International Telecommunication Union



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

Administrative Circular CAR/282

12 October 2009

To Administrations of Member States of ITU

Subject: Radiocommunication Study Group 4

 Proposed approval of 1 draft new Recommendation and 8 draft revised Recommendations

At the meeting of ITU-R Study Group 4 (Satellite services) held on 21 and 22 September 2009, the Study Group adopted the texts of 1 draft new Recommendation and 8 draft revised Recommendations and agreed to apply the procedure of Resolution ITU-R 1-5 (see § 10.4.5) for approval of Recommendations by consultation. The titles and summaries of the draft Recommendations are given in the Annex.

Having regard to the provisions of § 10.4.5.2 of Resolution ITU-R 1-5, you are requested to inform the Secretariat (<u>brsgd@itu.int</u>) by <u>12 January 2010</u>, whether your Administration approves or does not approve the draft Recommendations.

A Member State who indicates that a draft Recommendation 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 1-5).

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 1-5.

E-mail: itumail@itu.int

http://www.itu.int/

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 Common Patent Policy for ITU-T/ITU-R/ISO/IEC is available at http://www.itu.int/ITU-T/dbase/patent/patent-policy.html.

Valery Timofeev Director, Radiocommunication Bureau

Annex:

Titles and summaries of the draft Recommendations

Documents attached:

Documents 4/BL/4 to 4/BL/12 on CD-ROM

Distribution:

- Administrations of Member States of the ITU
- Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 4
- ITU-R Associates participating in the work of Radiocommunication Study Group 4

Annex

Titles and summaries of the draft Recommendations adopted by Radiocommunication Study Group 4

Draft new Recommendation ITU-R M.[1457-SAT]

Detailed specifications of the radio interfaces for the satellite component of International Mobile Telecommunications-2000 (IMT-2000)

Doc. 4/BL/4

Doc. 4/BL/5

At its April 2008 meeting, Study Group 4 decided that the entire section of Recommendation ITU-R M.1457 that specified mobile-satellite service air interfaces for IMT-2000 should be converted as soon as possible to a stand-alone Recommendation within Study Group 4.

On the basis of this decision, Working Party 4C developed a Recommendation which converts Section 6 of Recommendation ITU-R M.1457 into a new, stand-alone Recommendation. This draft new Recommendation also contains the addition of the new GMR satellite radio interface ("SRI-H") that was introduced in March 2008 and which has completed the evaluation process in accordance with Resolution ITU-R 47-1 and Recommendation ITU-R M.1225.

At its April 2009 meeting, Working Party 4C decided to send this draft new Recommendation to Study Group 4 for adoption.

Draft revision of Recommendation ITU-R M.1474

Methodology to evaluate the impact of interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) systems on baseband performance in digital line-of-sight fixed service receivers based on statistics of radio-frequency interference in the frequency range 1-3 GHz

The revision of this Recommendation expands the scope of this Recommendation to include bands around 1.5/1.6 GHz allocated to both the MSS and FS on a co-primary basis. There are also updates to references to certain other ITU-R Recommendations and minor editorial improvements.

This revision process has been undertaken jointly with Working Party 5C through the exchange of liaison statements.

Doc. 4/BL/6

Doc. 4/BL/7

Doc 4/BL/8

Methodology to evaluate the impact of interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) space-to-Earth transmissions on video baseband performance in TV-FM analogue line-of-sight fixed service receivers in the frequency range 1-3 GHz

The revision of this Recommendation expands the scope of this Recommendation to include bands around 1.5 GHz allocated to both the MSS and FS on a co-primary basis. There are also updates to references to certain other ITU-R Recommendations and minor editorial improvements.

This revision process has been undertaken jointly with Working Party 5C through the exchange of liaison statements.

Draft revision of Recommendation ITU-R M.1472

Methodology to evaluate the impact of interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) space-to-Earth transmissions on baseband performance in frequency division multiplexing-frequency modulation (FDM-FM) analogue line-of-sight (LoS) fixed service receivers in the frequency range 1-3 GHz

The revision of this Recommendation expands the scope of this Recommendation to include bands around 1.5 GHz allocated to both the MSS and FS on a co-primary basis. There are also updates to references to certain other ITU-R Recommendations and minor editorial improvements.

This revision process has been undertaken jointly with Working Party 5C through the exchange of liaison statements.

Draft revision of Recommendation ITU-R M.1471

Guide to the application of the methodologies to facilitate coordination and use of frequency bands shared between the mobile-satellite service and the fixed service in the frequency range 1-3 GHz

The revision of this Recommendation supplement and update the references to certain ITU-R Recommendations to be used for guidance to facilitate coordination and use of frequency bands shared between the mobile-satellite service and the fixed service in the frequency range 1-3 GHz.

Doc. 4/BL/9

Doc. 4/BL/10

Doc. 4/BL/11

Methodology for evaluating potential for interference from time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) Earth-to-space transmissions into line-of-sight fixed service receivers in the frequency range 1-3 GHz

The revision of this Recommendation expands the scope of this Recommendation to include bands around 1.6 GHz allocated to both the MSS and FS on a co-primary basis. There are also updates to references to certain other ITU-R Recommendations and minor editorial improvements.

This revision process has been undertaken jointly with Working Party 5C through the exchange of liaison statements.

Draft revision of Recommendation ITU-R M.1319-2

The basis of a methodology to assess the impact of interference from a time division multiple access/frequency division multiple access (TDMA/FDMA) mobile-satellite service (MSS) space-to-Earth transmissions on the performance of line-of-sight fixed service receivers in the frequency range 1-3 GHz

The revision of this Recommendation expands the scope of this Recommendation to include bands around 1.5 GHz allocated to both the MSS and FS on a co-primary basis. There are also updates to references to certain other ITU-R Recommendations and minor editorial improvements.

This revision process has been undertaken jointly with Working Party 5C through the exchange of liaison statements.

Draft revision of Recommendation ITU-R S.1673

Methodologies for the calculation of the worst-case interference levels from a non-geostationary HEO-type fixed-satellite service system into geostationary fixed-satellite service satellite networks operating in the 10 to 30 GHz frequency bands

The revision of this Recommendation modifies the radiation pattern used in the calculation of worst-case interference levels from a non-geostationary HEO-type fixed-satellite service system into geostationary fixed-satellite service satellite networks.

Although the satellites in high Earth orbits move with time, the worst-case interference should be computed at the moment when the satellites in high Earth orbits are in the worst-case geometry and assuming that the satellites in high Earth orbits come to the direction of the side-lobe peak of the receiving earth station, so that the side-lobe peak envelope should be used in the calculation. Therefore, the reference radiation pattern contained in Recommendation ITU-R S.465 should be used rather than the one contained in Recommendation ITU-R S.1428.

Consequential to this change, it was agreed to delete a reference to Recommendation ITU-R S.1428 in section 2 of Annexes 1 and 2 and to change the reference antenna radiation pattern (from Recommendation ITU-R S.1428 to Recommendation ITU-R S.465) in Annexes 3 and 4.

Draft revision of Recommendation ITU-R S.1711

Performance enhancements of transmission control protocol over satellite networks

Doc. 4/BL/12

Recommendation ITU-R S.1711 presents transmission control protocol (TCP) enhancements applied to satellite communication links. Various techniques, collectively referred to as "TCP performance enhancements" were developed to overcome satellite link limitations due to propagation delay and link errors. This Recommendation includes test results and measurements of these TCP enhancements. Background material on TCP performance over satellite links and comparison between various enhancements were also included in this Recommendation. This draft revision aims at focusing the Recommendation on the specification of TCP enhancements for satellite links, while the background material on TCP is transferred to a separate technical Report.

The main revisions to Recommendation ITU-R S.1711 are listed below:

- Recommends: revision of the text to provide more substantive recommendations.
- Annex 1: transfer of the list of acronyms before Annex 1.
- Annex 1: deletion of section 3 (transferred to Report ITU-R S.2148).
- Annex 2: deletion of the entire Annex (transferred to Report ITU-R S.2148).
- New Annex 2, section 3: addition of new measurement results.
- New Annex 2, section 5 (previous Annex 3, section 4): deletion of duplicated data, improvement of the readability of the test results, addition of a conclusive section.
- New Annex 2, section 7: addition of overall conclusions.