

**AEGOS Spatial Data Infrastructure:
Data, products and services
Examples of innovative spin-off projects based on AEGOS**

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The purpose of AEGOS project is to design and implement a pan-African spatial data infrastructure (SDI). Public georesources data and user-oriented products and services are the fundamental components of the AEGOS SDI. User-oriented products and services are powerful tools for a variety of users involved in planning and monitoring the use of georesources, such as decision-makers both in public and private sectors, authorities on all levels, as well as geoscientific communities and the civil society. Based on the primary data and the AEGOS infrastructure customised user-oriented products and services will contribute substantially to

- management of natural resources (minerals, water, geothermal energy)
- analysis and solution of land use conflicts
- creation of governance maps for a wide variety of applications
- involvement of the public in important decision making processes.

One of the core elements of the AEGOS SDI is a metadata catalogue, which provides information on available geo-resources data in Africa. This facilitates the availability of diversified data from multiple sources and their further use for the creation of innovative user-oriented products and services.

The objective of one of the AEGOS project teams in Phase 1 of the project was to identify and define useful and highly needed products and services. In order to do this the team carried out feasibility studies and tests of three use cases:

- a map of land use conflict analysis in Senegal
- a predictive model of mineral resources in Ghana
- a erosion potential map of the Limpopo region, South Africa.

The test cases were executed using existing data from these countries and applying advanced methodologies, such as artificial neural networks, decision trees and criteria catalogues. The results were encouraging.

It is proposed for AEGOS Phase 2 to identify more use cases in AEGOS member countries and to further develop methodologies and adapt best practises for creating innovative products and services. A use case can be for one country or for a group of neighbouring countries which provides a platform for developing transboundary services.

Finally, the developed methods and best practises shall be compiled in “cook books” and provided as “toolboxes” through the AEGOS SDI. This way the beneficial methods and best practises can be propagated to a broad user community in Africa and elsewhere.

In AEGOS Phase 2 the methodologies and applications of innovative user-oriented products and services shall be developed further in the frame of so-called “spin-off” projects. A number of such projects have been identified and proposed, such as

- “Transboundary resource management system in the Central African Copperbelt”,

- “Developing a geological data and map server for West Africa”,
- “Mineral Potential Mapping of Western Ethiopia and public involvement in land use planning”,
- “Implementation of a mineral resources management plan in Senegal”,
- “Mineral prospectivity maps of Ghana”
- “Hydrogeological mapping in Ethiopia, standardised processing and presentation of data via the AEGOS SDI”.

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