QUESTION ITU-R 209-2/3

Variability and risk parameters in system performance analysis

(1993-2012-2015)

Q. ITU-R 209/3

The ITU Radiocommunication Assembly,

considering

*a)* that for the proper planning of terrestrial and Earth-space links it is necessary to have appropriate parameters for the formulation of performance criteria of radiocommunication systems;

*b)* that the “average annual worst month” has been defined as the long-term statistic relevant to performance criteria referring to “any month”;

*c)* that due to the stochastic nature of propagation effects in radiocommunication systems there is a need for information on variability of these effects, with respect to the long-term statistic which may itself be subject to longer-term variability, for various periods of reference;

*d)* that there is a need for an unambiguous formulation of variability parameters to allow proper cost and performance trade-offs to be made in the analysis of system reliability, availability and quality,

decides that the following Questions should be studied

1 What is the variation of propagation effects for various periods of reference?

2 What is the variation of propagation effects for any location in the world?

3 What are the periods of reference to be specified for the formulation of risk parameters associated with the variation of propagation statistics?

4 What are the parameters most suited to the formulation of confidence limits and risks associated with the specification and estimation of system performance?

5 What are the procedures for the calculation of the parameters defining statistical variation of propagation effects in radiocommunication systems?

further decides

that the above studies should be completed by 2027.

Category: S3