



The Infrastructure for Spatial Information in the European Community vs. regional SDI: the shortest way for reaching economic and social development

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Ninth United Nations Regional Cartographic Conference for the Americas
New York, 10 – 14 August 2009
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About the presentation

- Very few information about Eurogi - www.eurogi.org ;
- No direct information about Sapienza Università di Roma - Italy - www.labsita.org
- Thoughts and reflections about SDI and e-government ;
- Some essential information about INSPIRE and vicinities;
- Brief discussion about geo-services ;
- Conclusions and recommendations .

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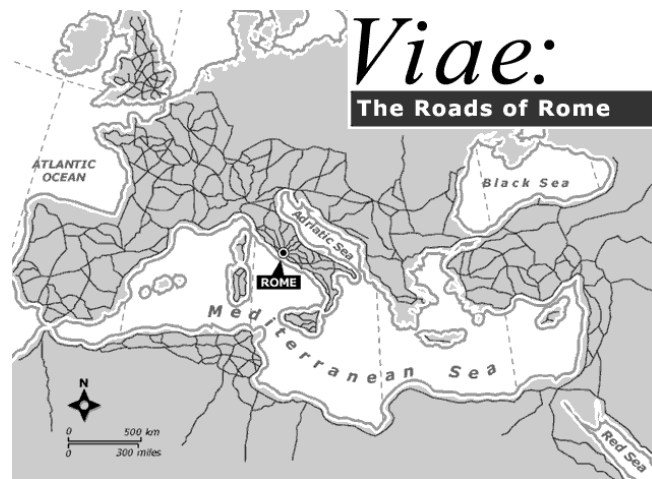


About EUROGI: Profile

- Celebrating 15 years of activities in 2009 (establ. 1994)
- Established as a Foundation ('Stichting') under Dutch law and the patronage of European Commission
- Core membership by national representation
- 23 members - Network of networks -
- Collectively representing more than 6500 organisations
All sectors: Public, Private, Academy, ...
- Inclusive - Open to the participation of all stakeholders
- Broad European coverage through members and projects
- Member centric organisation focused on GI usage
- Long time committed to INSPIRE
- Continuously collaborating with EU/EC and other Associations
- Policy oriented, Awareness raiser and Capacity builder



Infrastructures = territorial control





Infrastructures = territorial control

Carthusian
monasteries
in the 15th
Century.



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Infrastructures = territorial control



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e-government → services

e-government : *"the use of IT in public administrations combined with organizational change and new skills in order to improve public services and democratic processes, and strengthen support to public policies"*

e-government materializes in services :

- Direct services
- Indirect services
- e.g. (passport, birth cert., cadaster, etc.)



services → geo location

- Areas : rural, metropolitan, settled, industrial, touristic, etc.
- Independent on area features ;
- To fulfill final task ;
- To make territory livable ;
- To manage sustainability ;

Territory → Environment → human being -> GI



Spatial data = focus of '90ies

INSPIRE PRINCIPLES

1. Spatial data have to be stored, made available and maintained at the most appropriate level.
2. It should be possible to combine spatial data from different sources across the community in a consistent way and share them among several users and applications.
3. It should be possible for spatial data collected at one level of public authority to be shared among other public authorities.
4. Spatial data are made available under conditions which do not unduly restrict their extensive use.
5. It should be easy to discover available spatial data, to evaluate their suitability for a given purpose and to know the conditions which apply to their use.



INSPIRE foundations



INSPIRE is needed....

Needs

- **Better information** needed to support policies
- Improvement of existing **information flows**
- **Differentiation across regions** to be considered
- Revision of approach to reporting and monitoring, moving to concept of **sharing of information**

EU has islands of data of different standards and quality...



Situation in Europe

- **Data policy restrictions**
 - pricing, copyright, access rights, licensing policy
- **Lack of co-ordination**
 - across borders and between levels of government
- **Lack of standards**
 - incompatible information and information systems
- **Existing data not re-usable**
 - fragmentation of information, redundancy, inability to integrate

July 2004 - EC Proposal COM(2004) 516 for a Directive establishing an infrastructure for spatial information in the Community – INSPIRE
Political Agreement 21 November 2006
Entry into Force 15 May 2007

INSPIRE Governance - 13th EC GIS Workshop, Porto 4-6/07/07 – slide 11



INSPIRE



INSPIRE Directive General Provisions

- INSPIRE lays down **general rules** to establish an infrastructure for spatial information in Europe for the purposes of Community environmental policies and policies or activities which may have an impact on the environment.
 - This infrastructure shall build upon infrastructures for spatial information established and operated by the Member States.
- INSPIRE does not require collection of new spatial data – electronic format
- INSPIRE does not affect Intellectual Property Rights

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INSPIRE Directive Components

- I. Metadata
- II. Interoperability of spatial data sets and services
- III. Network services (discovery, view, download, transform, invoke)
- IV. Data and Service sharing (policy)
- V. Coordination and measures for Monitoring & Reporting

INSPIRE is a Framework Directive
Detailed technical provisions in Implementing Rules (IR)

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INSPIRE Spatial Data and Thematic Scope

ANNEX I – SPATIAL DATA THEMES REFERRED TO IN ARTICLES 6(A), 8(1) AND 9(A) : 1. Coordinate reference systems ; 2. Geographical grid systems ; 3. Geographical names ; 4. Administrative units ; 5. Addresses ; 6. Cadastral parcels ; 7. Transport networks ; 8. Hydrography ; 9. Protected sites .

ANNEX II – SPATIAL DATA THEMES REFERRED TO IN ARTICLES 6(A), 8(1) AND 9(B) :
1. Elevation ; 2. Land cover ; 3. Orthoimagery ; 4. Geology

ANNEX III – SPATIAL DATA THEMES REFERRED TO IN ARTICLES 6(B) AND 9(B) :
1. Statistical units ; 2. Buildings ; 3. Soil ; 4. Land use ; 5. Human health and safety ; 6. Utility and governmental services ; 7. Environmental monitoring facilities ; 8. Production and industrial facilities ; 9. Agricultural and aquaculture facilities ; 10. Population distribution — demography ; 11. Area management/restriction/regulation zones and reporting units ; 12. Natural risk zones ; 13. Atmospheric conditions ; 14. Meteorological geographical features ; 15. Oceanographic geographical features ; 16. Sea regions ; 17. Bio-geographical regions ; 18. Habitats and biotopes ; 19. Species distribution ; 20. Energy resources ; 21. Mineral resources



Context Conclusions

- Spatial Data Infrastructures are a GLOBAL concern
- A conceptual shift in policy development
 - Towards integrated (spatial) assessments
 - Towards risk based environmental management
- Risk based environmental management requires:
 - For Risk Assessment (local to global)
 - Comprehensive, co-ordinated/common Monitoring programmes
 - Long-term Archiving and Access-to-data organised at the point of use
 - Consensus on models and mapping/portrayal of risks
- Recent Community Environmental policy developments are both a challenge and an opportunity for INSPIRE

The Community needs INSPIRE

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e-gov → evolving

The **subsidiarity** principle which is intended to ensure that decisions are taken as closely as possible to the citizen and that constant checks are made as to whether action at European and/or central or upper level is justified in the light of the options available at national, regional or local level.



e-gov → evolving

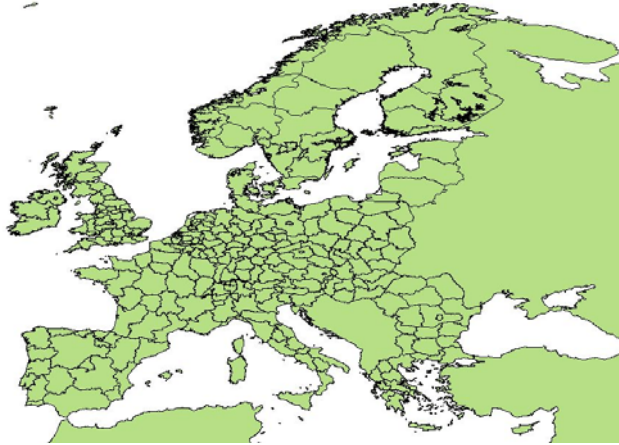
There's a dramatic need of capacity building within public administrations and the society

In the framework of the European policies principles are finalised to manage the national sovereignty and multiculturalism recalling some universal concepts and values.

Activities are the leaves of the big tree made by principles and methods



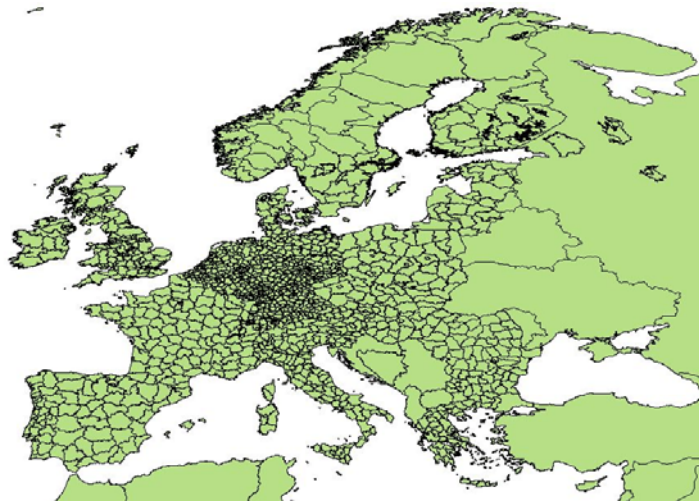
NUTS level 2 - Local administration = region



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NUTS level 3- Local administration=province



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SDI : the challenge of next few years !

- Geoinformation is pervading digital data human activities ;
- Citizens want to have ready to use services "located on the territory"
- Public authorities devolve missions, competencies and responsibilities to other authorities (local);
- From "central" to "local" ;
- Data and information increase day by day ;
- Every one is expected to accomplish the micro knowledge of the territory;
- Archiving and Geo-archiving is crucial



SDI : challenge for Europe !

- How to homogenize the knowledge and the understanding of OUR European territory ?
- Nowadays circulation of people is easier than circulation of knowledge ? (heritage of culture and behavior !)
- The understanding and the knowledge of the territory is really and deeply achieved ?
- Can be EU INSPIRE directive considered as the fundamental constituent of the "European environmental and territorial knowledge and data sharing constitution" ?



eContentplus programme

A multiannual **Community programme** to make digital content in Europe more accessible, usable and exploitable.

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Projects already in place

EURADIN project for the infrastructure of European addresses (2009-2010) **To significantly contribute to harmonizing the European Addresses, it will promote the creation of new added value products and services across Europe.**



ESDInet+

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



PLAN4ALL

The project **Plan4all** will be focused on the harmonisation of spatial planning data based on the existing best practices in EU regions and municipalities and on the base of results of current research project.



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EURADIN
European Address
Infrastructure

Addresses vs. Postal Addresses

INSPIRE - TWG on addresses

Several addressable geographical objects
(buildings, places names, km points,...)

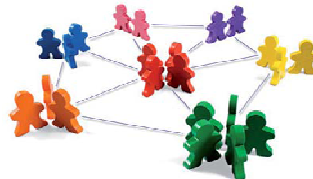
Harmonizing European addresses (Data, Metadata, Data
Flow and Business Model)

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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

INSPIRE CONFERENCE 2009 Rotterdam, NL- 19 JUNE 2009-
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Towards the Harmonisation of Spatial Planning Data

The harmonisation of spatial planning data according to the INSPIRE Directive based on the existing best practices in EU regions and municipalities and the results of current research projects.

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Evolutionary developments

⌘ SDIs may become sustainable through e-government ?

⌘ E-gov services + geo information = geogov

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e-gov → geogov

The geo-government (*geo-gov*) is the ability of public authorities to use geo information for managing , controlling, planning human activities and the nature of the territory.

Geo-gov concretizes if the geo-information is bundled within the public administration initiatives in a way that the final user (inhabitant ,environment and wildlife) gets advantages which may not be achieved without using geo-information and SDI .



e-gov → geogov

geo-services offered and/or supported by SDI are used locally by end users that have their own identity reflected in the services requested and the geo-gov acts locally as already experienced by the e-gov.



Rationale of recommendations

Even though the GI is pervading directly and indirectly our everyday life social and economic development may be achieved only if there are clear plans for the usage of spatial information in achieving services for the direct benefit of society.



Conclusion and recommendations

e-gov and GI conflation/converging should be recognized.

The evolving geo character of services provided by PA to inhabitants should be noted.

The already under development SDIs should be noted and their incredible progresses.

The emerging of geo-government fulfilled through SDI should be noted

The social and economic development based on local dimension should be noted

Taking advantage of resolutions already passed (see resolution II , 8th Cartographic Conference)

To draft a resolution aiming to foster the evolution of SDI for e-government



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