# INTERNATIONAL TELECOMMUNICATION UNION

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

**Circular Letter**
**4/LCCE/97**

18 December 2008

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

**Subject**: **Radiocommunication Study Group 4**

**– Proposed adoption by correspondence of 2 draft new Recommendations**

At the meeting of Radiocommunication Study Group 4, held on 16 and 17 October 2008, the Study Group decided to seek adoption of 2 draft new Recommendations according to § 10.2.3 of Resolution ITU-R 1-5 (Adoption by a Study Group by correspondence). The titles and summaries of the Recommendations are given in Annex 1.

The consideration period shall extend for two months ending on 18 February 2009. If no objections are received from Member States during this period, the approval by consultation procedure of § 10.4.5 of Resolution ITU-R 1-5 will be initiated. However, any Member State who objects to the continuation of the approval procedure for the draft Recommendations is requested to advise the Director of the reason and to indicate possible changes to the text in order to resolve the problem.

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 new Recommendations

**Documents attached**: Documents 4/41(Rev.1) and 4/50(Rev.1) on CD-ROM

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 4
- ITU-R Associates participating in the work of Radiocommunication Study Group 4
- Chairman and Vice-Chairmen of Radiocommunication Study Group 4
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

# Annex 1

## Titles and summaries of the draft new Recommendations

Draft new Recommendation ITU-R M.[1317_NEW] Doc. 4/41(Rev.1)

### Description of systems and networks in the radionavigation-satellite service (space-to-Earth and space-to-space) and technical characteristics of transmitting space stations operating in the bands 1 164-1 215 MHz, 1 215-1 300 MHz, and 1 559-1 610 MHz

The information on orbital parameters, navigation signals and technical characteristics of systems and networks in the radionavigation-satellite service (RNSS) (space-to-Earth, space-to-space) operating in the bands 1 164-1 215 MHz, 1 215-1 300 MHz, and 1 559-1 610 MHz are presented in this proposed draft new Recommendation. This information is intended for use in the assessment of the interference impact between systems and networks in the RNSS and with other services and systems.

This draft new Recommendation contains cross-references with other proposed draft new Recommendations related to RNSS systems.

This draft new Recommendation is intended to replace existing Recommendation ITU-R M.1317. Upon approval of this draft new Recommendation, Recommendation ITU-R M.1317 should be suppressed.

Draft new Recommendation ITU-R S.[CSREF-PATT] Doc. 4/50(Rev.1)

### Reference earth-station radiation pattern for antennas used with closely spaced satellites in the geostationary-satellite orbit for use in coordination and interference assessment in the frequency range from 2 to 31 GHz

This Recommendation provides reference radiation patterns for both circular and non-circular earth-station antennas used with closely spaced satellites in the geostationary-satellite orbit that, in the absence of particular information concerning the radiation pattern, should be used for coordination studies and interference assessment between earth stations in the fixed-satellite service and stations of other services sharing the same frequency band as well as coordination studies and interference assessment between systems in the fixed-satellite service.

The concept of “closely spaced” is an important distinguishing characteristic of the draft new Recommendation ITU-R S.[CSREF-PATT]. The antenna pattern offers some improvement over that of Recommendation ITU-R S.465-5 at geostationary separations in or very near the geostationary plane. At orbital geostationary separations within the coordination arc of the applicable frequency band, the improvement in the pattern may permit closer satellite spacings or an increase in the operating margins available to links making use of such antennas in the fixed-

satellite service. In addition, unlike Recommendation ITU-R S.465 which assumes rotationally symmetric antenna patterns, this draft new Recommendation (DNR) makes no such assumption and, therefore, other antenna shapes (i.e. rectangular, elliptical, etc) are also now addressed.

As regards the feasibility of implementing this DNR into the Bureau's antenna pattern library, it should be noted that the pattern for rotationally symmetric antennas could be easily implemented within the Bureau's antenna pattern library. Regarding the non-rotationally symmetric pattern, a new parameter (diameter along the geostationary orbit) would need to be added to the database. In addition, this parameter does not currently exist in Appendix 4 of the Radio Regulations and only a future conference could make that data field mandatory. Nevertheless, the pattern would still be useful in bi-lateral co-ordination should administrations agree to apply it.