International Telecommunication Union



Radiocommunication Bureau

(Direct Fax N°. +41 22 730 57 85)

Administrative Circular CAR/219

6 October 2006

To Administrations of Member States of the ITU

Subject: Radiocommunication Study Group 9

 Proposed approval of 1 draft new ITU-R Question and 1 draft revised ITU-R Question

At the meeting of Radiocommunication Study Group 9 held on 4 and 5 September 2006, 1 draft new Question and 1 draft revised Question were adopted and it was agreed to apply the procedure of Resolution ITU-R 1-4 (see § 3.4) for approval of Questions in the interval between Radiocommunication Assemblies.

Having regard to the provisions of § 3.4 of Resolution ITU-R 1-4, you are requested to inform the Secretariat (<u>brsgd@itu.int</u>) by <u>6 January 2007</u>, whether your Administration approves or does not approve these Questions.

After the above-mentioned deadline, the results of this consultation will be notified in an Administrative Circular. If the Questions are approved, they will have the same status as Questions approved at a Radiocommunication Assembly and will become official texts attributed to Radiocommunication Study Group 9 (see: http://www.itu.int/pub/R-QUE-SG09/en.)

Valery Timofeev Director, Radiocommunication Bureau

E-mail: itumail@itu.int

http://www.itu.int/

Annexes: 2

- 1 draft new ITU-R Question
- 1 draft revised ITU-R Question

Distribution:

- Administrations of Member States of the ITU
- ITU-R Associates participating in the work of Radiocommunication Study Group 9
- Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 9

Annex 1

Source: Document 9/111

DRAFT REVISION OF QUESTION ITU-R 145-1/9*

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

(1990-1999)

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 <u>radiocommunication technologies and operational techniques developments</u> 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.
- d) that the characteristics of a "3 kHz channel" have largely been derived from the use of such a channel for telephony,

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?
- 4 What are the possibilities for the use of independent sidebands for data transmission?
- 5 In evaluating high-speed data transmission systems, what statistical parameters should be used to describe the radio propagation medium and what values should be considered?

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

further decides

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

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

Category: S2

Annex 2

Source: Document 9/112

DRAFT NEW QUESTION ITU-R [HF-ADAPTIVE.CHAR]/9

Technical characteristics and channelling requirements for adaptive HF systems

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

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

Category: S2