



Radiocommunication Bureau
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Administrative Circular
CACE/324

28 July 2004

**To Administrations of Member States of the ITU and
Radiocommunication Sector Members participating in the
work of the Radiocommunication Study Groups and the Special
Committee on Regulatory/Procedural Matters**

Subject: Meeting of Radiocommunication Study Group 4 (Fixed-satellite service)

1 Introduction

By means of this Administrative Circular, we wish to announce that a meeting of ITU-R Study Group 4 will take place in Geneva on 22 October 2004, immediately after the meetings of Working Parties 4A and 4B (see Circular Letter 4/LCCE/83, dated 7 July 2004).

The Study Group meeting will be held in the ITU Headquarters, Geneva. Services directly connected with meeting activities, such as delegate registration, document distribution, etc. will be located in the vicinity of the meeting room. The opening session will take place at 09:00 hours and registration of delegates will start at 08:30 hours on 22 October 2004.

2 Programme of the meeting

The draft agenda for the meeting of Study Group 4 is contained in Annex 1. Contributions from participants will be processed in accordance with Resolution ITU-R 1-4.

The Questions assigned to Study Group 4 are listed in Document 4/1:

<http://www.itu.int/md/meetingdoc.asp?type=sitems&lang=e&parent=R03-SG04-C-0001>

2.1 Adoption of draft Recommendations at the Study Group meeting (§ 10.2.2 of Resolution ITU-R 1-4)

Eight draft new and revised Recommendations were prepared at the meetings of Working Party 4A (14-23 April 2004) and Working Party 4B (22-29 April 2004) and are proposed for adoption by the Study Group at its meeting in accordance with § 10.2.2 of Resolution ITU-R 1-4.

In conformity with §§ 2.25 and 10.2.2.2 of Resolution ITU-R 1-4, the title and the summary of the draft revised Recommendation are given in Annex 2.

As indicated in § 10.4.3 of Resolution ITU-R 1-4, the Study Group shall decide, for each draft Recommendation adopted, the eventual approval procedure to be followed. In the case where it is decided to submit a draft for approval by consultation, the decision of the delegations representing Member States must be unopposed; (see § 10.4.5.1 of Resolution ITU-R 1-4).

2.2 Adoption of draft Recommendations by a Study Group by correspondence (§ 10.2.3 of Resolution ITU-R 1-4)

The procedure described in § 10.2.3 of Resolution ITU-R 1-4 concerns draft new or revised Recommendations which are not specifically included in the agenda of a Study Group meeting or for which there was insufficient time for their preparation in the working languages prior to the meeting.

In accordance with this procedure, draft new and revised Recommendations prepared during the meetings of Working Parties 4A and 4B, held soon before the Study Group meeting will be submitted to the Study Group. After due consideration, the Study Group may decide to seek adoption of these draft Recommendations by correspondence. In such cases, the Study Group may also decide to apply the procedure for simultaneous adoption and approval (PSAA) of a draft Recommendation as described in § 10.3 of Resolution ITU-R 1-4 (see also § 2.3 below).

In accordance with § 2.25 of Resolution ITU-R 1-4, Annex 3 to this Circular contains a list of topics to be addressed at the Working Parties' and Task Groups' meetings just prior to the Study Group meeting, and for which draft Recommendations may be developed.

2.3 Decision on approval procedure

At the meeting, the Study Group shall decide on the eventual procedure to be followed for seeking approval for each draft Recommendation in accordance with § 10.4.3 of Resolution ITU-R 1-4. Approval may be sought by submitting the draft Recommendation to the next Radiocommunication Assembly, or by consultation of the Member States; alternatively, the Study Group may decide to use the PSAA procedure described in § 10.3 of Resolution ITU-R 1-4.

3 Visa requirements

We would remind you that citizens of some countries are required to obtain a visa in order to enter and spend any time in Switzerland. The visa must be requested and obtained from the office (embassy or consulate) representing Switzerland in your country or, if there is no such office in your country, from the one that is closest to the country of departure. If problems are encountered, the Union can, at the official request of the administration or company you represent, approach the competent Swiss authorities in order to facilitate delivery of the visa. Any such request must specify the name and functions of the individual(s) for whom the visa(s) is/are requested and be accompanied by a copy of the approved registration form approved for the ITU conference or meeting in question.

4 Participation

In order to make the necessary arrangements, it is requested that the intended participation of your representative(s) be advised not later than one month before the opening of the meeting, by means of the annexed form (Annex 4) (to be photocopied as required). For hotel accommodation see: <http://www.itu.int/travel>.

Valery Timofeev
Director, Radiocommunication Bureau

Annexes: 4

Distribution:

- Administrations of Member States and Radiocommunication Sector Members
- ITU-R Associates participating in the work of Radiocommunication Study Group 4
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and Special Committee on Regulatory/Procedural Matters
- 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 1

Draft agenda for the meeting of Radiocommunication Study Group 4

(Geneva, 22 October 2004)

- 1** Introduction
- 2** Approval of the agenda
- 3** Appointment of Rapporteur
- 4** Chairman's Report
- 5** Executive Reports from Working Parties
 - WP 4A
 - WP 4B
- 6** Consideration of new and revised Recommendations
 - 6.1** Recommendations where notice of intention to seek adoption was given (see Resolution ITU-R 1-4, § 10.2.2 and § 10.4)
 - adoption of text by Study Group
 - decision on approval procedure to be followed
 - 6.2** Recommendations where notice was not given (see Resolution ITU-R 1-4, § 10.2.3)
 - decision to seek adoption
 - decision on approval procedure to be followed
- 7** Consideration of new and revised Questions
- 8** Review of other contributions
- 9** Consideration of Working Party structure and the appointment of Working Party Chairmen
- 10** Consideration of future work programmes and discussion on a tentative meeting schedule
- 11** Any other business

V. RAWAT
Chairman, Study Group 4

ANNEX 2

Summaries of draft new and revised Recommendations

Working Party 4A

- 1 Document 4/22** (source: Doc. 4A/TEMP/12(Rev.2)) Draft new Recommendation – “Electronic data file format for earth station antenna patterns”.

Although the standard reference patterns for FSS earth station antenna main-beam and sidelobe gain, such as those in Recommendations ITU-R S.465 and ITU-R S.580, are adequate for many interference studies, cases sometimes arise where more detailed gain patterns for specific antennas, or antenna types are needed in ITU-R studies. Also, the gain data for particular antennas are used in the refinement of existing reference patterns and/or the development of new reference patterns. The Annex to this draft new Recommendation details a format in which gain data on specific FSS earth station antennas may be submitted by administrations in electronic form to ITU-R groups, and includes examples.

- 2 Document 4/23** (source: Doc. 4A/TEMP/30), draft new Recommendation – “Power flux-density values in the band 11.7-12.7 GHz and associated calculation methodology which may be used when the power flux-density values in § 6 of Annex 1 to Appendix 30 are exceeded”.

Section 6 of Annex 1 to RR Appendix 30 provides power flux-density values to determine if a proposed BSS network in one Region needs to coordinate with an FSS network in another Region, in the frequency band 11.7-12.7 GHz. The mask in that section provides the envelope of pfd values to trigger coordination with a wide range of FSS earth station antenna sizes. This draft new Recommendation gives a table of levels equivalent to those in § 6 of Annex 1 to RR Appendix 30 for particular combinations of FSS earth station antenna size and system noise temperature, and also describes the methodology by which these levels were computed and a methodology to determine such levels for other earth station antenna sizes by interpolation.

3 Document 4/24 (source: Doc. 4A/TEMP/1) Draft revision of Recommendation ITU-R S.1328 – “Additional GSO systems data for the Recommendation”

Recommendation ITU-R S.1328 was developed as a source of transmission parameters of FSS systems for use in ITU-R studies. For many years there was no standard format for the parameters and additional systems were contributed by administrations in a variety of formats. The Recommendation was distributed by the BR in paper form and stored on the ITU-R Website as a WORD document. This made it difficult for the data to be readily used in studies involving calculations and computations. In recent years a version of the Recommendation was adopted that includes standard formats for the data on GSO FSS and non-GSO FSS systems, and administrations are encouraged to submit the information on new systems in these formats, and as EXCEL texts. This greatly improves the utility of the information, which may be down-loaded from the ITU-R Website and incorporated directly into EXCEL calculations. The present document contains the first set of data to be submitted in the new format, and thus should be of considerable benefit to future studies in WP 4A and elsewhere.

Working Party 4B

1 Document 4/14 (source: Annex 22 to Doc. 4B/135) Draft new Recommendation ITU-R S.[TT&C] – “Performance and availability objectives for FSS telemetry, tracking and command systems”

This new Recommendation resulted from multi-year studies within ITU-R Working Party 4B and provides guidance to the designers of fixed-satellite service systems on the technical and operational aspects of telemetry, tracking and command systems.

2 Document 4/15 (source: Annex 15 to Doc. 4B/135) Draft revision of Recommendation ITU-R S.614-3 – “Allowable error performance for a satellite hypothetical reference digital path in the fixed-satellite service operating below 15 GHz when forming part of an international connection in an integrated services digital network”

This revision reflects changes made by the ITU-T to Recommendation ITU-T G.821 and indicates that satellite HRDPs designed in the future should be based upon the latest version of Recommendation ITU-R S.1062.

3 Document 4/16 (source: Annex 16 to Doc. 4B/135) Draft revision of Recommendation ITU-R S.1062-2 – “Allowable error performance for a satellite hypothetical reference digital path operating below 15 GHz”

This revision incorporates the significant changes necessary due to the revision by the ITU-T of Recommendation ITU-T G.826 and notes that Recommendation ITU-R S.1429 specifies error performance allowances due to interference and Recommendation ITU-R S.1323 provides a method for calculating operating margins to account for fading and interference.

- 4 Document 4/17** (source: Annex 20 to Doc. 4B/135) Draft revision of Recommendation ITU-R S.1149-1 – “Network architecture and equipment functional aspects of digital satellite systems in the fixed-satellite service forming part of synchronous digital hierarchy transport networks”

This revision updates this Recommendation to reflect changes made by the ITU-T in their Recommendations that cover the synchronous digital hierarchy.

- 5 Document 4/18** (source: Annex 30 to Doc. 4B/135) Draft revision of Recommendation ITU-R S.1522 – “Impact of loss of synchronization and recovery time on availability in hypothetical reference digital paths”

This revision updates the terminology used in this Recommendation.

ANNEX 3

Topics to be addressed at meetings of Working Parties 4A and 4B held immediately prior to the meeting of Study Group 4 and for which draft Recommendations may be developed

Working Party 4A

- 1 Methodology and criterion to assess interference from radio local area (RLAN) transmitters to non-GSO MSS feeder links in the band 5 150-5 250 MHz.
- 2 Practical levels of unwanted emissions.
- 3 Technical characteristics of ESVs in the 6 GHz and 14 GHz FSS bands.
- 4 Static methodology for calculating efd to trigger very large antenna coordination under Nos. 9.7A and 9.7B of the Radio Regulations.
- 5 Revision of Recommendation ITU-R S.1503 – Specification for software to check compliance of non-GSO system designs with the ‘validation’ efd limits in RR Article 22.
- 6 Revision of Recommendation ITU-R BO.1443-1 (Doc. 4A/TEMP/21) – Reference BSS earth station antenna patterns for use in interference assessment involving non-GSO satellites in the RR Appendix 30 frequency bands.
- 7 Methodology to calculate the minimum separation angles at the Earth's surface between the direction of a satellite in a HEO 'active' arc and the direction of a satellite in a GSO, and thus to find the maximum DT/T that the HEO satellite could cause.
- 8 Methodology for determining whether an FSS earth station at a given location could transmit in the band 13.75-14 GHz without exceeding the pfd limit in RR No. 5.502.
- 9 Guidelines for protection of FSS satellite networks using the GSO from interference caused by HEO satellite systems in highly inclined orbits in the band 19.7-20.2 GHz in connection with the application of RR 22.5 CA (WRC-03).

Working Party 4B

- 1** Performance of transmission control protocol/Internet protocol (TCP/IP) over satellite networks
- 2** Quality of Service (QoS) – Architectures and performance for satellite IP networks
- 3** Preliminary draft new Recommendation – Technical characteristics of air interfaces for global broadband satellite systems
- 4** SNG carriers universal access procedures
- 5** Revision of Recommendation ITU-R S.579-5 – Availability objectives for hypothetical reference circuits and hypothetical reference digital paths in the fixed-satellite service operating below 15 GHz

ANNEX 4



Registration Form
ITU-R Meetings
Geneva, Switzerland, 4 October – 5 November 2004

Radiocommunication Bureau

I wish to participate in

Table with 8 columns: WP 4-9S, WP 4B, WP 1A, WP 1B, WP 1C, SGs 4 & 9, WP 4A, SG 1. Includes sub-columns E, F, S.

Table with 8 columns: WP 3J, WP 3K, WP 3M, SG 4, WP 3L, WP 6Q, WP 6M, TG 6/9. Includes sub-columns E, F, S.

Table with 7 columns: WP 6E, SG 3, WP 6P, WP 6S, WP 6A, WP 6R, SG 6. Includes sub-columns E, F, S.

Mr. Mrs. Ms. Miss: (family name) (first name)

Accompanied by family member(s): (family name) (first name)

1. REPRESENTATION

Name of Member State:

- Head of Delegation, Deputy, Delegate (to be completed by representatives of Member States only)

Name of Sector Member:

- Recognized Operating Agencies, Regional Telecommunication Organizations, Scientific or Industrial Organizations, Intergovernmental Organizations operating Satellite Systems, UN, Specialized Agencies and the IAEA, Other Entities dealing with Telecommunication matters, Regional and other International Organizations, Associates

2. OFFICIAL ADDRESS

Name of the Company: Street address: City/State/Code/Country: Business tel.: Fax: E-mail: In case of emergency:

3. DOCUMENTS English French Spanish

Date: Signature:

For BR Secretariat use only. Table with 4 columns: Approved (if applicable), Personal Section, Meeting Section, Pigeonhole.

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