

HUMBOLDT Application Scenario

Forest

– Factsheet –

Global perspective:

Support of data source harmonization in field of natural resource monitoring and land cover and forest management

Benefit:

The interconnection of spatial data of forest management and natural resources monitoring and spatial planning improves:

- possibilities of collecting, updating, sharing and presentation of forestry spatial data and possibilities of assessment of the state of health of forest stands*
- using web services (WMS, WFS, WCS and WPS) in forest management and assessment of the state of health of forest stands through data description.*
- possibilities to evaluate suitability of forest management*

Relation to GMES/INSPIRE:

HUMBOLDT demonstrator for data harmonisation of standardized and non-standardized spatial datasets, implementation of INSPIRE compliant standards

Particularities:

- Support decisions of ministerial, regional and local authorities,*
- Enhance future direction and development of GMES*
- Deliver up-to-date data to other information systems to support timely warnings*

Use case:

Transformation between forestry data of Regional Plans of Forest Development (RPF) and Corine Land Cover (CLC) and Spatial (Territorially) Analytic Backgrounds (SAB)

Stakeholders involved:

Ministerial, regional and local authorities responsible for forest management, natural resource monitoring and subsidy programs.

Target audience:

- Forest administrators and owners (all kind of ownership)*
- Forest management planners*
- Public*

Spatial coverage:

- SAB and RPF data covers the whole Czech Republic*
- CLC data sets covers the Europe*

Data involved:

- Selected datasets from RPF, stored in Data Warehouse of the Information Data Centre of FMI, visualisation: Raster maps, WFS
- Selected datasets from CLC 2006
- Selected datasets from Spatial (Territorially) Analytic Backgrounds (SAB)

Major harmonisation issues:

- Transformation of source data to GML format
- Conversion and inverse conversion to/from CLC – data models transformation
- Transformation of source GML data to required format(s) – SHP, raster, web service etc.

System architecture:

Existing software components:

HSRS Geoportal (<http://geoportal.bnhelp.cz/index.php?SID=&lang=eng>) – Geoportal is a web application that allows users to search, view, examine and share spatial and non-spatial data. Geoportal is based on interoperability standards (OGC, W3C, OASIS, ISO) which are connected to other web-based resources and helps to create a distributed structure of information and knowledge based on spatial localization.

GeoServer – detailed information in <http://geoserver.org>

OGR2OGR – detailed information in <http://www.gdal.org/ogr2ogr.html>

HUMBOLDT components:

Mediator Service: for interaction of the Scenario client and the HUMBOLDT Framework services

Context Service: for management of user profiles and their harmonisation requirements

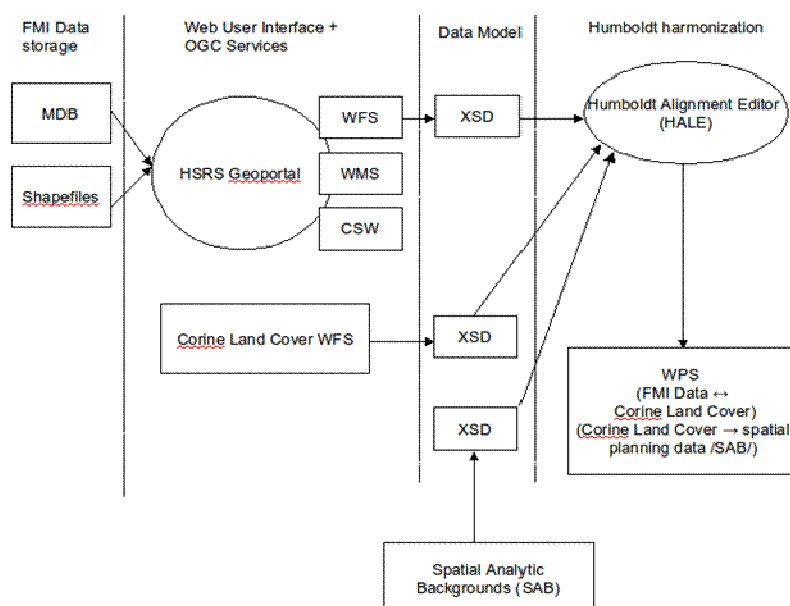
HUMBOLDT Alignment Editor: to define mapping between source and target schemas

Conceptual Schema Transformer (CST): to perform the schema transformation

Language Transformer Coordinate Transformation Service Edge Matching Service

Scenario Demonstrator will be available: March – April 2010

For more information please visit our Project Website www.esdi-humboldt.eu
and our Community Website <http://community.esdi-humboldt.eu>.



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