

SDI in Europe (INSPIRE)

E-Commerce + E-Governance = Future

SDI in a European perspective

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FIG com 3
WG 3.1

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GI-policy in EU

Policy drivers

- Telecommunications Policy
- Public Sector Information Policies
- e-Government
- Environmental Policy
- EU-Accession
- Wider Europe
- GSDI

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GI-policy in EU

Key Players

- Pan European GI Market Players
- National GI Associations
- Pan European Organisations
- Users at European Level
- Global GI Organisations
- European Commission Initiatives
- COGI
- EUROSTAT - GISCO

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GI-policy in EU

INSPIRE
INfrastructure for SPAtial InfoRmation in Europe

<http://inspire.jrc.it/>

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INSPIRE: Launched by MoU

EUROPEAN COMMISSION
Margrethe WALLSTRÖM
Philippe SOLBES
Members of the Commission

21 April 2002 (revised)

Memorandum of understanding between Commissioners Wallström, Solbes, Busquin

Infrastructure for Spatial Information in Europe (INSPIRE)

Further phases (negotiation, adoption, implementation and further development of the INSPIRE framework legislation)

Once the proposal for an INSPIRE framework legislation adopted by the Commission, the three lead services remain committed to continue to lead its negotiation and further implementation. The work arrangements between the lead services will be revised at the end of the first phases.

Margrethe Wallström, Philippe Solbes, Busquin

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Motiv triggerer:

- 13 months of intensive voluntary collaboration of over 100 experts in MS and accession countries
- Definition of scope and measures of legislative framework
- Impact assessment
- Widespread support as demonstrated by Internet consultation

INSPIRE: The Infrastructure for Spatial Information in Europe - Microsoft Internet Explorer provided by European Commission

<http://ec.gis.orinspire/>

INSPIRE: Infrastructure for Spatial Information in Europe

INSPIRE (Infrastructure for Spatial Information in Europe) is a recent initiative launched by the European Commission and developed in collaboration with Member States and accession countries. It aims at making available, harmonised and quality geographic information to support formulation, implementation, monitoring and evaluation of Community policies with a territorial dimension or impact.

INSPIRE Information Flow

The diagram shows the flow of information between Data resources, INSPIRE specifications, and Users. Data resources (National and Sub-national GIS, Environmental Data, etc.) provide information to INSPIRE specifications (Discovery Service, Technical integration, Harmonised data policy, etc.). These specifications then provide information to Users (Government & Administrations, Utility & Public Services, etc.).

INSPIRE is a legal initiative of the EU that will address technical standards and protocols, organisational and co-ordination issues, data policy issues including data access and the creation and maintenance of spatial information.


INSPIRE is the first step of a broad multi-sectoral initiative, that will initially focus on spatial information needed for...



WORKING GROUPS

- Architecture & Standards (AST)
- Reference Data and Metadata (RDM)
- Environmental Thematic Coordination (ETC)
- Data Policy & Legal Issues (DPL)
- Implementing Structures & Funding (ISF)
- Impact Assessment (IAS)

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GI-policy in EU

- 2001-2006 EXPERT GROUP
- 2001-2002 WORKING GROUPS
- 2003-2004 IMPLEMENTATION STRATEGY
- IMPACT ASSESSMENT
- 2003 - INTERNET CONSULTATION
- 2004 - REVISED SCOPE
- 2004 - 2006 POLITICAL PROCESS

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Why does Europe need an SDI?

Good policies require quality information!

Europe has lots of information, but fragmented and suffering some key problems:

- Existing information difficult to find and access;
- Lack of information on updating and observation methods (metadata);
- Barriers to sharing data and reuse;
- Lack of standardisation in data exchange and representation;
- Varying data quality within the same information layer across countries and regions

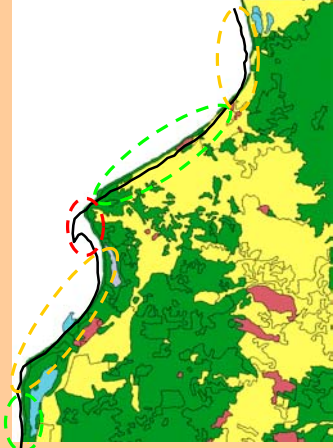
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INSPIRE Principles

- Data should be collected once and maintained at the level where this can be done most effectively
- Combine seamlessly spatial data from different sources across the EU and share it between many users and applications
- Spatial data should be collected at one level of government and shared between all levels of government
- Spatial data needed for good governance should be available on conditions that are not restricting its extensive use
- It should be easy to discover which spatial data is available, to evaluate its fitness for purpose and to know which conditions apply for its use

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Example:
All the data are not interoperable

CORINE Land Cover 1990
SABC Coastline

- 0 m < Difference < 50 m
- 50 m < Difference < 200 m
- Difference > 200 m

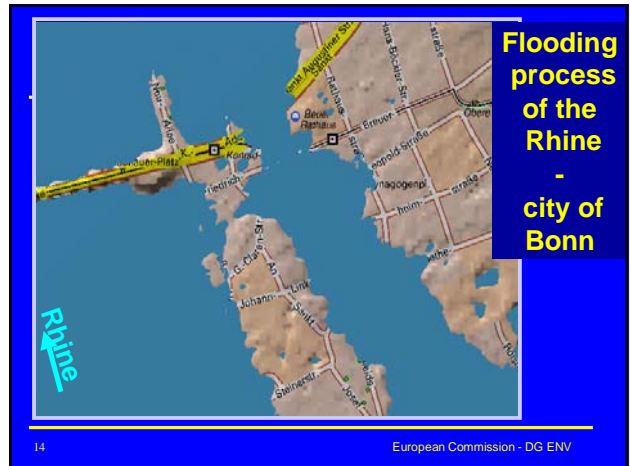
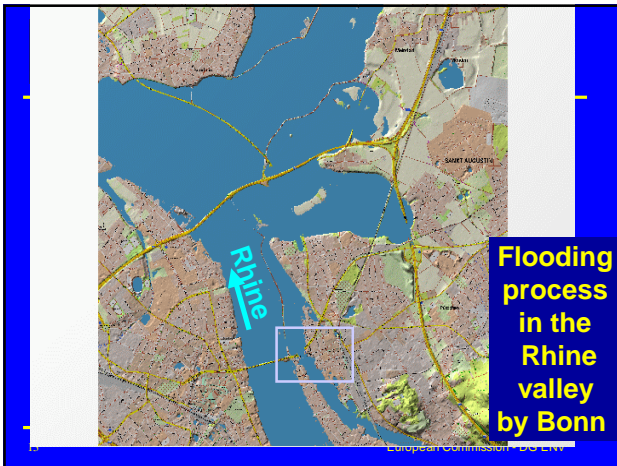
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What can an SDI do for European users?

- European SDI would support formulation, implementation and monitoring of common policies in Europe
- A glance into the future:
 - Urban ozone monitoring systems
 - Forest fire risk monitoring systems
 - Flood prediction and monitoring systems
 - Oils spills
 - Erosion
- European SDI would have significant spin-offs for research, education and the private sector and have societal benefits


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 **What is the purpose of a European SDI?** 

- To ensure implementation throughout Europe of the measures needed to address the obstacles to the use of spatial information across borders
- To free the potential of the use of existing information currently locked up by the GI obstacles
- To deliver the capacity to integrate information from different sources
- To provide a framework in which information collected at the local and regional level can be used in a national and european context and vice versa

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 **ESDI drivers**

- **INSPIRE focus: environment as the driver**
 - analysis of policies versus spatial data needs
 - maximise efficiency: multi-purpose datasets, cost-effectiveness
- **Need for a common geographic framework**
 - basic spatial reference data – common foundation for spatial data integration supporting environmental and sectoral policies
 - logical starting point for ESDI: common conceptual data model for all spatial data objects
- **Improved sharing of commonly used spatial data**
 - Easy access across the Community
 - Spatial coherence
 - Interoperability (where relevant)

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 **INSPIRE state of the play**

- **Recommendations on legal issues**
 - build upon subsidiarity but **do** involve regional and local levels
 - ensure complementarity with related legal initiatives, e.g. PSI
 - ensure compliance with the data protection directive
 - cope with authors rights and copyright
 - compliance with competition law

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 **INSPIRE state of the play**

- **Recommendations on organisational issues**
 - promote the creation of GI-associations
 - promote the creation of thematic centres of excellence
- **Recommendations on reference data and core thematic data**
 - clear priorities for data content
 - link with other major EU initiatives

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INSPIRE Annex I data

Basic data

- Administrative units
- Transport networks
- Hydrography including water catchments
- Elevation (including terrestrial elevation, bathymetry and coastline)
- Protected sites
- Land cover
- Cadastral parcels
- Ortho-imagery

Referencing and coordinate systems

- Coordinate reference systems
- Geographical names
- Geographical grid systems
- Addresses including postal regions

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Commonly used thematic data – INSPIRE Annex II data

- Statistical units
- Buildings
- Soil
- Geology
- Land use
- Human health and safety
- Government service and environmental monitoring facilities
- Production and industrial facilities
- Agricultural and aquaculture facilities
- Population distribution - demography
- Area management/restriction/ regulation zones & reporting units
- Natural risk zones
- Atmospheric conditions
- Meteorological spatial features
- Sea regions
- Bio-geographical regions
- Habitats and biotopes
- Species distribution
- Oceanic spatial features

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INSPIRE state of the play

- Recommendations on access services
 - promote a single EU geo-portal
- Recommendations on standardisation
 - urgent need to address the migration of existing metadata(systems) to a common standard
- Recommendations on funding
 - dedicate funds to transnational projects
 - assess every EU-level GI-project on INSPIRE compatibility

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Timetable

Estimated :

- 2004: INSPIRE on the Commission program
- 2006: Framework directive
- 2004-2006 Preparation periode
- 2007-2008 Transaction periode (adaption in MS)
- 2008 Standards for annex I data
- 2009 Metadata annex I data implementation
- 2011 Standards for annex II data
- 2012 Metadata annex II data implementation
- Review

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Next Expert Group meeting in Warsaw 22 June 2004

European GI/GIS Conference

Workshop on GeoPortal

eChallenges e-2004 conference in Vienna, 27 – 29 October

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<http://ec-gis.org/inspire>
<http://ec-gis.org/ginie>
<http://gis.vsb.cz/webcastle>
<http://eu-geoportal.jrc.it>
<http://www.eurogeographics.org>
<http://www.eurogi.org>