INTERNATIONAL TELECOMMUNICATION UNION

Radiocommunication Bureau
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Administrative Circular
CAR/222

18 October 2006

To Administrations of Member States of the ITU

Subject: **Radiocommunication Study Group 4**

- **Proposed approval of 1 draft revised ITU-R Question**
- **Proposed suppression of 4 ITU-R Questions**
- **Proposed modification of category of 23 ITU-R Questions**

At the meeting of Radiocommunication Study Group 4 held on 14 and 15 September 2006, 1 draft revised ITU-R Question was 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. Furthermore, the Study Group proposed the suppression of 4 ITU-R Questions.

Having regard to the provisions of § 3.4 of Resolution ITU-R 1-4, you are requested to inform the Secretariat (brsgd@itu.int) by 18 January 2007, 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 4 (see: http://www.itu.int/pub/R-QUE-SG04/en).

Valery Timofeev
Director, Radiocommunication Bureau

Annexes: 3

- 1 draft revised ITU-R Question, the proposed suppression of 4 ITU-R Questions and the modification of category of 23 ITU-R Questions.

Distribution:
- Administrations of Member States of the ITU
- ITU-R Associates participating in the work of Radiocommunication Study Group 4
- Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 4

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ANNEX 1

Source: Document 4/89

DRAFT REVISION OF QUESTION ITU-R 46-2/4

Preferred multiple-access characteristics in the fixed-satellite service

(1990-1993)

The ITU Radiocommunication Assembly,

considering

a) that satellites in the fixed-satellite service (FSS) are simultaneously used by many earth stations at different locations;

b) that various multiple-access methods including time division multiple-access (TDMA) and ~~spread spectrum (or~~ code division~~)~~ ~~M~~multiple-~~A~~access (~~SSMA or~~ CDMA) are already used or planned by various administrations;

c) that multicarrier-based multiple-access schemes such as orthogonal frequency division multiplexing – frequency division multiple-access (OFDM-FDMA or OFDMA), multicarrier CDMA (MC-CDMA) and multifrequency TDMA (MF-TDMA) have been adopted or are being considered to be adopted in many terrestrial system standards for future implementation;

~~c~~d) that, in order to ensure the efficient use of frequency spectrum and orbits, it may be desirable to determine the optimum multiple-access characteristics;

~~d~~e) that recommendation of certain system characteristics may be desirable;

~~e~~f) that the transmission characteristics of multiple-access systems, especially ~~TDMA~~multicarrier-based multiple-access systems, may be of importance in their interaction with one another;

~~f~~g) that increases in interference on ~~SSMA~~CDMA signals can be accommodated by reducing system capacity,

decides that the following Question should be studied

1 What are the preferred multiple-access methods taking into account in particular the nature of the network, the modulation methods and the different system characteristics used in the FSS?

2 What characteristics of multiple-access systems might usefully be recommended as preferred and, if appropriate, what operational characteristics should be selected for their application?

3 What is the effect of interference on networks using ~~SSMA~~CDMA techniques?

4 What is the effect of other transmission parameters such as coding and modulation on the systems or networks using multicarrier-based multiple-access techniques?

further decides

1 that the results of these studies should lead to the formulation of appropriate Recommendations by 20~~06~~10.

Category: S2

ANNEX 2

Source: Document 4/93

Questions proposed for suppression

Question ITU-R	Title
202-1/4	Interference criteria in the fixed-satellite service for the optimum inhomogeneous use of the available capacity of the geostationary orbit
230/4	Studies on efficient use of fixed-satellite service orbit/spectrum resources resulting from Resolution 18 (Kyoto-94)
241-1/4	Technical implications of possible definition of the quasi-geostationary orbit on the fixed-satellite service using geostationary and non-geostationary orbits
261/4	Allowable noise in fixed-satellite service systems due to interference

ANNEX 3

Source: Document 4/93

Proposed modification of categories

Number	Category	Group	Title
55-2/4	~~(S1)~~ (S2)	WP 4A	Feeder links in the fixed-satellite service used for the connections to and from geostationary satellites in various mobile-satellite services
68-1/4	~~(S2)~~ (S3)	WP 4A	Frequency sharing of the fixed-satellite service and the inter-satellite service with other space radio services under provisions of No. 9.21 of the Radio Regulations
70-1/4	~~(S2)~~ (S3)	WP 4A	Protection of the geostationary-satellite orbit against unacceptable interference from transmitting earth stations in the fixed-satellite service at frequencies above 15 GHz
81-1/4	~~(S2)~~ (S3)	WP 4A	Frequency sharing among networks in the fixed-satellite service, the mobile-satellite service and those of satellites equipped to operate in more than one service in the 20-50 GHz band
203-1/4	~~(S1)~~ (S2)	WP 4A	The impact of using small antennas on the efficient use of the geostationary-satellite orbit
205-1/4	~~(S1)~~ (S2)	WP 4A	Frequency sharing between non-geostationary-satellite feeder links in the fixed-satellite service used by the mobile-satellite service
206-3/4	~~(S1)~~ (S2)	WP 4A	Sharing between non-geostationary-satellite feeder links in the fixed-satellite service used by the mobile-satellite service and other space services, and networks of the fixed-satellite service using geostationary satellites
208/4	~~(S2)~~ (S3)	WP 4A	Use of statistical and stochastic methods in evaluation of interference between satellite networks in the fixed-satellite service
209/4	~~(S2)~~ (S1)	WP 4A	The use of frequency bands allocated to the fixed-satellite service for both the up and downlinks of geostationary-satellite systems
214/4	~~(S1)~~ (S2)	WP 4A	Technical implications of steerable and reconfigurable satellite beams
231/4	~~(S1)~~ (S2)	WP 4A	Sharing between networks of the fixed-satellite service using non-geostationary satellites and other networks of the fixed-satellite service
235/4	~~(S1)~~ (S2)	WP 4A	Use of operational facilities to meet power flux-density limitation under Article 21 of the Radio Regulations
236/4	~~(S1)~~ (S2)	WP 4A	Interference criteria and calculation methods for the fixed-satellite service
239/4	~~(C2)~~ (S2)	WP 4A	Sharing criteria between systems utilizing inter-satellite links

Number	Category	Group	Title
245/4	~~(C2)~~ (S1)	WP 4A	Out-of-band and spurious emission limits
246/4	~~(C2)~~ (S2)	WP 4A	Sharing between the inter-satellite service, Earth-exploration satellite (passive) service and other services in frequency bands above 50 GHz
256/4	~~(S1)~~ (C2)	WP 4A	Criteria and methodologies for sharing between the fixed-satellite service and other services with allocations in the band 40.5-42.5 GHz
259/4	~~(S1)~~ (S2)	WP 4A	Earth station off-axis e.i.r.p. density levels in the bands above 14.5 GHz allocated to the fixed-satellite service
264/4	~~(S1)~~ (C2)	WP 4A	Technical and operational characteristics of networks of the fixed-satellite service operating above 275 GHz
266/4	~~(C2)~~ (C1)	WP 4A	Technical characteristics of high-density fixed-satellite service earth stations operating with geostationary satellite orbit fixed-satellite service networks in the 20/30 GHz bands
268/4	~~(C2)~~ (S2)	WP 4A	Development of methodologies for the assessment of satellite unwanted emission levels before launch
269/4	~~(S3)~~ (S1)	WP 4A and 4B	Spectrum requirements and technical and operational characteristics of user terminals (VSAT) for global broadband satellite systems
270-1/4	~~(S3)~~ (S1)	WP 4A	Fixed-satellite service systems using very wideband spreading signals