



SLOVENSKI STANDARD
SIST ETS 300 581-7 E2:2003

01-december-2003

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Digital cellular telecommunications system (Phase 2) (GSM); Half rate speech; Part 7:
ANSI-C code for the GSM half rate speech codec (GSM 06.06 version 4.2.1)

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Ta slovenski standard je istoveten z: **ETS 300 581-7 Edition 2**

ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
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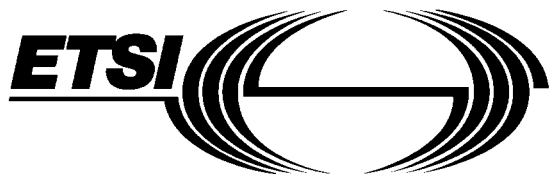
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Digital cellular telecommunications system (Phase 2);

Half rate speech;

**Part 7: ANSI-C code for the GSM half rate speech codec
(GSM 06.06 version 4.2.1)**

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Foreword

This second edition European Telecommunication Standard (ETS) has been produced by the Special Mobile Group (SMG) of the European Telecommunications Standards Institute (ETSI).

A 3.5 inch diskette is attached to the back cover of this ETS, this diskette contains clause 5, the bit-exact ANSI-C code for the GSM half rate codec.

This ETS specifies the half rate speech traffic channels for the European digital cellular telecommunications system. This ETS corresponds to GSM technical specification, GSM 06.06, version 4.2.1 and is part 7 of a multi-part ETS covering the half rate speech traffic channels as described below:

GSM 06.02	ETS 300 581-1: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 1: Half rate speech processing functions".
GSM 06.20	ETS 300 581-2: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 2: Half rate speech transcoding".
GSM 06.21	ETS 300 581-3: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 3: Substitution and muting of lost frames for half rate speech traffic channels".
GSM 06.22	ETS 300 581-4: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 4: Comfort noise aspects for half rate speech traffic channels".
GSM 06.41	ETS 300 581-5: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 5: Discontinuous Transmission (DTX) for half rate speech traffic channels".
GSM 06.42	ETS 300 581-6: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 6: Voice Activity Detection (VAD) for half rate speech traffic channels".
GSM 06.06	ETS 300 581-7: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 7: ANSI-C code for the GSM half rate speech codec".
GSM 06.07	ETS 300 581-8: "Digital cellular telecommunications system (Phase 2); Half rate speech Part 8: Test vectors for the GSM half rate speech codec".

Transposition dates

Date of adoption of this ETS:	3 April 1998
Date of latest announcement of this ETS (doa):	30 June 1998
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 December 1998
Date of withdrawal of any conflicting National Standard (dow):	31 December 1998

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1 Scope

This European Telecommunication Standard (ETS) part 7 contains an electronic copy of the ANSI-C code for the GSM half rate codec. The ANSI-C code is necessary for a bit exact implementation of the half rate speech transcoder (GSM 06.20 (ETS 300 581-2) [2]), Voice Activity Detection (GSM 06.42 (ETS 300 581-6) [6]), comfort noise (GSM 06.22 (ETS 300 581-4) [4]), Discontinuous Transmission (GSM 06.41 (ETS 300 581-5) [5]) and example solutions for substituting and muting of lost frames (GSM 06.21 (ETS 300 581-3) [3]).

2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

- [1] GSM 01.04 (ETR 100): "Digital cellular telecommunication system (Phase 2); Abbreviations and acronyms".
- [2] GSM 06.20 (ETS 300 581-2): "Digital cellular telecommunications system (Phase 2); Half rate speech Part 2: Half rate speech transcoding".
- [3] GSM 06.21 (ETS 300 581-3): "Digital cellular telecommunications system; Half rate speech Part 3: Substitution and muting of lost frame for half rate speech traffic channels".
- [4] GSM 06.22 (ETS 300 581-4): "Digital cellular telecommunications system (Phase 2); Half rate speech Part 4: Comfort noise aspects for half rate speech traffic channels".
- [5] GSM 06.41 (ETS 300 581-5): "Digital cellular telecommunications system (Phase 2); Half rate speech Part 5: Discontinuous transmission (DTX) for half rate speech traffic channels".
- [6] GSM 06.42 (ETS 300 581-6): "Digital cellular telecommunications system (Phase 2); Half rate speech Part 6: Voice Activity Detector (VAD) for half rate speech traffic channels".
- [7] GSM 06.07 (ETS 300 581-8): "Digital cellular telecommunications system (Phase 2); Half rate speech Part 8: Test vectors for the GSM half rate speech codec".
- [8] American National Standards Institute ANSI 9899 (1990): "Programming Language - C (ISO)".

3 Definitions and abbreviations

3.1 Definitions

Definition of terms used in this ETS can be found in GSM 06.20 (ETS 300 581-2) [2], GSM 06.21 (ETS 300 581-3) [3], GSM 06.22 (ETS 300 581-4) [4], GSM 06.41 (ETS 300 581-5) [5] and GSM 06.42 (ETS 300 581-6) [6].