

ITU-T Workshop

From Speech to Audio: bandwidth extension, binaural perception









Session 1: Loudness

The multimedia revolution has led to an increase in the required audio signal bandwidth for nextgeneration networks. In addition to existing narrowband and wideband codecs, development of full band is taking place.

The goal of this session is to initiate significant technical work on a common loudness rating algorithm for all bandwidths from narrowband to full band audio signals.

In this context, two contributions have been presented.

High frequencies for the hearing impaired

- demonstrate perceptual benefit of extended bandwidth of amplification and to compare normal hearing to hearingimpaired subjects.
- 4 Normal Hearing and 9 hearing-impaired subjects.
- Preference for NH people at bandwidth up to 16 Khz, Experiments showed that for 5 on 9 hearing-impaired subjects insufficient audibility at frequencies upper than 6 Khz occurs.