QUESTION ITU-R 257/7

Technical and operational characteristics of radio astronomy applications operating above 275 GHz

(2017)

The ITU Radiocommunication Assembly,

considering

*a)* that many cosmic phenomena are observable only at frequencies above 275 GHz owing to the physical laws which govern them;

*b)* that the ability of the radio astronomy service to operate at frequencies above 275 GHz has improved to the point that observations are regularly conducted at various terrestrial locations, on airborne platforms, and by space missions;

*c)* that applications of active services above 275 GHz are under development;

*d)* that compatibility of the use of the spectrum above 275 GHz should be ensured;

*e)* that compatibility is facilitated when the operational and technical characteristics of systems are clearly understood,

recognizing

*a)* that spectrum allocations do not currently exist above 275 GHz;

*b)* that RR No. **5.565** identifies bands in the range 275-1 000 GHz for use by administrations for passive service applications, including radio astronomy applications,

decides that the following Questions should be studied

1 What are the technical and operational characteristics of systems operating at frequencies above 275 GHz in the radio astronomy service?

2 Which of these technical and operational characteristics are of particular importance in ensuring the compatible use of spectrum above 275 GHz?

further decides

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

2 that the results of studies should be included in ITU-R Recommendations and/or Reports, as appropriate;

3 that the above studies should be completed before 2027.

Category: S2