

## COMPARABLE DATA CONTENT FOR DIRECT BROADCAST FROM POLAR-ORBITING SATELLITES

*(Submitted by WMO)*

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### **Summary and purpose of document**

To inform CGMS Members of WMO requirements concerning the comparable data content for direct broadcast from polar-orbiting satellites

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### **ACTION PROPOSED**

CGMS Members to provide information for the processing level of the S-band direct broadcast service for each polar-orbiting satellite.

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## DISCUSSION

### Comparable Data Set from Direct Broadcast of Near-Polar Orbiting Satellites

1. While recognizing that future satellite systems will not have duplicate instruments nor provide identical data, there is a need for a direct broadcast capability as part of a global dissemination service based on the already approved CGMS global specification for AHRPT (**See WMO WP-22**). CGMS satellite operators have already agreed that the global service should be provided by all satellite operators with near-polar-orbiting satellites. It should have a common frequency in the 1698-1710 MHz band and common bandwidth. It should also have a comparable data content, with Metop considered as a benchmark.
2. Level 0 data are required by the research community, while the operational users require primarily Level 1 data and secondarily some Level 2 data. Provision of higher-level data, i.e. level 0 and 1, would facilitate the standardization of application products, minimize the duplication of work and reduce the volume of data exchanged. It also requires a commitment that the processing is made in a consistent fashion, especially if the processing is shared between different facilities at local and/or global scale. The requirement for Level 0 data is based on the need to be able to use local application software to produce comparable products from any polar-orbiting satellite.
3. Operational CGMS Members should take into account the WMO requirements for the higher level data, i.e. 0 and 1 that have proved beneficial to the evolution of satellite meteorology in general and to NWP in particular.
4. Thus, detailed information are needed from each near polar-orbiting satellite operator on its intention to implement these requirements in the S-Band direct broadcast service for the different near-polar systems. In particular, each data stream should be identified as to the level of processing. This information will be consolidated into a CGMS table for the CGMS web site and for further distribution in the WWW Operational Newsletter. Table 1 is a sample and should be completed by each near polar-orbiting satellite operator.

Satellite	S-Band Direct Broadcast	Processing Level
Metop	AHRPT	1b