



Sharing Environmental Data with gein[®]

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- **gein[®]** =
German Environmental Information Network
- Portal to environmental issues in Germany
- Operating since 2000
- More than **90** suppliers of environmental information from governmental authorities and other public institutions at the federal and the state level
- More than **400 000** individual Web pages
- 9 database interfaces (more than **500 000** objects)

Project gein[®] 2.0:

- Fulfill the requirements of the EU Directive 2003/4/EC on public access to environmental information
- Merger of gein[®] and UDK
- Technical redesign

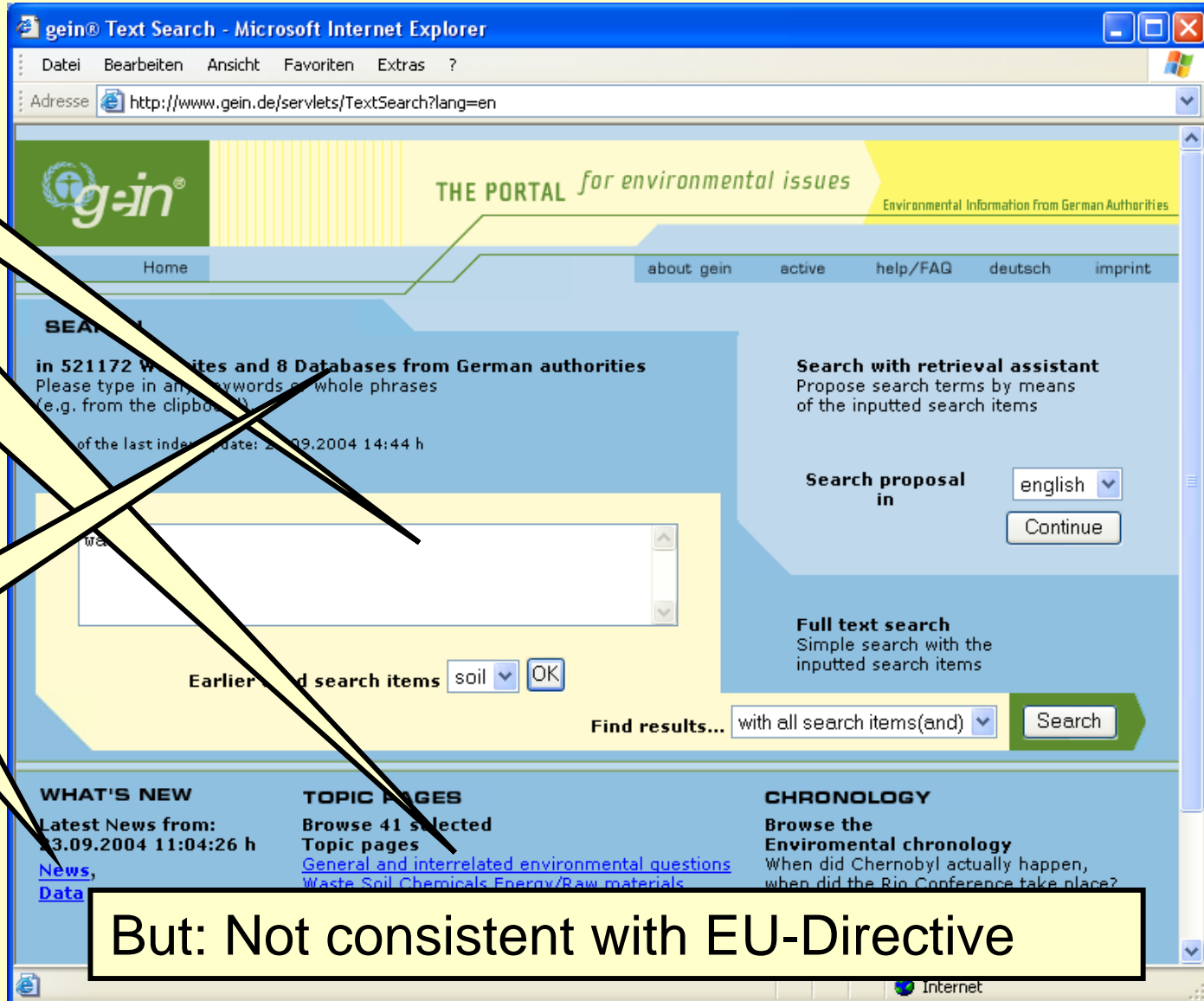
- Meeting the requirements of EU Directive 2003/4/EC
 - Dissemination of environmental information
 - Access to environmental information and data
 - Metadata („registers or lists of the environmental information held by public authorities or information points, with clear indications of where such information can be found“)

- Search

- Topic pages

- Up-to-date news and data

- Meta-information
 - UDK
 - others







A screenshot of a Microsoft Internet Explorer browser window displaying the 'gein Text Search' page. The browser's address bar shows 'http://www.gein.de/servlets/TextSearch?lang=en'. The page header includes the 'gein' logo and the text 'THE PORTAL for environmental issues' and 'Environmental Information from German Authorities'. A navigation menu contains links for 'Home', 'about gein', 'active', 'help/FAQ', 'deutsch', and 'imprint'. The main content area features a search box with the text 'in 521172 Websites and 8 Databases from German authorities'. Below the search box is a dropdown menu for 'Earlier search items' with 'soil' selected and an 'OK' button. To the right, there are sections for 'Search with retrieval assistant' and 'Full text search'. At the bottom, there are three columns: 'WHAT'S NEW' with a date of '23.09.2004 11:04:26 h', 'TOPIC PAGES' with 'Browse 41 selected Topic pages', and 'CHRONOLOGY' with 'Browse the Environmental chronology'. A large yellow box at the bottom of the screenshot contains the text 'But: Not consistent with EU-Directive'. The browser's status bar at the bottom shows 'Internet'.

But: Not consistent with EU-Directive

- Adaptation of the topic structure to requirements of the EU-Directive
 - Topics will be adapted to article 2
 - Expansion of the structure to topics of other departments (e.g. agriculture or human health)
 - Categories will be adapted to article 7
 - E.g. legislation on the environment, programmes, reports, data, authorisations, environmental impact studies, etc.
- Goals:
 - Complete coverage of information from all relevant departments
 - Access to information on federal, state and local level

- UDK is de-facto standard for environmental metadata

- “registers or lists of the environmental information held by public authorities” (Article 3, EU-Directive)
- UDK objects
- UDK addresses
- 6 UDK object classes

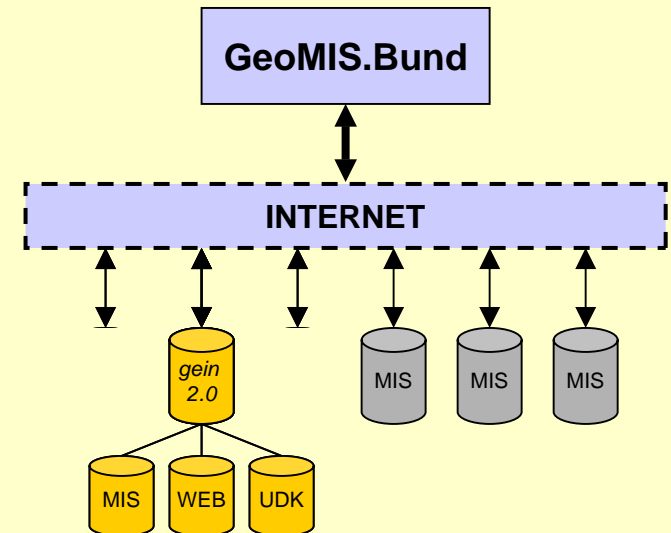
| | |
|--|---|
|  | 1.) data collection / data base |
|  | 2.) service / application / inf. system |
|  | 3.) document / report / publication |
|  | 4.) geodata / digital map |
|  | 5.) organisational unit / assignment |
|  | 6.) proposal / project / programme |

- UDK 5.0

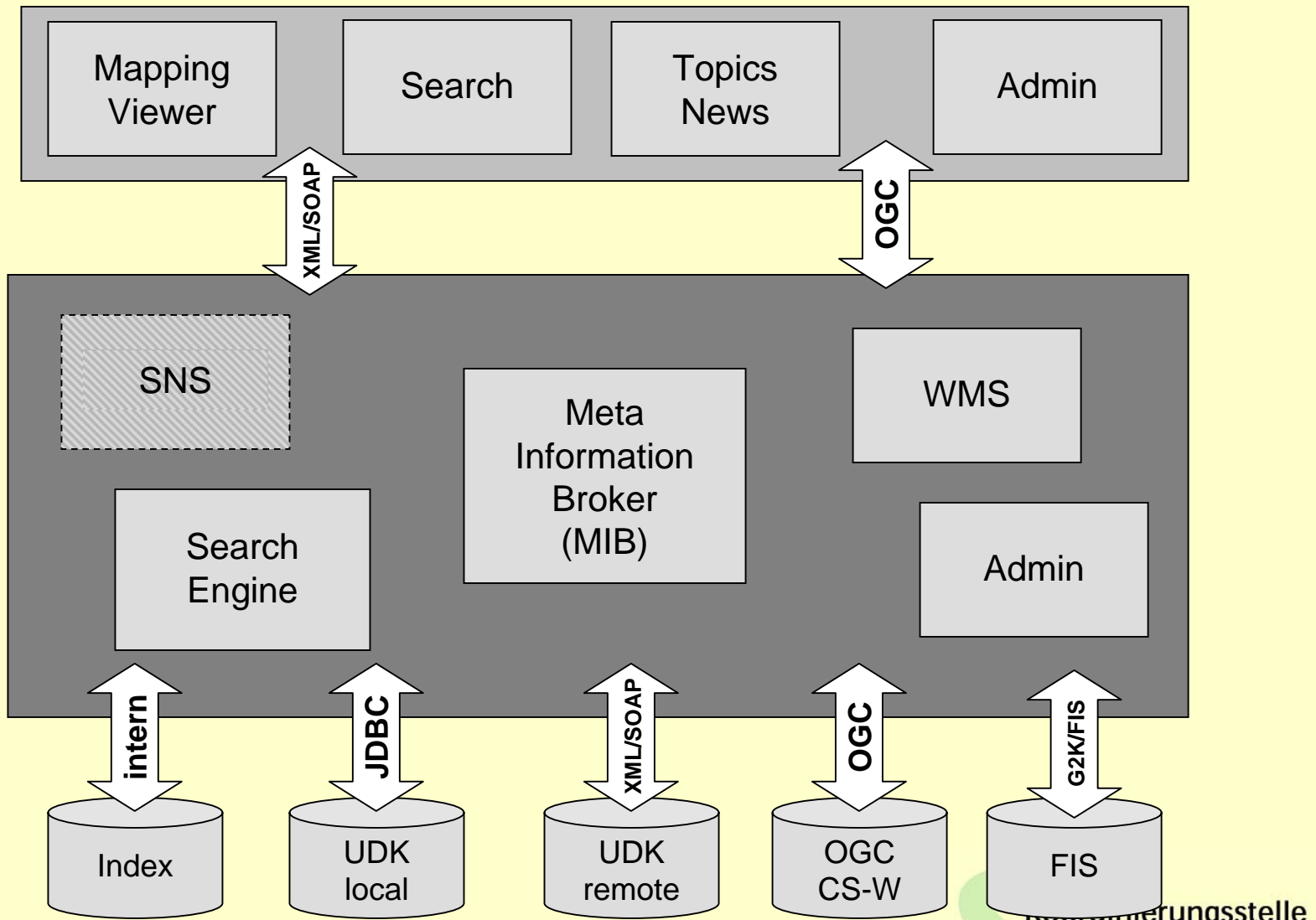
- DC compliant
- ISO 19115 / ISO 19119
 - object classes 4 and 2 → fully ISO 19115 / ISO 19119 compatible

- Management of metadata with the UDK
 - Lists of the environmental information held by public authorities
 - What data exist?
 - Who is responsible for the data?
 - How can I get the data?
- Integration of UDK in gein[®] 2.0
 - Same search mechanism
 - Access through gein[®] topic list
- Connection to external meta information systems
 - e.g. UOK, OGC compliant systems

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



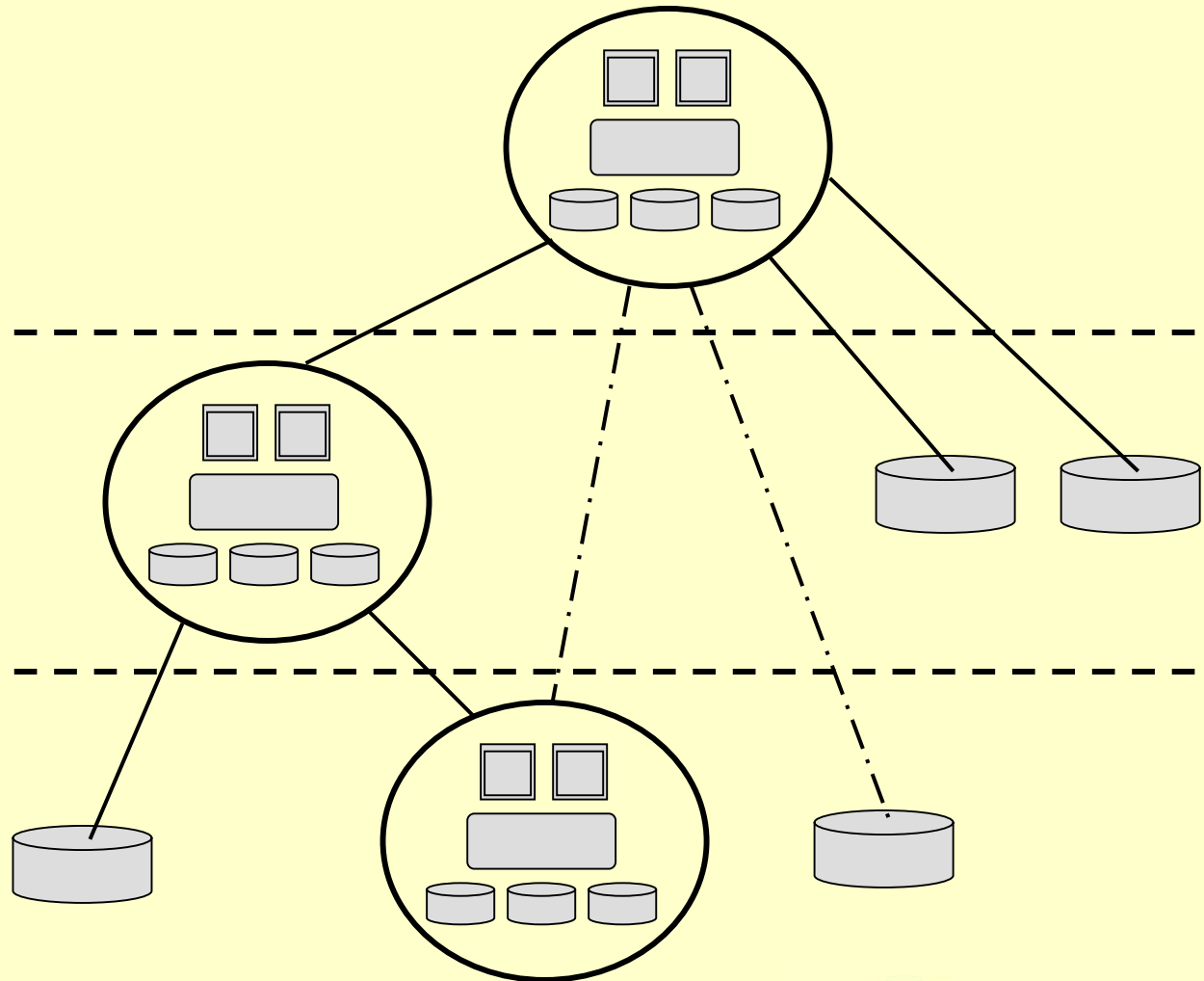
- New search engine
 - More pages, new administration, new functionality, integration of SNS
- Integration of the UDK
- Various database interfaces
 - Metadata, OGC compliant, FIS
- Possibility to install application on state-level
 - Distributed application, hierarchical network, cascading searches, etc.
- New design of the user interface
 - Functionality, arrangement of the components, etc.



Central installation

Federal and state level

Local level



- Multilingual
- Adaptable to needs of states
- Search engine
 - Simple search (next level: detailed search, map search)
- Structure of topics
 - Adapted to requirements of the EU-Directive
- News pages
 - Up-to-date headlines right on top page
 - Detailed news and monitoring data on next level
- Chronology
- Geographic data (next level)

- Most environmental data are geospatial data
- ISO/OGC compliant catalogue service
- Integration of OGC compliant Web-Mapping-Service (WMS)
- Search through map interface
- Visualisation of geospatial data with integrated map-viewer

gein[®] 2.0:

- gein[®] is **the** German portal for environmental issues
- Will be adapted to the requirements of EU Directive 2003/4/EC on public access to environmental information
- Integration of the UDK as gein[®] 2.0's central metadata component
- Various interfaces for the integration of diverse information systems
- Standard services for data access

www.gein.de

www.udk-gein.de

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