

ETSI Workshop "Telecommunication Quality beyond 2015"
21-22 October 2015
Vienna, Austria

Speech Quality in Car Emergency Call Situations – What's Different to Ordinary Hands-free Communication?

Dr.-Ing. Hans W. Gierlich

Speech communication in emergency call situations from a car to the Public Safety Access Point (PSAP) so far is not yet really considered in the European regulation scheme although eCall will be mandatory in Europe in 2018. In contrast, ERA Glonass implemented speech quality requirements already as part of their approval procedure since January 2015. However, the current speech quality requirements, parameters and testing procedures do not deliberately address the emergency call situation.

In order to properly address the eCall situation from the speech quality point of view a lot of basic investigations have been made over the last year. This work was mainly collected in ITU-T SG12 under question 4 and a new Recommendation P.1140 (working title P.emergency) was developed and consented by ITU-T SG12.

This paper introduces and discusses the different aspects of emergency calls originated from a vehicle after being involved in an accident. The generic differences to an ordinary hands-free call/hands-free system such as

- Crash proof system, might need to be implemented as a "one-box" design with limited power and reduced quality of acoustical components
- Different background noise scenarios
- Ability to allow conversations from all seats in the vehicle
- The importance of information contained in background noises

and their impact on parameters, testing procedures and requirements will be discussed. The presentation will introduce the current ITU-T Recommendation P.1140 "Speech communication requirements for emergency calls originating from vehicles" and will discuss the missing parameters and testing procedures which are not yet part of the new ITU-T Recommendation.

Find more event abstracts in our >> abstracts archive <<