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QKen meeting in Ljubljana

Preparation for Group Work

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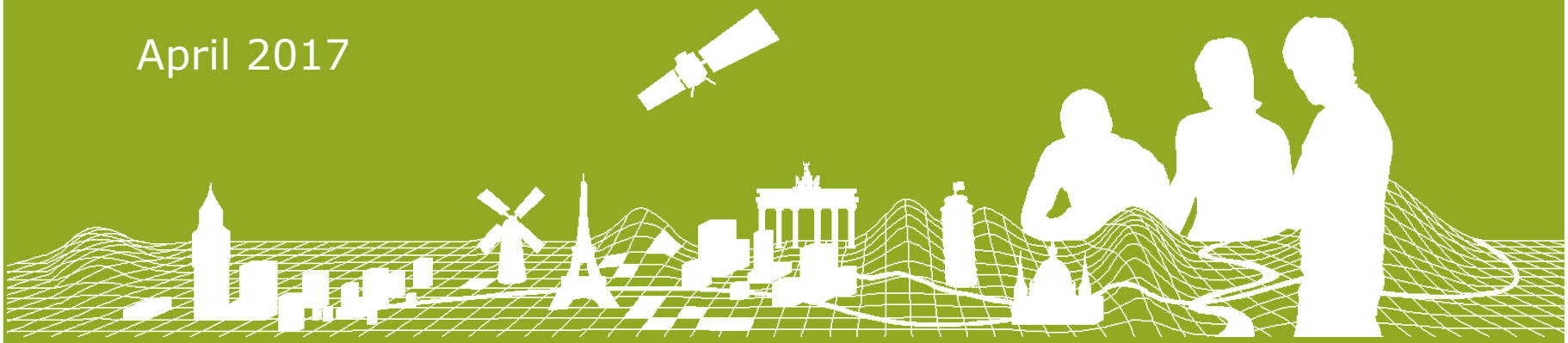

Group work – Creating a Data Quality Model

Definition

A quality model is a framework for measuring and presenting the quality of a spatial dataset. It contains a number of distinct parts some of which may not be applicable to some datasets. These are:

- An assessment of the quality requirements of the dataset usually expressed in terms of quality elements as defined in ISO 19157
- The identification of the evaluation methods, usually defined in terms of ISO 19157
- The identification of the metadata recording process defined as described in ISO 19115-1 or in a quality report.

In addition to this the model may include the following:

- Details of any additional methods used to control quality in the production flowline such as (but not limited to) validation tools, quality control, quality assurance or accreditation
- Details of any post flowline testing
- The required quality levels

Scenario

We have a completely new dataset, new editing solution and new database solution.

We are right at the beginning – no development has taken place yet.

Questions

- What would we do in order to create a Data Quality Model?
- What order would we do it in?
- What issues will we face?
- How will we overcome these issues?
- Are there any risks associated with this?

What would we do in order to create a Data Quality Model? (also order)

1. We have to investigate database for product specification
2. We have to analyse the quality requirement in feature type level
3. We have to account ISO 19157 to choose the quality element subelement, fit to the scope
4. According to ISO 19157 we must choose type of measure, give definition of measure
5. Evaulation method description
6. Result of value type and unit
7. Conformance level
   - Specify data quality unit
   - Specify dq measures
   - Specify dq evaluation procedures
   - Evaluating

What issues will we face?

- Correct usage of quality elements
- Setting of quality requirements
- Setting of real conformance level
- Choosing of sampling methods

How will we overcome these issues?

- Quality elements has to describe with good example
- Quality requirements has to describe very well
- Conformance level has to harmonise to the dataset
- Sampling methods has to describe according standards (ISO 3951)

Are there any risks associated with this?

- Different meaning of the definitions
- Different user requirements

Outcome

- A methodology that we could apply to any dataset.
- If we have time then we could consider how this changes with datasets that are already under development or already exist.
- If we consider this useful then we may look to put it into the ISO19100 guidelines