



## *Radiocommunication Bureau*

(Direct Fax N°. +41 22 730 57 85)

Administrative Circular  
CACE/406

23 January 2007

**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:** Radiocommunication Study Group 9  
– Approval of 1 new ITU-R Question and 1 revised ITU-R Question

By Administrative Circular CAR/219 of 6 October 2006, 1 draft new ITU-R Question and 1 draft revised ITU-R Question were submitted for approval by correspondence in accordance with Resolution ITU-R 1-4 (§ 3.4).

The conditions governing these procedures were met on 6 January 2007.

The texts of the approved Questions are attached for your reference (Annexes 1-2) and will be published in Addendum 3 to Document 9/1 which contains the ITU-R Questions approved by the 2003 Radiocommunication Assembly and assigned to Radiocommunication Study Group 9.

Valery Timofeev  
Director, Radiocommunication Bureau

**Annexes: 2**

Distribution:

- Administrations of Member States and Radiocommunication Sector Members
- 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
- ITU-R Associates in the work of Radiocommunication Study Group 9
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

## Annex 1

### QUESTION ITU-R 145-2/9\*

#### **Characteristics required for high-speed data transmission over HF radio circuits**

(1990-1999-2007)

The ITU Radiocommunication Assembly,

*considering*

- a) that an increasing demand is noted for high-speed data transmission over HF radio circuits and further increase in such demand may be expected;
- b) that recent radiocommunication technologies and operational techniques are leading to systems having greatly improved bandwidth efficiency, i.e. a larger capacity in bits per second per unit bandwidth;
- c) that it is desirable that the effects of the random variations and disturbances in the propagation medium be the ultimate factors governing the performance obtainable with such systems,

*decides* that the following Question should be studied

- 1 What performance characteristics are required for data transmission by HF radio systems?
- 2 What is the maximum achievable data rate in the HF radio channel for the desired bit error ratio?
- 3 How can error-correction coding, time interleaving, in-band frequency diversity and other techniques can be used to achieve the desired error probability?

*further decides*

- 1 that the results of the above study should be included in one or more Recommendation(s) and/or Report(s);
- 2 that the above study should be completed by 2010.

NOTE 1 – See Recommendations ITU-R F.436 and ITU-R F.763.

Category: S2

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\* This Question should be brought to the attention of Radiocommunication Study Group 8 (WP 8B).

## Annex 2

### QUESTION ITU-R 241/9

#### Technical characteristics and channelling requirements for adaptive HF systems

(2007)

The ITU Radiocommunication Assembly,

*considering*

- a) that in recent years adaptive HF systems which can automatically select a channel from an assigned group and control modulation mode, transmission speed and transmission power have been developed and continue to be developed;
- b) that voice traffic is increasingly being replaced by data traffic, which tends to require a high quality channel for short periods;
- c) that use of adaptive HF systems, which release the channel when they have no traffic, allows frequencies to be shared between several systems or users;
- d) that adaptive systems should achieve optimum operational performance and compatibility,

*decides* that the following Question should be studied

What are the appropriate technical characteristics and channelling requirements to implement adaptive HF systems, taking into account efficient use of spectrum and minimization of interference?

*further decides*

- 1 that the results of the above study should be included in one or more Recommendation(s) and/or Report(s);
- 2 that studies should be completed by 2010 at the latest.

Category: S2

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