

# INTERNATIONAL TELECOMMUNICATION UNION



*Radiocommunication Bureau*  
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**Administrative Circular**  
**CACE/541**

1 June 2011

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

**Subject: Meeting of Radiocommunication Study Group 4 (Satellite services),  
Geneva, 29–30 September 2011**

## **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 29 and 30 September 2011, following the meetings of Working Parties 4A, 4B and 4C (see Circular letter [4/LCCE/104](#)).

The Study Group meeting will be held in the ITU Headquarters, Geneva. The opening session will take place at 09:30 hours.

Group	Meeting date	Deadline for contributions	Opening session
Study Group 4	29-30 September 2011	Thursday, 22 September 2011 at 16:00 hours UTC	Thursday, 29 September 2011 at 09:30 hours (local time)

## **2 Programme of the meeting**

The draft agenda for the meeting of Study Group 4 is contained in Annex 1.

The Questions assigned to Study Group 4 may be found on:

<http://www.itu.int/ITU-R/go/que-rsg4/en>

### **2.1 Adoption of draft Recommendations at the Study Group meeting (§ 10.2.2 of Resolution ITU-R 1-5)**

Draft new and revised Recommendations, prepared by Working Parties 4A, 4B and 4C at their meetings in April/May 2011, are proposed for adoption by the Study Group at its meeting in accordance with § 10.2.2 of Resolution ITU-R 1-5.

In conformity with §10.2.2.2 of Resolution ITU-R 1-5, the titles and summaries of the draft new and revised Recommendations are given in Annex 2.

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## **2.2 Adoption of draft Recommendations by a Study Group by correspondence (§ 10.2.3 of Resolution ITU-R 1-5)**

The procedure described in § 10.2.3 of Resolution ITU-R 1-5 concerns draft new or revised Recommendations which are not specifically included in the agenda of a Study Group meeting.

In accordance with this procedure, draft new and revised Recommendations prepared during the meetings of Working Parties 4A, 4B and 4C held prior to 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 1-5 (see also § 2.3 below).

In accordance with § 2.25 of Resolution ITU-R 1-5, Annex 3 to this Circular contains a list of topics to be addressed at the meetings of the Working Parties held 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 1-5. 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 1-5.

## **3 Contributions**

Contributions in response to the work of Study Group 4 are invited. These will be processed according to the provisions laid down in Resolution ITU-R 1-5 and posted on <http://www.itu.int/md/R07-SG04-C/en>. **The deadline for reception of contributions is Thursday, 22 September 2011 at 16:00 hours UTC.** Submissions received later than this deadline cannot be accepted. Resolution ITU-R 1-5 provides that contributions which are not available to participants at the opening of the meeting shall not be considered.

Participants are requested to submit contributions by electronic mail to:

[rsg4@itu.int](mailto:rsg4@itu.int)

A copy should also be sent to the Chairman and Vice-Chairmen of Study Group 4. The pertinent addresses can be found on:

[http://www.itu.int/cgi-bin/htsh/compass/cvc.param.sh?acvty\\_code=sg4](http://www.itu.int/cgi-bin/htsh/compass/cvc.param.sh?acvty_code=sg4)

In agreement with the Chairman of Study Group 4, the upcoming Study Group meeting will take further steps towards working in a fully electronic environment. **The meeting will therefore be completely paperless** (no paper copies of documents will be distributed). Wireless LAN facilities will be available for use by delegates in the meeting rooms. Printers are available in the cyber café of the 2<sup>nd</sup> basement of the Tower building and on the 1<sup>st</sup> and 2<sup>nd</sup> floors of the Montbrillant building for delegates who wish to print documents. In addition, the Helpdesk Service ([helpdesk@itu.int](mailto:helpdesk@itu.int)) has prepared a limited number of laptops for those who do not have one.

## 4 Interpretation

Given that the meeting is scheduled to be held with interpretation, please note that interpretation will actually be provided only where Member States so request. Requests for interpretation should be sent to [rsg4@itu.int](mailto:rsg4@itu.int) at least one month before the start of the meeting, i.e. by 29 August 2011 at the latest. This deadline is required in order for the secretariat to make the necessary arrangements for interpretation.

## 5 Participation/Visa requirements

Delegate/participant registration for the meeting will be carried out online via the ITU-R website. Member States, Sector Members, Associates and ITU-R Academia were each requested to designate a focal point to be responsible for the handling of all registration requests for his/her administration/organization. Individuals wishing to attend should contact the focal point designated for all Study Group activities for his/her entity directly. The list of designated focal points (DFPs) is available on the **ITU-R Member Information and Delegate Registration** webpage at:

<http://www.itu.int/ITU-R/go/delegate-reg-info/en>.

The Delegate Registration desk will open at 08:30 hours on the first day of the meeting at the entrance of the Montbrillant building. Please note that the confirmation of registration sent to each delegate/participant by e-mail must be presented, together with photo identification, in order to receive a badge.

Information regarding hotel accommodation for meetings held in Geneva is available at <http://www.itu.int/travel/index.html>.

François Rancy  
Director, Radiocommunication Bureau

## Annexes: 3

### Distribution:

- Administrations of Member States 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
- ITU-R Academia
- 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, 29-30 September 2011)

(Room B, ITU Tower)

- 1** Opening remarks
  - 1.1** Director BR
  - 1.2** Chairman
- 2** Approval of the agenda
- 3** Appointment of the Rapporteur
- 4** Summary record of the previous meeting ([Document 4/147](#))
- 5** Consideration of the outputs of the Working Parties
  - 5.1** Working Party 4C
    - 5.1.1** Executive Report
    - 5.1.2** Draft Recommendations where notice of intention to seek adoption was given (see Res. 1, § 10.2.2 and 10.4)
    - 5.1.3** Draft Recommendations where notice of intention to seek adoption was not given (see Res. 1, § 10.2.3, 10.3 and 10.4)
    - 5.1.4** Draft Reports
    - 5.1.5** Draft Questions
  - 5.2** Working Party 4B
    - 5.2.1** Executive Report
    - 5.2.2** Draft Recommendations where notice of intention to seek adoption was given (see Res. 1, § 10.2.2 and 10.4)
    - 5.2.3** Draft Recommendations where notice of intention to seek adoption was not given (see Res. 1, § 10.2.3, 10.3 and 10.4)
    - 5.2.4** Draft Reports
    - 5.2.5** Draft Questions
  - 5.3** Working Party 4A
    - 5.3.1** Executive Report
    - 5.3.2** Draft Recommendations where notice of intention to seek adoption was given (see Res. 1, § 10.2.2 and 10.4)

**5.3.3** Draft Recommendations where notice of intention to seek adoption was not given (see Res. 1, § 10.2.3, 10.3 and 10.4)

**5.3.4** Draft Reports

**5.3.5** Draft Questions

- 6** Consideration of the set of five draft new Recommendations on RNSS systems
- 7** Liaison with other Study Groups and international organizations
- 8** Documents from the Radiocommunication Bureau
- 9** Consideration of future work programme and schedule of meetings
- 10** Any other business

V. RAWAT  
Chairman, Radiocommunication  
Study Group 4

## **Annex 2**

### **Titles and summaries of the draft new and revised Recommendations proposed for adoption at the Study Group 4 meeting**

#### **Working Party 4A**

Draft revision of Recommendation ITU-R BO.1659

[Doc. 4/166](#)

#### **Mitigation techniques for rain attenuation for broadcasting-satellite service systems in frequency bands between 17.3 GHz and 42.5 GHz**

##### **Summary**

In this proposed revision of Recommendation ITU-R BO.1659 a revision of Annex 2 to the Recommendation to include a new variation of hierarchical transmission scheme is suggested. Moreover, amendments are proposed to values, tables and figures of Appendix 1 to Annex 3 to take into account the updated rain attenuation model under Recommendation ITU-R P.618-10. Also, in Section 5 of Appendix 1 to Annex 3, new material is proposed to be added in order to assess the annual service availability observed in some cities in Region 1 for different values of power flux density at the Earth's surface.

Draft revision of Recommendation ITU-R SF.675-3

[Doc. 4/167](#)

#### **Calculation of the maximum power density (averaged over 4 kHz) of an angle modulated carrier**

##### **Summary**

As its title implies, Recommendation ITU-R SF.675-3 is limited to the case of angle modulated carriers and a reference bandwidth of 4 kHz. As this Recommendation is referenced in Footnote 2 to Tables A, B, C and D of Annex 2 of Appendix 4 of the Radio Regulations, it is important that it be updated. Changes are proposed to Section 3 of Annex 1 of the Recommendation to bring this Section up to date. Additionally, in order to address the case of maximum power density averaged over a 1 MHz bandwidth, a new Annex 2 is proposed. A section is also included in each Annex to address the case of tracking, telemetry and telecommand (TT&C) carriers.

It was also recognized that an ambiguity may exist in Footnote 2 to Tables A, B, C and D of Annex 2 of RR Appendix 4 for the case of carriers above 15 GHz having a necessary bandwidth of less than the averaging bandwidth. This possible ambiguity has also been addressed in the revised Recommendation.

Draft revision of Recommendation ITU-R BO.1776

[Doc. 4/168](#)

## **Reference power flux-density for the broadcasting-satellite service in the band 21.4-22.0 GHz in Regions 1 and 3**

### **Summary**

The term “Reference” is suggested to be replaced by the term “Maximum” in order to clarify the real intent of this Recommendation. In addition, several *considerings* were updated in order to take into account the WRC-07 Decisions. Moreover, throughout the document it is proposed to change the term “rain attenuation” to “total link attenuation” to encompass also the other atmospheric effects that will impact on the propagation losses. A note to explain this is proposed to be inserted.

Finally, in Annex 1, availability numbers are re-calculated using the updated rain attenuation model in the revised Recommendation ITU-R P.618 and total link attenuation for each case is also proposed to be inserted in the tables. Moreover, calculations are also conducted at a few more example cities.

## **Working Party 4B**

Draft revision of Recommendation ITU-R BO.1516

[Doc. 4/162](#)

## **Digital multiprogramme television systems for use by satellites operating in the 11/12 GHz frequency range**

### **Summary**

This proposed revision includes changes reflecting the suppression of former Recommendation ITU-R BO.1294.

Draft revision of Recommendation ITU-R SNG.770-1

[Doc. 4/163](#)

## **Uniform operational procedures for satellite news gathering (SNG)**

### **Summary**

This proposed revision includes changes that make this Recommendation specific to satellite news gathering operations using digital modulation and encoding techniques.

## Working Party 4C

Draft new Recommendation ITU-R M.[E-S TX+RX]

[Doc. 4/158](#)

### **Characteristics and protection criteria of receiving space stations and characteristics of transmitting earth stations in the radionavigation-satellite service (Earth-to-space) operating in the band 5 000-5 010 MHz**

#### **Summary**

Characteristics and protection criteria for radionavigation-satellite service (RNSS) receiving space stations, and characteristics of RNSS transmitting earth stations, planned or operating in the band 5 000-5 010 MHz are presented in this Recommendation. This information is intended for performing analyses of radio frequency interference impact on systems and networks in the RNSS (Earth-to-space) operating in this band from radio sources other than in the RNSS.

It should be noted that *considering* d) of this proposed new Recommendation refers to draft new Recommendation ITU-R M.[RNSS\_Guide]. Study Group 4 is invited to review this *considering* in light of the status of draft new Recommendation ITU-R M.[RNSS\_Guide] at its September 2011 meeting.

Draft revision of Recommendation ITU-R M.1854

[Doc. 4/160](#)

### **Use of mobile-satellite service (MSS) in disaster response and relief**

#### **Summary**

This Recommendation was revised in order to include information on a new geostationary-satellite system that has been brought into use at the orbital position 10°E by the satellite operator Solaris Mobile Limited in the bands 1 980-2 010 MHz (Earth-to-space) and 2 170-2 200 MHz (space-to-Earth).

This Recommendation was revised in liaison with ITU-D Study Group 2.



## **Annex 3**

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

#### **Working Party 4A**

- Protection criteria and interference assessment methods for non-GSO inter-satellite links in the 23.183-23.377 GHz band with respect to the space research service (PDNR ITU-R S.[ISS-NON\_GSO], see Annex 1 to Document [4A/514](#));
- Basic requirements for a methodology to calculate the statistics of interference received by fixed service stations from FSS/BSS space-to-Earth emissions for frequency bands above about 17 GHz (PDNR ITU-R F.[SF].[STATMETH], see Annex 2 to Document [4A/514](#)).

#### **Working Party 4B**

- Global circulation of IMT-2000 satellite terminals (PDNR ITU-R M.[SATIMT\_CIRCUL], see Annex 4 to Document [4B/172](#)).

#### **Working Party 4C**

- Characteristics and protection criteria of receiving earth stations and characteristics of transmitting space stations of the radionavigation-satellite service (space-to-Earth) operating in the band 5 010-5 030 MHz (PDNR ITU-R M.[S-E RX+TX], see Annex 1 to Document [4C/595](#));
  - Evaluation model for pulsed interference from radio sources other than in the radionavigation-satellite service to the radionavigation-satellite service systems and networks operating in the 1 164-1 215 MHz, 1 215-1 300 MHz, and 1 559-1 610 MHz frequency bands (PDNR ITU-R M.[PULSE\_EVAL], see Annex 2 to Document [4C/595](#));
  - 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 (PDNR ITU-R M.1787, see Annex 3 to Document [4C/595](#));
  - Protection criteria for Cospas-Sarsat search and rescue instruments in the band 406-406.1 MHz (PDNR ITU-R M.1478-1, see Annex 4 to Document [4C/595](#));
  - Protection criteria for Cospas-Sarsat local user terminals in the band 1 544-1 545 MHz (PDNR ITU-R M.1731-1, see Annex 5 to Document [4C/595](#)).
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