CGMS-XXX EUM-WP-20
Prepared by EUMETSAT
Agenda Item: II.3
Discussed in WG II

EUMETSAT ATOVS RETRANSMISSION SERVICE (EARS)

This paper describes the status of the implementation of the EUMETSAT ATOVS Retransmission Service and provides updated plots of the geographical coverage.

CGMS Members are invited to take note.

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1 Background

In June 2001, the EUMETSAT Council decided to establish a satellite data service which will provide the Meteorological Community with satellite data sets from NOAA polar orbiting satellites, covering data-sparse sea areas around Europe. This service is called the EUMETSAT ATOVS Retransmission Service (EARS). The aim of the Service is to provide ATOVS level 1a and 1c data with a timeliness of 30 minutes, thus meeting the requirements of EUMETSAT Member States for the use of NOAA sounding data in their NWP systems.

CGMS Members will recall that document CGMSXXIX EUM-WP 26 provided a description of the EARS service. This paper describes the current status of the implementation of the EARS Service.

Figures 1, 2 and 3 present the system overview and plots of geographical coverage.

2 Current Status

2.1 HRPT Stations and AAPP processing

The AAPP processing package has been installed on the SUN Netra workstation and integrated with the EUMETSAT GEMS and EFTS software packages and validation of the set-up is close to completion. To support these validation activities, the Danish Meteorological Institute (DMI) transfers raw HRPT data set from their station in Copenhagen to the AAPP processing node at EUMETSAT. It should be noted, however, that in the operational set-up the AAPP processing nodes will be located at each of the HRPT stations.

Arrangements for the provision of HRPT data are complete for Tromsø Satellite Station, Norway INTA, Spain and DMI, Denmark. Service preparation and installation activities are well advanced in both Tromsø and Maspalomas and final validation of these two stations will be complete by mid October 2002. Initiation of activities by DMI leading to the provision of HRPT Data from Soendre Stroemfjord, Greenland, started in September 2002.

The HRPT station operated by the Hellenic National Meteorological Service in Athens, Greece has been selected for the provision of data from the Mediterranean area.

Initial meetings have been held with NOAA and MSC (Canada) and work to establish a formal cooperation framework with both partners is ongoing.

2.2 Telecommunication Net

A competitive ITT has been completed for the telecommunication lines connecting the HRPT stations with EUMETSAT, and EUMETSAT with the DVB broadcast up-link station, and a contract has been awarded. Installations of the communication lines in Tromsø, Maspalomas and Darmstadt have been completed.

2.3 Broadcast

A DVB satellite multicast trial using a commercial provider has been completed. Six National Meteorological Services participated, each with a DVB receiving station. Statistics for broadcast performance and availability are being collected and it can already be stated that a consistent level of service availability, well above 99.5%, has been achieved over several months. A contract for the operational Service is now in place.

2.4 Product Quality Control

The Numerical Weather Prediction SAF located at the UK Met Office will support the quality control of EARS products, since it is currently receiving EARS data from EUMETSAT via the DVB Multicast link.

2.5 Schedule

It is currently planned that the EARS Early Operational Phase will commence on 12 November 2002. The target is to have the stations in Tromsø, Norway and Maspalomas, Spain operationally available first, with the station in Søndre Strømfjord, Greenland, added shortly thereafter. The stations in Alaska, Canada and Greece are expected to be added within six months of the start of the Early Operations Phase.

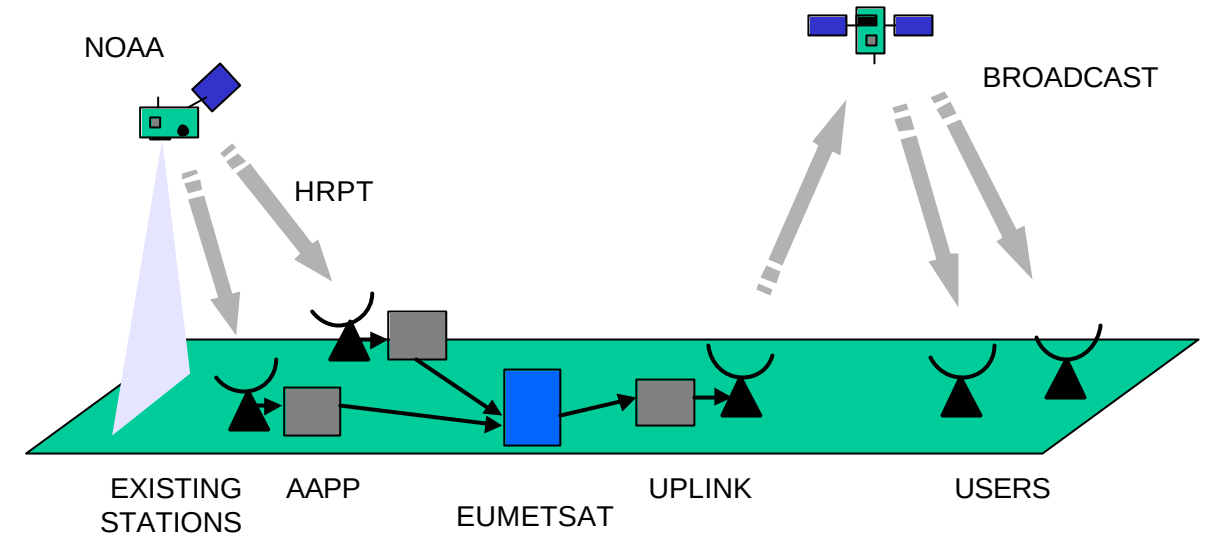

Figure 1. EARS System Overveiw

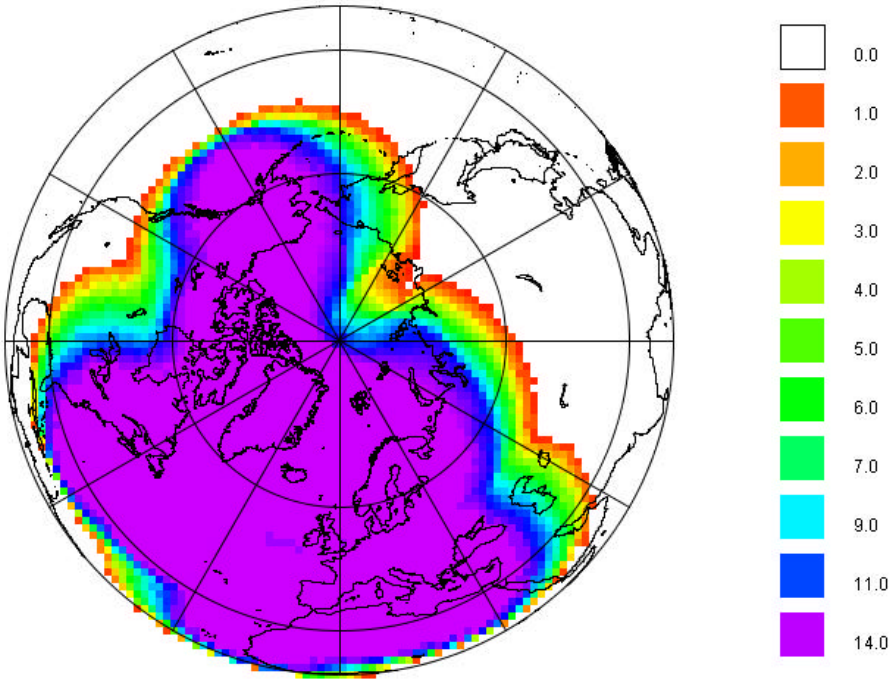

Figure 2. Geographical coverage of data collection.

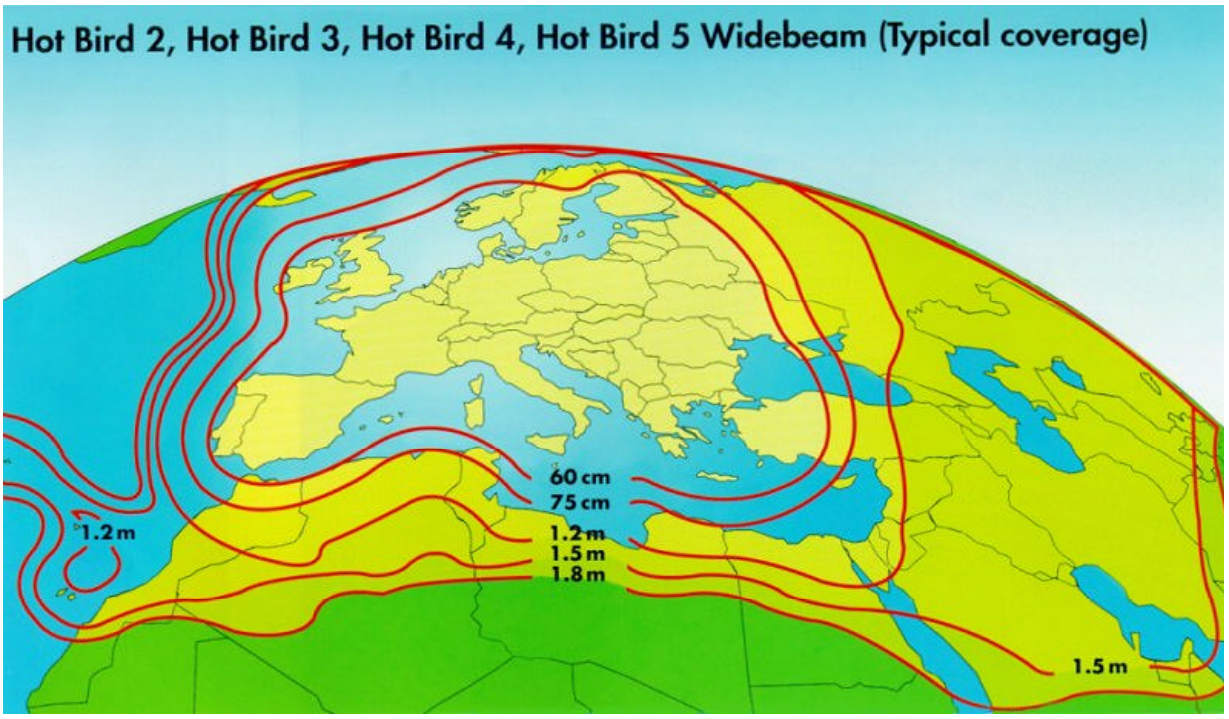

Figure 3. Geographical coverage of data dissemination via DVB Multicast. 60 cm line corresponds to 85 cm dish for EARS; 1.5 m line corresponds to 1.8 m dish for EARS