



HUMBOLDT: Re-using ORCHESTRA service specifications

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Introducing HUMBOLDT



HUMBOLDT - Leitmotif

It was the ultimate ambition of Alexander v. Humboldt to collect and integrate the knowledge of his time and, by doing this, to gain new insights in all areas of life.



A step towards the European Spatial Data
Infrastructure (ESDI)

Project philosophy:

re-use the existing – extend by need – arrive at the
ESDI – prosper by application

HUMBOLDT – Facts

Full title	<i>Development of a framework for data harmonisation and service integration</i>
Term	48 months 01/10/2006 – 30/09/2010
Effort	~ 13.5 mill. € (~50% self funded) ~ 110 person years
Contracting authority	Commission of the European Community FP6 – Aeronautics and Space (GMES)
Consortium	27 partners (coordinator Fraunhofer IGD)



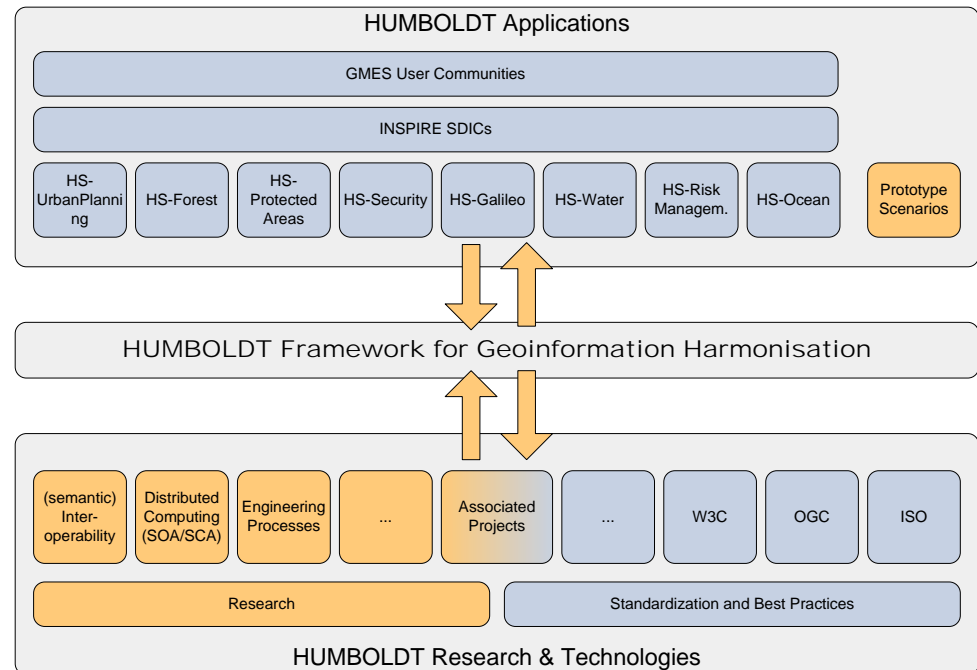
HUMBOLDT - Approach

Application-driven Approach

- ▣ Identification of user requirements (incl. “communication skills”)
- ▣ Proof of concept in different domains (scenarios)
- ▣ Evaluation as to user requirements

Technology-driven Approach

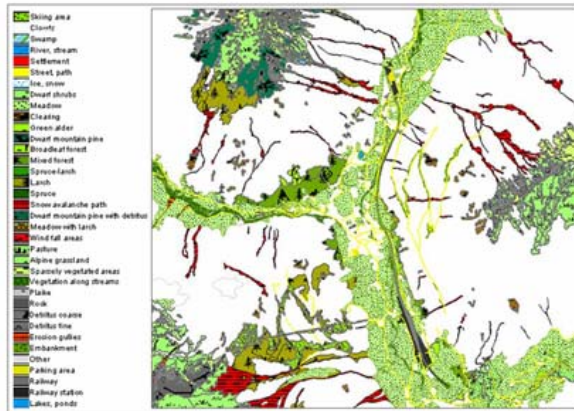
- ▣ Technical concept, implementation, and technical evaluation of the harmonisation framework
- ▣ Contributions and use of standards (OGC, W3C)



Implementation in Scenario Applications



Tackling the Alpine Convention – Multi-Scale Monitoring of the Alps



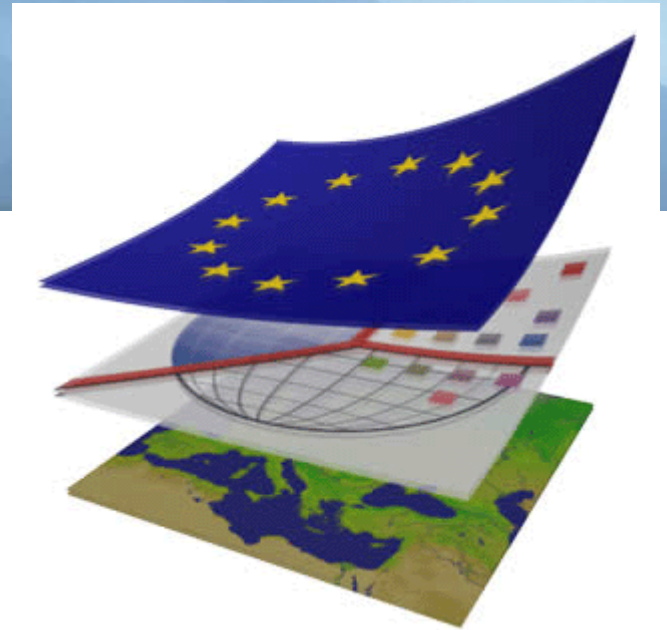
List of Scenarios

- ▣ HS-Border Security HS-ERiskA
- ▣ HS-Urban Planning HS-Water
- ▣ HS-Forest HS-Ocean
- ▣ HS-Protected Areas HS-Galileo
- ▣ → Further scenarios are planned

Applies to each scenario :

- Implementation of an end user application using harmonised data
- Evaluation against user requirements
- Demonstrator


ORCHESTRA Re-use



(Abstract) Service Specifications


Main purpose of re-use: Service Integration

- Methodology for creating new service types!

 In the analysis phase of the project, the following specifications have been identified as good or partial matches to the requirements for the first

HUMBOLDT phases:

- Ontology Access Service
- Schema Mapping Service
- Service Monitoring Service
- Service Chain Access Service

 In later phases, additional services such as the *Map and Diagram Service* are likely to be re-used.

 Thank you for your attention!



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