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| **Radiocommunication Bureau (BR)** | | |
| Administrative Circular  **CACE/804** | | 20 April 2017 |
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| **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 Academia** | | |
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| Subject: | **Radiocommunication Study Group 6 (Broadcasting Service)**  **– Proposed adoption of 1 draft new ITU-R Recommendation and 7 draft revised ITU-R Recommendations and their simultaneous approval by correspondence in accordance with § A2.6.2.4 of Resolution ITU‑R 1-7 (Procedure for the simultaneous adoption and approval by correspondence)** | |
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At the meeting of Radiocommunication Study Group 6, held on 31 March 2017, the Study Group decided to seek adoption of 1 draft new ITU-R Recommendation and 7 draft revised ITU-R Recommendations by correspondence (§ A2.6.2 of Resolution ITU-R 1-7) and further decided to apply the procedure for simultaneous adoption and approval by correspondence (PSAA, § A2.6.2.4 of Resolution ITU‑R 1‑7). The titles and summaries of the draft Recommendations are given in the Annex to this letter. 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.

The consideration period shall extend for 2 months ending on 20 June 2017. 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.

After the above-mentioned deadline, the results of the above procedures 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 Recommendations 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/en/ITU-T/ipr/Pages/policy.aspx>.

François Rancy

Director

**Annex:** Titles and summaries of the draft Recommendations

**Documents:** Documents [6/104](https://www.itu.int/md/R15-SG06-C-0104/en)(Rev.1), [6/106](https://www.itu.int/md/R15-SG06-C-0106/en), [6/112](https://www.itu.int/md/R15-SG06-C-0112/en), [6/114](https://www.itu.int/md/R15-SG06-C-0114/en)(Rev.1), [6/121](https://www.itu.int/md/R15-SG06-C-0121/en)(Rev.1), [6/128](https://www.itu.int/md/R15-SG06-C-0128/en), [6/134](https://www.itu.int/md/R15-SG06-C-0134/en) and [6/135](https://www.itu.int/md/R15-SG06-C-0135/en)

These documents are available in electronic format at: <https://www.itu.int/md/R15-SG06-C/en>

**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 Academia

– Chairmen and Vice-Chairmen of Radiocommunication Study Groups

– 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.[IRDR\_FREQS] Doc. [6/104](https://www.itu.int/md/R15-SG06-C-0104/en)(Rev.1)

Use of International Radio for Disaster Relief (IRDR) frequencies  
for emergency broadcasts in the High Frequency (HF) bands

This Recommendation provides International Radio for Disaster Relief (IRDR) frequencies and time slots that may be used for the High Frequency emergency broadcasts.

Draft revision of Recommendation ITU-R BT.2095-0 Doc. [6/106](https://www.itu.int/md/R15-SG06-C-0106/en)

**Subjective assessment of video quality using expert viewing protocol**

This revision is to add an annex (informative) about the experimental results that show the relationship between MOS values and the number of experts. The results also show the validity of the expert viewing protocol.

The proposed revision complements rather than changes the agreement reached in the current version.

Draft revision of Recommendation ITU-R BT.2100-0 Doc. [6/112](https://www.itu.int/md/R15-SG06-C-0112/en)

**Image parameter values for high dynamic range television   
for use in production and international programme exchange**

Recommendation ITU-R BT.2100-0 was published in July 2016. A footnote stated that “further studies are needed and may lead to a revision of this Recommendation, as appropriate, under the terms of Resolution ITU-R 1-7”. Further studies, including discussions in Rapporteur Group RG‑24, have led to the proposed minor adjustments and clarifications.

Table 3 describing the ‘Reference viewing environment for critical viewing of HDR programme material’ now uses the terms ‘surround’ and ‘periphery’. This is to align with usage of ‘surround’ in other bodies such as ISO. This is a change of terminology only.

A note is added to Table 4 ‘PQ system reference non-linear transfer functions’ to clarify the peak output delivered by the camera sensor.

The HLG transfer functions in Table 5 have been editorially modified so that the scene linear signals are shown normalized to the range [0:1] instead of [0:12]. In addition, the derived equation for the inverse OOTF is added, which will be useful for signal processing. A statement that HLG signals where E' is greater than 1.00 should be clipped and not shown on reference displays is removed, as experience has shown that displaying such signals may be beneficial.

Table 9 describes two different signal representations, “narrow” and “full”. The equations have been re-written to align with the mathematical approach used by ITU-T SG 16 and MPEG, following exchanges of liaison statements. The resulting values match those of SMPTE ST 2084.

Table 10 describes floating point signal representation. Rather than referring to PQ and to HLG these are now described as display-referred and scene-referred signals.

Report ITU-R BT.2390 describes a method for conversion of HDR signals between PQ and HLG.   
This is duplicated in Informative Annex 2 of Recommendation ITU-R BT.2100-0 and this Annex is therefore removed.

Draft revision of Recommendation ITU-R BS.2051-0 Doc. [6/114](https://www.itu.int/md/R15-SG06-C-0114/en)(Rev.1)

**Advanced sound system for programme production**

This revision adds two sound systems (0+7+0 and 4+7+0) that have been used for broadcast.   
The 0+7+0 and 4+7+0 are named I and J. Also the positions of two loudspeakers in the upper layer of system G (4+9+0) are changed.

1 New Systems I and J are added in Table 1.

2 Loudspeaker positions of System G are revised in Table 1 and new Table 9.

3 New Tables 3 to 12 for Systems A to J are inserted.

4 New figures of Systems A to J are drawn in new Table 13.

5 Explanation for Loudspeakers of “M+SC” and “M-SC” is added in new Appendix 2.

6 A new further recommend is added.

Draft revision of Recommendation ITU-R BT.1368-12 Doc. [6/121](https://www.itu.int/md/R15-SG06-C-0121/en)(Rev.1)

**Planning criteria, including protection ratios, for digital terrestrial   
television services in the VHF/UHF bands**

The revision includes addition of planning parameters for Digital Terrestrial Multimedia Broadcasting (DTMB) using 7 MHz bandwidth and for DTMB-A using 8 MHz bandwidth. DTMB and DTMB-A systems are described in Recommendation [ITU-R BT.1306-7](http://www.itu.int/rec/R-REC-BT.1306/en) and in Report  
[ITU-R BT.2295-1](http://www.itu.int/pub/R-REP-BT.2295).

Draft revision of Recommendation ITU-R BT.2077-1 Doc. [6/128](https://www.itu.int/md/R15-SG06-C-0128/en)

**Real-time serial digital interfaces for UHDTV signals**

This draft revision is to support the carriage of the HDR-TV signals with UHDTV pixel formats.  
Bit assignments of payload IDs are modified to signal transfer characteristics, luminance and colour difference signal representations, and digital coding range. Also, wavelengths for the multi-link using CWDM in Part 3 are modified to lower wavelengths for greater availability of optical components.

Draft revision of Recommendation ITU-R BS.2076-0 Doc. [6/134](https://www.itu.int/md/R15-SG06-C-0134/en)

**Audio Definition Model**

This draft revision adds new metadata descriptors for matrixed sound and for a more complete description of scene-based audio.

In addition to that, it provides additional table columns to describe default values of metadata elements as well as additional information on optionality where missing.

Besides, some metadata descriptors are added to ensure that all characteristics can either be describes using a spherical or a Cartesian coordinate system.

Draft revision of Recommendation ITU-R BS.2094-0 Doc. [6/135](https://www.itu.int/md/R15-SG06-C-0135/en)

Common definitions for the audio definition model

This draft revision adds new common definitions for ‘HOA’ Higher Order Ambisonic channels and packs and updates some definitions for ‘DirectSpeakers’ packs in accordance with revisions of both Recommendations ITU-R BS.2051 and ITU-R BS.2076.

1. Explanation of chunk ordering is added in section 3.

2. Some common definitions for ‘DirectSpeakers’ packs are updated in Table 2.

3. New common definitions for ‘HOA’ channels and packs are added in section 4.4.

4. Attachments are updated in section 5.

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