Provision of interoperable datasets to open GI to EU communities
An European example of SIM

Dr. Szabolcs MIHÁLY and Pál LÉVAI, Hungary

Location of Hungary

Main Statistics:
- State: republic
- State foundation: 25 December 1000
- Member of EU: 1st May 2004
- Capital: Budapest
- Area: 93 030 km²
- Highest point: Kékes (Gyöngyös) 1014 m
- Lowest point: Gyálarét (Szeged) 78 m
- Population: 10 033 000 (Nov 2008)
Introduction page of the GIS4EU project

The project supports the INSPIRE (2007/2/EC) Directive

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Analysed problems

- Necessity of making interoperable the datasets provided by different data providers,
- Difficulties in introduction of INSPIRE Directive, as a legislative framework for all European Member States,
- Fragmentation of available datasets and data sources (time and scale),
- Duplication in gathering information (time-costs-results),
- Difficulty in the harmonisation at different spatial scales (also inside the same data source).

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The proposal

- To share base cartography in order for it to be accessible (INSPIRE compliance) and interoperable (cross-border/scale/language) for aggregation purposes and operationally validate the INSPIRE Implementation Rules,
- To provide reference data from the following themes: administrative units, transport network, hydrography, and elevation in a common format to allow their aggregation,
- To share data, without building a central database, but through services and standards, and create the GIS4EU server which will enable access through standard services to data from different sources, by applying on-the-fly harmonisation,
- To analyse lack of information and dataset level,
- To provide guidelines and training.

Spatial themes of work

The project will take into consideration some of the themes included in INSPIRE Directive, in particular:
- Administrative units (Annex I),
- Hydrography (Annex I),
- Transport Network (Annex I),
- “3D” elevation models (Annex II).
Scales of reference

The project will work on the following scales for the integration of datasets:
- European,
- National,
- Regional,
- Local.

Focused aspects

- The following three aspects will be focused:
  - cross-scale,
  - cross-border,
  - cross-language.
Themes of work

European countries involved
Conceptual phase

- State of the art, also in accordance with the results achieved by other projects,
- Requirements collection,
- Specifications of data harmonisation process and standards validation,
- Multilingual and multicultural aspects:
  - Conceptual layer,
  - Translation and Dictionaries,
  - Ontology,
  - Research criteria.

Implementation phase

- Definition/refinement of interoperable SDI:
  - Common data model,
  - Guidelines.
- Operational validation of applied standards:
  - Definition of validation processes,
  - Guidelines.
- Evaluation and improvement:
  - Preparation of workflow specifications (a part from technology, enlargeable, flexible),
  - Quality assurance.
Dissemination phase

– Public impact:
  – Creation of a community,
  – Conferences, discussion/working groups, seminars,…
  – Reports, scientific publications,…

– Evaluation and impact:
  – Data availability and interoperability,
  – Accessibility and usability,
  – Dissemination of standards,
  – Common data model,
  – Guidelines.

Thematic Working Groups

Rules for the composition of TWGs:

• One for each theme,
• TWGs define for the corresponding theme:
  – Common data model (definition),
  – Aggregation rules (relation),
• Strict involvement in the provided themes,
• Each data provider is included in at least 2 TWG,
• Different composition of TWG for definition and relation,
• Composed by Data providers + Research partners + Technological partners.
Conceptual goals

Procedures
Enlargement of the working group

– Groups and institutions which will support the project:
  – EUROGI,
  – EUROGEOGRAPHICS
  – IGIG,
  – JRC.

– Moreover, the project intends to involve further data providers for increasing the area of European datasets.

International appearances of GIS4EU

• 11th GSDI Word Conference Rotterdam, The Netherlands June 15, 2009. GIS4EU Workshop 2.3 - Tools and Experiences in Implementing INSPIRE Data Specifications II: GIS4EU and Operational Validation of the INSPIRE Common Data Models


• ESIG2010 Conference Lisbon, Portugal, February 10, 2010. GIS4EU Workshop - When European Countries meet to share the Geographic Information
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Results: the thematic geoportal and the WP Deliverables...

Newsletters...

Proceedings...
User Requirements vs GIS4EU results

Meetings

- **Kick-Off** Venice, 3-4. December 2007,
- 7 Technical meetings (Turin, Munich, Barcelona, Székesfehérvár, Cracow, Nottingham, Lisbon),
- Mid-Term Project Review Meeting (Luxembourg),
- 5 National workshops (Venice, Genoa, Bari),
- 2 trainings (Munich, Milan),
- 3 international workshops (Székesfehérvár, Rotterdam, Lisbon),
- **Closing** 30. April 2010.
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Dr. Stefania De Zorzi
Project Coordinator

Phone: +39.041.2402523
Fax: +39.041.2402512
Email: dezorzi@corila.it

www.gis4eu.eu

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