Prepared by INDIA Agenda Item: V/1.2 Discussed in Plenary

INSTALLATION OF 100-DIGITAL CYCLONE WARNING DISSEMINATION SYSTEM (DCWDS) STATIONS IN INDIA

Installation of 100-Digital Cyclone warning Dissemination System (DCWDS) stations in India

CGMS Members are invited to take note.

INSTALLATION OF 100-DIGITAL CYCLONE WARNING DISSEMINATION SYSTEM (DCWDS) STATIONS IN INDIA

1.0 Introduction

A scheme for procurement and installation of 100 Nos. of Digital Cyclone Warning Dissemination System (DCWDS) has been implemented under the World Bank aided "A.P. Hazard Mitigation & Emergency Cyclone Recovery Project" by India Meteorological Deptt. (IMD) for the Govt. of Andhra Pradesh during the 9th five year Plan period. Presently analogue based CWDS receivers are operational at 250 locations all over India. These were designed in early 1980s based on the then available technology. Now better technology based on digital data transmission, is available.

2.0 Digital CWDS - System description

Digital CWDS system consists of following Ground segment

CWDS Transmit system
CWDS Receive system
CWDS Acknowledgement system
Space segment
INSAT C/S band BSS transponder for Cyclone warning

3.0 CWDS Transmit System

The transmit system is located at ACWC Chennai (Figure 3) consists of

- Out door units
 - Antenna
 - RFT with redundancy switch
- Indoor units
 - Voice encoder
 - Modulator
 - CWDS Network Management System
 - Redundancy switches

C-band antenna system is a 3.8 m offset-fed antenna, which is installed on ground. The RFT, voice encoder, modulator and NMS are in redundant configuration for better reliability of operations. In case of failure of any of this equipment the redundant chain is switched on automatically.

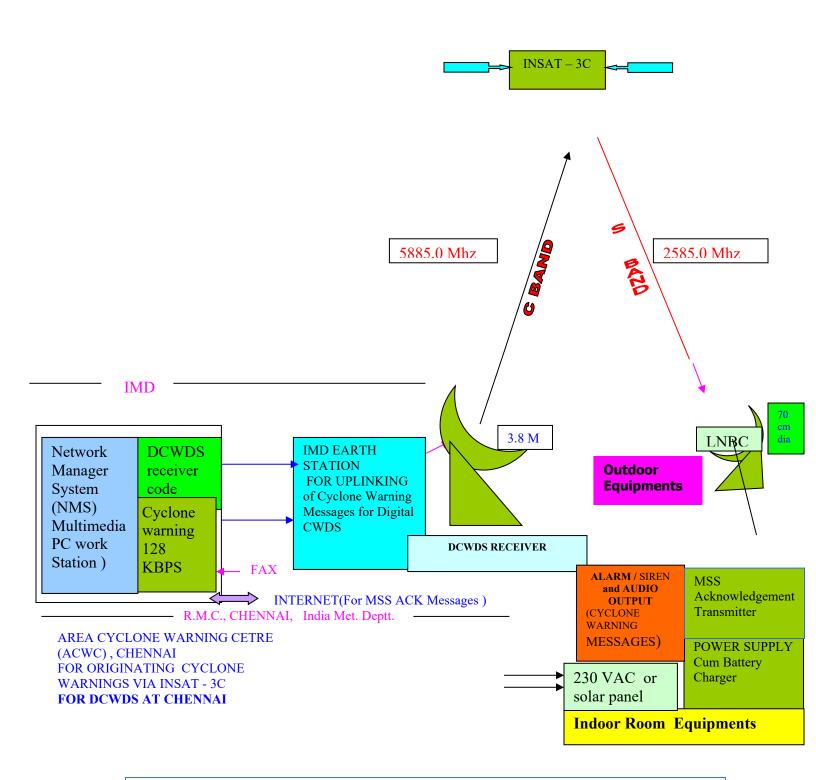


FIG: 1 BLOCK DIAGRAM OF DIGITAL CYCLONE WARNING DISSEMINATION SYSTEM (DCWDS)