



Radiocommunication Bureau

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Administrative Circular
CACE/339

14 March 2005

**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 4
- Approval of 2 new and 3 revised ITU-R Questions
 - Suppression of 8 ITU-R Questions

With reference to Administrative Circular CAR/180 of 18 November 2004, I wish to inform you that 2 draft new ITU-R Questions and 3 draft 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 Groups. The texts of these Questions are attached for your reference and will be published in Addendum 2 to Document 4/1 which contains the ITU-R Questions approved by the 2003 Radiocommunication Assembly and assigned to Radiocommunication Study Group 4.

In addition, the suppression of the 8 ITU-R Questions, listed in Annex 6, has been approved.

Valery Timofeev
Director, Radiocommunication Bureau

Annexes: 6

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 4
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

ANNEX 1

QUESTION ITU-R 226-2/4*

Use of portable and transportable transmitting earth stations for digital transmission of digital high-definition television for news gathering and outside broadcasts via satellite**

(1990-1993-1995-2005)

The ITU Radiocommunication Assembly,

considering

- a) that in point-to-point television transmission via satellite, quality objectives are fixed on the basis of large-sized transmitting and receiving stations;
- b) that the introduction of highly portable transmitting stations is essential, particularly for news gathering operations and can provide a satisfactory technical solution;
- c) that the special characteristics needed for portable and transportable stations and the reduced link budget characteristics of highly portable stations may necessitate acceptance of relaxed transmission performance objectives;
- d) that it may be necessary to provide, on the same satellite bearer, the auxiliary signals required for the operation of the portable and transportable transmitting stations but that these auxiliary signals should not have a perceptible effect on the transmission quality of the television signals;
- e) that throughout the world, where news events take place, standardized and uniform technical and operating procedures should be established to ensure prompt activation of satellite news gathering (SNG) and outside broadcasts (OB) service;
- f) that Recommendations ITU-R SNG.722, 770, 771, 1070 and 1007 take into account the issues dealing with technical and operational procedures affecting the use of portable and transportable transmitting earth stations for analogue and digital conventional TV, SNG and OB;
- g) that Recommendation ITU-R SNG.1561 is limited to MPEG-2 and conventional modulations schemes;
- h) that digital techniques offer new promising perspectives as compared to analogue for both encoding and transmission of high-definition (HD) television signals,

* This Question should be brought to the attention of Radiocommunication Study Group 6.

** This is not broadcasting as defined in the Radio Regulations, but provides programme contributions for subsequent broadcasting.

decides that the following Question should be studied

1 What Recommendations need to be adopted for the digital transmission of digital HDTV for SNG and OB via satellite concerning:

1.1 the overall transmission objectives and performance objectives for HDTV SNG and OB transmission by portable or transportable satellite earth stations;

1.2 the specific equipment required by portable or transportable SNG and OB earth stations to meet the overall transmission objectives and performance objectives;

1.3 the operational requirements related to HDTV SNG and OB transmission by portable or transportable satellite earth stations;

1.4 the need for interoperability;

1.5 the compatibility between different coding algorithms?

further decides

1 that the results of the above studies should be included in (a) Recommendation(s);

2 that the above studies should be completed by 2006.

Category: S1

ANNEX 2

QUESTION ITU-R 249-1/4

Interoperability of equipment for digital transmission of television news gathering via satellite news gathering

(1997-2005)

The ITU Radiocommunication Assembly,

considering

- a) that throughout the world, standardized and uniform technical and operating procedures should be established to ensure prompt deployment of satellite news gathering (SNG);
- b) that the very nature of SNG requires that earth stations be activated in an expedient manner;
- c) that the nature of SNG requires that operators be able to use equipment from different manufacturers;
- d) that the interoperability of the equipment can be achieved by the use of common operating parameters;
- e) that the transmission data rate should be compatible with that of other digital networks;
- f) that new coding (e.g. MPEG-4) and new adaptive coding and modulation (ACM) technologies are becoming available,

decides that the following Question should be studied

- 1** Which parameters and their range and other tools (peripheral subsystem interface (PSI), sequence information (SI), etc.) need to be defined to ensure interoperability of equipment from different manufacturers?

further decides

- 1** that the results of the above studies should be included in a Recommendation;
- 2** that the above studies should be completed by 2006.

Category: S1

ANNEX 3

QUESTION ITU-R 270-1/4^{1,2}

Fixed-satellite service systems using very wideband spreading signals

(2003-2005)

The ITU Radiocommunication Assembly,

considering

- a) that new transmission techniques using very wide spectrum may be used in fixed-satellite service (FSS) uplinks and/or downlinks;
- b) that the above transmission techniques include impulse-radio which is characterized by repetition of very short pulse transmissions;
- c) that the signals of the FSS systems using short pulse transmission mentioned in *considering* b) may be spread to very large bandwidth within the FSS allocations;
- d) that although some FSS systems using wideband spreading signals emit very low average power, some systems may emit relatively high peak power levels;
- e) that the applications of the FSS systems using wideband spreading signals have different features from the other FSS systems;
- f) that the characteristics of the FSS systems using wideband spreading signals are different from currently deployed FSS systems;
- g) that the space segments of the FSS systems using wideband spreading signals radiate signal to a very wide area;
- h) that the interference effect of the emissions from an FSS system using wideband spreading signals needs to be defined;
- j) that the FSS systems using wideband spreading signals may address new applications and new uses;
- k) that the scope of this Question in studying transmission techniques using very wide spreading signals should be limited to those signals of FSS systems within the bandwidths of FSS allocations,

¹ This Question should be brought to the attention of Radiocommunication Study Groups 1, 7, 8 and 9 for information.

² This is different from the application in Question ITU-R 269/4.

noting

a) that ITU-R Task Group 1/8 is currently studying characteristics, compatibility, measuring techniques and spectrum management issues for ultra-wideband emissions, which should not be confused with this Question,

decides that the following Question should be studied

- 1 What are the appropriate characteristics of FSS systems using wideband spreading signals, that are within the bandwidths of FSS allocations?
- 2 What requirements are necessary to ensure that satellite devices radiating wideband spreading signals will not cause harmful interference to other FSS systems?

further decides

- 1 that in order to perform the necessary studies, key technical data and characteristics of satellite systems using wideband spreading signals should be defined and documented;
- 2 that the results of the studies outlined above should be included in one or more Recommendations;
- 3 that the studies should be completed by 2007.

Category: S3

ANNEX 4

QUESTION ITU-R 271

**Interference between satellite news gathering (SNG) carriers
by unintentional access**

(2005)

The ITU Radiocommunication Assembly,

considering

- a) that satellite news gathering (SNG) services are offered on several radiocommunication satellites;
- b) that the use of SNG is expanding in all parts of the world;
- c) that the proliferation of the use of SNG stations has caused an increase in unintentional interference to other satellite users;
- d) that all SNG operators do not apply the same procedures to access the satellite;
- e) that the origin of the interfering SNG carriers are difficult to identify,

decides that the following Question should be studied

- 1 what recommended set of access procedures can be used by SNG operators?
- 2 what kind of carrier identification could be economically embedded in the digital carrier?
- 3 what training course or material would be appropriate for SNG operators?

further decides

- 1 that a Recommendation and/or Report should be prepared by 2006.

Category: S1

ANNEX 5

QUESTION ITU-R 272*

Frequency sharing between the FSS and the space research service in the 37.5-38 GHz and 40-40.5 GHz bands

(2005)

The ITU Radiocommunication Assembly,

considering

- a) that the 37.5-38 and 40-40.5 GHz bands are allocated to the FSS;
- b) that the bands, or portions thereof, are also allocated to the space research, fixed, mobile, Earth exploration-satellite and mobile-satellite services;
- c) that the band 37.5-38 GHz is shared, *inter alia*, between the FSS (space-to-Earth) and the space research service (SRS) (space-to-Earth) on a primary basis;
- d) that the band 40.0-40.5 GHz is shared, *inter alia*, between the SRS (Earth-to-space) and the FSS (space-to-Earth) on a primary basis;
- e) that the use of the band 37.5-38 GHz by the SRS may include the reception of signals at earth stations from manned Lunar-based and planetary-based stations, and from space very long baseline interferometry (S-VLBI) satellites;
- f) that the use of the band 40-40.5 GHz by the SRS may include the transmission of signals from earth stations for reception by manned Lunar-based and planetary-based stations, and for telecommand and precise reference signals used for S-VLBI satellites;
- g) that geostationary (GSO) and non-geostationary (non-GSO) FSS satellite systems are expected to be introduced into the bands 37.5-38 GHz and 40-40.5 GHz,

decides that the following Question should be studied

- 1 What are the criteria and techniques to facilitate sharing between systems operating in the SRS and the FSS in the bands 37.5-38 GHz and 40-40.5 GHz?

further decides

- 1 that the results of the above studies should be included in (a) Recommendation(s);
- 2 that the above studies should be completed by 2006.

Category: S2

* This Question should be brought to the attention of Radiocommunication Study Groups 7, 8 and 9.

ANNEX 6

List of ITU-R Questions to be suppressed

| Question ITU-R | Title |
|---------------------------|---|
| 7-3/4 | Baseband transmission variability, delay and echoes in systems in the fixed-satellite service |
| 44-1/4 | Use of transportable transmitting earth stations in the fixed-satellite service including use for feeder links to broadcasting satellites |
| 67-1/4 | Frequency sharing between the fixed-satellite service and the Earth exploration-satellite (passive) and space research (passive) services near 19 GHz |
| 78-1/4 | Use of satellite communication systems in the B-ISDN |
| 216/4 | Interruptions to traffic due to site diversity arrangements and/or equipment protection arrangements on digital paths or circuits in the fixed-satellite service |
| 234/4 | Phase jitter and wander requirements for satellite earth station modems |
| 257/4 | Spectrum requirements below 17 GHz for telemetry, tracking and control of fixed-satellite service networks operating with service links above 17 GHz |
| 265/4 | An inter-satellite link between a geostationary satellite and a non-GSO constellation sharing frequencies with an inter-satellite link between geostationary satellites |
