

HD Voice+: HEAD acoustics test equipment perfectly suited to achieve logo certification for new GSMA standard

Measuring newly defined performance requirements with the front end MFE VIII.1

The GSM Association (GSMA) has now specified test methods to assess the minimum performance requirements for allowing manufacturers of LTE mobile terminals and network providers to make use of the HD Voice+ (High Definition Voice+) logo. HD Voice+ comprises the EVS (Enhanced Voice Services) codec operated in super-wideband or fullband modes and the enhancements to terminals and networks according to the requirements defined in TS.23 Annex H. Due to newly defined requirements regarding e.g. jitter, packet loss and delay, HEAD acoustics' measurement equipment is perfectly suited for achieving HD Voice+ logo certification for 4G setups.

Perfectly suited software and hardware solutions for appropriate tests

With the advanced communication quality analysis system ACQUA in combination with the measurement front end MFE VIII.1, EVS codec option Cod-EVS as well as the software option MFE VIII.1-IMP, HEAD acoustics provides appropriate solutions for testing accordingly. Cod-EVS supports all specified bandwidths from narrowband to fullband and all bit rates and modes (handset, handheld hands-free and headset). The option MFE VIII.1-IMP enables users to simulate different IP network impairments, such as delay, jitter, or packet loss, directly at the source of the signal and to apply it to the outgoing IP packets of the MFE VIII.1. The implementation of HEAD acoustics is worldwide unique: MFE VIII.1-IMP attaches the impairment information to the time signal before encoding. Thus, always the same impairments are applied to the same part of the time signal regardless of the DTX state. This way, network impairments are reproducible even with activated DTX.

Performance requirements refer to Release 13 of 3GPP specifications TS 26.131 and TS 26.132

The minimum performance requirements defined for HD Voice+ logo certification refer to Release 13.0 of the two standards TS 26.131 and TS 26.132 of 3GPP standardization body. Mobile vendors, network operators and manufacturers from the automotive industry have to make sure that their devices or applications fulfill the required speech quality acoustical characteristics and speech processing in order to use the HD Voice+ logo.

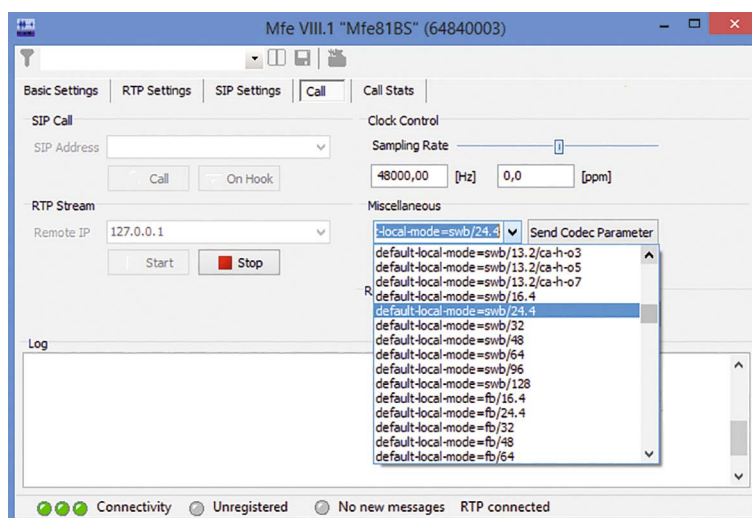
About HEAD acoustics – Telecom Division

HEAD acoustics was founded in 1986 and has been involved in noise and vibration, electroacoustic and voice quality testing since its inception. HEAD acoustics is based in Herzogenrath, Germany, with affiliates in France, Great Britain, Japan, South Korea and USA as well as a world-wide network of representatives. The Telecom Division of HEAD acoustics manufactures telecom test equipment and provides consulting services in the field of speech and audio quality. Moreover, HEAD acoustics closely co-operates with DECT Forum, ETSI, ITU-T, 3GPP, TIA, CTIA, GSMA and other standardization bodies with regard to the development of quality standards for voice transmission and speech communication. In many partnership projects, HEAD acoustics has proven its competence and capabilities in conducting tests and optimizing communication products with respect to speech and audio quality under end-to-end as well as mouth-to-ear scenarios.

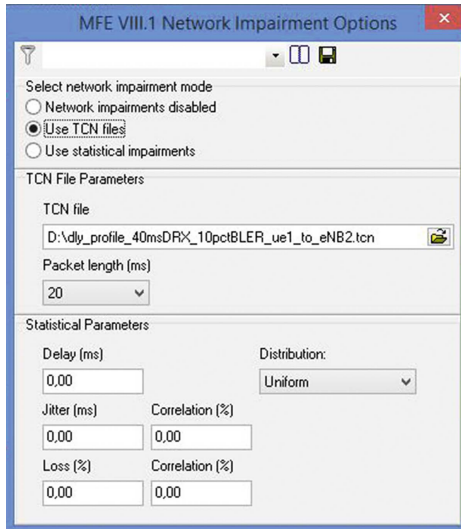
Images



Measurement front end MFE VIII.1



The HEAD acoustics implementation of the EVS codec supports all codec modes of EVS



The software option MFE VIII.1-IMP enables to simulate different IP network impairments such as jitter, packet loss and delay