

WORLD METEOROLOGICAL ORGANIZATION

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CBS EXPERT TEAM ON WIS GISCs AND DCPCs
FIFTH MEETING
MELBOURNE, 13 -16 MARCH 2012

REPORT ON STATUS OF WIS IMPLEMENTATION IN KENYA

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Summary and purpose of document

This document summarises the activities on WIS implementation in Kenya Meteorological Department and East African Sub Region in general

ACTION PROPOSED

The meeting is invited to appreciate the WIS activities being undertaken and consider the recommendations made.

1. PROPOSED WIS DCPC CENTRES

Kenya Meteorological Department (KMD) has a Regional Telecommunications Centre (RTC), a Regional Specialized Meteorological Centre (RSMC) and a Regional Instrument Calibration Centre (RIC) all based in Nairobi.

These three centres have been nominated as DCPCs for WIS and are expected to participate in the WIS network once the necessary facilities are implemented. They are currently undertaking the following functions

- 1.1. RTC, Nairobi links to the GTS the National Meteorological Centres in the Sub Region that includes Dar-Es-Salaam, Entebbe, Kigali, Bujumbura, Addis Ababa and Reunion.
- 1.2. The RSMC, Nairobi provides national weather services, runs NWP models and posts the products into the KMD websites twice daily.
- 1.3. RIC Nairobi, calibrates instruments for national and sub regional use. It also manufactures instruments such as rain gauges and Stevenson screens.

2. INSTALLATION OF IMIS TOWARDS WIS CONNECTIVITY

KMD acquired an Integrated Meteorological Information System (IMIS) from Meteo France International (MFI) to facilitate WIS connectivity. The installation of IMIS commenced in November and completed in December 2011. Prior to the installation three IT personnel underwent a seven weeks training for operational and management activities of IMIS at MFI site in Toulouse, France.

Although not yet connected to WIS the IMIS is already connected to GTS through the message switching system at the RTC, Nairobi. Data from GTS both in alphanumeric and binary codes are now being decoded and archived in the IMIS database together with metadata for a wide range of information.

Through the Internet the IMIS is currently downloading boundary data from global models and runs regional numerical weather prediction (NWP models to produce forecasts for use at RSCMC, Nairobi.

Plans are underway to implement the required interface that will enable connectivity of IMIS with WIS network. Already the Internet bandwidth at KMD has been upgraded to 8 MB/S for download and 4 MB/S for upload. Once the IMIS is connected to WIS the bandwidth can be easily increased if found necessary. With introduction of optical fibre links in Kenya high bandwidths are easily available.

3. CLIMOST DATA MANAGEMENT SYSTEM

Climsoft system which is the main climate data management system in KMD receives real time data from manual and automatic stations. The data is then encoded into TDCF messages and transmitted to GTS and the IMIS database where it is made available to the user applications. Climsoft has capability to produce metadata, data inventories and many

other data products in XML format. This will enable uploading of climate data and products to WIS in the right format once the connectivity to WIS is realised.

4. WIS IMPLEMENTATION IN THE EAST AFRICAN SUB REGION

Progress towards implementation of WIS in the sub region is still low. Apart from the workshops that were held on the sensitisation of WIS not much has happened since. There is need for a WIS focal point who can assist in coordinating joint activities in the Region. Request towards this was made in the previous meeting and it is expected that it will be considered in this meeting.

5. CONCLUSION AND RECOMMENDATIONS

Although KMD is making some progress albeit slow towards implementation of WIS, participation of other member countries in the sub region is required. Now that three GISCs are already operational there is need to create more awareness on benefits to be obtained from participation in WIS network. Therefore appointment of a WIS focal point if not done yet need to be given a high priority.