INSPIRE@EC – Experiences from the implementation of the European Commission SDI

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Organisational context - the European Commission

- ~24,000 staff
- 43 Directorates Generals
- 3 main sites (Brussels, Luxembourg, Ispra)
- 12 Directorates Generals distributed at all three sites deal directly with Geographical information
INSPIRE@EC – Initial project goals

- Respect the obligation to implement INSPIRE in the Commission
- Infrastructure that supports users within the European Commission in sharing and using spatial data and services compliant to the provisions of INSPIRE
- INSPIRE@EC – the reference point for GI in the Commission
INSPIRE@EC – central versus distributed

- Discovery service
- INSPIRE services
- Metadata repository
- Data repository
- Editor

- Exposes
- Maintains
- Discovery service
- INSPIRE services
- Metadata repository
- Data repository
- Editor

- Discovers
- Indexes
- Exposes
- Indexes
- Maintains
- Eposes
- Replicates
- Maintains

- Consumer
- DIGIT/EUROSTAT

- Exposes
- Indexes
- Exposes
- Indexes
- Replicates
- Maintains

- DG
- A
- B
- C
- D
Question 1: Single corporate platform or distributed system?

Distributed system
- User specific portals
- INSPIRE education aspect
- Share the work load

Co-operate platform and single architecture
- Good control on technology used
- Reuse of developments
- Interoperability guaranteed
- Better data and service quality
Question 2: Geoportal or Internet GIS

Original plan

- Publish Find Bind
- Actual work outside the Portal

Reach new users

- A primitive GIS client serves the majority of users
- Integration of simple GIS analysis features and a data management feature into the portal

- Not only the infrastructure to connect users but also basic GIS use cases part of the portal
- A compromise has to be found between expert users searching for data and occasional users who want to have everything integrated
Question 3: Open source or proprietary software?

Pro proprietary
- Integrated platform covering desktop GIS, GIS server and spatial data infrastructure
- Product maturity and service bus integration

Pro open source
- More independent from product lifecycles
- Exchanging solutions helps to enforce adherence to standards
- Commercial Geoportal frameworks require anyway substantial developments
- Unlimited ownership extremely important in the public sector
- At a global level Open source is leading
Challenge 1: Educate your users

- INSPIRE jargon problematic ("resource, resource type, discovery service")
- Services and data, what is the difference
- Searching for metadata is a difficult concept
- Minimum GI experience required (working with projection systems, layering of data)
- Classification using GEMET keywords not in line with user concepts
- Range of federated discovery searches difficult to understand
Challenge 2: Create metadata

- “Ground water monitoring stations on pesticides in the Provence-Alpes Côte d’Azur region”

Or

- “Map service: WMS base”

- Titles are extremely important
- Additional information needed at first glance
  - Resource type
  - Service type
  - Projection systems if not automatically transformed
- Corporate tool to support good practice metadata
Challenge 3: Operation of services

- Caching or dynamic mapping
- Layer structure
- Download – WFS or file download
- Transformation to INSPIRE data models will come later
A single answer: INSPIRE as a learning project

- Gradual implementation helps reaching interoperability
  - Metadata first
  - View services
  - Download services
  - Data specifications
- Best practices for discovery services, view services, Geoportal GUI will improve acceptance