ministry of Culture and National Cultural Heritage
13. Romanian Academy
15. National Agency for Mineral Resources
16. Special Telecommunications Service
17. Association of Rural settlements of Romania
18. Association of Municipalities of Romania
19. Association of Cities of Romania
INIS Council Roles
Romanian Geospatial Information Infrastructure

Ministry of Environment and Forests – 12 spatial data themes

- I.8 Hydrography
- I.9 Protected sites
- II.2 Land cover
- III.7 Environmental monitoring facilities
- III.8 Production and industrial facilities
- III.11 Area management/restriction/regulation zones and reporting units
- III.13 Atmospheric conditions
- III.14 Meteorological geographical features
- III.16 Sea regions
- III.17 Bio-geographical regions
- III.18 Habitats and biotopes
- III.19 Species distribution

INIS Council Roles

Romanian Geospatial Information Infrastructure

Ministry of Administration and Interior – ANCPI – 8 spatial data themes

- I.1 Coordinate reference systems
- I.2 Geographical grid systems
- I.4 Administrative units
- I.5 Addresses
- I.6 Cadastral parcels
- II.3 Orthoimagery
- III.2 Buildings
- III.6 Utility and governmental services

Ministry of National Defence – 2 spatial data themes

- I.3 Geographical names
- II.1 Elevation

Ministry of Agriculture and Rural Development/APIA – 2 spatial data themes

- III.3 Soil
- III.9 Agricultural and aquaculture facilities
INIS Council Roles

Romanian Geospatial Information Infrastructure

**National Institute of Statistics** – 2 spatial data themes
- III.1 Statistical units
- III.10 Population distribution - demography

**Ministry of Regional Development and Tourism** – 2 spatial data themes
- III.4 Land use
- III.12 Natural risk zones

- I.7 Transport networks - **Ministry of Transportation and Infrastructure**
- II.4 Geology - **Ministry of Education, Research, Youth and Sports**
- III.5 Human health and safety - **Ministry of Health**
- III.20 Energy resources - **Ministry of Economy, Trade and the Business Environment**
- III.21 Mineral resources - **National Agency for Mineral Resources**

**Special Telecommunications Service** – Telecommunication infrastructure
CHALLENGES
Challenges for INIS Council

Romanian Geospatial Information Infrastructure

• Important challenge is to maintain a high level of commitment of all stakeholders and experts to contribute to the development

• Requires a notable amount of expertise, money, time and commitments as resources to ensure an effective implementation

• Difficult financial climate of this period makes it potentially more challenging to support investment in new IT infrastructures, education and training services

• At the local level many public sector administrations still have limited or no knowledge of INSPIRE Directive due to an insufficient dissemination efforts
  – more involvement will see when the data themes INIS’s organizations are responsible for, mainly in Annex I and II are addressed by INSPIRE

ANCPI is nominated as a National contact point with the European Commission and is in the process to set up an appropriate coordinating mechanism inside INIS Council.
Technical Challenges

Romanian Geospatial Information Infrastructure

• Very few people understand or use the complexity of the technical documentation of the INSPIRE architecture
• Even in using the guidelines for creation of metadata files that are compliant both with the INSPIRE Implementing Rules as well as relevant European and International standards
• The capacity to sustain training process, technical competencies, consistence of training materials and translation into Romanian language have to be build up immediately

ANCPI have been significant efforts in respect to the IT infrastructure and signed an Enterprise License Agreement with ESRI to sustain coordination of the INIS Council activities.
Key elements for INIS Council

Romanian Geospatial Information Infrastructure

To overcome these barriers:

• Metadata to describe all existing geospatial information resources
• Harmonization of key spatial data themes to support environmental policies
• Agreements on network services and technologies to discover, view, access and download information resources
• Policy agreements on sharing and access, including licensing and eCommerce
• Coordinating and monitoring mechanism at the national, local and regional level

ANCPI have been significant efforts in respect to the IT infrastructure and signed an Enterprise License Agreement with ESRI to sustain coordination of the INIS Council activities.
Implementation Status of the ROMANIAN GEOPORTAL
Romanian INIS GeoPortal
Romanian Geospatial Information Infrastructure

- Phase 1 - Initial release provides access to:
  - Romanian Base Map – at 1:5,000 scale
  - Orthophotos at 1:5,000 scale, 2005/2008

http://geoportal.ancpi.ro/geoportal
Romanian INIS GeoPortal
Romanian Geospatial Information Infrastructure

• Major functionalities allow end users for:
  – discovery and viewing of
    • spatial data sets and services
    • geospatial applications
  – preview live data and maps
  – prepare maps that combine different geospatial information products
  – search and discovery metadata records directly
  – publish and expose their own geospatial resources for discovery
  – register as a portal user
Romanian INIS GeoPortal
...share and access geospatial resources of any type from anywhere
Romanian INIS GeoPortal

Romanian Geospatial Information Infrastructure

- Phase 2 – 2010/2012
  - Data models harmonization across INIS Council
  - Data download
  - Transformation services
  - Security and access control
  - Monitoring Quality-of-service
  - Electronic License & eCommerce to support whole process online
DEMO

ROMANIAN INIS GEOPORTAL