

QESTRAL (Part 2): Calibrating the QESTRAL model using listening test data

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Abstract

The QESTRAL model is a perceptual model that aims to predict changes to spatial quality of service between a reference system and an impaired version of the reference system. To achieve this, the model required calibration using perceptual data from human listeners. This paper describes the development, implementation and outcomes of a series of listening experiments designed to investigate the spatial quality impairment of 40 processes. Assessments were made using a multi-stimulus test paradigm with a label-free scale, where only the scale polarity is indicated. The tests were performed at two listening positions, using experienced listeners. Results from these calibration experiments are presented. A preliminary study on the process of selecting of stimuli is also discussed.

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