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LTE;  
Codec for Enhanced Voice Services (EVS);  
Detailed algorithmic description  
(3GPP TS 26.445 version 12.3.0 Release 12)**



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# Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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# 1 Scope

The present document is a detailed description of the signal processing algorithms of the Enhanced Voice Services coder.

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 26.441: "Codec for Enhanced Voice Services (EVS); General Overview".
- [3] 3GPP TS 26.442: "Codec for Enhanced Voice Services (EVS); ANSI C code (fixed-point)".
- [4] 3GPP TS 26.444: "Codec for Enhanced Voice Services (EVS); Test Sequences".
- [5] 3GPP TS 26.446: "Codec for Enhanced Voice Services (EVS); AMR-WB Backward Compatible Functions".
- [6] 3GPP TS 26.447: "Codec for Enhanced Voice Services (EVS); Error Concealment of Lost Packets".
- [7] 3GPP TS 26.448: "Codec for Enhanced Voice Services (EVS); Jitter Buffer Management".
- [8] 3GPP TS 26.173: "ANSI-C code for the Adaptive Multi Rate - Wideband (AMR-WB) speech codec".
- [9] 3GPP TS 26.190: "Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Transcoding functions".
- [10] 3GPP TS 26.103: "Speech codec list for GSM and UMTS".
- [11] 3GPP TS 26.290: "Extended AMR Wideband codec; Transcoding functions".
- [12] 3GPP TS 26.401: "General audio codec audio processing functions; Enhanced aacPlus general audio codec; General description".
- [13] 3GPP TS 26.114: "IP Multimedia Subsystem (IMS); Multimedia Telephony; Media handling and interaction".
- [14] 3GPP TS 22.105: "Services and Service capabilities".
- [15] IETF RFC 4867 (2007): "RTP Payload Format and File Storage Format for the Adaptive Multi-Rate (AMR) and Adaptive Multi-Rate Wideband (AMR-WB) Audio Codecs", J. Sjoberg, M. Westerlund, A. Lakaniemi and Q. Xie.
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