



*Radiocommunication Bureau*

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Administrative Circular  
CACE/312

10 March 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:** Approval of 2 new ITU-R Questions and 1 revised ITU-R Question and their assignment to Radiocommunication Study Group 1

With reference to Administrative Circular CAR/162 of 1 December 2003, I wish to inform you that 2 new ITU-R Questions and 1 revised ITU-R Question have been approved by correspondence in accordance with Resolution ITU-R 1-4 (§ 3.4) and therefore constitute official texts for study by the Radiocommunication Study Group. The texts of these Questions are attached for your reference and are contained in Addendum 1 to Document 1/1 which contains the ITU-R Questions approved by the 2003 Radiocommunication Assembly and assigned to Radiocommunication Study Group 1.

Valery Timofeev  
Director, Radiocommunication Bureau

**Annexes:**

- 3 new and revised ITU-R Questions

Distribution:

- Administrations of Member States and Radiocommunication Sector Members
- ITU-R Associates in the work of Radiocommunication Study Group 1
- 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

### QUESTION ITU-R 209-1/1

#### **Parameters of radio systems and equipment required for spectrum management and the efficient use of the radio spectrum**

(1995-2004)

The ITU Radiocommunication Assembly,

*considering*

- a) that many new systems and networks require access to the radio spectrum due to the rapid development of telecommunications;
- b) that it is necessary to undertake detailed compatibility studies to ensure an acceptable level of compatibility between new systems and existing systems operating in the same or other parts of the radio frequency spectrum;
- c) that if new radiocommunication systems are designed and improvements are made to the design of existing systems taking into account efficient use of the spectrum, the opportunities to introduce new systems will be increased;
- d) that many technical parameters of radiocommunication systems and equipment are used in studies of compatibility and assessment of spectrum efficiency, together with other factors such as operational characteristics, density of use and probability of worse case interference scenarios occurring;
- e) that these studies result in the determination of minimum limit values for such technical parameters;
- f) that these limit values are often specified in the ITU Radio Regulations (RR), ITU-R Recommendations or national standards;
- g) that it is necessary to achieve an acceptable balance between these limit values used for compatibility and spectrum efficiency on the one hand and the complexity of system and equipment design and production cost on the other hand;
- h) that there are other system parameters related to quality of service and user or manufacturer preference that are not directly related to compatibility or spectrum efficiency,

*noting*

- a) that Recommendation ITU-R SM.1413 Radiocommunication Data Dictionary (RDD) is to be used to supplement Appendix 4 of the RR for facilitating the advanced publication, coordination and notification processes of frequency assignments with the ITU Radiocommunication Bureau and in the coordination processes between administrations,

*decides that* the following Questions should be studied

- 1 What are the additional parameters to those contained in Appendix 4 of the RR of different categories of radiocommunication systems and equipment which are essential to be specified in order to ensure compatibility and spectrum efficiency on a national level?
- 2 What factors should be taken into account when setting the limit values for these parameters?

*further decides*

- 1 that the results of the above studies should be included in (a) Recommendation(s) and/or Report;
- 2 that the above studies should be completed by 2007.

Category: S2

## ANNEX 2

### QUESTION ITU-R 229/1

#### **Improving the international spectrum regulatory framework**

(2004)

The ITU Radiocommunication Assembly,

*considering*

- a) the provisions of Resolution 951 (WRC-03),

*noting*

- a) that the purpose of the Radio Regulations (RR) is to ensure a framework for the effective management and use of spectrum and not to constrain the development of existing or new applications and technologies,

*noting further*

- a) that Article 0 (preamble) of the RR indicates that the RR themselves provide for and, where necessary, regulate new applications of radiocommunication technology,

*decides* that the following Question should be studied

**1** What are the emission, reception, and other relevant characteristics of the existing, emerging, and future applications, systems, and technologies which may require modification of the RR in order to improve the regulatory framework?

**2** What means are there to improve the effectiveness, appropriateness, and impact of the RR, with respect to the evolution of existing, emerging, and future applications, systems and technologies?

**3** What are regulatory options for modifications to the RR that address the *considerings* of Resolution 951 (WRC-03) and which might be considered by the Special Committee on Regulatory and/or Procedural Matters (SCRPM)?

*further decides*

**1** that the results of the above studies should be included by the Director of the Radiocommunication Bureau in his Report in time for the next World Radiocommunication Conference for the purposes of considering whether to place this subject on a future conference agenda; and

**2** that the above studies should be completed prior to the next CPM.

Category: C1

## ANNEX 3

### QUESTION ITU-R 231/1\*

#### **Improved measurement methods for unwanted emissions of primary radars using magnetrons**

(2004)

The ITU Radiocommunication Assembly,

*considering*

- a) that the principal objective of Appendix 3 of the Radio Regulations (RR) is to specify the maximum permitted level of unwanted emissions in the spurious domain;
- b) that the out-of-band and spurious domains of an emission are defined in Article 1 of the RR;
- c) that Recommendation ITU-R SM.1541 specifies the boundary between the out-of-band and spurious domains for primary radars, and that the boundary is related to the emission mask based on the -40 dB bandwidth;
- d) that Appendix 3 of the RR refers to Recommendation ITU-R SM.1541;
- e) that the measurement methods for unwanted emissions of some radars are described in Recommendation ITU-R M.1177;
- f) that the 2003 World Radiocommunication Conference *recommends* 2 in Recommendation 75 (WRC-03), that studies be carried out by ITU-R “to establish improved measurement methods for unwanted emissions of primary radars using magnetrons”,

*recognizing*

- a) that § 3.3 of Annex 1 in Recommendation ITU-R SM.1539 mentions that the specification of the boundary between the out-of-band and spurious domains of primary radars is subject to ongoing studies in the ITU-R and that there would be benefit in having these completed by the next Radiocommunication Assembly;
- b) that there is a possibility that calculated values for the -40 dB bandwidth related to unwanted emissions of primary radars using magnetrons underestimate the actual bandwidth,

*noting*

- a) that improved technology and new features contained within spectrum analysers and other equipment used to measure unwanted emissions may lead to better measurement techniques for determining unwanted emission levels from primary radars;
- b) that computer control of the measurement system using suitable software will allow unwanted emissions from primary radars to be measured more reliably and with greater ease,

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\* This Question should be brought to the attention of ITU-R Working Party 8B and JRG 1A-1C-8B.

*decides* that the following Question should be studied

**1** What improved measurement methods can be used for the measurement of unwanted emissions of primary radars using magnetrons?

*further decides*

**1** that the results of the above studies should be included in (a) Recommendation(s) and/or Report;

**2** that the above studies should be completed by 2007.

Category: S2

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