Networking of Spatial Data

eSDI-NET+

*European Network on Geographic Information Enrichment and Reuse*

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**SCORUS Conference**

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Spatial Data Infrastructure (SDI)

“A Spatial Data Infrastructure or SDI is a framework of spatial data, metadata, users and tools that are interactively connected in order to use spatial data in an efficient and flexible way.“
Situation Today

- Fast growing of geographic digital content
- Inadequate dissemination
- Re-use of data often difficult (technological, organisational, legal, cultural and linguistic barriers)

Negative impact on the costs and on the real accessibility of geographic information
The Approach: INSPIRE & ESDI

• *Enrichment of geographical data by metadata*

• *Development of a European Spatial Data Infrastructure (ESDI)*

• *Extensive geographic information reuse*

• *Improve administration in the EU by securing the availability of qualified, useable spatial data*
INSPIRE & GMES

- GMES (Global Monitoring for Environment and Security) is a European initiative for the implementation of information services dealing with environment and security.

- GMES as drivers of service development and INSPIRE as a driver of integration in respect of these services.

- GMES is the European participation in the worldwide monitoring and management of our planet Earth and the European contribution to the Group on Earth Observation (GEO). The global community acts together for a synergy of all techniques of observation, detection and analysis.
Future Perspectives of SDI’s

- **SDIs are being developed.** The public and private sector is delivering real services to citizens.

- **SDI will play a key role in the modernization of public administration,** increasing quality of service, and improving cost-effectiveness.

- **Importance of SDI for economic development** being increasingly recognized

- **Environmental directives** as driving force to set up cross-border solutions, and tie Europe together.
Consequences

• Need to build a forum for the many initiatives and SDI stakeholders across Europe especially acting on local level. Nowadays, those are scattered and sometimes difficult to trace.

• Need for pan-European knowledge transfer about the usage and abilities of GI across politics, industry, science and society

• Need to document, share and build on their operational experience.
Our approach

• A coordinating body at a neutral level to manage and distribute input from European SDI stakeholders

• Development of a broad reference group from industry, science politics and users:

   eSDI-Net+
eSDI-Net+

Network for promotion of cross border dialogue
and exchange of best practices on Spatial Data
Infrastructures (SDI’s) throughout Europe

Establishment of a Thematic Network
funded within the eContentplus programme
of the European Commission
ECP-2006-GEO-320005
Objectives of eSDI-Net+

• To establish a Thematic Network as platform for communication and exchange among stakeholders involved in the creation and use of SDI’s

• To bring together potential SDI stakeholders in order to increase awareness and to facilitate the creation of
  - guidelines
  - standards
  - best practices

• To establish communication mechanisms between European and local levels to maximize benefits of INSPIRE, GMES and GALILEO and e-government programmes

• To develop solutions for multicultural and multilingual access, exploitation, use, and reuse of digital GI content in Europe
Some Urban Planning Challenges

• Climate change has become a central issue
• The future availability of energy
• Transport, land use & the effectiveness of transport investment
• Managing transport, land use and energy together to maximise cost efficiency and effectiveness
• Urban sprawl
• Economic growth and decline
• Social inclusion/ exclusion
• Crisis Management (Environmental Hazards, Accidents & Incidents, Civil Disorder)
Topics of Urban Planning SDI

- Citizen satisfaction with the local community
- Local contribution to global climate change
- Local mobility and passenger transportation
- Availability of local public open areas and services
- Quality of local outdoor air
- Children’s journeys to and from school
- Sustainable management of the local authority and local businesses
- Noise pollution
- Sustainable land use
- Products promoting sustainability
- Ecological footprint (impact and damage of ecosystems)
Identification and Analysis of Best Practices

• Workshop, aimed at establishing common parameters, used to assess SDI initiatives

• National and application oriented workshops aimed at characterizing SDI implementations (i.e. Urban Planning)

• Workshops focusing on common issues, usability, socio economic impact of SDI.

• Workshops addressing the issues of integration between SDI’s and e-government policies
Best Practice Showcase

- Selection of best applicable solutions
- Demonstrating success show cases
- SDI Best Practice Award
- Dissemination of show cases
- Stimulate the re-use and exploitation
Thematic Network - Initial Partners

Geographic coverage
Organisations from 15 European countries from the different regions in Europe

Involvement of Stakeholders
- Providers of digital geographical data
  (local, national and regional public authorities, private organisations and institutions)
- Users of digital geographical data
  (research institutes, universities, software manufacturers)
- National and international GI umbrella Associations
- Consultancy and Network Management

Relationship foreseen with general purpose Pan European associations with interest in GI, not directly part of the network
Relation to other European Initiatives

Network Environment
related initiatives & projects, politics, user community, market

INSPIRE Initiative
• Regulations

GMES Projects
• HUMBOLDT
• ORCESTRA
• others

GALILEO
• Infrastructure

eSDI-Net+ Network
network members, partners and members of participating organisations

Dialogue
User needs
Recommendations
Exchange of SDI best practices
Stakeholders’ view
Information about available tools and approaches

eSDI-Net+ consortium
• Representatives from SDI key players throughout Europe

Potential members
• Further SDI stakeholders covering the whole Europe

Related networks and organisations
• SDI stakeholders
• GI key players
• JRC, EUROSTAT, ESA
Administration Structure

Network Environment
User community, market, related projects, initiatives, politics

Network Co-ordination Committee
- Long-term decisions
  ➜ *One representative / partner*

Netowrk Co-ordinator
- Project administration
- Dissemination management
- Contact point to EU
- Contact point to externals
  ➜ Network Co-ordinator

Executive Board
- Short-term decisions
  ➜ GI Content Expert
  ➜ Technological Expert
  ➜ Dissemination & Networking Expert
  ➜ Workpackage Leaders

Advisory Board
- Feedback to strategic developments, project review
  ➜ Team of experts, e.g. from JRC, Eurostat, ESA

Workpackage Leaders
- Management & monitoring of tasks, deliverables and progress

Synchronisation
Reporting
Review & Recommendations
eSDI-Net+ : At a Glance

- Development of a Forum for European Spatial Data Providers and Users

- Building a platform for Research, Industry and Government: Facilitating the exchange of Know-How on Spatial Data Information

- Collect information on SDI related topics for further distribution and discussion among European SDI stakeholders

- Enhance innovative collaboration on a strategic and operative level to maximize individual efficiency and effectiveness in communication
GET INVOLVED!
Consortium Members

1. The Foundation “INI-GraphicsNet Stiftung”, Germany (IGS)
2. AGH University, Poland (AGH)
3. AM/FM GIS Italia, Italy (AMFM)
4. Association for Geospatial Information in South-East Europe, Bulgaria (AGISEE)
5. Association of Geographic Information Laboratories for Europe, Netherlands (AGILE)
6. Association USIG (Users of Geographic Information), Portugal (USIG)
7. CNR-IMATI, Italy
8. EUROGI, Netherlands
9. Fraunhofer Gesellschaft, Germany (FHG-IGD und FOKUS)
10. GISIG, Italy
11. Hungarian Association for Geo-information (HUNAGI)
12. Research Institute for Artificial Intelligence, Romania (ICIA)
13. Intergraph, Czech Republic (INGR)
14. Kuovola Region Federation of Municipalities, Finland (KRF)
15. Linköpings Universitet, Department of Computer and Information Science, Sweden (LIU-IDA)
16. Regione Piemonte, Italy (PIEMONTE)
17. Katholieke Universiteit Leuven, Belgium (K.U.Leuven R&D)
18. The South East European Research Centre, Greece (SEERC)
19. The University “Jaume I” (King James I), Spain (UJI)
20. University of Rome “La Sapienza”, Italy (URS)
21. Università TELMA, Italy (TELMA)