Create and Use Harmonised Spatial Data with HALE *2.6.0*

Workshop at the INSPIRE Conference 2013

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data harmonisation panel

Fraunhofer IGD

Goals

- Explain **why** we develop HALE for INSPIRE
- Enable you to **create INSPIRE-compliant data sets** with HALE
- Inform you about **new features and capabilities** of HALE

- We want to learn more about **your** experiences & requirements!

Let‘s get started!

- Who has heard of HALE already?
- Who has used HALE before?
- Who would like to try it now?
  - Get the USB stick with data and software
  - Unpack the appropriate archive for your operating system*, preferably the 64bit versions
  - Start HALE

* unfortunately, no Android or iOS versions yet…

Agenda

- A Quick Introduction to HALE and the challenges we want to help resolve

Case Study 1: Converting the INSPIRE Planned Land Use data for the Trento Region of Italy

- Loading resources, analysing schemas and data
- The 3 R's of basic mapping: Retype, rename, reclassify
- INSPIRE Mapping Functions
- Dealing with references
- Data export and usage

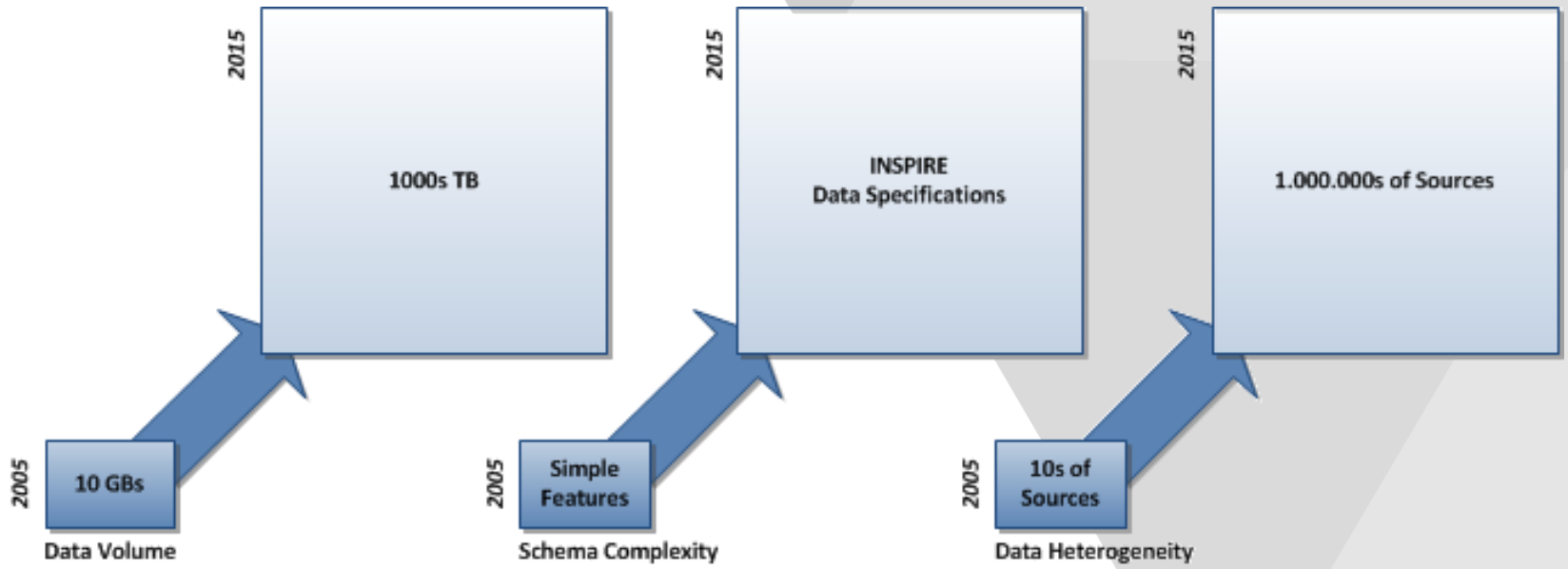
Case Study 2: MERIDIAN2 UK Open Government Data to INSPIRE Hydrophysical Waters Data

- Mapping inheritance
- Functions and their documentation
- Additional Export functions: HTML, XSLT, Excel (CSV/XLS)
- One more thing…

- Q&A, Discussion

Data Harmonisation Challenges…

- Efficiency and Effectiveness
- Understanding and quality
- Re-use of data and harmonisation assets



… In INSPIRE

- Spatial harmonisation
  - Edge Matching, Reference Systems, Multiple Representations
- Structure
  - References, Aggregates & Composites, Inheritance
- Quality
  - Metadata, geometric quality, classification accuracy, …
- Semantics
  - Code Lists, Feature Types

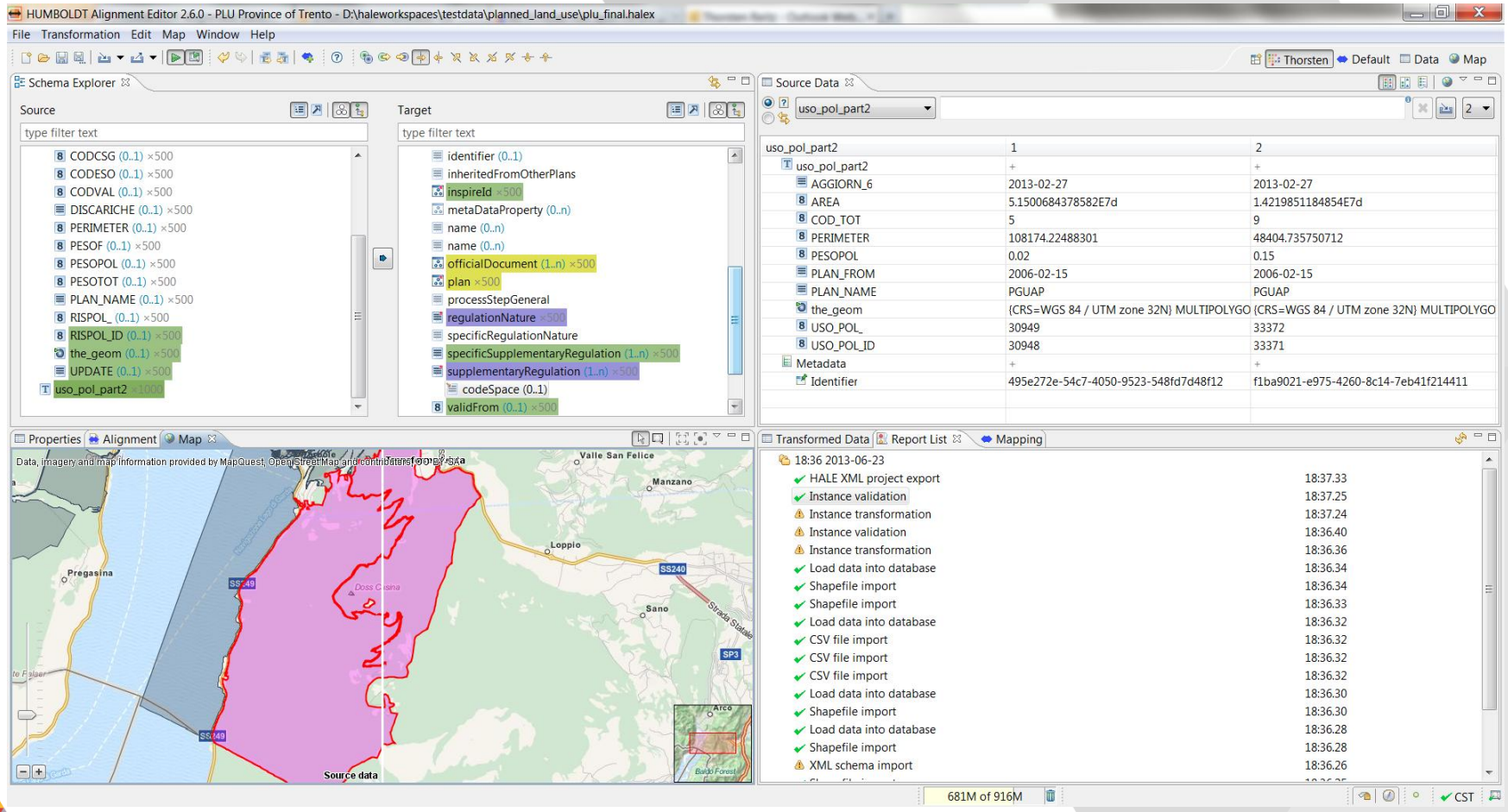
HALE Goals

- Simplicity
  - Use a basic approach that allows users to focus on the conceptual level
- Understanding transformation consequences
  - Provide (near-)instant feedback on any user action
- Transparency
  - Ensure Output Data quality is well-understood and documented
- Scalability
- Specifically support INSPIRE activities
  - Transformation Testing in Data Specification
  - Provision of INSPIRE Data Sets

HALE Approach

- Declarative
  - Identify correspondances and link them directly
- Interactive
  - Instant transformation
- Deterministic
  - Focused, task-based processes
- Driven by a Formal Quality Model
  - Validation against schema
  - Validation against mismatches

The HALE Canvas



Silvia Franceschi

PLANNED LAND USE IN THE TRENTINO PROVINCE

Simon Templer

HYDROPHYSICAL WATERS PROVISION FORM UK OPEN GOVERNMENT DATA

The HALE Experiment

- Help us in our research!
  - Do one or both presented mapping projects yourselves, starting from the „start“ halex projects
  - Send your completed project file(s) + logfiles by the 5th of July to tr@xsdi.org or pass by the dhp booth.
  - ...and/or fill in the online evaluation questionnaire: http://www.dhpanel.eu/q
- For each submitted project or evaluation questionnaire) you get a chance to win a great wine from tuscany.
- Please distribute this to others, especially domain experts in the hydrography and Land Use domains.

Happy end

- *hale* is Open Source Software and licensed using the **LGPL 3.0**.
- Find out more about the data harmonisation panel: http://www.dhpanel.eu
- HALE community site: http://www.esdi-community.eu/projects/show/hale
- Public user and developer mailing list: dev@esdi-humboldt.eu
- Contact the hale team: info@dhpanel.eu