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Global Geospatial Information Management (GGIM)
African Chapter

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Global Geospatial Information Management

Fourth Session of the United Committee of Experts

Report on GGIM Regional Activities in Africa

1. Introduction

1. This report covers activities carried out by the Africa region with regard to geospatial information management since the third session of the United Nations Committee of Experts (UNCE) on Global Geospatial Information Management (GGIM). The report includes actions taken as a follow-up of resolutions adopted by UN-GGIM and other activities considered as being of interest to member States and partners.

2. The activities are focussed on: (i) Policy issues; (ii) Technical issues; (iii) Capacity and Outreach.

2. Policy Issues: To Foster Policies and e-Strategies

3. During the period under review, the region continued to encourage the development and implementation of spatial data infrastructures as the appropriate mechanism for the production, management, dissemination and use of spatial data and information products at regional and national level.

- Provision of advisory services to the African Union to develop an African Space Policy and Strategy. The policy aims at harnessing the potential benefits of space science and technology in addressing Africa's socio-economic opportunities and challenges.
- Contribution to the definition, the development and the initial operations of AfriGEOSS, an initiative developed within the Group on Earth Observation (GEO) framework to strengthen the link between the current GEO activities with existing capabilities and initiatives in Africa and 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. An AfriGEOSS implementation plan is currently being developed to enable coordination of national activities into sub-regional and continental level and tailor GEO global initiatives to meet Africa needs.

4. At national level, technical support and advisory services are routinely provided to member States to advance their geoinformation policies and resources.

- Niger: advisory services to set the stage of the process of developing an action plan for the “Plan Géomatique National”, the country proposed NSDI, along with establishing a Geographic Information Systems for territorial management in local councils.

5. **GGIM in Africa:** The following activities were undertaken for the implementation of the Africa component of GGIM:

- Participation in the Third Session of the Committee of Experts of GGIM, held in Cambridge in July 2013. The Africa region was then appointed Rapporteur of the session.
- Commencing the necessary dialogue to mainstream the enabling capabilities of geospatial technology into National Statistics Offices activities so as to ensure that national statistical, planning and cartographic authorities have effective collaboration between them in the development of respective data infrastructures and systems.
- Finalisation of the African Action Plan on GGIM. The document will be validated later in the year by member States and partners.

3. Technical issues : Geoinformation Resources for Development

6. The activities carried out in this area aim increasing the number of information and knowledge resources and services developed at the regional, subregional and national levels to improve availability and use of spatially-enabled information for development in Africa. The activities also encompass promotion of the common and interoperable tools and standards.

7. Development of Geospatial Datasets and applications: Several regional geospatial databases are being developed, incrementally updated and accrued to support regional initiatives. These databases form the core of the African Regional Spatial Data Infrastructure. These include: the continuous update of the African component of the Second Level Administrative Boundaries (SALB) geodatabases; ii) the sourcing, collecting, processing, validating and building of the African infrastructures geodatabases.

8. Field projects: The Region pursued its effort to develop through the African Reference Frame (AFREF) Project, a unified geodetic reference frame for Africa so that maps and other geoinformation products can be represented seamlessly. The activities undertaken include:

- Setting the stage for the computation of the first AFREF static solution for African unified vertical datum and geoid
- Finalizing with Ordnance Survey the logistic details of the roll out of the 72-donated reference stations to the AFREF Project. The AFREF International Steering Committee has developed criteria for selecting the locations to install the donated stations. The agreed installation sites are: Kenya/RCMRD, Sierra Leone, Liberia (or Ghana), Chad, Côte d'Ivoire, Zimbabwe, Zambia, Namibia, Burundi, and DRC. Custodianship agreements were developed to be signed by the national authority with primary responsibility for geodetic control and surveys in those countries.

4. Capacity Building and Outreach Activities

9. In terms of capacity building and outreach in the area of geospatial information management, the region has continued to collaborate and coordinate activities with its partners to organize seminars and workshops to raise awareness and share knowledge on the importance of using geospatial technology for Africa development agenda.

10. The region successfully contributed to organize the Global Geospatial Conference 2013, a joint GSDI 14 World Conference and AfricaGIS 2013 Conference. The latter is the premier conference and exhibition focusing on geo-information science and technologies in Africa. The Joint conferences provided a forum for geo-information professionals to meet, interact, and be updated on new developments, products and emerging trends and issues. It also offered a unique opportunity for interaction among practitioners to share information and knowledge to advance the development and application of geospatial science and technologies in Africa.

11. The African endeavour to build partnership with regional and international organizations has continued to voice the continent perspective in the global arena of geospatial information management through provisions of technical inputs and advisory service to several regional initiatives and participation to various forums on geoinformation at national and regional levels.

5. Perspectives

12. The region is conducting studies as needed on emerging concepts and disseminates the knowledge to member States. In the future, the region will endeavor to carry out –together with partners and other regional initiatives – a number of synergistic actions to foster the development of geoinformation resources

13. Inventory of geospatial data in Africa: As part of its commitment for creating and managing knowledge in the continent, the region will publish the status of core geospatial datasets in Africa through a comprehensive compilation and inventory of presently available fundamental datasets in each Member State. The action should lead to a background study on policies, strategies, and operational plans of action to fill the data gaps in Africa.

14. Community Mapping: Several GIS solutions providers have developed tools and methodologies for involving the community at large in mapping their respective neighborhoods. This is based on the principle that members of the community know their neighbourhoods more than any expert from outside. The region would like to develop a general programme on community mapping with the aim of having National Mapping Agencies to adopt community mapping as a way to increase the mapping coverage of their countries. The Africa looks forward to work with partners and possibly other interested technology solution providers to organize a technical workshop so as to introduce the concept to national mapping agencies and develop a methodology for them to incorporate the results of such community mapping into their national mapping programme. This could involve training designated focal points on the moderation of edits by the community so that they can review proposed changes to their maps and either moderates them or alert designated moderators of errors or outright misrepresentations.

15. Forthcoming Geo-related Events: There several geo-related events that will take place in the coming months in Africa.

- *ARRSE.2014 Conference*. The AARSE international conference is conducted biennially across Africa, alternately with the Africa GIS conference, and is the premier forum in Africa for research on remote sensing technologies and geospatial information science, gathering leading scholars from the remote sensing and related communities. The AARSE conference series commenced in 1996, and 10th conference (AARSE.2014) will take place on 27-31 October 2014 and will be hosted by the University of Johannesburg, South Africa. The conference is open to a wide variety of stakeholders including high level policy-makers, individual and corporate practitioners from Africa and outside; United Nations agencies; sub-regional, regional and international inter-governmental and non-governmental organisations; academic and research institutions; multi-national corporations; small and medium enterprises; and civil society organisations. The conference will give once again a unique opportunity for participants and organizations to interact with practitioners and other stakeholders so as to present their expertise, products and capabilities.

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