



COVERING NOTE

GENERAL SECRETARIAT INTERNATIONAL TELECOMMUNICATION UNION

Subject: Corrigendum 1 (02/2000)

Geneva, 22 April 2002

Recommendation ITU-T G.729 Annex D

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

ITU-T Recommendation G.729 Annex D (09/1998)

Coding of speech at 8 kbit/s using conjugate-structure algebraic-code-excited linear-prediction (CS-ACELP) – Annex D: 6.4 kbit/s CS-ACELP speech coding algorithm

These corrections should be introduced in the ANSI-C source code of G.729 annex D version 1.2 delivered to ITU-T in September 1998. The software included in ITU-T Rec. G.729 Annex D has already been modified accordingly (version 1.3).

- In routine d2i40_11 (file acelpcod.c), replace the line 1115
`*ptr_Ri0i2 = mult(*ptr_Ri0i2, mult(p_sign[i0+1], p_sign[i1+1]))`
by
`*ptr_Ri0i2 = mult(*ptr_Ri0i2, mult(p_sign[i0], p_sign[i1]));`
- In routine d2i40_11 (file acelpcod.c) replace line 1237: `code[m1_bestPos] = shr(p_sign[m1_bestPos], 2);`
by `code[m1_bestPos] = add(code[m1_bestPos], shr(p_sign[m1_bestPos], 2));`
- In routine Decode_ACELP64 (file deacelpd.c), replace line 48: `cod[pos[j]] = 8191; /* 1 in Q13 */`
by `cod[pos[j]] = add(cod[pos[j]], 8191);`
- In routine Decode_ACELP64 (file deacelpd.c), replace line 51: `cod[pos[j]] = -8192; /* -1 in Q13 */`
by `cod[pos[j]] = sub(cod[pos[j]], 8192);`
- the instruction `static Word16 past_qua_en[4] = { -14336, -14336, -14336, -14336 };` should be removed from files `qua_gain.c` (line 58) and `qua_g6k.c` (line 61) and inserted in file `codld8kd.c` after line 74. The fixed codebook gain predictor memory array `past_qua_en` should be passed as an argument to routines `Qua_gain_6k` (line 442 in file `codld8kd.c` and line 44 in file `qua_g6k.c`) and `qua_gain` (line 446 in file `codld8kd.c` and line 42 in file `qua_gain.c`)
- the instruction `static Word16 past_qua_en[4] = { -14336, -14336, -14336, -14336 };` should be removed from files `dec_gain.c` (line 45) and `dec_g6k.c` (line 42) and inserted in file `declld8kd.c` after line 48. The fixed codebook gain predictor memory array `past_qua_en` should be passed as an argument to routines `Dec_gain_6k` (line 239 in file `declld8kd.c` and line 35 in file `dec_g6k.c`) and `Dec_gain` (line 242 in file `declld8kd.c` and line 33 in file `dec_gain.c`)
- Add one line after line 123 in file `filterd.c` (routine `Update64`) `onset = 0`