question itu-r 264/4

Technical and operational characteristics of networks of the
fixed-satellite service operating above 275 GHz[[1]](#footnote-1)\*

(2000)

The ITU Radiocommunication Assembly,

considering

*a)* that the spectrum in many of the frequency bands used for space radiocommunication is increasingly congested and this problem is expected to get worse;

*b)* that telecommunication links are being used or planned for use on some satellite systems for inter-satellite communications at frequencies above 275 GHz;

*c)* that the viability of telecommunication links operating above 275 GHz (space-to-Earth and Earth-to-space) is currently being investigated;

*d)* that at frequencies above 275 GHz, sharing between services is not precluded;

*e)* that extensive research has already been done and standards established on the hazards of radiation at frequencies above 275 GHz through the International Electrotechnical Commission in standard IEC 60825-1 and the American National Standards Institute in standard ANSI Z136.1‑1993;

*f)* that the focus of study of Questions by Radiocommunication Study Groups includes the following:

– use of the radio-frequency spectrum in space radiocommunication;

– characteristics and performance of radio systems;

– operation of radio systems,

decides that the following Questions should be studied

1 What are the technical and operational characteristics of Earth-to-space, space-to-Earth, and space-to-space links at frequencies above 275 GHz on geostationary orbits (GSO) and non‑GSO fixed‑satellite service (FSS) networks?

2 Are sharing studies required for FSS networks operating at frequencies above 275 GHz?

further decides

1 that the results of studies above 275 GHz should be brought to the attention of the other Study Groups;

2 that the results of the above studies should be included in appropriate Recommendations and/or Reports;

3 that preliminary results of the above studies should be available by 2027.

Category: S2

1. \* The frequency spectrum above 275 GHz is currently not allocated (see also No. **5.565** of the Radio Regulations). [↑](#footnote-ref-1)