

Recommendation 18-1

**USE OF THE BANDS 31.3 – 31.8 GHz and 36 – 37 GHz FOR EESS PASSIVE SENSING**

The SFCG,

CONSIDERING

- a) that 31.3 – 31.8 GHz is essential as the only window for remote sensing of surface information to be used in connection with the atmospheric profile temperature measurements performed in the 50 – 60 GHz band, and that in this band the data loss acceptable by the EESS (passive) is less than 0.01%;
- b) that in a number of countries the upper part of this band, 31.5-31.8 GHz, is also allocated to Fixed and Mobile Services on a primary basis;
- c) that 36 – 37 GHz is the most suitable band for snow detection (shallow snow, snow water equivalent) and has been used for the last 20 years for climatological studies of snow, sea ice, soil moisture, microwave vegetation index and land surface temperature;
- d) that in the future a reduction of the current 1000 MHz bandwidth allocated from 36-37 GHz may become possible, in the light of technological developments;
- e) that current and planned EESS passive sensors are centred on 36.5 GHz;
- f) that the two bands serve different purposes and are unique in their nature;

RECOMMENDS

- 1. that the 31.3 – 31.8 GHz allocation be maintained for EESS (passive) without the addition of any new primary allocation to active services;
- 2. that the 36 – 37 GHz allocation be maintained for EESS (passive);
- 3. that, if at a future date, the reduction of the bandwidth in the 36-37 GHz band becomes feasible, the reduced band be centred on 36.5 GHz.