

RECOMMENDATION ITU-R BR.1694

**Videocassette recording formats for international exchange
of large-screen digital imagery programmes intended
for presentation in a theatrical environment**

(Question ITU-R 15/6)

(2004)

The ITU Radiocommunication Assembly,

considering

- a) that Recommendation ITU-R BT.1666 identifies broad user requirements and presentation quality targets for large-screen digital imagery (LSDI) applications intended for presentation in a theatrical environment;
- b) that Recommendation ITU-R BT.1680 identifies the image systems specified in Recommendations ITU-R BT.709 and ITU-R BT.1543 as appropriate for the distribution of LSDI programmes for presentation in a theatrical environment (see Note 1);
- c) that the 5.1 reference sound system (five independent channels plus an optional low frequency extension channel), specified in Recommendation ITU-R BS.775 as the highest level in a hierarchy of multichannel sound systems, meets the requirements for presentation of LSDI applications in a theatrical environment;
- d) that Recommendation ITU-R BT.1662 specifies a reference chain for LSDI applications, and it identifies a need for some quality headroom on LSDI programme masters, with respect to the quality required on programme presentation;
- e) that this quality headroom can be used to apply some bit-rate reduction in the distribution of LSDI programmes, on condition that the presentation should remain visually transparent to the master quality at the viewing distance envisaged for the application;
- f) that Recommendation ITU-R BT.1666 also foresees the implementation of an international exchange of LSDI programmes (see Note 2) through the use of recorded media;
- g) that Recommendation ITU-R BR.1375 recognizes that the two videotape recording formats known as HDCAM and HD-D5 are the ones most widely used at the present time and they meet the requirements for the international exchange of high-definition television (HDTV) programmes, depending on the application (see Note 3),

recommends

- 1 that, in the short term, both the HDCAM (SMPTE D11) and the HD-D5 videotape recording formats may be used for the international exchange of videocassette recordings of LSDI programmes based on Recommendation ITU-R BT.1680;
- 2 that in those cases when the LSDI application requires full video bandwidth and/or 5.1 audio channels, the HD-D5 format should be preferred for international programme exchange of such LSDI programmes (see Note 4);

3 that studies should continue on other recording formats, based on videotape or on an electronic media support, which could be recommended in the future for the same LSDI applications based on consideration of their quality, performance, widespread availability and compliance with Annex 1 to Resolution ITU-R 1.

NOTE 1 – It may be necessary to use higher-resolution image systems in the LSDI hierarchy for LSDI applications based on theatrical presentation at very short viewing distances.

NOTE 2 – International programme exchange is defined as the transmission of television or sound programme material (or components thereof) among professional parties in different countries. It should be based on internationally agreed and widely employed technical standards or operating practices, except by prior bilateral agreement among the parties involved.

NOTE 3 – The Appendix to Recommendation ITU-R BR.1375-2 provides comprehensive comparative tables of the characteristics and performances of the two mentioned HDTV videotape recording formats.

NOTE 4 – The format can carry up to four AES3 channels, each one capable of carrying two linear pulse-code modulation (PCM) audio channels.
