



**The *gein*<sup>®2.0</sup> Information Broker  
for  
Environmental and Geospatial Data**

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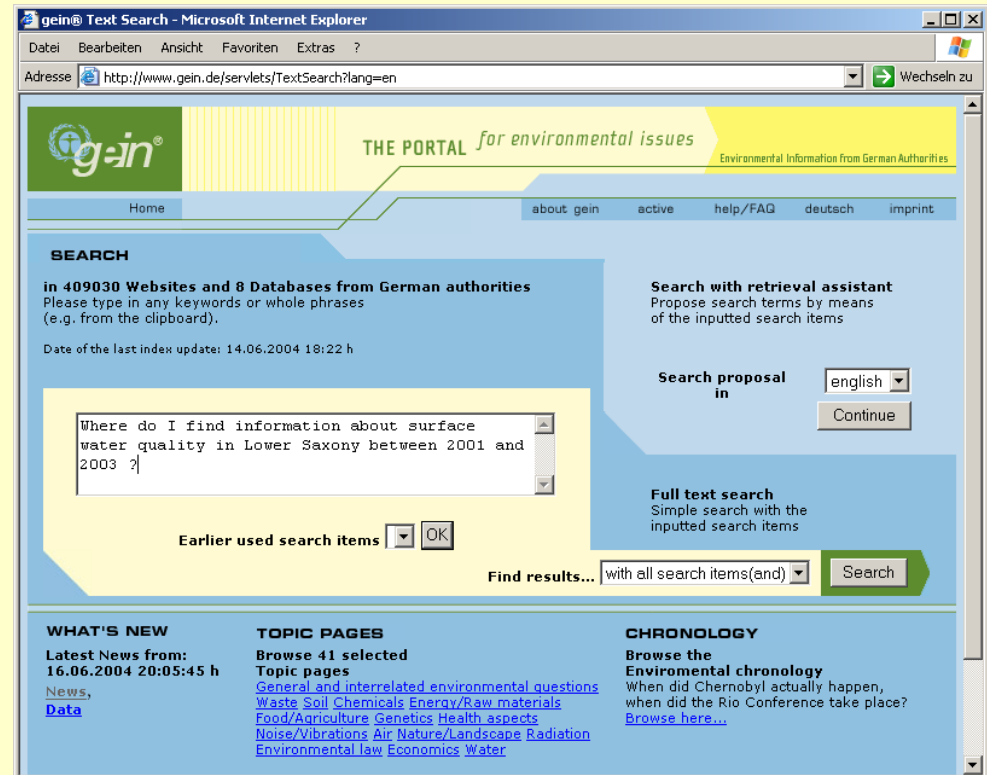
*10th EC-GI & GIS Workshop*  
*Warsaw*  
*23.-25.6.2004*

- What is *gein*<sup>®</sup> ?
- What is the UDK ?
- What is *gein*<sup>®</sup> 2.0 ?
- How can the UDK/*gein*<sup>®</sup> 2.0 be used as a catalog service for geospatial data ?
- How will UDK/*gein*<sup>®</sup> 2.0 be integrated in the national (German) SDI ?

- *gein*<sup>®</sup> = „The **G**erman **E**nvironmental **I**nformation **N**etwork“
- Thematic focus is on environmental data
- Developed and maintained with funding from the German federal government and the federal states
- Portal restricted to „official“ information providers (i.e., government agencies and affiliated organizations)
- The result is a high quality of data in *gein*<sup>®</sup> !

*gein*<sup>®</sup> = The official portal for environmental information  
in Germany

- Technical concept:  
Integrated access to web-pages and (meta)data registries
- gein<sup>®</sup> features advanced functionality for information retrieval and automatic metadata generation  
  
→ (Semantic Network Services - SNS)
- System is online since 2000  
**(www.gein.de)**
- Current version: 1.1



- Umweltdatenkatalog UDK = Catalog of Environmental Data Sources
- Used since beginning of the 90's used by federal and state agencies in Germany (and Austria) as a registry for environmental data
- „Classic“ metadata catalog and information system
  - stand-alone version (Win-UDK)
  - online version (Web-UDK)
- In addition :
  - elaborate data acquisition component (Win-UDK)
  - web-based access to catalogs distributed among federal states through V-UDK

**[www.umweltdatenkatalog.de](http://www.umweltdatenkatalog.de)**







- Version 5.0 to be released September 2004

- Since 2003: Maintenance and development of UDK and *gein*<sup>®</sup> through the UDK/GEIN Coordination Center (@ the Environmental Ministry of Lower Saxony, Hannover)
- Currently: Re-design of system
- EU Directive 2003/4/EC on public access to environmental information

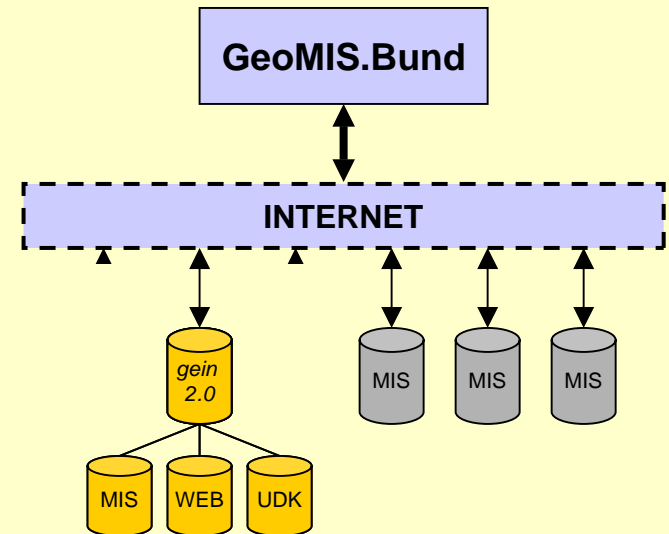
→ *gein*<sup>®</sup> 2.0

- *gein*<sup>®</sup> 2.0 will integrate *gein*<sup>®</sup> functionality and the UDK metadatabase
- UDK will become core component (Meta Information Broker - MIB)
- Release of *gein*<sup>®</sup> 2.0 is expected by the end of 2005

- UDK uses own metadata model
  - de-facto standard for environmental data
  - DC compliant, large overlap with ISO 19115 (only 22 out of 115 fields not ISO)
  - UDK objects, UDK addresses
  - 6 UDK object classes
- UDK was not specifically designed for geospatial data, but environmental data are often geospatial
  - → object class 4
  - UDK used by mapping agencies (Hesse, Hamburg, Lower Saxony) as geodata registry
- UDK 5.0: object classes 2 and 4 → fully ISO 19115 / ISO 19119 compatible

	1.) data collection / data base
	2.) service / application / inf. system
	3.) document / report / publication
	4.) geodata / digital map
	5.) organisational unit / assignment
	6.) proposal / project / programme

- Close cooperation with emerging German SDI (GeoMIS.Bund<sup>®</sup> / GDI-DE<sup>®</sup>)
- UDK Hesse, UDK Lower Saxony, UDK Hamburg (HMDK) already MIS in GeoMIS.Bund<sup>®</sup>
- Goal: UDK/gein<sup>®</sup> 2.0 become fully integrated data catalog in GDI-DE<sup>®</sup>
- Problem: Current interface not optimized
- UDK 5.0/gein<sup>®</sup> 2.0 will be equipped with CSW-2.0 compatible interface



- *gein*<sup>®</sup> and UDK are well established as information system / metadata registry for government agencies in Germany (and Austria)
- UDK data model = de-facto standard for environmental data
- By end of 2005: Merger of *gein*<sup>®</sup> and UDK → *gein*<sup>®</sup> 2.0
- Although not specifically designed for geospatial data, UDK can be and is already used as geodata catalog
- In part, UDK is already integrated in national SDI (GeoMIS.Bund<sup>®</sup>)
- Implementation of ISO standards (ISO 19115, ISO 19119) and OGC CSW 2.0 interface will make system OGC compatible and interoperable

Goal:

Full integration of UDK 5/ *gein*<sup>®</sup> 2.0 into national (and European ?) SDI

Thank you very much for your attention !

If you have questions, please consult our web page

**[www.udk-gein.de/en/](http://www.udk-gein.de/en/)**

or contact us via e-mail

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