RECOMMENDATION ITU-R SA.1258-1

# 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)

(1997-1999)

The ITU Radiocommunication Assembly,

*considering*

a) that the World Radiocommunication Conference (Geneva, 1997) (WRC-97) allocated the meteorological-satellite (MetSat) and the Earth exploration-satellite (EES) services to primary basis 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 the sub-band 401-403 MHz is used for the operation of Earth-to-space links in data collection systems (DCS) on geostationary orbit (GSO) MetSat and non-GSO EES and MetSat;

d) that data collected by MetSat and MetAids operations are vital to the study and prediction of weather events and climate trends which threaten life and property;

e) sharing between MetSat, EES and MetAids services has been successful due to careful coordination,

*recognizing*

**1** that EES and MetSat operations in the band 401-403 MHz may impact MetAids operations even if careful coordination between the services is ensured;

**2** that distance and/or frequency separation can be used to ensure that EES, GSO MetSat and MetAids operations do not interfere with each other at the current stage of deployment;

**3** that co-channel sharing is not possible between non-GSO EES and either MetSat or MetAids, but coordination in frequency can be accomplished;

**4** that MetAids and MetSat/EES services use of the band is increasing;

**5** that any reduction in spectrum available to the MetAids service in order to accommodate other services will result in higher levels of interference between MetAids, EES and MetSat services,

*recommends*

**1** that co-channel sharing is feasible between GSO MetSat and MetAids services in the band 401-403 MHz only in locations where the spatial density of data collection platforms is low and where they 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 co-channel sharing is not feasible between the MetAids service on the one hand, and non-GSO EES, or non-GSO MetSat services on the other in the band 401-403 MHz;

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