Intergraph Compliance with INSPIRE
Carlos Laiginhas
INSPIRE Context and Intergraph Engagement
Back to the 80’s: **GRASS**
([Geographic Resources Analysis Support System](#)).

In the early 90’s: **OpenGIS Project**, staring the vision of **Interoperability**.
In 1994, OGC was founded with eight charter members, including Intergraph Corporation as first commercial Principal Member.
BEGINNING  First “INSPIRE” meeting (in 2001, as E-ESDI)

PARTICIPATION  Intergraph experts in Thematic Working Groups


DEVELOPMENT  Intergraph staff in Drafting Teams and SDIC’s

ENGAGEMENT  Intergraph as technology provider in EU Projects
Spatial Data Infrastructures and INSPIRE Compliance
SDI Concept

- “There is no delight in owning anything unshared”
  
  *Seneca, 4 BC – AD 65*

- SDI are all about “exchange” and “sharing” and the out coming common benefits;

- A network of *interoperable* nodes:
SDI Implementation

Interoperability requires SOA - Service Oriented Architectures, nevertheless, SDI are not just geospatial web services and geoportals.
Spatial Data Infrastructures and INSPIRE Compliance

- **SDI Implementation**

  - **Driven by people, policies and processes**
  - **Controlling access in global and collaborative platforms**
  - **Facilitating enterprise-wide geospatial solutions**
  - **Regulating data and services formats and comm. protocols**
  - **Backbone based in geospatial datasets**

Organizations, networks, GIS services, standards, and geodata are integrated to provide a comprehensive spatial data infrastructure.
Spatial Data Infrastructures and INSPIRE Compliance

- SDI Implementation

  - ISO and OGC general compliance:
    - Metadata: Standards, profiles and format;
    - Data: Exchange standards and comm. protocols.

  - INSPIRE compliance further affects SDI comps:
    - People and organizations: Usage logic and patterns;
    - Infrastructures: Quality of service expectations;
    - Services: Implementing rules and technical guidance;
    - Standards: Requirements and specifications;
    - Geospatial data: Data models and harmonization.
Intergraph compliant products

SDI clients:
- GeoMedia and ERDAS Imagine (desktop)
- GeoMedia Smart Client (web; java client)
- Geospatial Portal (web)

SDI servers:
- GeoMedia WebMap and/or ERDAS Apollo
- Geospatial SDI
  - Extra SDI services and extensions for INSPIRE
  - Metadata management and INSPIRE profile
  - Services security and quality monitoring
Overview of Intergraph Geospatial Server

Data Layer
- Structured data
- Other data & services
- Catalog & Metadata
- Unstructured data (raster, vector, point clouds, motion video, ...)

Apps Layer
- GeoMedia WebMap
- GeoMedia SmartClient

View Layer
- Workflow Manager
- Smart Client
- Browser Client
- Mobile Client
- Admin Console

Security & Administration

Discovery Service
Delivery Service
Data Mgmt Service
Enterprise Services

Geo-Processing
R/W Data Access
Crawling
Streaming & Caching (ECWP, GDO+)
OGC/INSPIRE
Catalog

Spatial Data Infrastructures and INSPIRE Compliance

©2013 Intergraph Corporation
- Intergraph Geospatial Portal
  - INSPIRE compliant interoperable web client:
- Collaboration, support and guidance:
  - Guía técnica de recomendación del Consejo Directivo de la Infraestructura de Datos Espaciales de España

Generación de servicios de localización según el Perfil INSPIRE de ISO Metadata Application Profile for CSW 2.0 [CSW ISO AP] con tecnología Geoespacial SDI 2013 de Intergraph.
Customer References
Intergraph participations on European projects was the test beds for INSPIRE implementation of:

- Data models, schema remodeling and harmonization;
- Metadata management and search for datasets and services;
- INSPIRE extended OWS for discovery, view and analysis/download;
- Experiencing geoportal needs, design and customization.
The Portuguese Territorial SDI is an example of a customized Geospatial Portal that follows INSPIRE “publish-find-bind” pattern. Here is the discovery panel.
After discovery, SNIT makes available for “binding” the official land use plans (raster) in WMS, and compiled land use vectors in WFS (for analysis). Here is the visualization panel.
Any Geospatial Portal implementation have the possibility to make available to the user a set of tools to test and monitor the quality of the services running on the portal. The tests can be predefined by the administrators or ad-hoc configured by the user, using INSPIRE quality parameters. The results can be located on the map, visually informing on the QoS. A results window can also be used for detailed, analytical and graphical analysis of the QoS tests results.
Customer References

- Thematic implementations
Customer References

- National and regional implementations
Customer References

- Local and city solutions
Questions?