## **Abstract**



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In-Car Communication: Performance Parameters and Testing Procedures from the Users Point of View

Hans W. Gierlich

Almost any modern car is equipped with microphone(s) and loudspeaker systems intended for high quality audio reproduction and hands-free communication. Signal processing power is getting increasingly cheaper and the algorithms developed for hands-free communication can be adapted in such a way that systems for enhancing in-car communication (ICC) seem to be realizable with just some more signal processing and without adding additional hardware components. Consequently the car industry is increasingly interested in deploying such systems in cars.

However, even if an ICC system in the first view is not so much different to a public address system, in-car communication requires significantly more advanced signal processing and automated control. ICC has to work seamlessly and should preserve the original talkers voice quality and location but enhancing the speech intelligibility the same time.

The contribution will discuss the different quality parameters relevant to the user. Different auditory and instrumental test procedures as developed so far will be introduced. Open issues will be discussed. System stability requirements and associated test methods will be highlighted as well. The work currently ongoing in ITU-T standardization is introduced.