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COMMISSION FOR BASIC SYSTEMS
OPEN PROGRAMME AREA GROUP ON INTEGRATED OBSERVING SYSTEMS

EXPERT TEAM ON SATELLITE UTILIZATION AND PRODUCTS

ITEM: 6.2

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KMD USER PERSPECTIVES

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Summary and Purpose of Document

The document describes current issues faced by KMD and other NMHSs in RA I associated with using the SYNERGIE data processing and display system. These should be brought to the attention of the user-provider dialogue maintained in RAIDEG.

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DISCUSSION

CURRENT SATELLITE DATA RECEPTION STATUS AT KMD

For two decades, since the first EUMETSAT User Forum in Africa, the number of African users of satellite data has grown from a few in the 1990s to hundreds across the continent today. Likewise, Earth observation applications have grown from weather forecasting to include a wide range of environmental and climate monitoring applications supporting various sectors of the African economy such us: risk reduction, food security, water management, health, energy, marine resources etc just to mention a few. Since 2000, the European Development Fund (EDF) has invested substantially in Earth observation applications in Africa, complementing continuous efforts by EUMETSAT and various other partners.

Over the past three years, the RAIDEG (RA I Dissemination Expert Group) has been instrumental for the technical dialogue between EUMETSAT and the African user community in order to facilitate the use of EUMETSAT satellite data throughout the continent (cf. ET-SUP-7/Doc. 6.2.2).

Currently, the Kenya Meteorological Department (KMD) has very good access to satellite data via EUMETCast, coupled with the SYNERGIE[1] system whose main purpose is to gather, visualize, interact, and add value to all meteorological data on a single workstation.

Its design makes SYNERGIE the best fitted decision making tool for National Meteorological Services whatever their size and organization, from national headquarters to regional or specialized forecasting centers.

SYNERGIE includes dedicated functions for all forecasting positions:
- General forecasting
- Nowcasting and met support to specific events.
- Aviation forecasting
- Short, middle and long range forecasting
- Marine forecasting
- Forecasts for media
- Training
- Research
- Early warnings.

As SYNERGIE is a highly modular tool, it can also answer the specific needs of professionals from weather-sensitive economic sectors such as agriculture, energy providers, as well as off-shore oil platforms. There are many versions of the SYNERGIE system and each version has different cost implications. Credit goes to EUMETSAT and the European Development Fund for facilitating the availability of the system in Africa.

However, there are a number of shortcomings in various versions of SYNERGIE that were selected for use in RA I. For example:

1. SYNERGIE-PUMA version 4.1.4.2.
The operational SYNERGIE system in some of the African countries is “SYNERGIE- system version 4.1.4.2”. This was the first version of SYNERGIE to be installed in Kenya as well as in many other African countries. Unfortunately, this version lacks the all important RGB composites functionalities which are very important in weather forecasting and many other applications.

2.SYNERGIE-2010 version 4.3.0.2
This version of SYNERGIE has more functionalities like RGB data which is easily accessible at KMD. Other functionalities of this SYNERGIE version include: MPEF, METOP, VITO, MODIS etc. However, some of the data from these is not accessible or hardly available, for example from VITO

1 Synergie is a software environment distributed by Meteo France International (http://www.mfi.fr/en/)

and MODIS.

The following is suggested to RAIDEG:

(a) For those African countries using SYNERGIE version 4.1.4.2, facilitate the availability of the inaccessible RGB data. This is because SYNERGIE is the main means satellite data access in most of African countries.

(b) For the countries with SYNERGIE-2010 (version 4.3.0.2), facilitate the availability of data such as: NDVI, LAI, Albedo, a number of MPEF products and METOP products.

(c) Seek input concerning (a) and (b) above from every RA I member so as to have a comprehensive list of all the essential data which is inaccessible in the operational SYNERGIE in respective the countries.