



Radiocommunication Bureau
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Administrative Circular
CACE/571

1 June 2012

**To Administrations of Member States of the ITU, Radiocommunication Sector Members,
ITU-R Associates participating in the work of Radiocommunication Study Group 6
and ITU-R Academia**

Subject: Radiocommunication Study Group 6 (Broadcasting service)

- **Proposed adoption of 9 draft new ITU-R Recommendations and 8 draft revised ITU-R Recommendations and their simultaneous approval by correspondence in accordance with § 10.3 of Resolution ITU-R 1-6 (Procedure for the simultaneous adoption and approval by correspondence)**

At the meeting of Radiocommunication Study Group 6, held on 1 May 2012, the Study Group decided to seek adoption of 9 draft new Recommendations and 8 draft revised ITU-R Recommendations by correspondence (§ 10.2.3 of Resolution ITU-R 1-6) and further decided to apply the procedure for simultaneous adoption and approval by correspondence (PSAA), (§ 10.3 of Resolution ITU-R 1-6). The titles and summaries of the draft Recommendations are given in the Annex.

The consideration period shall extend for 2 months ending on 1 August 2012. If within this period no objections are received from Member States, the draft Recommendations shall be considered to be adopted by Study Group 6. Furthermore, since the PSAA procedure has been followed, the draft Recommendations shall also be considered as approved.

Any Member State who objects to the adoption of a draft Recommendation is requested to inform the Director and the Chairman of the Study Group of the reasons for the objection.

After the above-mentioned deadline, the results of the PSAA procedure will be announced in an Administrative Circular and the approved Recommendations will be published as soon as practicable (see <http://www.itu.int/pub/R-REC>).

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 Common Patent Policy for ITU-T/ITU-R/ISO/IEC is available at <http://www.itu.int/ITU-T/dbase/patent/patent-policy.html>.

François Rancy
Director, Radiocommunication Bureau

Annex: Titles and summaries of the draft Recommendations

Documents attached: Documents 6/12(Rev.1), 6/17(Rev.1), 6/18(Rev.1), 6/19(Rev.1), 6/20(Rev.1), 6/21(Rev.1), 6/23(Rev.1), 6/24(Rev.1), 6/28(Rev.1), 6/33(Rev.1), 6/35(Rev.1), 6/36(Rev.1), 6/37(Rev.1), 6/38(Rev.1), 6/39(Rev.1), 6/48(Rev.1), 6/51(Rev.1) on CD-ROM (if requested)

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 6
- ITU-R Associates participating in the work of Radiocommunication Study Group 6
- ITU-R Academia
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and the Special Committee on Regulatory/Procedural Matters
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

Annex

Titles and summaries of the draft Recommendations

Draft new Recommendation ITU-R BS.[3DTV-AUD]

Doc. [6/12\(Rev.1\)](#)

Audio system for the production and international exchange of 3DTV programs for broadcasting

This Recommendation specifies the audio system that should be used worldwide for the production and international exchange of the audio component of 3DTV programs for broadcasting. UHDTV is not included in the scope.

Draft new Recommendation ITU-R BT.[IMAGE-UHDTV]

Doc. [6/18\(Rev.1\)](#)

Parameter values for UHDTV systems for production and international programme exchange

Study Group 6 (WP 6C) has been carrying out a detailed study on ultra-high definition television (UHDTV) since the start of the previous study period in 2008. The results of these studies are described in Report ITU-R BT.2246-1 which in particular addresses the baseband image format and the derivation of system parameter values.

This Recommendation specifies UHDTV system parameter values for programme production and international exchange.

Draft new Recommendation ITU-R BT.[3DTV SUBMETH]

Doc. [6/19\(Rev.1\)](#)

Subjective methods for the assessment of stereoscopic 3DTV systems

This Recommendation provides methodologies for the assessment of stereoscopic 3DTV systems including general test methods, the grading scales and the viewing conditions.

Draft new Recommendation ITU-R BT.[GVC]

Doc. [6/20\(Rev.1\)](#)

General viewing conditions for subjective assessment of quality of SDTV and HDTV television pictures on flat panel displays

Flat Panel Displays have replaced CRT displays within the domestic and professional television display markets. Plasma (PDP), Liquid Crystal (LCD), and Organic Light Emitting Diode (OLED) technology stand out as the most prominent forms of flat panel display technology currently available for professional monitors, whereas PDP and LCD technologies are the most common form of consumer technology. These pixel matrix displays have characteristics that differ significantly from CRT characteristics resulting in a revised set of viewing conditions and signal parameter settings.

Draft new Recommendation ITU-R BT.[3DTV-REQS]

Doc. [6/21\(Rev.1\)](#)

Performance requirements for the production, international exchange and broadcasting of 3DTV Programmes

This Recommendation specifies the performance requirements and criteria that should be used worldwide for the production, international exchange and broadcasting of stereoscopic 3DTV programmes.

Draft new Recommendation ITU-R BT.[3D-VID]

Doc. [6/23\(Rev.1\)](#)

HDTV digital image systems for the production and international exchange of 3DTV programs for broadcasting

This Recommendation specifies the digital image systems that should be used worldwide for the production and international exchange of stereoscopic HDTV 3DTV programs for broadcasting.

Draft new Recommendation ITU-R BT.[3D-VID_2]

Doc. [6/24\(Rev.1\)](#)

1 280 × 720 digital image systems for the production and international exchange of 3DTV programs for broadcasting

This Recommendation specifies the digital image systems that should be used worldwide for the production and international exchange of stereoscopic 1 280 × 720 3DTV programs for broadcasting.

Draft new Recommendation ITU-R BT.[TRANS]

Doc. [6/48\(Rev.1\)](#)

Guidelines on the implementation of systems for in-service measurement and monitoring of “perceptual transparency” for the distribution chain of SDTV and HDTV programmes

This Recommendation specifies provisions to be taken into account when implementing an in-service method to measure and monitor the impairments to the perceptual quality of television programmes introduced in the television distribution chain.

Draft new Recommendation ITU-R BT.[3DTV-IF]

Doc. [6/51\(Rev.1\)](#)

Serial Digital Interface for production and international exchange of HDTV 3DTV programmes

This Recommendation specifies the serial digital interface for production and international exchange of HDTV 3DTV programmes.

Draft revision of Recommendation ITU-R BS.775-2

Doc. [6/17\(Rev.1\)](#)

Multichannel stereophonic sound system with and without accompanying picture

The low frequency effects channel (LFE) offered by some multi-channel audio systems has been the source of some confusion and there has been some miss-use of this channel. This revision to Recommendation ITU-R BS.775 adds informative text to provide users additional guidance on the use of the LFE channel.

Draft revision of Recommendation ITU-R BS.1770-2

Doc. [6/28\(Rev.1\)](#)

Algorithms to measure audio programme loudness and true-peak audio level

This Recommendation was revised one year ago to add gating to the loudness measurement algorithm specified in Annex 1 of the Recommendation. Study Group 6 believes this additional revision to the Recommendation is important at this time in order to remove uncertainty in the implementation of the true-peak metering algorithm that is specified in Annex 2. The proposed revisions to the true peak algorithm consist of removing the optional DC blocking filter, and the optional pre-emphasis. This will eliminate a source of uncertainty in meter implementations and thus measured values. Further Recommends 1 has been removed because indication of short term loudness has been dealt with in Recommendation ITU-R BS.1771. Additionally, editorial changes to the text have been made to clarify and remove parts that have led to misunderstanding, for example, removing references to the RLB filter and replace with K-weighting. Study Group 6 believes this proposed revision complements rather than changes the agreement reached in the previous meeting, and urgently needs to be approved.

Draft revision of Recommendation ITU-R BS.1660-5

Doc. [6/33\(Rev.1\)](#)

Technical basis for planning of terrestrial digital sound broadcasting in the VHF band

This modification mainly aims to modify Section 8.2.1.4 of Annex 3 of the Recommendation dealing with “DRM interfered with by DVB-T in VHF Band III” to introduce necessary correction factor.

Draft revision of Recommendation ITU-R BT.1735

Doc. [6/35\(Rev.1\)](#)

Methods for objective quality coverage assessment of digital terrestrial television broadcasting signals of System B specified in Recommendation ITU-R BT.1306

The Rapporteur Group in Working Party 6A was tasked to consider the following remaining issues for the revision of Recommendation ITU-R BT.1735:

- further consider the need for an additional 3-step grading scale for digital TV and also assist in the application of the methods specified in Recommendation ITU-R BT.1735;
- specify the parameters that the DTTB measurement receivers should measure, in order to determine the transition margin required between the Grade 3 and the Grade 1;
- determine which parameters, in addition to MER and BER, should be used to evaluate the quality of coverage in large scale SFN networks.

The above sub-objectives have been completed and included in the attached draft revision of Recommendation ITU-R BT.1735.

Draft revision of Recommendation ITU-R BT.1877

Doc. [6/36\(Rev.1\)](#)

Error-correction, data framing, modulation and emission methods for second generation of digital terrestrial television broadcasting systems

The recommendation is amended to highlight the restrictions with respect to the T2-Base and T2-Lite profiles of DVB-T2 system.

Draft revision of Recommendation ITU-R BT.1833-1

Doc. [6/37\(Rev.1\)](#)

Broadcasting of multimedia and data applications for mobile reception by handheld receivers

Recommendation ITU-R BT.1833-1 defines basic characteristics and performance for terrestrial multimedia broadcasting systems for mobile reception using handheld receivers in VHF/UHF bands.

In its October 2011 meeting, WP 6B prepared a preliminary draft revision including the technical parameters of the new terrestrial multimedia broadcasting system as System T2.

Since then ETSI has officially published a revision to DVB-T2 standard as ETSI EN 302 755 v.1.3.1 (04/2012) addressing the set of parameters of DVB-T2-Lite as proposed for addition to Recommendation ITU-R BT.1833-1.

Draft revision of Recommendation ITU-R BS.1196-2

Doc. [6/38\(Rev.1\)](#)

Audio coding for digital broadcasting

It is proposed to add “Extended HE AAC” to the list of recommended audio coding systems. It is further proposed to add a technical description as new Annex 5.

The MPEG-D Unified speech and audio coding (USAC) standard was recently finalized by ISO/MPEG. The profile defined in this standard, the “Extended HE AAC” profile, constitutes an upgrade to the existing MPEG-4 AAC family type of codecs (AAC LC, HE AAC, HE AAC v2). Since all of these codecs of the AAC family are contained in the actual version of Recommendation ITU-R BS.1196-2, it appears consequential and prudent to add this upgrade of HE AAC v2 to the Recommendation.

Relative to the presently recommended codecs, USAC dramatically improves audio and speech quality at very low bit rates as they may be employed in present or future contribution and broadcast delivery systems. However it may also be used at higher data rates, where it retains and even exceeds the quality of the existing AAC family codecs.

Draft revision of Recommendation ITU-R BS.1548-2

Doc. [6/39\(Rev.1\)](#)

User requirements for audio coding systems for digital broadcasting

This modification to Recommendation ITU-R BS.1548 updates the informative appendix of Annex 2 of the Recommendation in order to bring the text up to date regarding audio codecs that have been shown to meet the requirements for emission.

Because AAC LC is included in Extended HE AAC, HE AAC v2, and HE AAC, a note has been added to indicate that all of these AAC versions (a sequence of supersets of AAC LC) also fulfil the list of requirements for high quality. Because AC-3 is included in E-AC-3 (E-AC-3 being a superset of AC-3), the term “AC-3” has been changed to “AC-3/E-AC-3”. For intermediate audio quality, both “Extended HE-AAC” and “HE-AAC with MPEG Surround” have been added as both have been shown to meet the requirements.