

RECOMMENDATION ITU-R SA.1258

**SHARING OF THE FREQUENCY BAND 401-403 MHz BETWEEN THE
METEOROLOGICAL SATELLITE SERVICE, EARTH EXPLORATION SATELLITE
SERVICE AND METEOROLOGICAL AIDS SERVICE**

(Question ITU-R 217/7)

(1997)

The ITU Radiocommunication Assembly,

considering

- a) that the World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992) (WARC-92) adopted Resolution No. 710 to upgrade the meteorological-satellite (METSAT) and the Earth exploration-satellite (EES) services to primary status in the band 401-403 MHz;
- b) that the band 400.15-406 MHz is currently allocated to the meteorological aids (MetAids) service on a primary basis;
- c) that METSAT and EES are currently allocated on a secondary basis worldwide in the sub-band 401-403 MHz;
- d) that the sub-band is used for the operation of data collection systems (DCS) on METSATs;
- e) that data collected by MetAids operations are vital to the prediction of weather world-wide which threatens life and property;
- f) sharing between METSAT, EES and MetAids has been successful due to careful coordination between the two services,

recognizing

- 1** that any reduction in spectrum available to MetAids in order to accommodate other services will result in higher levels of interference from MetAids to EES and METSATs;
- 2** that changes to the EES and METSAT allocation in the band 401-403 MHz may impact MetAids operations if careful coordination between the services is not ensured;
- 3** that achievable distance and/or frequency separation can be used to ensure that geostationary-satellite orbit (GSO) EES and METSAT operations do not interfere with MetAids operations;
- 4** that although simultaneous co-channel sharing is not possible between non-GSO EES, METSAT and MetAids, coordination in frequency, time, and distance can be accomplished,

recommends

- 1** that sharing is feasible between GSO EES, METSATs, and MetAids in the band 401-403 MHz, provided that the data collection platforms meet the following conditions: uplink e.i.r.p. density limitations of 22 dB(W/100 Hz) and transmission durations of up to 1 min per message;
- 2** that sharing is feasible between non-GSO EES, METSATs, and MetAids in the band 401-403 MHz, provided that the data collection platforms meet the following conditions: uplink e.i.r.p. density limitations of 7 dB(W/1 600 Hz) and transmission durations of up to 1 min per message with a duty cycle of less than 5%;

3 that systems which do not meet the restrictions of *recommends* 1 and 2 require coordination between MetAids operators, METSAT and EES operators prior to implementation.
