International Telecommunication Union



Radiocommunication Bureau (Direct Fax N°. +41 22 730 57 85)

Administrative Circular CAR/191 24 May 2005

To Administrations of Member States of the ITU

Subject:Radiocommunication Study Group 3

- Proposed approval of 3 draft revised Recommendations

At the meeting of ITU-R Study Group 3 (Radiowave propagation) held on 28 and 29 October 2004, the Study Group decided to seek adoption of 4 draft revised Recommendations by correspondence, according to § 10.2.3 of Resolution ITU-R 1-4.

As stated in Circular letter 3/LCCE/24, dated 31 January 2005, the consultation period for the Recommendations ended on 31 March 2005.

The Recommendations have now been adopted by Study Group 3 with the exception of Recommendation ITU-R P.372 (Document 3/30 (Rev.1)) and the approval procedure of Resolution ITU-R 1-4 § 10.4.5 is to be applied, noting the interim procedures recommended by the RAG at its meeting in November 2004*. The titles and summaries of the Recommendations are given in Annex 1.

Two Administrations objected to the adoption of the draft revised Recommendation ITU-R P.372 in Document 3/30(Rev.1). In accordance with the provisions of Resolution ITU-R 1-4 and after consultation with the Study Group Chairman, the document will be sent back to Working Party 3J for further review.

Having regard to the provisions of § 10.4.5.2 of Resolution ITU-R 1-4, you are requested to inform the Secretariat (<u>brsgd@itu.int</u>) by <u>24 August 2005</u> whether your Administration approves or does not approve the draft Recommendations.

A Member State who indicates that the draft Recommendations should not be approved is requested to advise the Secretariat of the reason and to indicate possible changes in order to facilitate further consideration by the Study Group during the study period (§ 10.4.5.5 of Resolution ITU-R 1-4).

^{*} See Circular Letter CA/145.

After the above-mentioned deadline, the results of this consultation will be notified in an Administrative Circular and arrangements made for the approved Recommendations to be published in accordance with § 10.4.7 of Resolution ITU-R 1-4.

Any ITU member organization aware of a patent held by itself or others which may fully or partly cover elements of the draft Recommendation(s) mentioned in this letter is requested to disclose such information to the Secretariat as soon as possible. The "Statement on Radiocommunication Sector Patent Policy" is contained in Annex 1 of Resolution ITU-R 1-4.

Valery Timofeev Director, Radiocommunication Bureau

Annex: Titles and summaries

Documents attached: Documents 3/BL/1-3 on CD-ROM

Distribution:

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

ANNEX 1

- 3 -

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

Draft revision of Recommendation ITU-R P.1546-1

Doc. 3/BL/3

Method for point-to-area predictions for terrestrial services in the frequency range 30 to 3 000 MHz

Several parts of the Recommendation have been revised. The most significant revisions were introduced in section 8 of Annex 5 on the mixed path propagation prediction method, which was modified in order to improve precision of field strength calculation for any mixed land-sea path. In the existing Recommendation ITU-R P.1546-1, the method of treatment of negative effective antenna height can result, in certain cases, in under-estimating the interfering field strength. The revisions incorporated in sub-section 4.3 of Annex 5 provide realistic propagation prediction for negative effective transmitting/base antenna heights.

In Annexes 2, 3 and 4 containing the field strength versus distance curves for frequencies 100 MHz, 600 MHz and 2000 MHz and for 50%, 10% and 1% of the time, a small number of cases were slightly modified in order to eliminate some inconsistencies where:

- a field strength for a given percentage of time was greater than the corresponding field strength at the next lower time percentage;
- a land field strength exceeded the corresponding sea field strength;
- a cold sea field strength exceeded the corresponding warm sea field strength.

Draft revision of Recommendation ITU-R P.526-8

Doc. 3/BL/2

Propagation by diffraction

This revised Recommendation includes several new basic definitions such as the definition of penumbra width, diffraction zone, obstacle surface smoothness criterion, isolated obstacle, types of terrain, Fresnel integrals, etc. Modifications were introduced in the single knife-edge, single rounded obstacle and multiple isolated obstacles models. New sections have been added giving a model to calculate diffraction by thin screens and a section containing a general guide for the evaluation of diffraction loss corresponding to diffraction over spherical earth and diffraction over isolated obstacles. New Appendices describe the methods of calculation of cylinder parameters and sub-path diffraction loses.

Draft revision of Recommendation ITU-R P.833-4

Attenuation by vegetation

The changes include an improved radiative energy transfer model for propagation through vegetation above 1 GHz, the incorporation of advice on fading dynamics for paths passing through vegetation from Recommendation ITU-R P.1410 and measured statistics for three species of tree.
