



# RDM (Reference data and metadata) position paper

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# Background

- ↓ Three physical meetings in Luxembourg (February 8), Paris (March 19), Bonn (May 27-28)
- ↓ Orientation paper delivered in April
- ↓ Draft position paper delivered in June
- ↓ Members and contributors from 15 countries, EEA, ESA and EuroGeographics

# Mandate of the RDM group

- ↓ Agree on the reference data elements
- ↓ Define the necessary resolution and quality according to user requirements
- ↓ Provide, if possible, information on data availability, quality, copyright rules, price and maintenance
- ↓ Provide, if possible, input to measure the impact of various choices of data in terms of accessibility and costs
- ↓ Provide a time scale for the availability of data

# Structure

- ⇒ Purpose of the document
- ⇒ Executive summary
- ⇒ Methodological approach
- ⇒ Common aspects of reference data
- ⇒ Description of reference data components
- ⇒ Metadata
- ⇒ Inter-relationships with other position papers
- ⇒ References
- ⇒ Glossary
- ⇒ Annex (RDM group members)

# Reference data: definition

- ↓ It is a series of datasets that everyone involved with geographic information uses to reference his/her own data as part of their work
- ↓ It provides a common link between applications and thereby provides a mechanism for the sharing of knowledge and information amongst people

# Reference data: definiton

- ↓ Reference data must fulfil three functional requirements
  - ↓ Provide an unambiguous location for a user's information
  - ↓ Enable the merging of data from various sources
  - ↓ Provide a context to allow others to better understand the information that is being presented

# Reference data: definition

- ↓ The following territorial levels should be addressed:
  - ↓ European
  - ↓ National
  - ↓ Regional
  - ↓ Local
- ↓ The metadata is part of the reference data
- ↓ Metadata shall be used to facilitate access and use of the related geographical reference data


# Reference data: components

- ↓ The group agreed on the following components:
  - ↓ Geodetic reference system
  - ↓ Units of administration
  - ↓ Units of property rights (parcels and buildings)
  - ↓ Addresses
  - ↓ Selected topographic themes (hydrography, transport, height)
  - ↓ Orthoimagery
  - ↓ Geographical names

# Common Aspects




- ↓ Geodetic reference system and projections
- ↓ Data quality
- ↓ Maintenance
- ↓ Interoperability
- ↓ Language and culture
- ↓ Resolution/scale and implementation priorities

# Recommendations from RDM

-  Recommendation on reference system and projections in line with the recommendations from the AST group
- ETRS89, EVRF2000
  - Lambert Azimuthal equal area for statistical analysis and display
  - Lambert Conic Conformal at scales  $\leq 1:500,000$
  - Transverse Mercator at scales  $> 1:500,000$

# Recommendations from RDM

## Data quality



-  the quality of the reference data should be known
-  adopt relevant ISO standards
-  document results of quality measurements

## Maintenance




-  consider “change only updates” with time stamp
-  keep snap shot approach in the short term

# Recommendations from RDM (2)

## Interoperability




-  adopt related standards proposed by AST group
-  define conceptual model for the reference data components

## Language and culture

-  That reference data specifications are created and described in a way that is commonly understood and which takes into account cultural differences
-  use international standards for the storing of alphanumeric character sets
-  To agree of common definitions for and their attributes belonging to the components of the reference data

# Recommendations from RDM (3)

## Resolution/scale and implementation priorities

-  That the primary reference data components should be collected and maintained at the largest possible scale, generally at the local level.
-  To define and implement mechanisms that allow the update information to flow from the local to the European level of the reference data.
-  To focus the INSPIRE framework implementation (comprising architecture, standards, specifications, processes) on large-scale reference data components, but approach the content implementation (reference data sets) in a pragmatic and step-by-step way, based on the current state of play.

# Recommendations from RDM (4)

## Resolution/scale and timeframe

Geographical level	Resolution range	Scale level	Scale range
European	> 100 m	Small scale	< 1:250.000
National	~ 25 m	Medium scale	1:100.000 ~ 1:250.000
Regional	~ 10 m	Medium scale	1:25.000 ~ 1:50.000
Local	< 2.5 m	Large scale	> 1:25.000

Indicative timeframe:

Small scale and metadata: 4 3 years

Medium scale: 6 years

Large scale: 10 years

# Description of reference data components

Component name	Component definition	Comments on availability and restrictions
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# Areas where further study is necessary

- ↓ Setting of data quality parameter levels
- ↓ The complex issue of “change only updates” with time stamps
- ↓ Defining a conceptual model for the reference data components
- ↓ To carry out a complementary study to identify the resolution (horizontal, vertical, time) requirements for reference data that may vary according to feature/component and geographic areas

# Areas where further study is necessary (2)

- ↓ Metadata profile compatible with ISO 19115 must be developed. It is therefore recommended to carry out a specific study on this issue with the involvement of all the stakeholders
- ↓ That priority should be given to create a one stop Internet "European GI" portal for discovering and accessing GI data. This would require further study to establish resource requirements.