



Radiocommunication Bureau
(Direct Fax N°. +41 22 730 57 85)

Administrative Circular
CAR/189

12 April 2005

To Administrations of Member States of the ITU

Subject: Radiocommunication Study Group 6
– Proposed approval of 3 draft new Recommendations and 3 draft revised Recommendations

At the meeting of ITU-R Study Group 6 (Broadcasting Services) held on 4 November 2004, the Study Group decided to seek adoption of 3 draft new Recommendations and 3 draft revised Recommendations by correspondence, according to § 10.2.3 of Resolution ITU-R 1-4.

As stated in Addendum 1 to Circular letter 6/LCCE/43, dated 9 February 2005, the consultation period for the Recommendations ended on 9 March 2005.

The Recommendations have now been adopted by Study Group 6 and the approval procedure of Resolution ITU-R 1-4 § 10.4.5 is to be applied, noting the interim procedures recommended by the RAG at its meeting in November 2004*. The titles and summaries of the Recommendations are given in Annex 1.

Having regard to the provisions of § 10.4.5.2 of Resolution ITU-R 1-4, you are requested to inform the Secretariat (brsgd@itu.int) by 12 July 2005 whether your Administration approves or does not approve the draft Recommendations.

A Member State who indicates that the draft Recommendations should not be approved is requested to advise the Secretariat of the reason and to indicate possible changes in order to facilitate further consideration by the Study Group during the study period (§ 10.4.5.5 of Resolution ITU-R 1-4).

After the above-mentioned deadline, the results of this consultation will be notified in an Administrative Circular and arrangements made for the approved Recommendations to be published in accordance with § 10.4.7 of Resolution ITU-R 1-4.

* See Administrative Circular CA/145.

Any ITU member organization aware of a patent held by itself or others which may fully or partly cover elements of the draft Recommendation(s) mentioned in this letter is requested to disclose such information to the Secretariat as soon as possible. The “Statement on Radiocommunication Sector Patent Policy” is contained in Annex 1 of Resolution ITU-R 1-4.

Valery Timofeev
Director, Radiocommunication Bureau

Annex: Titles and summaries

Documents attached:

Documents 6/BL/27 – 6/BL/32 on CD-ROM

Distribution:

- Administrations of Member States of the ITU
- Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 6
- ITU-R Associates participating in the work of Radiocommunication Study Group 6

ANNEX 1

Titles and summaries of the draft Recommendations adopted by Radiocommunication Study Group 6

Draft new Recommendation ITU-R BT.[Doc. 6/114]

Doc. 6/BL/27

Quality of service ranking and measurement methods for digital video broadcasting services delivered over broadband IP networks

This Recommendation specifies performance requirements and objective measuring methods of QoS for the delivery of digital video broadcasting services over broadband IP networks. The specified performance requirements are based on an IP QoS ranking at various levels, from “excellent” to “out-of-service”. They rely on the objective end-to-end measurement of the values of a small number of parameters on the delivered IP streams, performed at the consumer premises equipment and relayed back to the head-end. The recommended objective measurement methods and parameters are known to influence the quality of service delivered to the user.

Draft new Recommendation ITU-R BT.[Doc. 6/120]

Doc. 6/BL/28

Objective measurement of perceptual image quality of large screen digital imagery applications for theatrical presentation

This Recommendation specifies that the measurement techniques for the objective measurement of perceptual image quality of large screen digital imagery (LSDI) applications for theatrical presentation should conform to those specified in Recommendation ITU-R BT.1683, applicable to standard-definition digital broadcasting systems.

Draft new Recommendation ITU-R BT.[Doc. 6/121]

Doc. 6/BL/29

Harmonization of procedural content formats for interactive TV applications

This draft Recommendation defines APIs, semantic guarantees and system aspects of platform behaviour for harmonized procedural content formats for interactive TV applications.

It is intended to harmonize the application environment for interactive TV applications. The potential for commonality in the procedural application environment is based on the analysis of the common core identified in the work leading to this Recommendation. Such commonality would benefit content providers through knowledge of commonly adopted procedural functionality and economies of scale.

Use of BSS broadcasting-satellite service assignments for FSS transmissions and of the associated feeder-link assignments for fixed-satellite service transmissions in bands subject to Appendices 30 and 30A of the Radio Regulations

The objective of the proposed draft revision of Recommendation ITU-R BO.1373-1 is to increase its usefulness to administrations through the following:

- a) modifying the Recommendation in order to reflect WRC-03's decisions related to the use of BSS downlink Plan assignments and feeder-link Plan assignments for FSS transmissions;
- b) adding a new Annex 2 to the Recommendation to provide guidelines on power levels for FSS transmissions in BSS feeder-link assignments.

Error-correction, data framing, modulation and emission methods for digital terrestrial television broadcasting

The revised and amended text in Recommendation ITU-R BT.1306 is in:

- Annex 1, Table 1b), including associated footnotes;
- Annex 1, Table 1c), including associated note;
- Appendix 2 to Annex 1.

This draft revision complements rather than changes the existing Recommendation.

System B in Recommendation ITU-R BT.1306-1 (DVB) is updated with new functionality to facilitate handheld reception of digital terrestrial television broadcasting (DVB-H).

For the network planning DVB-H will offer improvements in the required C/N in portable and mobile reception by providing additional error correction and time interleaving by the MPE-FEC. The maximum Doppler frequency (speed) in mobile reception will also be improved due to the additional time interleaving.

DVB-H is using the DVB-T transmission system as the physical layer and adding extra error-correction and time-slicing mechanism on the link layer. DVB-H is carrying IP-datagrams encapsulated with multi-protocol encapsulation.

DVB-H makes use of the following standards for the link layer and the physical layer:

Link layer

DVB (ETSI EN 301 192 Standard) with the following technical elements specifically targeting DVB-H use:

- time-slicing in order to reduce the average power consumption of the terminal and enabling smooth and seamless frequency handover;
- forward error-correction for multi-protocol encapsulated data (MPE-FEC) for an improvement in *C/N* performance and Doppler performance in mobile channels, also improving tolerance to impulse interference.

Physical layer

DVB-T (ETSI EN 300 744 Standard) with the following technical elements specifically targeting DVB-H use:

- DVB-H signalling in the TPS-bits to enhance and speed up service discovery. Cell identifier is also carried on TPS-bits to support quicker signal scan and frequency handover on mobile receivers;
- 4K-mode for trading off mobility and SFN cell size, allowing single antenna reception in medium SFNs at very high speed, adding thus flexibility in the network design;
- in-depth symbol interleaver for the 2K and 4K-modes for further improving their robustness in mobile environment and impulse noise conditions.

It should be mentioned that both time-slicing and MPE-FEC technology elements, as they are implemented on the link layer, do not touch the DVB-T physical layer in any way. The DVB-H receivers will in general have the same RF-performance as DVB-T receivers. If MPE-FEC is used, this will improve the *C/N* performance.

A full DVB-H system is defined by a combination of elements in the physical and link layers as well as service information. The new standard DVB-H (EN 302 304) has been developed to support the special requirements.

Draft revision of Recommendation ITU-R BT.1368-4

Doc. 6/BL/32

Planning criteria for digital terrestrial television services in the VHF/UHF bands

This draft modification complements rather than changes the existing Recommendation, by providing new information for the use of mobile, portable and hand-held reception of digital terrestrial television services in the VHF/UHF bands and new protection ratio for DVB-T interfered with by CDMA.

The new text in Recommendation ITU-R BT.1368-4 is proposed in:

Annex 2, new § 1.5.2

Annex 2, new § 6

Annex 4, new § 4.

Additionally changes are proposed in Section 5 of Annex 2, Appendix 1 to Annex 2 and Section 2 of Annex 4.