The Cooperation with the Organization of African Geological Surveys and the role of Earth Observation

Rabat, Morocco, 17th October 2016

40 Years Listening to the Beat of the Earth
EGS Task Force on International Cooperation and Development, chaired by Marek Graniczny (PGI - NRI) with two deputies Diana Ponce de Leon Gil (IGME – Spain) and Fabian Helms (BGR), is continuing its activities to intensify and improve international cooperation since 2011.

The first goal was the African continent, where cooperation was established with the Organization of African Geological Surveys (OAGS). This year, another challenge appeared relating cooperation with geological surveys of Latin America associated within the Organization of Ibero-American Geological and Mining Surveys (ASGMI).
**ICDTF - Mission and vision**

**The mission** of the ICDTF is to make of EGS the European centre of excellence for geological cooperation with European countries which are not EGS members as well as with countries and organisations in other continents.

**The vision** of the ICDTF is to increase the quality, efficiency and cost-effectiveness of the Geological Surveys of Europe science delivery and to capitalise on International Cooperation and Development (science) opportunities.

Due to the cross-cutting nature of its mandate, the ICDTF will cooperate closely with the other EGS Expert Groups when topics of respective competence are concerned.
A stronger partnership on raw materials between EU and Africa is now a necessity. This was the main result of the High-Level Conference: EU-Africa Partnership on Raw Materials, held in Brussels in 25 – 26 January 2012 by the European.

Mr. Demicheli pointed out the urgency “to boost social welfare and development and enhance environmental protection in Africa by developing a geological knowledge base across the continent.
A joint meeting of the Mineral Resources (MREG) and Int. Cooperation Task Force (ITCF) of EGS has taken place on 21.03.2012 in Brussels.

On September 10-11, 2012, the PGI-NRI hosted the EGS leaders and experts of the EGS International Cooperation and Development Task Force (ICDTF) and Mineral Resources Expert Group (MREG) who came to Warsaw to continue works on preparation of the pilot Pan-African project.
The **EGS – OAGS workshop** “Enhancing Africa-Europe Geological Surveys Cooperation” was organized in Niamey, Niger, 11-12 December 2012.

The document draft project proposal for “Geoscientific knowledge and skill at African Geological Surveys” was presented and discussed in details during the two days of the workshop.

The document had been prepared by 15 European experts from 12 geological Surveys for review by and discussion with the African experts.
Feasibility Study “Geoscientific knowledge and skills in African Geological Surveys” has been signed by EC DG DEVCO and EGS authorities on July 19th 2013 (Contract 323-534).
The specific objectives of the project are as follow:

- **Enhance capacity** and **role** of **African national geological surveys**;
- Contribute to **capacity building** in assessing **mineral resources** by national geological surveys in Africa;
- Increase activity of national geological surveys in **regional mapping** and **exploration** to upgrade their **geoscientific information base** and mineral resources inventories;
- Strengthen the level of national geological surveys **geological knowledge** and skills through **training**;
Activities and Leaders

Team Leader - Luca Demicheli (EGS)

AC 1 Coordination
Leaders - PGI – NRI, President of OAGS – Namibia
Deputies EGS Secretariat, vice-Presidents Niger, Mozambik
Activities and Leaders

WP 2  Activities needed to strengthen the OAGS
Leaders - GEUS, South Africa
Deputies - EGS Secretariat, Ivory Coast
Activities and Leaders

AC 3  Gap analysis of geoscientific mapping
Leaders - CGS, Namibia
Deputies - BRGM, Senegal

Meder ring structure - Ethiopia

Processed by Z. Kowalski – PGI-NRI
Activities and Leaders

AC 4  Mineral resources assessment gap analysis
Leaders  -  GTK, Ghana
Deputies – GEUS, Geo-ZS, SGU, Nigeria, Ivory Coast, South Africa
Activities and Leaders

**AC 5** Geohazard mapping and monitoring and Geoheritage gap analysis

Leaders - LGT, Algeria

Deputies – IGME Spain, ISPRA, Mozambique, South Africa
Activities and Leaders

AC 6  Capacity building and training concept
Geoscience information infrastructure and management
Leaders - ISPRA, Niger
Deputies - BRGM, CGS, Botswana
Activities of the Study - Meetings

A successful **OAGS-EGS workshop** dedicated to this Study was held in Ghana on 25 September 2013. Participants in this meeting were 17 experts coming from **10 European geological surveys:** Czech Republic, Finland, France, Germany, Italy, Lithuania, Poland, Spain, Sweden, and United Kingdom.

12 experts coming from **12 African geological surveys:** Algeria, Botswana, Egypt, Ghana, Ivory Coast, Morocco, Mozambique, Namibia, Niger, Nigeria, Senegal and South Africa, along with the **OAGS President** and the **EGS Secretary General.**
Activity of the Study - Meetings

Finalization of the feasibility study “Geoscientific knowledge and skills in the African Geological Surveys”.

- Continuation of preparation of the draft final report.
- Arrangement and organization of the project Final Workshop in Cape Town (South Africa).
- **EGS-OAGS Workshop – 8\(^{th}\)-9\(^{th}\) February 2015 Cape Town, South Africa**
  - The main aims of the Workshop were:
    - collection of any further comments on the Report’s final draft;
    - approval of the final draft by African partners;
    - discussion about the future implementation of the project.
Giving presentation *Enhancing geoscientific knowledge and skills in African Geological Surveys* by ICDTF Chairman, during the **EGS Director’s Workshop - Geological infrastructures priorities in Africa and beyond (Brussels 25th March)**.

Submission the final report to DG DEVCO by EGS Secretariat.
Remotely sensed data are absolutely necessary in Africa to apply and solve following issues:

- Geological mapping.
- Exploration of raw materials and groundwater
- Identification and monitoring of geohazards (natural and man made).
- Assessing the impact of mining activity on the surrounding environment.
Geological mapping

EuroGeoSurveys - The Geological Surveys of Europe
Mineral and ground water exploration

Geological map of Catanda massif (Silva, 1973)

Location of sampling points in profile

Content of REE (ppm) (n=43)

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Natural geohazards

Figure 2: Distribution of sheet and rill erosion in South Africa.
Impact of mining activity
THANK you for your attention!