

HUMBOLDT Application Scenario European Risk Atlas (ERiskA)

– Factsheet –

Global perspective:

Facilitate cross-border cooperation between agencies responsible for disaster management in the Lake Constance Region (Switzerland, Austria and Germany) by developing a cross-border flood risk management application

Benefit:

Solve interoperability and data harmonisation issues for a co-operation between the agencies responsible for disaster management by providing tools for the exchange of information taking into account real-time in-situ measurements at lake and river gauges

Relation to GMES/INSPIRE:

Harmonise spatial data for an application in the GMES thematic area “Emergency Response” taking into consideration INSPIRE Data Specifications; ERiskA participated in the testing of INSPIRE data specifications




Particularities:

Harmonise data of 3 countries, integrate in-situ sensor measurements, time-critical system

Use case: Information Exchange

Information on potentially flooded areas and resulting inundation of infrastructure like roads and railways has to be exchanged between command and control centres, other agencies and the public in different parts of the cross border Lake Constance Region.

Stakeholders involved:

-  *HUMBOLDT partners involved in ERiskA development: Technische Universität München, Intergraph SG&I Deutschland GmbH, Swiss Federal Institute of Technology*
-  *Data providers: Landesvermessungsamt Feldkirch (Austria), Landesamt für Geoinformation und Landentwicklung Baden Württemberg (Germany), Landesamt für Vermessung und Geoinformation Bayern (Germany) and swisstopo (Switzerland)*
-  *Pilot user: Landeswarnzentrale Vorarlberg (office for warning affairs of the Austrian state Vorarlberg)*

Target audience:

Citizens and agencies responsible for disaster management in the Lake Constance Region

Data involved:

Transport networks (road, railway), hydrography (watercourse and standing water), gauge, flood area, water level measurement, discharge measurement, warning level, warning level classification, elevation, aerial image, topographic map

Spatial coverage:

Test area in the Lake Constance Region includes territories in Bayern and Baden-Wuerttemberg (Germany), Vorarlberg (Austria), St. Gallen and Thurgau (Switzerland)

Major harmonisation issues:

Spatial reference systems, conceptual schemas (data models), classification schemas, metadata profiles (problem: nor or insufficient metadata for most of data sets), scale/resolution, spatial consistency of data

System architecture of selected use case “Information Exchange”:

External software components:

Intergraph Desktop and Web GIS environment: GeoMedia Pro, GeoMedia WebMap plus newly developed GeoMedia Extensions and adjusted Intergraph Web Client

HUMBOLDT components used in ERiskA:

HUMBOLDT Mediator Service: for interaction of ERiskA client and HUMBOLDT Framework Services

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

HUMBOLDT Conceptual Schema Transformer (CST) to execute the mappings defined in HALE

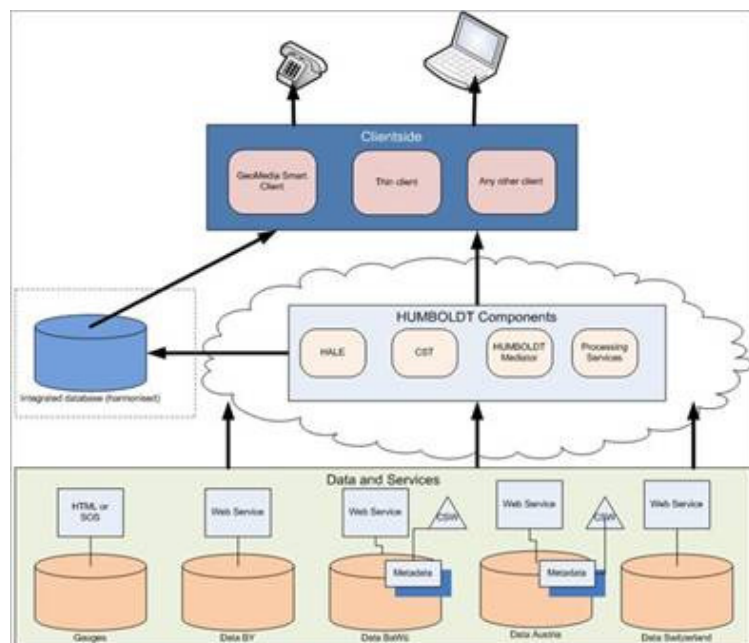
HUMBOLDT Coordinate Transformation Service (optional)

HUMBOLDT Edge Matching Service (optional)

Scenario Demonstrator will be available:

End of June 2010

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



Scenario Contact:

Ulrich Schäffler
Technische Universität München
schaeffler@tum.de

HUMBOLDT Project Office:

zeitform Internet Dienste Phone: +49 6151 155 637
Fraunhoferstrasse 5 Fax: + 49 6151 155 634
64283 Darmstadt Email: po@esdi-humboldt.eu
Germany http://www.esdi-humboldt.eu