In the present book, speech transmission quality is modeled on the basis of perceptual dimensions that are relevant for today’s public-switched and packet-based telecommunication systems. The complete transmission path from the mouth of the speaker to the ear of the listener is regarded, and both narrowband (300–3400 Hz) as well as wideband (50–7000 Hz) speech transmission are taken into account. A new analytical assessment method is developed that allows the dimensions to be rated by non-expert listeners, and a new parametric model for the quality estimation of transmitted speech based on the perceptual dimensions is derived.

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