

ITU-R

Radiocommunication Sector of ITU

Recommendation ITU-R BS.1679-1 (10/2015)

Subjective assessment of the quality of audio in large screen digital imagery applications intended for presentation in a theatrical environment

BS Series
Broadcasting service (sound)



Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

Policy on Intellectual Property Right (IPR)

ITU-R policy on IPR is described in the Common Patent Policy for ITU-T/ITU-R/ISO/IEC referenced in Annex 1 of Resolution ITU-R 1. Forms to be used for the submission of patent statements and licensing declarations by patent holders are available from <http://www.itu.int/ITU-R/go/patents/en> where the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the ITU-R patent information database can also be found.

Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
BO	Satellite delivery
BR	Recording for production, archival and play-out; film for television
BS	Broadcasting service (sound)
BT	Broadcasting service (television)
F	Fixed service
M	Mobile, radiodetermination, amateur and related satellite services
P	Radiowave propagation
RA	Radio astronomy
RS	Remote sensing systems
S	Fixed-satellite service
SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
V	Vocabulary and related subjects

Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

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RECOMMENDATION ITU-R BS.1679-1

Subjective assessment of the quality of audio in large screen digital imagery applications intended for presentation in a theatrical environment

(Question ITU-R 15/6)

(2004-2015)

Scope

This Recommendation is intended for use in the assessment of audio quality in large screen digital imagery applications intended for presentation in a theatrical environment. It may be used with theatrical speaker configurations as identified in Recommendation ITU-R BS.775 and Recommendation ITU-R BS.2051.

The ITU Radiocommunication Assembly,

considering

- a) that it will be necessary to verify the suitability of the technical solutions considered for members of that family of large screen digital imagery (LSDI) applications;
- b) that such verification will also need to include, when necessary, subjective assessment tests performed under rigorous scientific conditions;
- c) that Recommendation ITU-R BS.1284 specifies general requirements applicable to the subjective assessment of the quality or impairment of program audio;
- d) that LSDI programs intended for presentation in a theatrical environment will be generally accompanied by multichannel audio, thus requiring a subjective assessment procedure designed for multichannel audio;
- e) that Recommendation ITU-R BS.775 and Recommendation ITU-R BS.2051 cover multichannel stereophonic audio signals and advanced sound systems with and without accompanying picture;
- f) that the subjective assessment of the quality of audio in LSDI applications intended for presentation in a theatrical environment requires a procedure in which the quality of the audio is assessed in the presence of the image component of the LSDI program, since perceptual interaction between audio and picture can affect the assessment of audio quality;
- g) that Recommendation ITU-R BS.1286 covers methods for the subjective assessment of audio systems with accompanying picture;
- h) that, the source-coding (if any) used for the delivery of LSDI program audio for presentation in a theatrical environment should be transparent or virtually transparent to the audio quality present on the program master, and the subjective assessment of source-coding transparency requires a procedure designed to assess small audio impairments;
- i) that Recommendation ITU-R BS.1116 covers methods for the subjective assessment of small impairments in audio systems including multichannel audio systems,

recommends

- 1** that the subjective assessment of audio quality or audio impairments in LSDI applications designed for program presentation in a theatrical environment should be based on a choice among the specifications contained in Recommendations ITU-R BS.1284, ITU-R BS.1286 and ITU-R BS.1116;