qUESTION ITU-R 129-3/7[[1]](#footnote-1)\*

Unwanted[[2]](#footnote-2)\*\* emissions radiated from and received by  
stations of the science services[[3]](#footnote-3)\*\*\*

(1990-1993-2003-2012)

The ITU Radiocommunication Assembly,

considering

*a)* that the radiation of unwanted emissions by space stations or earth stations of the science services could cause interference to other services;

*b)* that the radiation of unwanted emissions by other services could cause interference to space stations and earth stations of the science services;

*c)* that the various radio services differ greatly in the sensitivity of their stations to interference;

*d)* that the specification of acceptable levels of unwanted emissions must take into account the practical aspects of achieving these levels;

*e)* that limitations on the level of unwanted emissions should take into account the probability of simultaneous interference to a station from more than one interfering source;

*f)* that there is a need to adopt a standard technique for the measurement of unwanted emissions in order to determine compliance with specified levels of these emissions,

noting

*a)* that Appendix 3 of the Radio Regulations specifies only the maximum permitted levels of spurious emissions for transmitters of stations of the space services,

decides that the following Questions should be studied

1 What limits, based upon practical considerations, should be placed upon the power of unwanted emissions radiated by space and earth stations of the science services in order to protect other services?

2 What levels of unwanted emissions from stations of other services are acceptable at space and earth stations of the science services?

3 In what ways can radio astronomy and passive sensor observations be affected by unwanted emissions from radio transmitters, and from other electrical equipment?

4 What techniques may be employed at space and earth stations of the science services to mitigate the effects of unwanted emissions?

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 2023.

Category: S2

1. \* This Question should be brought to the attention of Radiocommunication Study Groups 1, 4, 5 and 6. [↑](#footnote-ref-1)
2. \*\* Unwanted emissions include both spurious and out-of-band emissions. [↑](#footnote-ref-2)
3. \*\*\* Science services include space operation, space research, Earth exploration-satellite, meteorological-satellite and standard frequencies and time signals services, radio astronomy and radar astronomy. [↑](#footnote-ref-3)