

Detection of Digital Transmission Systems for Voice Quality Measurements

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ABSTRACT

In-service, Non-intrusive Measurement Devices (INMD) estimate the perceived quality of the telephone link by extracting quality-defining criteria like echo attenuation, echo delay, active speech level, noise level, frame losses and transient failures from a telephone call. In addition, the quality depends on the used digital transmission systems (codec systems). This paper proposes a method to distinguish between two codec classes. With the help of features determined from the speech signal, a classifier decides about the class affiliation of the signal. The recognition rate for signals with 16 seconds of active speech is about 97%.