

The German Environmental Information Portal PortalU® and INSPIRE

Current adoptions of the UDK data model

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Koordinierungsstelle
PortalU

The German Environmental Information Portal PortalU®

- joint German federal-state-project
- distributed system: bundles decentralized distributed environmental information
- was designed due to increasing demands on the access of environmental information (i.p. EU Directives 2003/4/EG & 2007/2/EG)
- over 2 years successfully online

Goal: central access to environmental information of public authorities for citizens and experts

Features of PortalU®

- powerful search engine
- metadata component for the environmental data catalogue UDK (Umweltdatenkatalog)
- standard OGC web mapping service (WMS) and map viewer
- query interfaces for search in connected systems and for transfer of search results

- is a metadata information system for the proof of environmental data sets of public administrative bodies in Germany.
- It is used by the Federal Environmental Agency, the Federal Nature Conservation Agency and in most federal states
- UDK contains metadata and informs about who possesses where which kind of environmental data
- currently about 20 000 metadata sets are available
- the UDK data model is currently ISO conform
 - UDK class „geoinformation / map“ to ISO 19115
 - UDK class „service / information system“ to ISO 19119

- March 2007: Directive 2007/2/EG of establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)
- INSPIRE should be designed to
 - ... support European Community policy on the environment
 - ... to improve the availability, quality, organisation, accessibility and sharing of spatial information
 - ... to improve cross-boarder usage of spatial data in Europe
 - ⇒ refers to web-based services for discovery, visualisation and download of data
- Technical details of INSPIRE are govern by Implementing Rules (IR), which are currently developed.
- Current state IR Metadata
 - May 2008: IR have been approved by the INSPIRE Committee
 - June 2008: adding of comments from the European Parliament
 - after publication: IR are immediately applicable law in the Member States
 - until 2010 metadata of Annex I & II themes and until 2013 metadata of Annex III themes have to be made available

- all INSPIRE metadata elements can be mapped to ISO 19115 and 19119 elements
- the demands of INSPIRE IR Metadata interfere with the current UDK data model
 - new mandatory fields (conformity, unique resource identifier)
 - optional field become mandatory (lineage)
 - content of fields has to be adopted (constraint related to access and use, spatial data service type, keyword, metadata point of contact)

Objectives according to adoptions in the UDK

- keeping expenses low
- implementing INSPIRE demands as fast as possible
- avoiding the loss of information due to simplified demands



Lineage

- Information about the history of origin and the quality of the data set
- Mandatory field for geodata
- Adoption of already existing data
 - Current optional UDK field will be change to mandatory for the class Geoinformation/Maps
 - If there is no entry: automatically entry “Unbekannt” (unkown)

Spatial data service type

- Mandatory field for services
- Adoption of already existing data
 - Service typ is a UDK mandatory field for the class “Service / Informationssystem”
 - Allocation of existing information to code list:

INSPIRE ID	Description	Current UDK term
1	Discovery Service	CSW
2	View Service	WMS
3	Download Service	WFS
4	Transformation Service	
5	Invoke Spatial Data Service	
6	Other Service	All other entries



Keyword

- UDK: currently 3 UMTHESES thesaurus keywords are mandatory
- INSPIRE demand: 1 GEMET (General Multilingual Environmental Thesaurus) keyword is mandatory
- The German part of the GEMET is a subset of the UMTHESES. In the future 3 UMTHESES keywords are further on mandatory. One of this keywords have to be at the same time a GEMET keyword.
- Adoption of already existing data
 - Automatically check, if one of the three UMTHESES keywords is simultaneously a GEMET keyword
 - If not: search for a hierarchical higher UMTHESES keyword until a GEMET keyword is found

Conclusions

- The INSPIRE Implementing Rules are getting more and more concrete
- The German environmental catalogue UDK seems to be set up for the future, due to the support of ISO 19155 and 19119
- The UDK data model will be adopted according to the IR Metadata demands in August 2008
- The migration of all existing UDK data sets to the modified INSPIRE compliant new UDK data model will be completed by the end of August 2008

Thanks for your Attention!

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