QUESTION ITU-R 145-3/7

**Technical factors relating to the protection of  
radioastronomical observations**

(1990-1993-2000-2017)

The ITU Radiocommunication Assembly,

considering

*a)* that radio astronomy is based on the reception of natural emissions at much lower power levels than are generally used in other radio services, and may therefore suffer harmful interference at levels which could be tolerated by many other services;

*b)* that, for an understanding of astronomical phenomena, radioastronomers must observe both at specific and immutable line frequencies and also in a series of bands throughout the continuum spectrum;

*c)* that existing measures to protect the radio astronomy service are based on the assumption that the radio astronomy stations are located on Earth;

*d)* that Question ITU-R 230/7 deals with radio astronomy observations from space,

decides that the following Questions should be studied

1 What are the preferred frequency bands for the radio astronomy service?

2 What are the characteristics of observational techniques in radio astronomy?

3 What are the factors which affect the practicability of frequency sharing between radio astronomy and other radio services?

4 In what ways can radio astronomy observations be affected by spurious and out-of-band emissions from radio transmitters located in other frequency bands and by other electrical equipment?

further decides

1 that the results of the above studies should be included in (a) Recommendation(s) and/or Report(s), as appropriate;

2that the results of studies should be brought to the attention of the other Study Groups;

3 that the above studies should be completed before 2023.

Category: S2