

Proposal and discussions on standard code lists to define geographical and thematic coverage

SEMIDE – Expert workshop on metadata management & referential datasets

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- **Keyword element : standard code lists proposal**
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Keyword element : standard code lists proposal – “keyword” for the topic

- **“keyword” for the topic : a 2 levels classification**
 - ◆ ‘Water data domain’ keyword,
 - ◆ ‘Thematic’ keyword.

- **‘Water data domain’ keyword**
 - ◆ Topic 1st level classification list, specific to water management,
 - ◆ Answers EMWIS need concerning multilingual searches,

Keyword element : standard code lists proposal – “keyword” for the topic

‘Water data domain’ keyword

- Keyword value and meaning should be displayed in the interface.

EMWIS ‘Water data domain’ keyword value	EMWIS ‘Water data domain’ keyword meaning	Example
AD	AD ministrative context	National boundary, administrative boundaries, main towns, list of projects
ENV	ENV ironmental data	DEM, Soil occupation
HYE	HYD rological Entities	Basin, river , lakes, aquifers
IUD	I ntake- U se- D ischarge	Quantity of water intake for irrigation, quality of water discharge from WWTP
MO	MO nitoring	Monitoring networks, monitoring stations, data on water levels, data on water quality
UP	U ser P olluter (including user polluters characteristics and description of infrastructures)	List of industries using water, characteristics of dams, list of WWTP
WSS	W ater S upply S anitation services	Data on population connected to drinking water, efficiency of water

Keyword element : standard code lists proposal – “keyword” for the topic

▫ ‘Thematic’ keyword

- ◆ Topic 2nd level classification list, referring to the topic concerned by the data,
- ◆ Based on GEMET : answers to the requirement concerning the use of, at least, one word from GEMET multilingual thesaurus,
- ◆ GEMET concepts will be stored by reference (ie: Using conceptID).
- ◆ Work needed :
 - ◆ Understand the way concepts are managed in GEMET (does the conceptID changes if the definition changes ?
 - ◆ Define what GEMET translation should be displayed in the interface : all ? User interface settings based ?
 - ◆ Use GEMET broader/narrower/related concepts through search

Keyword element : standard code lists proposal – “keyword” for the place

▫ “keyword” for the place

- ◆ ‘River Basin’ keyword,
- ◆ ‘Aquifer ’ keyword,
- ◆ ‘Country & Region’ keyword.

▫ ‘River Basin’ keyword

- ◆ Objective : link the metadata to water management units,
- ◆ Constraint : management units name are cleared that codes (ex : name = ‘le Rhin’; code=‘FRC’).
- ◆ Information sources considered :

Standard code lists proposal – “keyword” for the place

▫ ‘River Basin’ keyword - information sources

- ◆ Covering both Euro and non Euro Med countries :
 - The JRC pan-European River and Catchment Database V2 (CCM-2),
 - UNEP/GRID Drainage Basins.
- ◆ For Euro- Mediterranean countries :
 - EEA, European river catchments (ERC) version 2,
 - WISE river basin districts,
- ◆ For non Euro- Mediterranean countries:
 - EMWIS collection of MPCs river basins,
 - FAO layers on Hydrological Basin in Africa ,
 - UNEP Plan Bleu : river basins in the Mediterranean,
 - Sahara and Sahel Observatory (OSS) : river basins sharing the Northern Sahara Aquifer System

Standard code lists proposal – “keyword” for the place

▫ ‘River Basin’ keyword

- ◆ Conclusion :
 - ◆ Information sources :
 - ◆ EMWIS Euro Mediterranean Countries : WISE River Basin Districts retained,
 - ◆ EMWIS Non Euro Mediterranean Countries : lack of harmonized information source. Combination of various sources is inefficient.
- ◆ Proposal:
 - ◆ EMWIS technical unit should do a completion work with the involvement of National Focal Points necessary
 - ◆ It could start from the already collected information by EMWIS.
 - ◆ It should aim to have a homogeneous definition of river basins across all EMWIS countries (Euro Med and non Euro Med).

Keyword element : standard code lists proposal – “keyword” for the place

▫ ‘Aquifer’ keyword

- ◆ Objective : link the metadata to water management units,
- ◆ Constraint : management units name are cleared that codes (ex : Name=‘Plateau lorrain versant Rhin’; Code=‘FR_GW_FRC008’).
- ◆ Information sources considered :
 - ◆ WHYMAP (Worldwide Hydrogeological Mapping and Assessment Programme) project : ongoing UNESCO work,
 - ◆ WFD Groundwater reporting.

Keyword element : standard code lists proposal – “keyword” for the place

▫ ‘Aquifer’ keyword

- ◆ Conclusion :
 - ◆ WHYMAP : coverage ok but no code nor name available,
 - ◆ WFD groundwater reporting : only for Euro Med countries, a name is not always provided.

- ◆ Proposal :
 - ◆ EMWIS technical unit should carry out a completion work with a necessary involvement of regional focal point.

Keyword element : standard code lists proposal – “keyword” for the place

▫ ‘Country & Region’ keyword

- ◆ Objective : link the metadata to administrative units,
- ◆ Constraint : a legal reference is needed.

- ◆ Proposal :
 - ◆ Advised to use short country names and alpha-2 code elements officially published by ISO in ISO-3166 (ex : fre for France),
 - ◆ EMWIS technical unit should complete the ISO list with Region names defined at EMWIS level.

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Other elements possible refining

‘Topic category’

- ◆ Included in the ‘CLASSIFICATION OF SPATIAL DATA SETS & SERVICES’ category and is mandatory.
- ◆ Some category do not seem to refer to EMWIS common activities.
ex : 2.11. Intelligence / Military (intelligenceMilitary)
- ◆ Proposal:

numerical identifier	textual name for humans (will enable the translation)	language neutral name for computers
2.2	Biota	biota
2.4	Climatology / Meteorology / Atmosphere	climatologyMeteorologyAtmosphere
2.7	Environment	environment
2.12	Inland Waters	inlandWaters
2.14	Oceans	oceans

Other elements possible refining

▫ **'Originating controlled vocabulary'**

- ◆ Included in the 'KEYWORD' category,
- ◆ "Mandatory if the keyword originates from a Controlled vocabulary" .

- ◆ Proposal for the Thematic keyword (will be based in GEMET):
 - ◆ Title: "GEMET Thesaurus version 1.0"
 - ◆ Date:
 - ◆ `dateType: publication`
 - ◆ `date: 2009-06-30` (date of the thesaurus implementation in the metadata catalogue tool).

Other elements possible refining

▫ **'Specification' & 'Degree'**

- ◆ Included in the 'CONFORMITY' category. Both are mandatory.
- ◆ Proposal :
 - ◆ It has to be defined at EMWIS level whether dataset conformity will be evaluated.
 - ◆ If no, given that this element is mandatory, it should be automatically filled with
 - ◆ 'Specification' = a reference to INSPIRE implementing rules.
 - ◆ 'Degree' = 5.3. Not evaluated (notEvaluated).

Other elements possible refining

▫ 'Metadata standard name' - additional WISE metadata

- ◆ Mandatory,
- ◆ WISE implementation instruction is the following: "*WISE should have a standard text reflecting the WISE profile*" : such a standard text could be "*ISO 19115 Geographic information – Metadata – WISE profile*".
- ◆ Proposal :
 - ◆ Advised to implement the standard text that will be defined at WISE level.

Other elements possible refining

▫ 'Metadata standard version' - additional WISE metadata

- ◆ Mandatory,
- ◆ WISE implementation instruction is the following: "*WISE should have a standard text*" : such a standard text could be "*ISO 19115:2003*".
- ◆ Proposal :
 - ◆ Advised to implement the standard text that will be defined at WISE level.

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Questions/Discussion

Questions

- ◆ Q1: Geographical coverage: definition of geographical datasets for River basins and Aquifers
- ◆ Q2: How could be defined the administrative water management units for non EU countries (the River Basin Districts for the EU)?
- ◆ Q3: What level of details do we need to define the thematic coverage? Are 7 domains sufficient to describe the variety of existing information sources (ADministrative context, ENVironmental data, HYdrological Entities, Intake-Use-Discharge, Monitoring, User Polluter, Water Supply Sanitation services)?