The new Earth Data Namibia – a milestone in collecting and distributing the Namibian national geo-scientific data

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The new Earth Data Namibia Information Management System (EDN) was planned and implemented as a one stop system that is able to provide a wide variety of national geo-scientific and environmental data to both governmental and private users. The implementation of EDN is intended to stimulate national development by an open and user-oriented policy that helps to attract investors to the mineral industry and makes data available for other sectors, such as land use planning, agriculture, geo-hazard prevention, and water resource management.

EDN is operated by the Geological Survey of Namibia (GSN) in Windhoek. It hosts the following data:

- Geology/ economic geology: mineral deposits, geochemistry, bore holes logs, geological maps,
- Mining/ Licensing: mineral licenses, mines, processing plants, waste dumps,
- Environmental data: polluted sites, water and soil sampling, radon monitoring, dust monitoring,
- Land possession: farms and addresses,
- Library/ archive: metadata and data of documents, reports, maps, drawings etc.

At the moment the system hosts information on 2334 mineral occurrences, 712859 geochemical samples, 131 thematic maps, 15411 non-published documents, 3531 reports, 7696 published documents, 8394 historical and current mineral licenses and 51546 bore holes. The metadata editing and search functions have made it easier to discover the current and archival data promptly.

For data access and management two different interfaces are available:

- At the Geological Survey/ Ministry of Mines and Energy a **WINDOWS based interface** provides access to all modules of the system. Using a clear roll concept, confidential and public data are separated. Public data are accessible for all users at the National Earth Science and Energy Information Centre of the Ministry of Mines and Energy.
- On the **Internet** a web-based interface provides an easy-to-use web site portal to the database and the selected spatial data.



EDN was launched in the 90s with several ACCESS databases and ESRI Arcview 3. In 2001 it was completely transferred to a fully integrated database and GIS, based on ORACLE 6.0 and Arcview 3.3. In 2011, after an operation time of almost 10 years, it was re-implemented using Microsoft SQL server 2010, ESRI ARCGIS server 10.0, Linux, PostgreSQL, and Geoserver.

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