

Cultural differences of speech quality perception in the presence of background noise

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During the last years the objective judgment of speech quality in the presence of background noise has gained more and more interest. Especially in wideband terminals the quality of the transmitted speech is of major importance in order to provide superior quality experience to the user. Since most of conversations today are made in the presence of background noise especially the performance of noise cancellation algorithms is getting more and more important.

An objective model describing a procedure of predicting the speech quality in background noise is described in the ETSI standard EG 202 396-3. However, recently more and more discussions were raised regarding the prediction performance of the algorithm described in the ETSI standard. A very interesting aspect in these discussions is the dependence of auditory judgements on the cultural background of the test panels.

In order to further investigate the cultural influence a variety of auditory tests were performed. Of special interest are auditory tests which were conducted in different countries and/or cultural environments using the same data for conducting the listening tests. The contribution will discuss the differences as they can be expected in different cultures and ways to address these differences in objective test procedures.