



SLOVENSKI STANDARD SIST ETS 300 532 E1:2003

01-december-2003

9 j fcdg]`X][]HUb]`WV] b]`h`Y_ca i b]_UV`g_]`g]ghYa `fZUnU&L`E`DcXdcfUXj c]c]bg_Y
j Y ZY_j Yb bY`fB HA: L`g][bU]nUV`Y`dfY_`g]ghYa U; GA `f| GA `\$' `o% L

European digital cellular telecommunications system (Phase 2); Support of Dual Tone Multi-Frequency signalling (DTMF) via the GSM system (GSM 03.14)

iteh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: ^{SIST ETS 300 532 E1:2003} **ETS 300 532 Edition 1**
<https://standards.iteh.ai/catalog/standards/sist/d1042d1d-6b10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003>

ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
-----------	---	--

SIST ETS 300 532 E1:2003

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST ETS 300 532 E1:2003

<https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f025159f9ec/sist-ets-300-532-e1-2003>



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 532

September 1994

Source: ETSI TC-SMG

Reference: GSM 03.14

ICS: 33.060.30

Key words: European digital cellular telecommunications system, Global System for Mobile communications (GSM)

**European digital cellular telecommunications system (Phase 2);
Support of Dual Tone Multi-Frequency signalling (DTMF)
via the GSM system
(GSM 03.14)**

<https://standards.iteh.ai/catalog/standards/sist/d1042d1d-bb10-4103-ba06-f0025159f9ec/etsi-ets-300-532-1994>

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1994. All rights reserved.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 532 E1:2003](https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f025159f9ec/sist-ets-300-532-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f025159f9ec/sist-ets-300-532-e1-2003>

Contents

Foreword	5
1 Scope	7
2 Normative references	7
3 Definitions and abbreviations	7
4 Requirement	7
5 Cause of DTMF generation	7
6 Support of DTMF across the air interface.....	8
6.1 General	8
6.2 Specific	8
6.3 Tone durations	9
7 Effect of Handover	13
7.1 Internal Handover	13
7.2 External Handover	13
History	14

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 532 E1:2003](https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003>

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 532 E1:2003](https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003>

Foreword

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

This ETS defines the Discontinuous Reception (DRX) in the GSM system for the European digital cellular telecommunications system (Phase 2). This ETS corresponds to GSM Technical Specification (GSM-TS) GSM 03.14 version 4.1.1.

The specification from which this ETS has been derived was originally based on CEPT documentation, hence the presentation of this ETS may not be entirely in accordance with the ETSI/PNE rules.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 532 E1:2003](https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003>

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 532 E1:2003](https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/df042d1d-bb10-4103-ba06-f0025159f9ec/sist-ets-300-532-e1-2003>

1 Scope

This Technical Specification describes how DTMF (Dual Tone Multi Frequency) signals are supported in the GSM system.

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): "European digital cellular telecommunications system (Phase 2); Abbreviations and acronyms".
- [2] GSM 05.02 (prETS 300 574): "European digital cellular telecommunications system (Phase 2); Multiplexing and multiple access on the radio path".
- [3] CEPT T/CS 34-08: "Automatic sender for push-button multifrequency signalling".
- [4] CEPT T/CS 46-02: "Multifrequency signalling system to be used for push-button telephones".

3 Definitions and abbreviations

Abbreviations used in this specification are listed in GSM 01.04.

4 Requirement

Dual Tone Multi Frequency (DTMF) is an inband one out of four plus one out of four signalling system, primarily used from terminal instruments in telecommunication networks. The international recommendations which apply are CEPT recommendations T/CS 34-08 (sender) and T/CS 46-02 (receiver) as detailed in sections 6.2 and 6.3.

In the GSM system the MSC must support DTMF in the mobile to land direction.

The support of this facility in the land to mobile direction is for further study.

The use of DTMF is only permitted when the speech teleservice is being used or during the speech phase of alternate speech/data and alternate speech/facsimile teleservices. The responsibility for checking this lies in the MS.

5 Cause of DTMF generation

A user may cause a DTMF tone to be generated by depression of a key in the MS. Optionally (on a mobile station basis) manufacturers of mobile equipment may choose to allow DTMF to be controlled from a remote terminal.

The man-machine interface questions associated with this facility are not discussed further in this Technical Specification.