

QUESTION ITU-R 19-1/6

Bit-rate reduction coding of audio signals for broadcasting applications

(1993-1995-2002-2009)

The ITU Radiocommunication Assembly,

considering

- a) that a number of different bit-rate reduction coding systems have been developed for digital audio applications;
- b) that requirements on bit-rate reduction coding systems for broadcasting are specified in Recommendations ITU-R BS.1548;
- c) that recent progress in digital audio coding techniques allows for a very considerable degree of bit-rate reduction to be achieved while maintaining high quality;
- d) that applications exist for audio bit-rate reduction coding systems for digital audio broadcasting, television sound and for storage of signals;
- e) that the requirements for the various broadcasting applications mentioned in § c) might be very different and should be carefully defined in view of the planned services;
- f) that the performance of the whole broadcasting chain should be considered, and multiple transcoding between bit-rate reduction coding standards used for production, transmission links and broadcasting should be avoided as far as possible,

decides that the following Questions should be studied

- 1 What are the sound quality and other requirements needed for production including recording, for transmission links and for various broadcasting applications from terrestrial transmitters and for satellite, including multichannel audio formats?
- 2 What are the bit-rate reduction techniques that would satisfy the quality level and other requirements for each of the applications listed in § 1 while making efficient use of storage or transmission media?
- 3 What are the techniques which would maximize interoperability between the various parts of the broadcasting chain?
- 4 What is the nature of signal impairments due to bit-rate reduction coding techniques, in particular after a number of cascaded codecs?
- 5 What are the lossless bit-rate reduction techniques which could be applied to audio coding, especially for studio and storage application?
- 6 What methods could be used to minimize the incompatibilities between the various bit-rate reduction coding techniques and what interface for compressed bit-rate audio can be recommended to avoid transcoding digital signals in linear format?



Documents
Document Sharing Hub

7 What methods of transcoding between low bit-rate coding techniques adopted by ITU-R can be recommended, if unavoidable?

8 What audio coding schemes are appropriate for application where remote interaction is important?

further decides

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

2 that the above studies should be completed by 2011.

Category: S2

Formatted: Font: Bold



Documents
Document Sharing Hub