



Radiocommunication Bureau (BR)

Administrative Circular
CACE/904

14 June 2019

To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates participating in the work of Radiocommunication Study Group 3 and ITU Academia

Subject: **Radiocommunication Study Group 3 (Radiowave propagation)**
 – **Proposed approval of 5 draft revised ITU-R Recommendations**

At the meeting of Radiocommunication Study Group 3 held on 24 May 2019, the Study Group adopted the texts of 5 draft revised ITU-R Recommendations and agreed to apply the procedure of Resolution ITU-R 1-7 (see § A2.6.2.3) for approval of Recommendations by consultation. The titles and summaries of the draft Recommendations are given in the Annex to this letter. Any Member State who objects to the approval of a draft Recommendation is requested to inform the Director and the Chairman of the Study Group of the reasons for the objection.

Having regard to the provisions of § A2.6.2.3 of Resolution ITU-R 1-7, Member States are requested to inform the Secretariat (brsgd@itu.int) by 14 August 2019, whether they approve or do not approve the proposals above.

After the above-mentioned deadline, the results of this consultation will be announced in an Administrative Circular and the approved Recommendations will be published as soon as practicable (see <http://www.itu.int/pub/R-REC>).

Any ITU member organization aware of a patent held by itself or others which may fully or partly cover elements of the draft Recommendations mentioned in this letter is requested to disclose such information to the Secretariat as soon as possible. The Common Patent Policy for ITU-T/ITU-R/ISO/IEC is available at <http://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx>.



Mario Maniewicz
Director

Annex: Titles and summaries of the draft Recommendations

Documents: 3/93, 3/94(Rev.1), 3/95(Rev.1), 3/97(Rev.1), 3/98(Rev.1)

These documents are available in electronic format at:
<https://www.itu.int/md/R15-SG03-C/en>

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 3
- ITU-R Associates participating in the work of Radiocommunication Study Group 3
- ITU Academia
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

Annex

Titles and summaries of the draft Recommendations adopted by Radiocommunication Study Group 3

Draft revision of Recommendation ITU-R P.533-13

Doc. 3/93

Method for the prediction of the performance of HF circuits

Minor revisions are proposed to improve the modelling of above the MUF loss and to correct the equations for within the month probability.

Draft revision of Recommendation ITU-R P.372-13

Doc. 3/94(Rev.1)

Radio noise

This draft revision does not make substantive changes to the recommended information but it proposes that the text should be split into several distinct parts for ease of use. After a general part where some additional wording is proposed to clarify the content and extent of the recommendation, the parts deal with natural radio noise, roughly in descending frequency order, then with man-made noise, and finally with the appropriate method for combining the result where noise is present from several kinds of sources.

Draft revision of Recommendation ITU-R P.341-6

Doc. 3/95(Rev.1)

The concept of transmission loss for radio links

In summary, the revisions to this Recommendation are:

- to re-arrange the order in which the terms and definitions are given. There is no intention to make substantive changes in this re-ordering;
- to bring the symbols associated with the terms into conformity;
- to redefine the term “total loss” and “basic transmission loss”;
- to add a new annex to the Recommendation to provide a way of determining power flux density and field strength;
- to re-number the annexes and equations as necessary.

Calculation of free-space attenuation

This revision provides a definition of the terms “free-space” and “free-space propagation”. It also aligns the symbols used within the Recommendation with those defined in the preliminary draft revision of Recommendation ITU-R P.341-6 (Document [3/95](#)). In Section 4 the received power definition has been revised to apply to a conjugately matched antenna rather than an isotropic antenna.

Attenuation due to clouds and fog

The purpose of this document is to propose a revision to Annex 3 of Recommendation ITU-R P.840-7 that:

- specifies the applicable probability range;
- tests if P is greater than P_{CLW} and, if so, sets $L_{red} = 0$;
- harmonizes the text with preceding sections in the recommendation; and
- harmonizes the interpolation method with the integrated cloud liquid water content time series synthesis method in Recommendation ITU-R P.1853 which requires m , σ , and P_{CLW} at the location of interest (i.e. by spatially interpolating the values of m , σ , and P_{CLW} at the four surrounding gridpoints and determining L_{red} at the location of interest from the spatially interpolated values of m , σ , and P_{CLW} rather than determining L_{red} at the location of interest by spatially interpolating the calculated values of L_{red} at the four surrounding gridpoints).

Section 4 of ITU-R P.840-7 provides the values of m , σ , and P_{CLW} at a desired location required by the cloud attenuation time-series generator in Recommendation ITU-R P.1853; and the associated value of L_{red} is provided for reference only. Section 3 rather than the approximation calculated by Section 4 should be used to calculate L_{red} in all other cases.

The Annex replaces Section 4 in its entirety.
