

Catalogue of fundamental geo-spatial datasets for Africa: Country report for Angola



HSRC
Human Sciences
Research Council

PROJECT MANAGERS:

HUMAN SCIENCES RESEARCH COUNCIL (HSRC)

EIS-AFRICA

REGIONAL AND NATIONAL PARTNERS:

CENTRE FOR THE ENVIRONMENT AND DEVELOPMENT OF THE ARAB REGION AND EUROPE (CEDARE)

CENTRE DE SUIVI ECOLOGIQUE (CSE)

OBSERVATOIRE SATELLITAL DES FORETS D AFRIQUE CENTRALE (OSFAC)

REGIONAL CENTRE FOR THE MAPPING OF RESOURCES FOR DEVELOPMENT (RCMRD)

REGIONAL CENTRE FOR TRAINING IN AEROSPACE SURVEYS (RECTAS)

MARCH 2007

1. Background

A continental-wide study was conducted in 2006 to catalogue the existence of fundamental geo-spatial datasets in Africa. This study was contracted to a consortium consisting of the HSRC and EIS-AFRICA as lead organisations and numerous sub-regional partners. It was conducted under the auspices of the UNECA.

The study used a questionnaire to obtain information about the 30 fundamental geo-spatial datasets. Although the study team was not able to establish a contact in Angola several international agencies had data for this country. The report reflects the findings collected from that questionnaire for Angola.

2. Data availability

Table 1: Availability of fundamental geo-spatial datasets

Dataset	Have it?	Source
Geodetic control points	No	
Height datum	No	
Geoid model	No	
Aerial photography	No	
Satellite imagery	Yes	Map Maker Trust/ UNECA
DEM	Yes	UNECA
Spot heights	No	
Bathymetry	Yes	GEBCO
Coastline	No	
Water bodies	Yes	Map Maker Trust/ UNECA
Government boundaries	Yes	Map Maker Trust/ UNECA
Populated places	Yes	UNECA
EA	No	
Place names	Yes	Map Maker Trust/ UNECA
Feature names	Yes	UNECA
Land parcels	No	
Land tenure	No	
Street address	No	

Dataset	Have it?	Source
Postal code zones	No	
Land use planning zones	No	
Roads	Yes	Map Maker Trust/ UNECA
Road centrelines	No	
Railways	Yes	Map Maker Trust/ UNECA
Airports	Yes	UNECA
Bridges	No	
Power	No	
Telecommunication	No	
Land cover	No	
Soils	No	
Geology	No	

Angola has access to eleven of the fundamental geo-spatial datasets and the country therefore has inadequate representation of these datasets.

2.1 Data characteristics

Data characteristics were very poorly completed and it is therefore difficult to determine whether the geo-spatial datasets available are indeed of good quality. An example of reading the table is: satellite imagery it was indicated that it is available at the scale of 20 – 80m, it is fully complete and available in a GIS format. Empty cells in the table indicate that no response was received.

Table 2: Dataset metadata

Dataset	Scale at which available (000/ resolution m)	Completeness (%)	Format	Accessibility
Geodetic control points				
Height datum				
Geoid model				
Aerial photography				
Satellite imagery	20-80/ >1000	100	GIS	
DEM	50-125m	100	GIS	
Spot heights				

Dataset	Scale at which available (000/ resolution m)	Completeness (%)	Format	Accessibility
Bathymetry	All scales	100	Db/ GIS	Unrestricted/ Authorisation/ Payment
Coastline				
Water bodies	62.5-100/ 500-1000	100	GIS	Unrestricted/Free
Government boundaries	500-1000	100	GIS	Unrestricted/Free
Populated places	12-50	100	GIS	
EA				
Place names	12-50/ 500-1000	100	GIS	Unrestricted/Free
Feature names	>10	100	GIS	
Land parcels				
Land tenure				
Street address				
Postal code zones				
Land use planning zones				
Roads	500-1000	100	GIS	Unrestricted/Free
Road centrelines				
Railways	500-1000	100	GIS	Unrestricted/Free
Airports	500-1000	100	GIS	
Bridges				
Power				
Telecommunication				
Land cover				
Soils				
Geology				

Many datasets with completed data scale characteristics are available at a general scale while others like place and feature names are available at a detailed scale. The data completeness is not certain, while most data is available in a GIS format and with unrestricted and free access. Only bathymetry data requires payment.

3. Conclusion

Despite the fact that it seems that Angola has access to many of the fundamental geo-spatial datasets, the lack of data characteristics complicates the final decision on the quality of the data. Based on this one cannot conclude that the existing geo-spatial data is useful.