

AFREF Project: Public-private partnerships and innovative funding approaches

United Nations Economic Commission for Africa
ICT and Sciences & Technology Division (ISTD)
Geoinformation Systems Section (GiSS)

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Outlines

- **1. AFREF : Rationale**
- **2. AFREF : Objectives**
- **3. AFREF : Vision**
- **4. AFREF : Funding**
- **5. AFREF : Operationalisation**



ECA - Background

- The United Nations Economic Commission for Africa (ECA) is the regional body of the UN Secretariat in Africa with mandate to undertake activities to develop the social and economic sectors in Africa
 - The activities of ECA are divided into programmatic areas. One of these sub programmes is "Harnessing Information for Development," which covers, among others, all activities designed to strengthen geoinformation for sustainable development in Africa.
 - There is a legislative technical committee that oversees and advises on each of the sub programmes of ECA



SubCommittee on Geoinformation

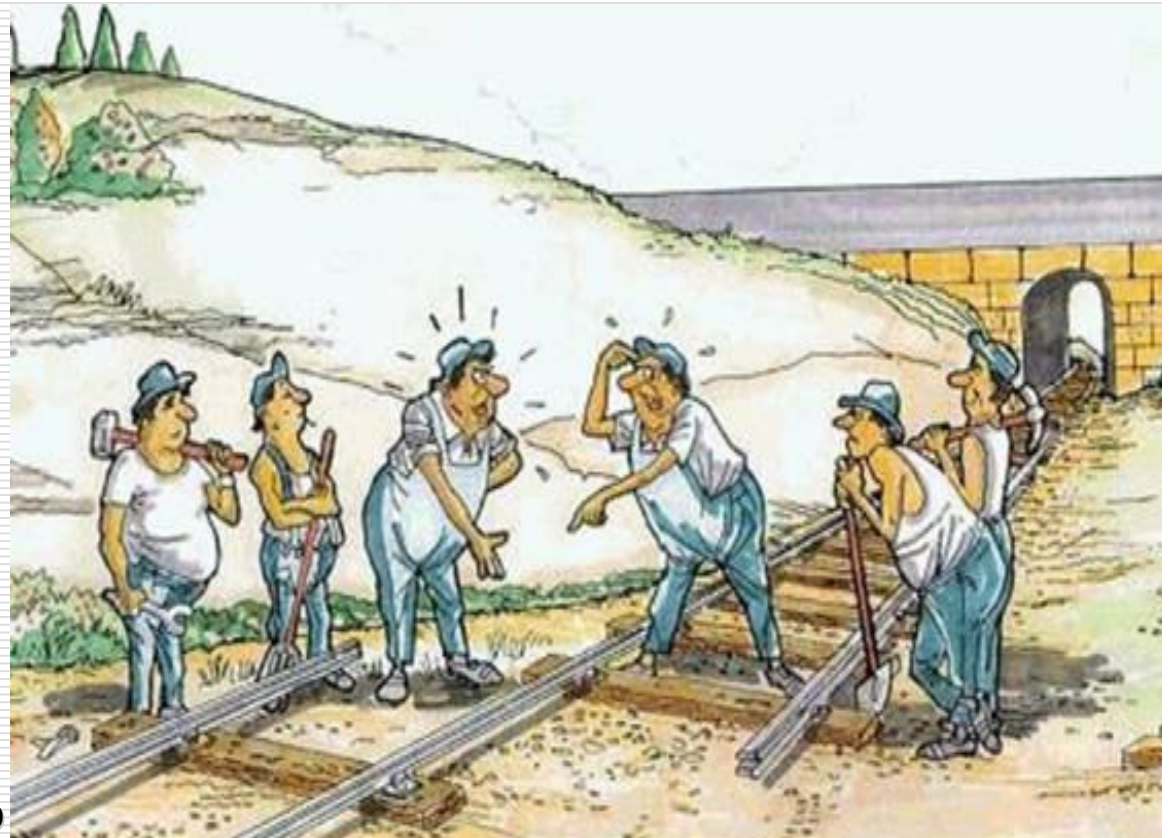
- ❑ CODI-Geo oversees the implementation of the resolutions ratified by the Committee
- ❑ 4 Technical Working Groups

Working Group	Convener	Other Members
Standards	EIS Africa	
AFREF	RCMRD and AOCRS	IAG (SC1.3d)
Capacity Building	RECTAS	
Fundamental Datasets	South Africa	AOCRS, RCMRD, ICA (WG MAFA)



AFREF: Rationale & Justification

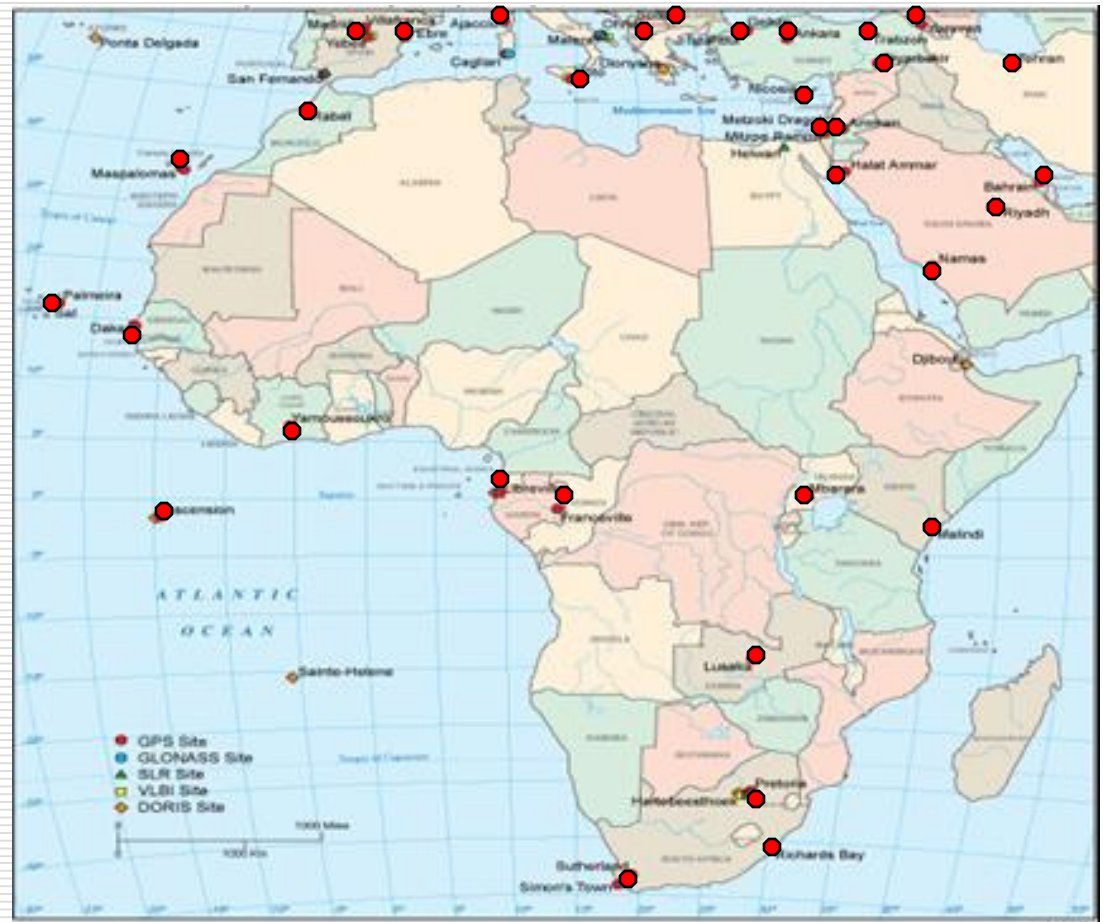
- So far, each African country has its national geodetic reference frame for producing maps and other geoinformation products.
- Work on transnational infrastructure projects is normally undertaken in sections and a uniform mapping surface is required to ensure that the sections actually join up





AFREF Concept

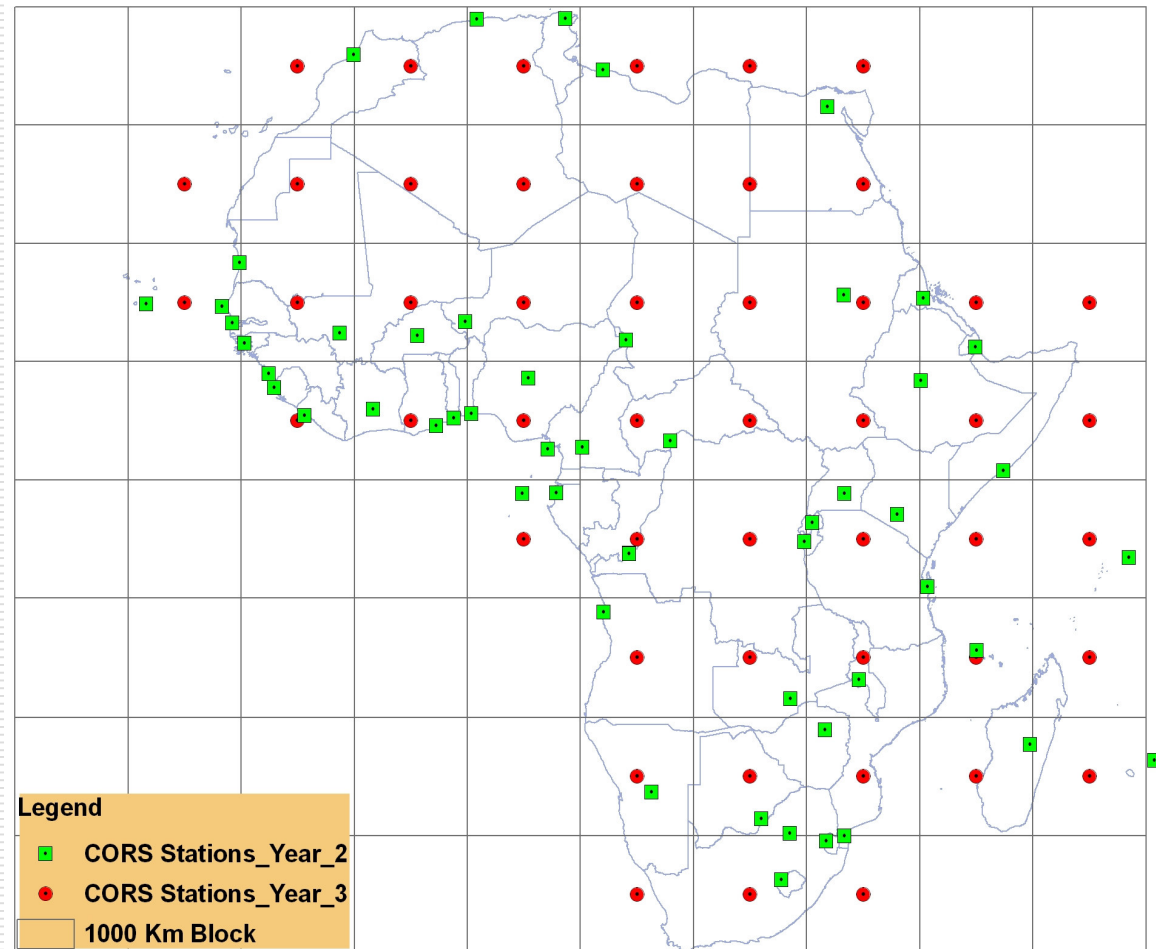
- The African Geodetic Reference Frame (AFREF) was conceived as a unified geodetic reference frame for Africa, fully consistent and homogeneous with the International Terrestrial Reference Frame (ITRF), which will be the fundamental basis for the national and regional three-dimensional reference networks. The reference frame will be composed of a network of points where precise observations will be taken and used to define a Terrestrial Reference Frame that will result in a best-fit datum over Africa





AFREF: Vision

- The network would be at such a density that positioning professionals (surveyors, engineers, environmentalists, agriculturalists, mineral prospectors, etc) would always be within a reasonable distance of at least one such control point any place in Africa, with relevant parameters made freely available to practitioners.





AFREF: Funding

Designation	Cost			Total Cost
	Y1	Y2	Y3	
1. Equipments	110 000	1 166 000	1 078 000	2 354 000
2. Capacity Building	105 000	287 000	271 000	663 000
3. Services	168 000	168 000	168 000	504 000
4. Management	200 000	200 000	200 000	600 000
5. Others costs	278 577	278 577	278 577	835 730
Grand Total	861 577	2 099 577	1 995 577	4 956 730



AFREF: Operationalization

- The strategy leads with building a Partnership with Providers.
 - Contacts with Trimble
 - Donation of the five GPS reference stations equipment that will add to the network of stations, for the determination of the African reference frame as well as being part of network of continuously observing reference stations (CORS).
 - In addition, the Commission has developed a proposal to densify the network such that positioning professionals (surveyors, engineers, environmentalists, mineral prospectors, etc) would always have access to parameters of at least one reference point within 500Km from any place in Africa



AFREF: Operationalization (Cont'd)

- The strategy leads with organizing an African Policy Makers' Workshops.
 - To channel the Project into the NEPAD's Programme on Science and Technology
 - To set up the activities into the umbrella of the ministerial structures of the African Union, notably the African Ministerial Council on Science and Technology (AMCOST).



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