Test sequences for the GSM-EFR speech codec using the

Adaptive Multi-Rate (AMR) speech codec mode MR122 (GSM 06.74 and 26.074)

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These test sequences correspond to AMR C code (GSM 06.73) version 7.4.0

Input test sequences:

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all input sequences are identical to the AMR test input sequences \*.inp.

Speech codec test sequences; PC Byte format:

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with DTX disabled

t00.inp ... t22.inp (encoder input, from GSM 06.74)

t00\_efr.cod ... t22\_efr.cod (encoder output)

t00\_efr.dec ... t22\_efr.dec (decoder input)

t00\_efr.out ... t22\_efr.out (decoder output)

with DTX enabled, VAD option 1

Dtx1.inp ... Dtx4.inp (encoder input, from GSM 06.74)

Dtx1\_efr.cod ... Dtx4\_efr.cod (encoder output)

Dtx1\_efr.dec ... Dtx4\_efr.dec (decoder input)

Dtx1\_efr.out ... Dtx4\_efr.out (decoder output)

with DTX enabled, VAD option 2

Dt21.inp ... Dt24.inp (encoder input, from GSM 06.74)

Dt21\_efr.cod ... Dt24\_efr.cod (encoder output)

Dt21\_efr.dec ... Dt24\_efr.dec (decoder input)

Dt21\_efr.out ... Dt24\_efr.out (decoder output)

The \*.cod file format is identical to the GSM\_EFR \*.cod file format, that is:

244 Data Bits, VadFlag, SpFlag -> 246 Words per frame (20ms)

The \*.dec file format is identical to the GSM\_EFR \*.dec file format, that is:

Bfi, 244 Data Bits, Sid, Taf -> 247 Words per frame (20ms)

The \*.dec files can be built from the \*.cod files with the GSM\_EFR executable

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Differences to AMR Mode MR122:

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the testsequences differ in two parts from the AMR Mode 12.2 testsequences:

- DTX handling

(VadFlag and SpFlag instead of TxType; different SID frames)

- Decoder homing frame

(Decoder homing frame for GSM\_EFR is different than for AMR MR122)

A detailed description of all sequences can be found in GSM 06.74 and 26.074.