



## Feasibility Study:

# GEOSCIENTIFIC KNOWLEDGE AND SKILLS OF AFRICAN GEOLOGICAL SURVEYS

### WP 3 - Gap analysis of geoscientific mapping

Acquisition of metadata to geological maps as base for the compilation of an index map and map catalogue of available maps

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## WP3: Partner organisations



Bundesanstalt für  
Geowissenschaften  
und Rohstoffe

**BGR** – Bundesanstalt für Geowissenschaften und Rohstoffe



British  
Geological Survey  
NATIONAL ENVIRONMENT RESEARCH COUNCIL

**BGS** – British Geological Survey



Geoscience for a sustainable Earth  
**brgm**

**BRGM** - Bureau de Recherches Géologiques et Minières



**CzGS** – Ceska geologicka sluzba



**IGME** – Greece - Institute of Geology & Mineral Exploration



**PGI-NRI** – Polish Geological Institute - National Research Institute



**SGUDS** - State Geological Institute of Dionýz Štúr (Slovakia)



**GIRAF**  
Geoscience Information in  
Africa

**GIRAF** - Network Geoscience Information in Africa

## WP3: Objectives



- **Compilation of a map catalogue / index maps of available maps on:**
  - Geology
  - Mineral occurrences, e.g. raw materials, energetic minerals
  - Groundwater occurrences and quality
  - Geochemistry
  - Geophysics
  - Remote Sensing data
- **Identification of areas where detailed geological mapping is required**

## WP 3: Methods



- Collection of all necessary **geospatial metadata of published and unpublished digital and analogue maps** for geology, mineral resources, groundwater, geophysics, geochemistry and imageries on international, national, regional and local scales;
- Identification of areas where **more detailed field mapping is needed** (= “white areas”);
- Identification of **actual and potential users needs**;
- **Recommendations** to better the situation.



## Activity 3: GAP analysis of geoscientific mapping

- **Task 3.1:** Create and disseminate a questionnaire no 1.2 to assess the present situation of all African Geological Surveys and similar institutions in Africa for activities in geoscientific fieldwork and map production.
- **Task 3.2:** Evaluate gathered information to show the present situation with African Geological Surveys;
- **Task 3.3:** Write a concept note with recommendations for strengthening mapping activities and the provision of geoscientific information and geodata by Geological Surveys in Africa.
- **Task 3.4:** Present the assessment results and recommendations at the Project Workshop for comments, feedback discussion and refine with the OAGS members.
- **Task 3.5:** Present the assessment results and recommendations at the Project Workshop for comments, feedback discussion and refine with the OAGS members.

# WP3: Deliverables - Internal reports

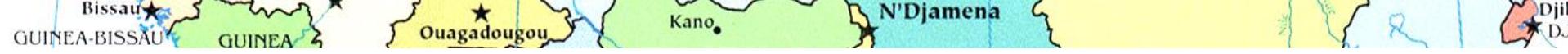
- **IR3.1:** Overview on existing available geoscience maps and geodata in Africa as well as a description of the present situation on mapping activities in African countries by national geological surveys. **15.10.2013**
- **IR3.2:** Concept Note on strategies to strengthen the capacities of African geological surveys in the field of geological mapping and the provision of geodata (maps and web services). **20.01.2014**
- **IR3.3:** Dissemination result. **15.11.2014**



# „As-Is Analysis“

- Overview of existing available maps and geodata and
- Description of the present situation on mapping activities with African Geological Surveys.





## Data Entry Form Graphic User Interface

# Database for metadata

**EUROGEO SURVEYS**  
European Geoscience for Society  
The Geological Surveys of Europe

Feasibility Study: Geological Mapping in Africa and Gap Analysis  
WP 3 - Gap analysis of geoscientific mapping  
Acquisition of metadata to geological maps as base for the compilation of an index map and map catalogue of available maps

Country:  Map Title:  Map Scale:   
Map SubTitle:  Type of publication:   
Main topic of map:   
Citation:   
Keywords:

**Geographic Extent - Bounding Rectangle**

North Latitude:	-9,00000
20,00000	<input type="text" value=""/>
West Longitude:	-10,00000
21,00000	<input type="text" value=""/>
South Latitude:	-10,00000

Coordinates: Details in DD

**GIS Viewer**

**Visualisation of bounding box**

Map is confidential

Publisher:   
Location:  Year of Publication:

MapQuality:  Type of production:

WMS\_available Name\_URL: kfJH Ä DÄCS  
 DB\_available Name\_DB: Min\_Occ\_Dep.mdb

Day of record entry:

Map elaborated in international Cooperation with:

Note for data entry:  required Information

**BGR**



## Table metadata

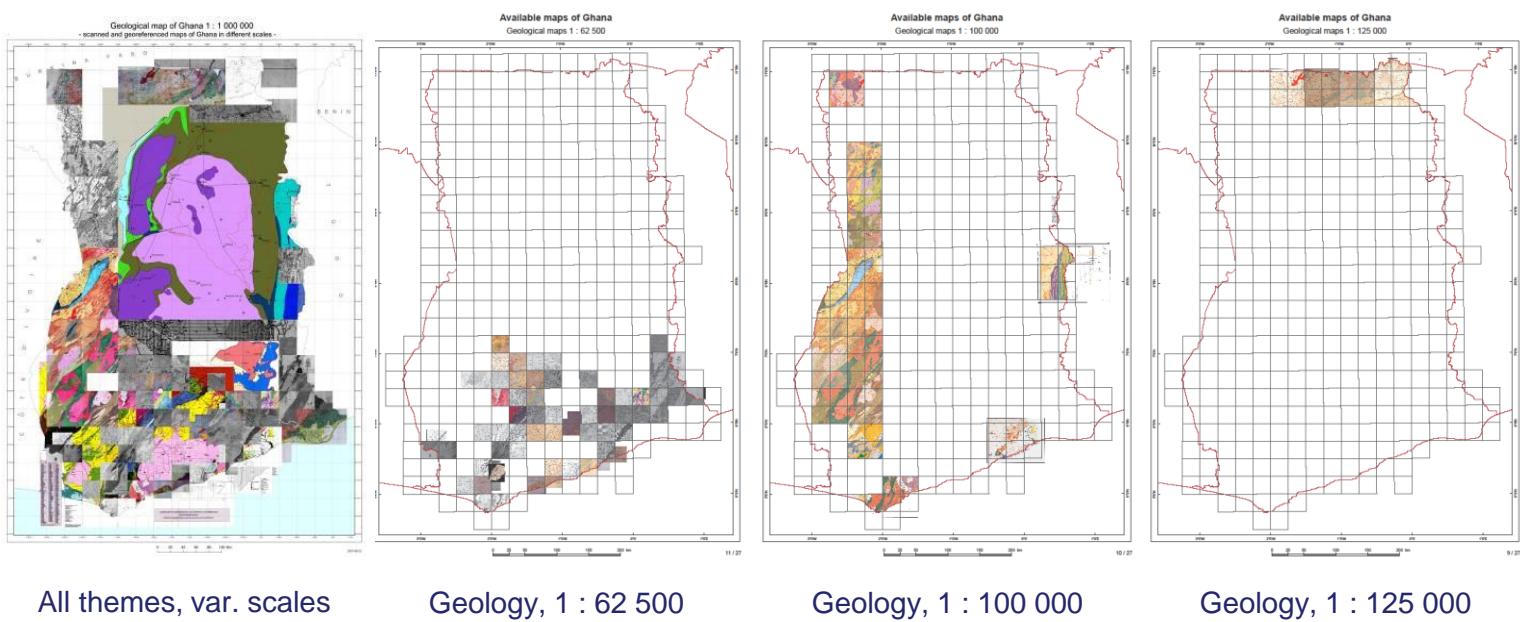
Feldname	Felddatentyp	Beschreibung
fid	AutoWert	
Country	Zahl	Country Name, Base is countr98 by ESRI
BndBox_Nord	Zahl	Latitude North, decimal degree
BndBox_East	Zahl	Longitude East, decimal degree
BndBox_South	Zahl	Latitude South, decimal degree
BndBox_West	Zahl	Longitude West, decimal degree
MapTitle	Text	Main title of map
MapSubTitle	Text	Subtitle of map
MapScale	Zahl	Mapscale
MapTopic	Zahl	Main theme of map
Keywords	Text	Keyword to describe the content of the map
Citation	Text	How to make bibliographic reference to the map
Publisher	Text	Editor and publisher of the map
Location	Text	Town where the editor is located
YearPublication	Zahl	Year of publication
MapQuality	Zahl	basic description of map quality
TypeProduction	Zahl	how the map is produced: GIS, conventional
WMS_available	Ja/Nein	Is Web Map Service available
Name_URL	Hyperlink	Name of WMS
DB_available	Ja/Nein	Database for map available
Name_DB	Text	Name of database
DataEntryRecord	Datum/Uhrzeit	Day of entering record for metadata
DatasetLanguage	Text	In which language the map is published
SpatialRepresentationType	Text	Type of data
TypePublication	Text	Type of Publication
confidential	Ja/Nein	Confidentiality of the map / data
InternationalCooperationPart	Text	International Cooperation project in which the map is produced

Feldeigenschaften	
Allgemein	Nachschlagen
Feldgröße	Long Integer
Neue Werte	Inkrement
Format	
Beschriftung	
Indiziert	Nein
Smarttags	
Textausrichtung	Standard

# Generation of index maps:

## e.g. Geological Maps (Ghana)



# WP3: Concept Note

- Strategies and recommendations to strengthen the capacities of African Geological Surveys in the field of geological mapping and the provision of geodata (maps and web services)



# Interaction with other WPs



Tasks	Involved work package
Task 3.1	all
Task 3.2	all
Task 3.3	WP6
Task 3.4	
Task 3.5	



# Thank you

