Question ITU-R 232-1/7[[1]](#footnote-1)\*, [[2]](#footnote-2)\*\*

Frequency sharing between spaceborne passive sensors and other
services in the bands 10.60-10.68 GHz, 31.5-31.8 GHz and 36-37 GHz

(2000-2002)

The ITU Radiocommunication Assembly,

considering

a) that the bands 10.60-10.68 GHz, 31.5-31.8 GHz and 36-37 GHz are allocated on a primary basis to the Earth exploration-satellite service (passive);

b) that the band 10.60-10.68 GHz is also allocated on a primary basis to the fixed and mobile services with limits on transmission characteristics in some countries as given in RR 5.482;

c) that the band 31.5-31.8 GHz is also allocated on a secondary basis to the fixed and mobile services in Regions 1 and 3 with some countries within Region 1 allocating the band to the fixed and mobile services on a primary basis as given in RR 5.546;

d) that the band 36-37 GHz is also allocated on a primary basis to the fixed and mobile services;

e) that the band 10.60-10.68 GHz is essential for land and sea surface temperature, soil moisture, wind intensity and precipitation over the sea (in combination with the other windows between 1 and 40 GHz);

f) that the band 31.5-31.8 GHz is essential for determining the surface temperature of the Earth and will be jointly used with the 50 to 60 GHz bands for temperature sounding of the atmosphere;

g) that the band 36-37 GHz is essential for the study of the global water cycle;

h) that the performance and interference criteria for satellite passive sensing are contained in Recommendations ITU-R SA.1028 and ITU-R SA.1029,

decides that the following Question should be studied

**1** What are the technical and operational characteristics of passive spaceborne sensor systems in this band?

**2** What are the criteria by which passive spaceborne sensor systems can share with other services in the bands 10.60-10.68 GHz, 31.5-31.8 GHz and 36-37 GHz?

further decides

**1** that the results of the above studies should be included in (a) Recommendation(s);

**2** that the above studies should be completed by 2012.

1. \* In the year 2011, Radiocommunication Study Group 7 extended the completion date of studies for this Question. [↑](#footnote-ref-1)
2. \*\* This Question should be brought to the attention of Radiocommunication Study Group 5. [↑](#footnote-ref-2)