

Interoperability in the Organizational Context

November 6th 2007

Bas Kok,
President- elect GSDI

SDI Americas Symposium: "Concepts, Practices and Projects"

GSDI 10 Conference

Small Island Perspectives on Global Challenges:
The Role of Spatial Data in Supporting a Sustainable Future

Port of Spain, Trinidad
February 24 - 29 2008



GSDI 11 Conference

The Netherlands June 15 - 19 2009



GSDI 11 Conference

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- Theme:
“SDI convergence on global level: Bridging the SDI’s in Europe, the America’s, Asia and the Pacific, and Africa”
 - Joint Conference GSDI, European Commission
 - INSPIRE, Infrastructure for Spatial Information in Europe
 - Join discussions and contribute to global issues
 - Define agenda for global SDI convergence with all regions.

Interoperability

Factors in Europe

- Interoperability processes
- Use of standards is of crucial importance
- Effective information exchange
- Between governments, communities and citizens
- Important conditions for the creation, implementation and maintenance of standards, portals, data and network services

Interoperability

Programs and Initiatives in Europe

- Public Sector Information Directive
- Water Framework Directive
- Habitat
- eEurope
- Galileo
- GMES
- ESPON
- **INSPIRE**

INSPIRE

Main organizational conditions for successful interoperability

- Leadership and legal framework
- Vision for coordination and cooperation
- Clear communication strategy
- Ability to create initiatives of local communities
- Interaction within policy framework



INSPIRE

From Commission proposal to Community Directive implementation

- **Preparatory phase (2004-2006)**
 - Co-decision procedure
 - Start of preparation of Implementing Rules
- **Transposition phase (2007-2009)**
 - Directive entered into force **15 May 2007**
 - INSPIRE Committee starts its activities **26 June 2007**
 - Continuation of preparation of Implementing Rules
 - Transposition into national legislation
 - Adoption of Implementing Rules by Comitology
- **Implementation phase (2009-2013)**
 - Implementation and monitoring of measures
 - Continuation of preparation of Implementing Rules
 - Adoption of Implementing Rules by Comitology

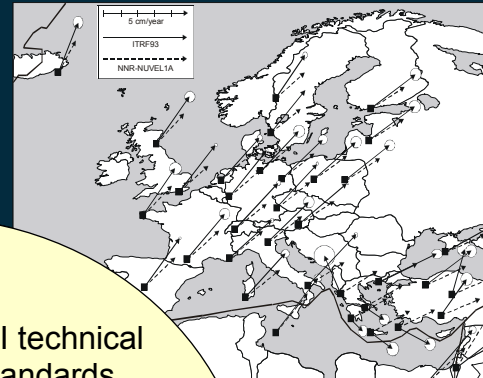
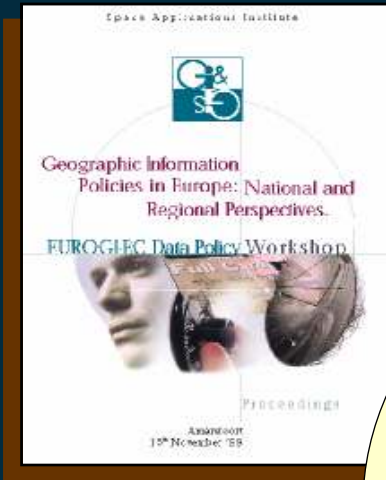
INSPIRE

Policy drivers

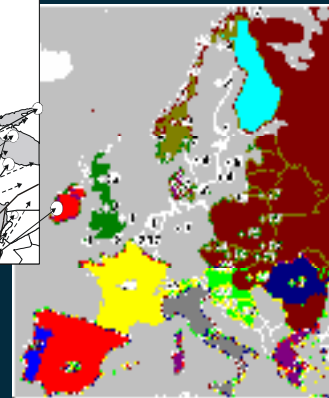
- Arhus Convention (1998)
- White Paper on European Governance (EC 2001)
- The European Sustainable Development Strategy (EU 2001)

INSPIRE framework

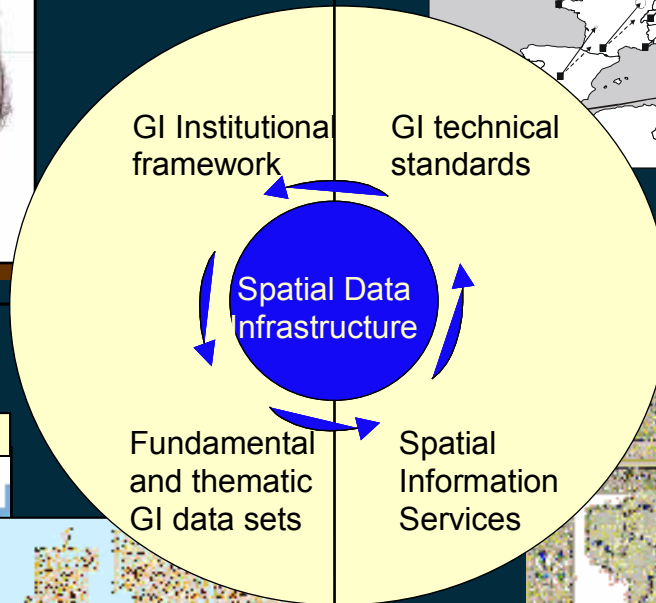
Different Policies and standards



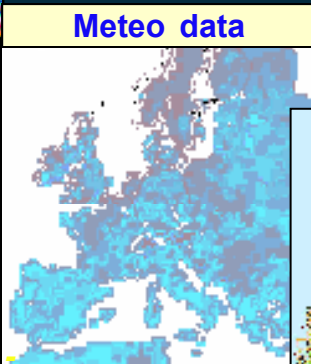
Europe is moving 3cm/year



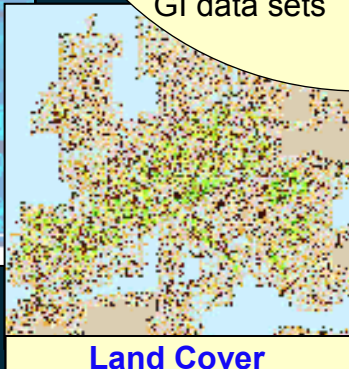
Different sea levels in Europe



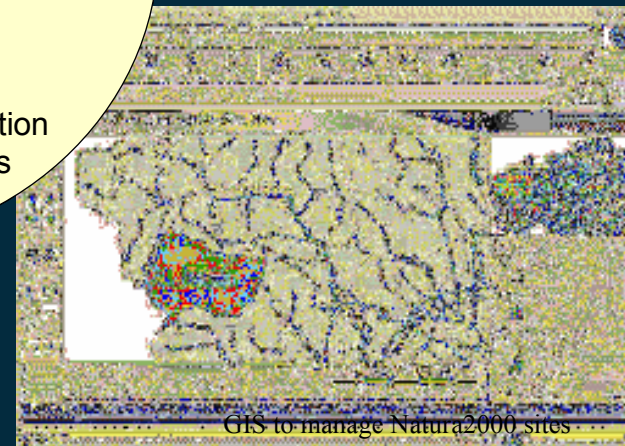
Catchments



Meteo data



Land Cover



GIS to manage Natura 2000 sites

eEurope : eGovernment on line



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 and share it between many users and applications
- Spatial data should be collected at one level of government and shared between all levels
- 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

INSPIRE

What does it include?

- INSPIRE lays down **general rules** for the establishment of an infrastructure for spatial information in Europe to support environmental policies and policies that affect the environment
- This infrastructure shall be based on infrastructures for spatial information established and operated by the Member States
- INSPIRE requires also specific **implementing rules** to be adopted through a committee procedure representing Member States

INSPIRE

Components

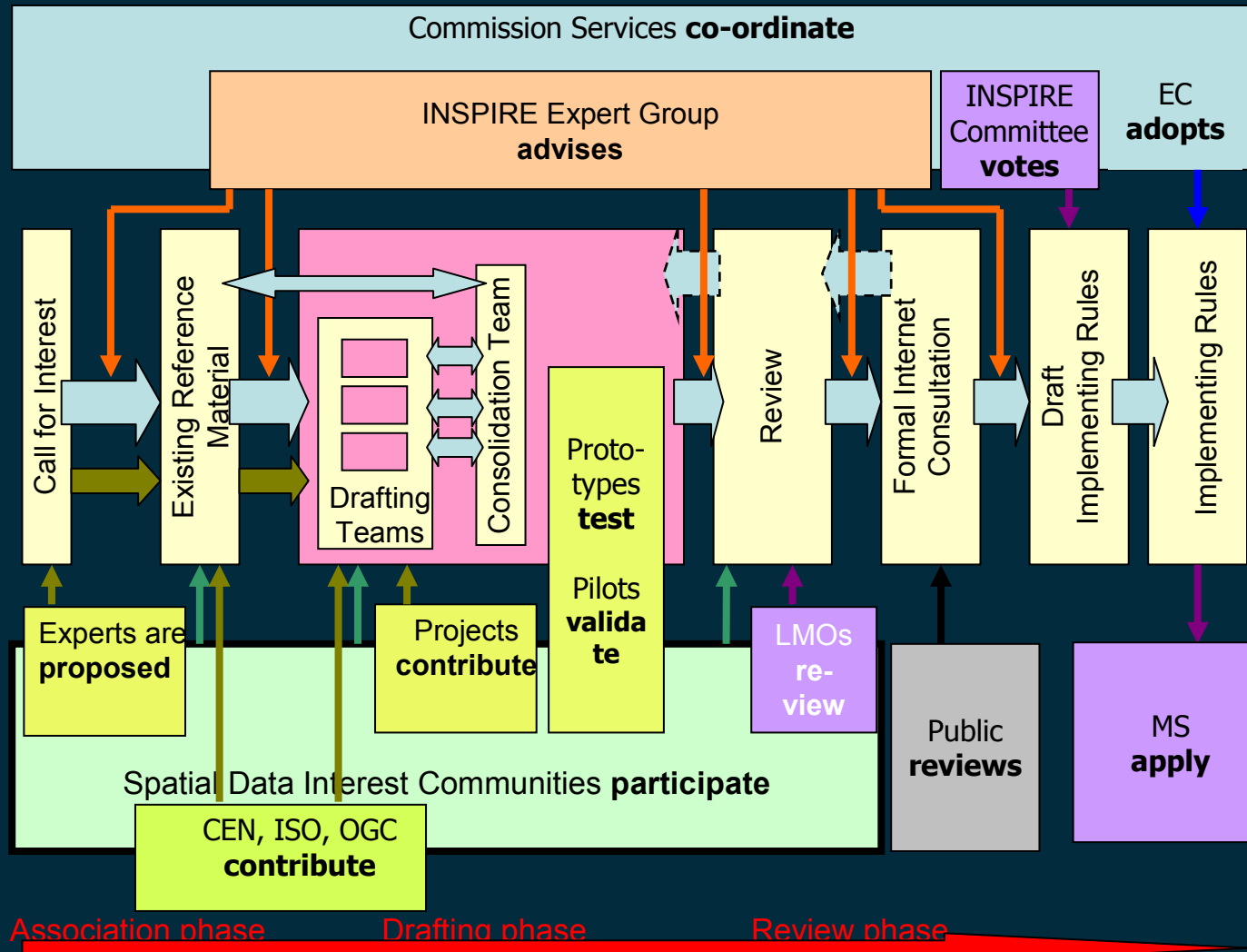
- Metadata
- Interoperability of spatial data sets and services
- Network services (discovery, view, download, invoke)
 - Made available through the European geo-portal
- Data and Service sharing (policy)
- Coordination and measures for Monitoring & Reporting

INSPIRE

Ambitious targets

- Three important core data clusters
 - Three annexes
 - Important reference core data sets
 - Essential/crucial data sets
 - such as: Land Information/Cadaastre
 - Thematic data set

INSPIRE process



INSPIRE

Work Programme 2007-2009

- Published on 16 May 2007
 - <http://www.ec-gis.org/inspire/>
- Driven by roadmap
 - Dates in Directive drive Implementing Rule development
- Is intended as a tool for SDIC and LMO resource planning
 - Dates in calendar will change according to new developments (e.g., > 1200 comments on draft IR for Metadata)

INSPIRE

The role of Legally Mandated Organisations (LMO)

- To collaborate within the SDICs, or autonomously in providing technical specifications
- To help identify user needs
- To contribute to the analysis of the technical and operational feasibility of implementation of proposed draft Implementing Rules
- To provide feedback on the cost/benefit consequences of Implementing Rules at Member State level.

INSPIRE

Implementing phase: a participatory approach to policy making

- Open and transparent approach in:
 - Formulating the policy (Experts from Member States writing position papers as input)
 - Assessing likely impact (Expert from MS prepared Extended Impact Assessment)
 - Advising on process (INSPIRE Expert Group with representatives MS)
 - Mobilizing stakeholder through open registration of Spatial Data Interest Communities and Legally Mandated Organisations
 - Providing input to drafting of Implementing Rules through experts, reference material, and projects
 - Commenting on Drafts

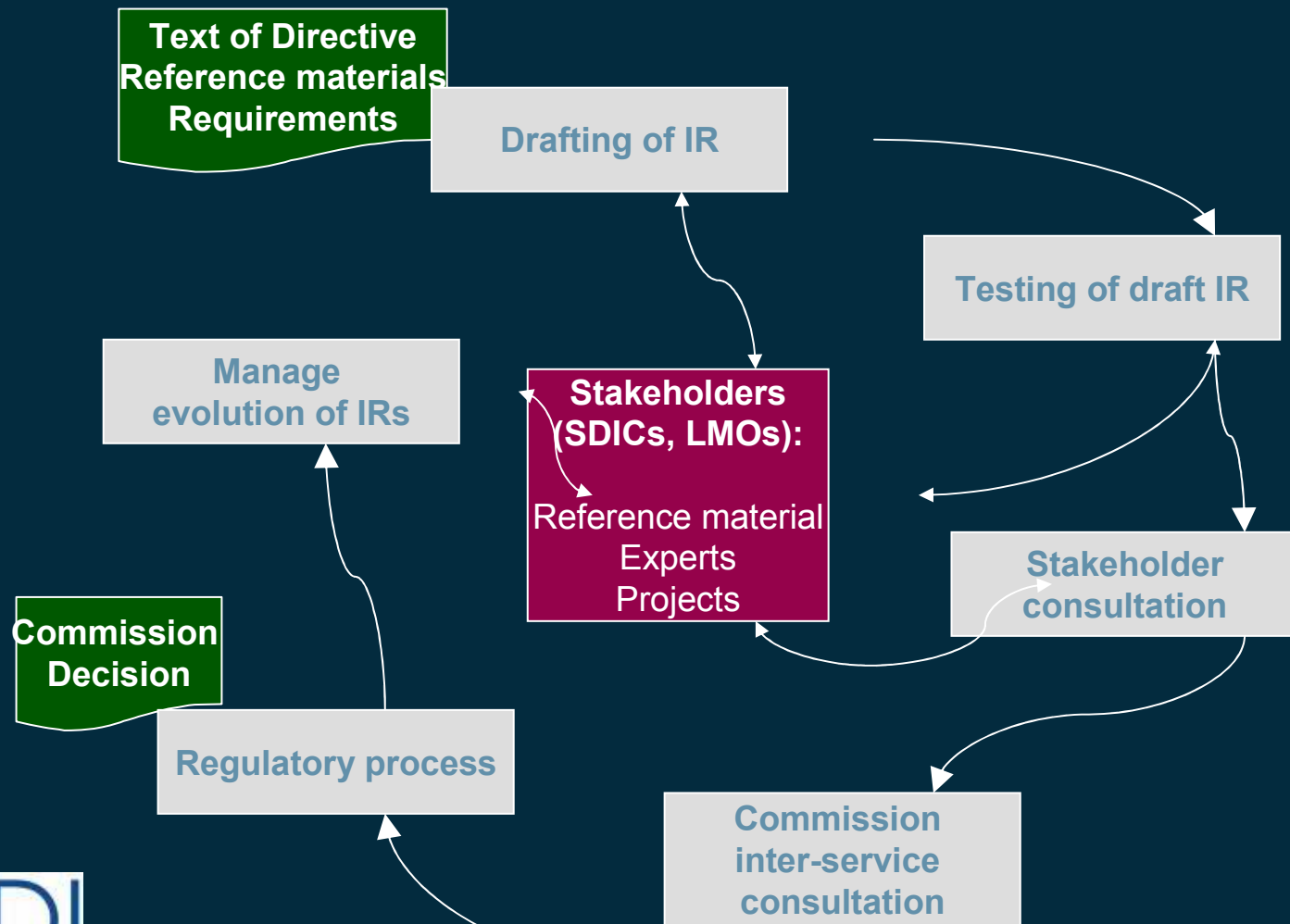
INSPIRE

Organizational Interoperability Approach

- Top-down: INSPIRE is a framework Directive with implementing rules to be adopted in the coming years
- Bottom-up: Highest involvement of key stakeholders through the “Spatial Data Interest Community” concept is needed for development, implementation and sustained operation

Work Programme 2007-2009

Implementing Rule development cycle



Excerpt from Roadmap (IR adoption)

Milestone date	Article	Description
2007-05-15		<i>Entry into force of INSPIRE Directive</i>
2007-08-15	22§2	<i>Establishment of the INSPIRE Committee</i>
2008-05-15	5§4	Adoption of IR for creation and updating of metadata
2008-05-15	21(4)	Adoption of IR for monitoring and reporting
2008-05-15*	16	Adoption of IR for discovery and view services
2008-11-15*	16	Adoption of IR for download services
2008-11-15*		Adoption of IR for data exchange
2008-11-15*	16(a)	Adoption of IR for Coordinates Transformation Service

Excerpt from Roadmap (IR adoption)

Milestone date	Article	Description
2009-05-15*	17(8)	Adoption of IR governing the access rights of use to spatial data sets and services for Community institutions and bodies
2009-05-15	9(a)	Adoption of IRs for the interoperability and harmonisation of spatial data sets and services for Annex I spatial data themes
2009-05-15	24§1	<i>Provisions of Directive are brought into force in MS</i>
2010-11-15*	16	Adoption of IR for invoke "spatial data service"
2012-05-15	9(b)	Adoption of the IR s for the interoperability and harmonisation of spatial data sets and services for Annex II and III spatial data themes

* = date proposed by Commission

Excerpt from Roadmap (Implementation)

Milestone date	Article	Description
2010-05-15	21§1	Implementation of provisions for monitoring
2010-05-15	6(a)	Metadata available for spatial data corresponding to Annex I and II
2010-05-15*	16	Discovery and view network services operational
2010-05-15	15	The EC establishes and runs a geo-portal and Community level
2010-11-15*	16	Download services operational
2010-11-15*	16(a)	Coordinates Transformation Services operational

Excerpt from Roadmap (Implementation)

Milestone date	Article	Description
2011-05-15	7§3, 9(a)	Newly collected and extensively restructured Annex I spatial data sets available
2012-11-15*	16	Invoke "spatial data service" service operational
2013-05-15	6(b)	Metadata available for spatial data corresponding to Annex III
2014-05-15	7§3, 9(b)	Newly collected and extensively restructured Annex II and III spatial data sets available
2016-05-15	7§3, 9(a)	Other Annex I spatial data sets available
2019-05-15	7§3, 9(b)	Other Annex II and III spatial data sets available

* = date proposed by Commission

Interoperability Process

Open and Transparent



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Thank you very much

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