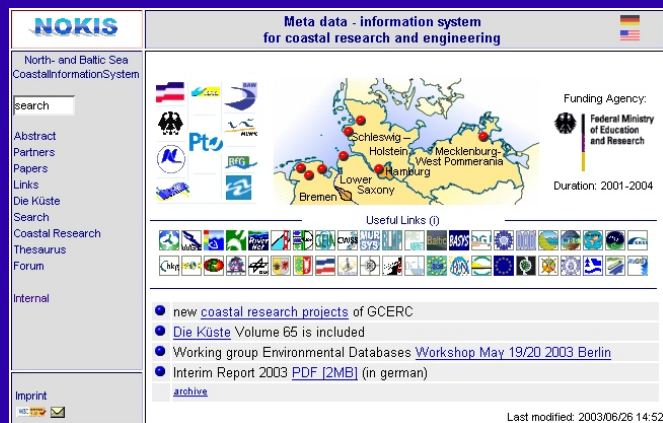


<http://nokis.baw.de>

The NOKIS web portal offers information about the German coastal zone. In particular, the abstracts of all papers published in the German journal "Die Küste" and the information concerning past and on-going research projects, which have been funded through the German Coastal Engineering Research Council KFKI, give a review of coastal research and development activities. Digital documents of a number of recent project reports are available online.



Full text indexing of the complete NOKIS metadata base and of some additional external metadata archives has been implemented. Any keywords can be used to search for data, reports and their corresponding provider. The web portal is bilingual to support international communication and exchange.

Present NOKIS partners represent current data providers and data users from the coastal zone. Additional partners have been attracted during the pilot phase to join the system.

PROJECT INFORMATION

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North Sea and Baltic Sea Coastal Information System

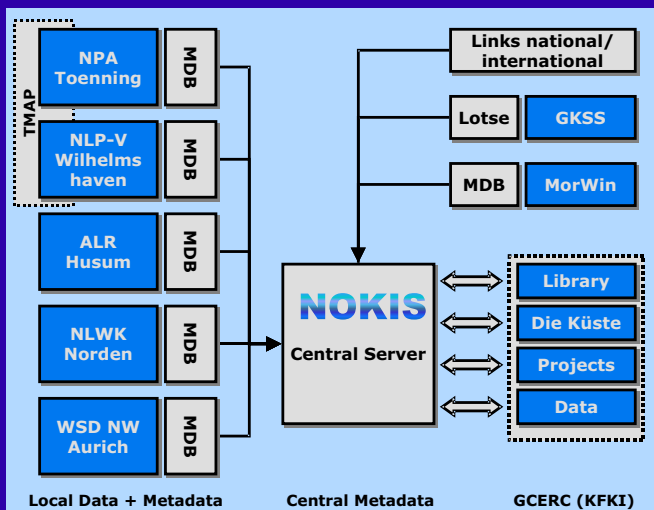


Metadata Information System for Coastal Research and Engineering



PROJECT

The basic concept of the metadata information system NOKIS has been developed by a team of scientists and engineers from various coastal authorities: Federal Administration of Waterways and Navigation, Lower Saxony Water Management and Coastal Defense Agency, Regional State Office for the Rural Areas Husum, National Park Offices of the Wadden Sea in Lower Saxony and Schleswig-Holstein, Federal Waterways Engineering and Research Institute, and German Coastal Engineering Research Council.



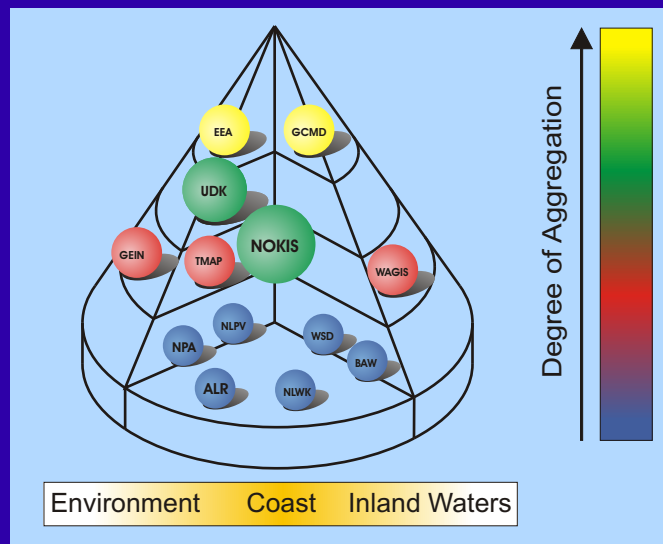
After defining a metadata standard for the coastal zone a corresponding metadata editor was developed to facilitate the creation and maintenance of metadata for all existing and future data sets, GIS-files and related reports and publications in the participating institutions.

The prototype version of this metadata information system is based on an open and optionally expandable concept. Utilization of the system will further and intensify communication and the exchange of information and data in the coastal community.

CONCEPT

NOKIS is a central repository for coastal metadata from Federal and State organizations. The local databases, some of them proprietary, remain on distributed servers under control of the owners. Metadata are generated locally in order to support on site documentation and data handling. They are then copied to the NOKIS central server.

Via the common web portal NOKIS those metadata can be accessed through search engines. Requirements of higher-level information systems (e.g. German Environmental Data Catalog - UDK) are met by the standardized NOKIS metadata base.

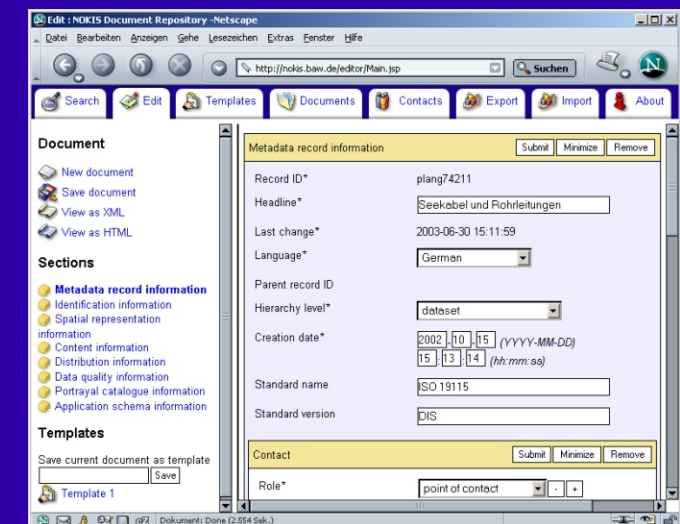


There are no license fees because OpenSource software products are used to a large extent. Each NOKIS partner is granted the right of use for the metadata editor. The underlying software technology is based on Java, XML, JavaServerPages, and PostgreSQL. The map server of the University of Minnesota within an Apache Tomcat web server is part of the package.

STANDARD

Metadata used in NOKIS are a subset of the ISO 19115 standard for geospatial metadata and have been adapted to meet the requirements of the coastal zone. They provide a structured collection of information about data with regard to "what, when, where, why, who" and "how".

In particular, they incorporate the characterization of data and metadata, their temporal and spatial extent, data quality, data access and presentation methods, which facilitate documentation and data discovery.



In cooperation with the Research Center for Information Technology - FZI, the project group has developed a user-friendly editor to create these metadata.

This configurable tool has been field-tested since the end of 2002. Implementation and user support is provided by plan-GIS (Leer). Its context-sensitive help system incorporates the experience gained.