



GROUP ON  
EARTH OBSERVATIONS

## GEO-X

15-16 January 2014

AfriGEOSS

Document 11

*This document is submitted to GEO-X for consultation*



## **AfriGEOSS**

### **Approach, Progress and Way forward**

#### **1 INTRODUCTION AND PURPOSE**

The AfriGEOSS initiative was fully endorsed by the GEO-IX Plenary in November 2012, with several GEO Members and Participating Organizations expressing their willingness to provide contributions. The background of the initiative and its conceptual approach was described in Document 10 “AfriGEOSS-An Initiative to Build GEOSS in Africa”, presented at GEO-IX.

After one year from the presentation of the initiative, the main purpose of this document is to provide an update on the progress in its implementation approach and on the planned way forward to make AfriGEOSS one of the key initiatives for the next GEO decade to 2025.

#### **2 AFRIGELOSS STRATEGIC OBJECTIVES**

The overall objectives of AfriGEOSS were presented at GEO-IX and were shared with an increasing number of potential stakeholders during 2013; they were recognized to be suitable for coordinated GEO action to enhance the region’s capacity for producing, managing and using Earth observations, thus enabling Africa’s participation in, and contribution to, the Global Earth Observation System of Systems (GEOSS). They are:

- Coordinate and bring together relevant stakeholders, institutions and agencies across Africa that are involved in GEO and other Earth observation activities;
- Provide a platform for countries to participate in GEO and to contribute to GEOSS;
- Assist in knowledge sharing and global collaboration;
- Identify challenges, gaps and opportunities for African contributions to GEO and GEOSS;
- Leverage existing capacities and planned assets and resources; and
- Develop an appropriate strategy and participatory model for achieving the above goals.

#### **3 THE CONTEXT**

The African Earth Observation community is continuously growing and is establishing its presence in the region and in the global arena, taking also benefit from the national and sub-regional programs and from the ongoing cooperation initiatives with a great number of external Partners. The development and uptake of Earth observation data and information to improve the socio-economic status of the African continent is a prominent part of these activities and a fast-growing process. The GEO African Member States have recognized in the implementation of the Global Earth Observation System of Systems (GEOSS) through the next GEO decade the opportunity to consolidate the above process.

The AfriGEOSS initiative, developed within the GEO framework, will strengthen the link between the current GEO activities with existing capabilities and initiatives in Africa and will provide the necessary framework for countries and organizations to access and leverage on-going bilateral and multilateral EO-based initiatives across Africa, thereby creating synergies and minimizing duplication for the benefit of the entire continent.

The AfriGEOSS will also build on the on-going process, lead by the African Union Commission, of developing the African Space Policy and drafting the African Space Strategy. The strategy is being developed through the engagement with experts on the various space themes, including Earth observations experts for the definition of the user needs and requirements. AfriGEOSS will use these consultations, their results and the space strategy as one of its building blocks.

The GEO partnership currently includes 22 Member States and five Participating Organisations from Africa (see Appendix). Even if this number has increased in recent years, more needs to be done to ensure wider participation to GEO: AfriGEOSS is expected to be a suitable vehicle to accelerate this process.

## **4 IMPLEMENTATION APPROACH**

### **4.1 General**

The AfriGEOSS implementation approach will be twofold, “bottom-up” by enabling coordination of national activities into sub-regional and continental level and “top-down” by tailoring GEO global initiatives to meet Africa needs.

The following lines of action will be followed to substantiate the identified approach:

- Address both the infrastructure and the services/application components, based on the build-up of sub regional networks that should form the backbone of a regional (continental) one and, in parallel, define options for a coordination framework at regional level;
- Re-establish strong contacts with the current GEO Principals and enlargement of the GEO partnership in Africa. Building these relationships will ensure support from decision-making level for national activities and global contributions;
- Develop an extensive inventory of current and planned initiatives and available resources. The audit of what is happening in Africa will allow to map the on going activities to the AfriGEOSS objectives and to assist in managing overlaps, identifying opportunities and addressing gaps, as well periodically assess the progress against the objectives;
- Link existing initiatives, not yet connected to GEO, to the GEO Work Plan, clearly indicating contribution to GEOSS;
- Influence upcoming initiatives, to ensure that Africa takes full benefit from and makes contribution to GEO global initiatives especially;
- Leverage resources to fill identified gaps;
- Raise awareness and outreach African Communities, on a continuous basis, using the existing networks and through specific measures such as development of an AfriGEOSS website, use of Social media, a dedicated page in Environmental Information System (EIS) Africa newsletter and other continental newsletters, a periodic GEOSS in Africa conference.

### **4.2 Sub-regional Roadmaps**

Each sub-region is going to consolidate a common set of user requirements that should be addressed by Earth observation data and information. They will be based on government priorities and socio-economic development plans within each sub-region. These sub-regional roadmaps will outline the objectives, the timing and the activities progressively being developed within the AfriGEOSS coordination framework in each sub-region. They will cover Infrastructure, Applications and associated Capacity Building.

The sub-regional representatives in the Working Group will lead the development of the sub-regional roadmaps and sub-regional workshops will be held to consolidate the Roadmaps.

### **4.3 Organizational arrangements**

The initial arrangement being defined to carry forward the AfriGEOSS initiative includes:

- A Steering or Advisory Committee, consisting of GEO Principals (from African Members and Participating Organizations) and high-level representatives of other key stakeholders such as the African Union Commission;
- A Working Group, based on the current composition and aiming at two representatives from each sub-region, supported by the GEO Secretariat;
- Sub-regional focal points, building on the role and activities of sub-regional organizations.
- National focal points (supported to establish National GEO communities (e.g. SA-GEO)).

It is considered to be flexible enough to allow a smooth and progressive inclusion of new stakeholders and of new activities

## **5 PROGRESS TO DATE**

Based on the endorsement by GEO-IX, an AfriGEOSS Working Group was established and has started to put AfriGEOSS into practice; the Group includes representatives from GEO African Member countries (Gabon, Ghana, Morocco, Nigeria, South Africa) supported by the GEO Secretariat.

The Group has started to gather information on the initiatives and projects that are ongoing, as the basis for drafting AfriGEOSS plans. On behalf of the Working Group, the Secretariat has circulated a letter to GEO Principals asking for information on their existing and planned activities related to the enhancement of the capacity of African countries for producing, managing and using Earth observation data and information; several answers were received. Initial contacts have also been made with UNECA and the African Union Commission to discuss their involvement in the initiative.

Based on this preparatory work, the official launch of the AfriGEOSS initiative took place on 5 November 2013 during the joint Africa GIS 2013 and GSDI 2014 Global Geospatial Conference in Addis Ababa, Ethiopia.

In addition to the official launch, an AfriGEOSS exhibition booth was arranged and a brochure prepared to raise awareness on GEO and AfriGEOSS; a workshop was also held to better explain the objectives and approach, which a fair amount of participants.

All this generated a lot of interest for the AfriGEOSS initiative and a number of potential stakeholders have started to pledge their support and contribution to.

## **6 THE WAY FORWARD**

### **6.1 Next steps**

The Working Group, in the next several months, will develop a top-level Implementation Plan for AfriGEOSS, addressing both the sub-regional and regional level.

In parallel, necessary steps will be taken to consolidate the organizational arrangements, including the definition of a Terms of Reference and appointment of the Steering/Advisory Committee, to broaden of the Working Group and to define its links to the GEO Work Plan.

South Africa has confirmed the secondment of an expert to the GEO Secretariat, with their main duty to support the start-up and, then, the coordination of the AfriGEOSS initiative.

## **6.2 Reference mid-term calendar**

<b>Time</b>	<b>Event</b>	<b>AfriGEOSS Actions</b>
Jan-14	GEO Summit	AfriGEOSS approach; Exhibition; Video showcase; Side Event
Apr-14	AMCOST Bureau	AfriGEOSS presentation as part of the agenda of AMCOST
Jun-14	GEO Work Plan Symposium	Presentation of AfriGEOSS Implementation Plan and organizational arrangements
Jul-14	Executive Committee Meeting	Progress & Implementation Plan
Oct-14	AMCOST Meeting	Presentation/Recognition of AfriGEOSS; identification of provisional working arrangements with AUC
Nov-14	AARSE 2014	Plenary session; side event on AfriGEOSS - regional activities; exhibition
Jan-15	GEO Plenary	Review – initial achievements and Work Plan
Oct-15	AMCOST Meeting	Approval of AUC involvement
Jan-16	GEO Summit	Review - achievements and Work Plan

## APPENDIX

### BACKGROUND INFORMATION: AFRICA IN GEO

As of November 2013, the GEO membership included 89 countries plus the European Commission.

The 22 Members from Africa are: Algeria, Burkina Faso, Cameroon, Central African Republic, Republic of the Congo, Egypt, Ethiopia, Gabon, Ghana, Guinea-Bissau, Republic of Guinea, Ivory Coast, Madagascar, Mali, Mauritius, Morocco, Niger, Nigeria, South Africa, Sudan, Tunisia, and Uganda.

Five of GEO's 64 Participating Organisations are based in Africa:

- AARSE - African Association of Remote Sensing for the Environment;
- ACMAD - African Centre for Climate Monitoring and Applications Development;
- EIS-Africa Environmental Information System;
- RCMRD - Regional Centre for Monitoring and Remote Sensing Development;
- UNECA - United Nations Economic Commission for Africa; and

