



*Radiocommunication Bureau*  
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**Administrative Circular**  
**CACE/546**

22 August 2011

**To Administrations of Member States of the ITU, Radiocommunication  
Sector Members, ITU-R Associates participating in the work of  
Radiocommunication Study Group 5 and ITU-R Academia**

**Subject: Meeting of Radiocommunication Study Group 5 (Terrestrial services),  
Geneva, 21-23 November 2011**

## **1 Introduction**

By means of this Administrative Circular, we wish to announce that a meeting of ITU-R Study Group 5 will take place in Geneva from 21 to 23 November 2011, following the meetings of Working Parties 5A, 5B and 5C (see Circular Letter [5/LCCE/28](#)).

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

<b>Group</b>	<b>Meeting date</b>	<b>Deadline for contributions</b>	<b>Opening session</b>
Study Group 5	21-23 November 2011	Monday, 14 November 2011 at 16:00 hours UTC	Monday, 21 November 2011 at 09:30 hours (local time)

## **2 Programme of the meeting**

The draft agenda for the meeting of Study Group 5 is contained in Annex 1. The Questions assigned to Study Group 5 may be found on:

<http://www.itu.int/ITU-R/go/que-rsg5/en>

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

Twelve Recommendations are proposed for adoption at the Study Group 5 meeting. In conformity with § 10.2.2.2 of Resolution ITU-R 1-5, the titles and the summaries of the draft new and revised Recommendations are given in Annex 2.

## **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 5A, 5B, 5C and 5D 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 5 are processed according to the provisions laid down in Resolution ITU-R 1-5 and posted on <http://www.itu.int/md/r07-SG05-c/en>. **The deadline for reception of contributions is Monday, 14 November 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:

[rsg5@itu.int](mailto:rsg5@itu.int)

A copy should also be sent to the Chairman and Vice-Chairmen of Study Group 5. The pertinent addresses can be found on:

<http://run.as/itu.int/c8iff5>

## 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 [rsg5@itu.int](mailto:rsg5@itu.int) at least one month before the start of the meeting, i.e. by 21 October 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) and detailed information regarding visa requirements is available on the **ITU-R Member Information and Delegate Registration** webpage at:

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

In agreement with the Chairman of Study Group 5, 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.

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 of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 5
- ITU-R Associates participating in the work of Radiocommunication Study Group 5
- 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 5\*

(Geneva, 21-23 November 2011)

- 1 Opening of the meeting
- 2 Approval of the agenda
- 3 Appointment of the Rapporteur
- 4 Approval of the Summary Record of the previous meeting (Document [5/248](#))
- 5 Consideration of the outputs of the Working Parties
  - 5.1 Working Party 5A
  - 5.2 Working Party 5B
  - 5.3 Working Party 5C
  - 5.4 Working Party 5D
- 6 Consideration of other inputs (if any)
- 7 Preparations for the RA-12
- 8 Status of Handbooks, Questions, Recommendations, Reports, Opinions, Resolutions and Decisions
- 9 Liaison with other Study Groups, CCV and international organizations
- 10 Schedule of meetings
- 11 Any other business

A. HASHIMOTO

Chairman, Radiocommunication Study Group 5

#### \*Note from the Study Group 5 Chairman

As indicated in Annexes 2 and 3 to this Circular Letter, it is likely that more than 40 draft Recommendations will be submitted to the Study Group. In addition, the meeting will have to approve many draft Reports, possibly over 30, including those relating to WRC-12 agenda items. The preliminary texts for the draft Reports are found in the Annexes to the following Chairmen's Reports (Working Parties 5A to 5D):

- Document 5A/703 (<http://www.itu.int/md/R07-WP5A-C-0703/en>);
- Document 5B/727 (<http://www.itu.int/md/R07-WP5B-C-0727/en>);
- Document 5C/560 (<http://www.itu.int/md/R07-WP5C-C-0530/en>);
- Document 5D/1068 (<http://www.itu.int/md/R07-WP5D-C-1068/en>).

Given this situation, the SG 5 Chairman suggests the following procedure, as an exceptional option:

- for draft Recommendations/Reports, after brief introduction of the input document, the Chairman may ask the floor whether it is acceptable to agree to the whole document without conducting a page-by-page consideration unless it is specifically requested from the floor.

The Chairman of Study Group 5 requests participants' understanding of this exceptional arrangement in order to complete the work within the limited time frame.

## **Annex 2**

### **Titles and summaries of the draft new and revised Recommendations proposed for adoption at the Study Group 5 meeting**

Draft new Recommendation ITU-R M.[LMS PPDR UHF]

Doc. 5/201

#### **Frequency arrangements for public protection and disaster relief radiocommunication systems in UHF bands in accordance with Resolution 646 (WRC-03)**

This Recommendation provides guidance on frequency arrangements for public protection and disaster relief radiocommunications in certain regions in some of the bands below 1 GHz identified in Resolution 646. Currently, the Recommendation addresses arrangements in the ranges 380-470 MHz in certain countries in Region 1, 746-806 MHz and 806-869 MHz in Region 2, and 806-824/851-869 MHz in some countries in Region 3 in accordance with Resolutions ITU-R 53 (RA-07), ITU-R 55 (RA-07) and 644 (Rev.WRC-07), 646 (WRC-03), and 647 (WRC-07).

Draft revision of Recommendation ITU-R F.758-4

Doc. 5/209(Rev.3)

#### **Considerations in the development of criteria for sharing between the fixed service and other services**

This revision includes the following:

- revision of the scope;
- refinement of the text under the *considering* and the *noting* parts;
- replacement of Annex 1 with the entire new text on considerations in the development of sharing criteria in the light of the performance/availability objectives developed after the previous version of this Recommendation was approved;
- replacement of Annexes 2 and 3 with the updated new texts and information on FS system parameters, and the old information on these parameters was transferred to Report ITU-R F.2108;
- deletion of Annex 4, the information of which was also transferred to Report ITU-R F.2108.

**Evaluation of interference from high-altitude platform (HAPS) gateway links (HAPS-to-ground direction) in the fixed service to conventional fixed wireless systems in the range 5 850-7 075 MHz**

This Recommendation provides a method for the evaluation of interference between fixed service (FS) systems using high-altitude platform stations (HAPS) gateway links (HAPS-to-ground) and conventional fixed wireless systems in the range 5 850-7 075 MHz in response to the technical study invited by Resolution 734 (Rev.WRC-07). The method is used to determine areas where specific values of  $I/N$  would be exceeded in an FS receiver. Results include plots and calculations of the areas for various specified  $I/N$  values.

**Radio-frequency channel arrangements for fixed wireless systems operating in the 15 GHz (14.4-15.35 GHz) band**

Besides editorial improvements/updating, this revision includes the following:

- deletion of Annex 1 because obsolete and no longer in use;
- new 56 MHz arrangements homogeneous with the 14 and 28 MHz ones;
- new Annex describing another channel arrangement based on the 2.5 MHz homogeneous pattern.

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

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 average bandwidth. This possible ambiguity has also been addressed in the revised Recommendation.

**Radio-frequency channel arrangements for medium- and high-capacity digital fixed wireless systems operating in the upper 6 GHz (6 425-7 125 MHz) band**

This revision includes the following:

- provision for the possible use of two adjacent 40 MHz channels for very high capacity systems;
- obsolete use of polarization and connection to single antenna have been updated;
- a new *recommends* and annex added for the split of 30 MHz channels in lower size 3.5, 7 and 14 MHz channels;
- other editorial improvements/updating.

**Radio-frequency channel arrangements for fixed wireless systems operating in the 18 GHz frequency band**

This revision has updated the channel arrangements presented in Annex 4 removing obsolete arrangements no longer in use.

**Radio-frequency channel arrangements for fixed wireless system operating in the 10 GHz band**

The revision includes the following:

- addition of scope;
- addition of new Annexes 3 and 4:
  - recommending channel arrangements, based on 3.5 MHz homogeneous pattern in the whole band 10.0-10.68 GHz;
  - providing specific arrangements using channel separation of 3.5, 7, 14 and 28 MHz;
  - providing the possible use of two adjacent 28 MHz channels for very high capacity systems;
- other editorial improvements/updating.

### **Radio-frequency channel arrangements for fixed wireless systems operating in the 23 GHz band**

This revision includes the following:

- the *considering* part has been updated;
- in Annex 1 the specific country reference has been deleted;
- current Annex 2 has been deleted because the arrangement is no longer in use in the referenced country since the band 21.4-22.0 GHz has been allocated to the broadcasting-satellite service (BSS) on a primary basis in Regions 1 and 3;
- in current Annex 3 (new Annex 2), additional arrangements have been added;
- current Annex 4 (new Annex 3) has been revised for better reflecting the use of the band in North America.

### **Radio-frequency arrangements for systems of the fixed service operating in the 38 GHz band**

This revision includes the following:

- the obsolete channel separation 140 MHz has been changed, similarly to a number of other bands above 18 GHz, with the nowadays more widely implemented 112 MHz;
- the already existing generic provision for the use of guardbands and centre gap has been explicitly expanded in a specific number of 3.5, 7, 14 and 28 MHz “extra channels”;
- other editorial improvements/updating.

### **Radio-frequency channel arrangements for fixed wireless systems operating in the 11 GHz band**

This revision includes the following:

- provision for the possible use of two adjacent 40 MHz channels for very high capacity systems;
- deletion of the arrangement in current Annex 1 because it is obsolete and no longer in use;
- in the current Annex 5 (now renumbered 4) new 7, 14 and 28 MHz channel arrangements with duplex separation 490 MHz have also been added to the current arrangements with duplex separation 530 MHz;
- other editorial improvements/updating.



### **Radio-frequency channel arrangements for fixed wireless systems operating in the 7 GHz band (7 110-7 900 MHz) band**

This revision includes modification to Annex 1 as follows:

- addition of a new sub-band 7 125-7 425 MHz, similar to that already present for the band 7 425-7 725 MHz;
- addition of arrangements for 14, 7, 3.5 and 1.75 MHz channel spacing.

### **Generic unwanted emission characteristics of base stations using the terrestrial radio interfaces of IMT-2000**

This revision includes the addition of one sentence to the scope. Deletion of *considering k)* and addition of *considering l)* and *m)*. Addition of *noting c)*. Modifications to Note 2, Note 3, Note 4, Note 5 and addition of new Note 7. [The annexes have also been updated.](#) All frequency bands or parts of the bands referenced in this Recommendation which are not identified for IMT in the ITU Radio Regulations have been marked with “#”.

### **Generic unwanted emission characteristics of mobile stations using the terrestrial radio interfaces of IMT-2000**

This revision includes the addition of one sentence to the scope. Deletion of *considering m)* and addition of *considering n)* and *o)*. Addition of *noting b)* and *c)*. Modifications to Note 2, Note 3, Note 4, Note 5 and addition of new Note 7. [The annexes have also been updated.](#) All frequency bands or parts of the bands referenced in this Recommendation which are not identified for IMT in the ITU Radio Regulations have been marked with “#”.

### Annex 3

#### **Topics to be addressed at meetings of Working Parties 5A, 5B, 5C and 5D held prior to the meeting of Study Group 5 and for which draft Recommendations may be developed**

##### **Working Party 5A**

- [Preliminary] draft revision of Recommendation ITU-R M.1732 - Characteristics of systems operating in the amateur and amateur-satellite services for use in sharing studies (Annex 6 to [Document 5A/703](#))
- Working document towards a preliminary draft new Recommendation ITU-R M.[VARICODE] - Telegraphic alphabet for data communication by phase shift keying at 31 baud (Annex 8 to [Document 5A/703](#))
- Working document towards a preliminary draft new Recommendation ITU-R M.[WAS.QoS] - Quality of service performance [requirements and] objectives for wireless access systems (Annex 9 to [Document 5A/703](#))
- Preliminary draft new Recommendation ITU-R M.[LMS.PPDR.UHF TECH] - Radio interface standards for use by public protection and disaster relief operations in some parts of the UHF band in accordance with Resolution 646 (WRC-03) (Annex 10 to [Document 5A/703](#))
- [Preliminary] draft revision of Recommendation ITU-R M.1073-2 - Digital cellular land mobile telecommunication systems (Annex 12 to [Document 5A/703](#))
- Preliminary draft new Recommendation ITU-R M.[LMS.MGWS1] - Multiple Gigabit Wireless Systems in frequencies around 60 GHz (Annex 14 to [Document 5A/703](#))
- Preliminary [draft new Recommendation ITU-R M.[LMS.AR]] or [draft new revision of Recommendation ITU-R M.1452-1] - Millimetre wave [automotive radars and] radiocommunication systems for intelligent transport system applications (Annex 16 to [Document 5A/703](#))
- [Preliminary] draft new Recommendation ITU-R M.[LMS.WASN] - Objectives, characteristics and functional requirements of wide-area sensor and/or actuator network (WASN) systems (Annex 18 to [Document 5A/703](#))

## Working Party 5B

- Preliminary draft revision of Recommendation ITU-R M.629 - Use for the radionavigation service of the frequency bands 2 900-3 100 MHz, 5 470-5 650 MHz, 9 200-9 300 MHz, 9 300-9 500 MHz and 9 500-9 800 MHz (Annex 1 to [Document 5B/727](#))
- Preliminary draft revision of Recommendation ITU-R M.1796 - Characteristics of and protection criteria for terrestrial radars operating in the radiodetermination service in the frequency range 8 500-10 680 MHz (Annex 3 to [Document 5B/727](#))
- Preliminary draft revision of Recommendation ITU-R M.625-3 - Direct-printing telegraph equipment employing automatic identification in the maritime mobile service (Annex 5 to [Document 5B/727](#))
- Preliminary draft revision of Recommendation ITU-R M.690-1 - Technical characteristics of emergency position-indicating radio beacons (EPIRBs) operating on the carrier frequencies of 121.5 MHz and 243 MHz (Annex 8 to [Document 5B/727](#))
- Preliminary draft revision of Recommendation ITU-R M.1084-4 - Interim solutions for improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service (Annex 9 to [Document 5B/727](#))
- Preliminary draft revision of Recommendation ITU-R M.1173 - Technical characteristics of single-sideband transmitters used in the maritime mobile service for radiotelephony in the bands between 1 606.5 kHz (1 605 kHz Region 2) and 4 000 kHz and between 4 000 kHz and 27 500 kHz (Annex 12 to [Document 5B/727](#))
- Preliminary draft revision to Recommendation ITU-R M.585-5 - Assignment and use of maritime mobile service identities (Annex 16 to [Document 5B/727](#))
- Preliminary draft revision of Recommendation ITU-R M.1082 - International maritime MF/HF radiotelephone system with automatic facilities based on digital selective calling signalling format (Annex 17 to [Document 5B/727](#))
- Preliminary draft new Recommendation ITU-R M.[5 150-5 250 MHz ARNS Radars] - Characteristics of and protection criteria for radars operating in the aeronautical radionavigation service (ARNS) in the frequency band 5 150-5 250 MHz (Annex 18 to [Document 5B/727](#))
- Preliminary draft new Recommendation ITU-R M.[13.25 to 13.4 GHz ARNS Radars] - Characteristics and protection criteria for radars operating in the aeronautical radionavigation service (ARNS) in the frequency band 13.25-13.40 GHz (Annex 19 to [Document 5B/727](#))
- Preliminary draft new Recommendation ITU-R M.[500 kHz-16QAM] - Characteristics of a digital system for broadcasting maritime safety and security related information from shore-to-ship in the 500 kHz band (Annex 20 to [Document 5B/727](#))
- Preliminary draft new Recommendation ITU-R M.[CHARLIE] - Technical characteristics of, and protection criteria for non-ICAO ARNS systems, operating around 1 GHz (Annex 21 to [Document 5B/727](#))
- Working document toward a preliminary draft new Recommendation - Operational and technical characteristics of radio altimeters [Utilizing the band 4 200-4 400 MHz] (Annex 22 to [Document 5B/727](#))
- Working document towards a draft new Recommendation ITU-R M.[RAD ALT PROT] - Protection criteria related to the operation of aircraft radio altimeters (Annex 23 to [Document 5B/727](#))

### **Working Party 5C**

- Preliminary draft revision of Recommendation ITU-R F.746-9 - Radio-frequency arrangements for fixed service systems (Annex 13 to [Document 5C/530](#))
- Preliminary draft revision of Recommendation ITU-R F.1336-2 - Reference radiation patterns of omnidirectional, sectoral and other antennas in point-to-multipoint systems for use in sharing studies in the frequency range from 1 GHz to about 70 GHz (Annex 12 to [Document 5C/530](#))
- Preliminary draft revision of Recommendation ITU-R F.1245-1 - Mathematical model of average and related radiation patterns for line-of-sight point-to-point radio-relay system antennas for use in certain coordination studies and interference assessment in the frequency range from 1 GHz to about 70 GHz (Annex 11 to [Document 5C/530](#))
- Preliminary draft new Recommendation ITU-R F.[92-95 GHz] - Radio-frequency channel arrangements for fixed service systems operating in the 92-95 GHz range (Annex 10 to [Document 5C/530](#))
- Preliminary draft revision of Recommendation ITU-R F.1495-1 - Interference criteria to protect the fixed service from time varying aggregate interference from other radiocommunication services sharing the 17.7-19.3 GHz band on a co-primary basis (Annex 9 to [Document 5C/530](#))
- Preliminary draft new Recommendation ITU-R F.[42 GHz] - Radio-frequency channel and block arrangements for fixed wireless systems operating in the 42 GHz (40.5-43.5 GHz) band (Annex 27 to [Document 5C/461](#))
- Preliminary draft new Recommendation ITU-R F.[71-86 GHz] - Radio-frequency channel arrangements for fixed wireless systems operating in the 71-76 and 81-86 GHz bands (Annex 7 to [Document 5C/530](#))

### **Working Party 5D**

- Preliminary draft revision of Recommendation ITU-R M.1036-3. Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications-2000 (IMT 2000) in the bands 806-960 MHz, 1 710-2 025 MHz, 2 110-2 200 MHz and 2 500-2 690 MHz ([Attachment 4.7 to Document 5D/1068](#))
- Preliminary draft new Recommendation “Techniques designed to increase the potential for sharing between IMT systems and FSS networks in the 3.4-3.6 GHz band” ([Attachment 4.4 to Document 5D/1068](#))
- Preliminary draft revision of Recommendation ITU-R M.1224 “Vocabulary of terms for International Mobile Telecommunications-2000 (IMT-2000)” ([Attachment 6.3 to Document 5D/1068](#))
- Working document towards preliminary draft new Recommendation ITU-R M.[IMT.RSPEC] “Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-Advanced (IMT-Advanced)” ([Attachment 5.4 to Document 5D/1068](#))
- Working document towards the preliminary draft revision of Recommendation ITU-R M.1579 “Global circulation of IMT-2000 terminals” ([Attachment 5.12 to Document 5D/1068](#))