

**SLOVENSKI STANDARD****SIST ETS 300 370:1999****01-november-1999**

---

**Digitalne izboljšane brezvrvične telekomunikacije (DECT) - Globalni sistem mobilnih komunikacij (GSM) - Profil vzajemnega delovanja (IWP) pri DECT/GSM - Dostop in preslikava (opis postopka/protokola govorne storitve s pasovno širino 3,1 kHz)**

Digital Enhanced Cordless Telecommunications (DECT); Global System for Mobile communications (GSM); DECT/GSM Interworking Profile (IWP); Access and mapping (protocol/procedure description for 3,1 kHz speech service)

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST ETS 300 370:1999](#)  
<https://standards.iteh.ai/catalog/standards/sist/de0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999>

**Ta slovenski standard je istoveten z:** **ETS 300 370 Edition 2**

---

**ICS:**

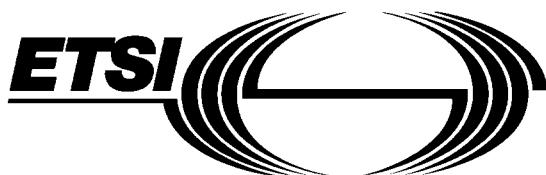
33.070.30	Digitalne izboljšane brezvrvične telekomunikacije (DECT)	Digital Enhanced Cordless Telecommunications (DECT)
33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)

**SIST ETS 300 370:1999****en**

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

SIST ETS 300 370:1999

<https://standards.iteh.ai/catalog/standards/sist/de0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999>



# **E**UROPEAN **T**ELECOMMUNICATION **S**TANDARD

ETS 300 370

February 1998

Second Edition

Source: DECT

Reference: RE/DECT-010073

ICS: 33.020

**Key words:** DECT, GSM

# Digital Enhanced Cordless Telecommunications (DECT); Global System for Mobile communications (GSM); DECT/GSM Interworking Profile (IWP); SIST ETS 300 370:1999 **Access and mapping** <https://standards.iteh.it/en/standard/sist-ets-300-370-1999-e37810cfabd3>

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 4 92 94 42 00 - Fax: +33 4 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 1998. All rights reserved.

Page 2

ETS 300 370: February 1998

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 370:1999](#)

<https://standards.iteh.ai/catalog/standards/sist/de0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999>

## Contents

Foreword .....	9
Introduction.....	9
1 Scope .....	11
2 Normative references.....	12
3 Definitions, abbreviations and symbols.....	14
3.1 DECT definitions .....	14
3.2 Abbreviations .....	16
3.3 GSM abbreviations and definitions .....	17
3.4 Symbols for status columns.....	18
4 General.....	18
5 Interworking requirements.....	19
5.1 General .....	19
5.2 Reference configurations.....	19
5.2.1 FP functional attachment to the GSM PLMN .....	19
5.3 General interworking model for FP GSM PLMN attachment.....	20
5.4 Interworking context.....	20
5.4.1 General.....	20
5.4.2 Basic interworking rules .....	21
5.4.3 Location area mapping.....	23
5.4.4 Interpretation of broadcast attributes.....	23
6 Interworking mappings, FP attached to the GSM PLMN.....	24
6.1 FP C-Plane IWU procedures .....	24
6.1.1 Call handling IWU procedures .....	24
6.1.1.1 Normal outgoing call.....	24
6.1.1.2 Emergency call .....	27
6.1.1.3 Incoming call.....	27
6.1.1.4 Normal call release initiated by the PP .....	29
6.1.1.5 Normal call release initiated by the GSM PLMN.....	30
6.1.1.6 Abnormal call release initiated by the PP .....	31
6.1.1.7 Abnormal call release initiated by the GSM network .....	32
6.1.1.8 Exceptional cases.....	33
6.1.1.9 Other.....	33
6.1.2 Other IWU procedures .....	33
6.1.2.1 Authentication procedure.....	34
6.1.2.2 Identity procedure .....	35
6.1.2.3 Location registration related procedures .....	36
6.1.2.4 Detach procedure .....	40
6.1.2.5 Temporary identity assignment procedures .....	41
6.1.2.6 Ciphering procedure .....	42
6.1.2.6.1 Ciphering rejection.....	43
6.1.2.7 CM service procedure .....	43
6.1.2.8 CM service procedure abnormal cases .....	46
6.1.2.9 External handover procedure .....	46
6.1.2.9.1 General description.....	46
6.1.2.9.2 Handover candidate procedure .....	47
6.1.2.9.3 Handover required indication.....	47
6.1.2.9.4 Handover resource allocation .....	48
6.1.2.9.5 Handover execution by FP.....	48
6.1.2.9.6 Handover request to FP-2.....	48
6.1.2.9.7 Handover confirm by FP-2 .....	48

6.1.2.9.8	Ciphering procedure .....	48
6.1.2.9.9	Handover completion .....	49
6.1.2.9.10	Sequence number handling .....	50
6.1.2.9.11	Handover reject.....	50
6.1.2.9.11.1	Handover reject by PP .....	50
6.1.2.9.11.2	Handover reject by FP-1.....	50
6.1.2.9.11.3	Handover reject by FP-2.....	50
6.1.2.9.11.4	Handover reject by MSC .....	50
6.1.2.9.11.5	Support of external handover due to O&M activities .....	51
6.1.2.9.11.6	Handling of transaction identifiers during and after external handover .....	51
6.1.3	Paging related IWU procedure .....	51
6.1.4	Other specific IWU procedures .....	52
6.1.4.1	Equipment identity IWU procedures .....	52
6.1.4.2	Miscellaneous procedures .....	52
	6.1.4.2.1     Notification of progress and interworking .....	52
	6.1.4.2.2     User notification .....	53
6.1.4.3	Handling of Dual Tone Multi–Frequency (DTMF) .....	53
6.1.5	Exception handling .....	55
6.1.5.1	Error handling.....	55
6.1.5.2	Timers .....	55
	6.1.5.2.1     Call handling IWU procedures .....	55
	6.1.5.2.2     Other IWU procedures and paging procedures .....	55
6.1.6	Message mappings.....	56
6.1.6.1	GSM to DECT .....	56
	6.1.6.1.1     AUTHENTICATION REQUEST– {AUTHENTICATION–REQUEST}.....	57
	6.1.6.1.2     AUTHENTICATION REJECT– {MM– INFO–SUGGEST}.....	57
	6.1.6.1.3     IDENTITY–REQUEST – {IDENTITY– REQUEST}.....	57
	6.1.6.1.4     TMSI REALLOCATION COMMAND – {TEMPORARY–IDENTITY–ASSIGN}..	58
	6.1.6.1.5     CIPHERING MODE COMMAND – {CIPHER–REQUEST}.....	58
	6.1.6.1.6     LOCATION UPDATING ACCEPT – {LOCATE–ACCEPT}.....	59
	6.1.6.1.7     LOCATION UPDATING REJECT – {LOCATE–REJECT} .....	59
	6.1.6.1.8     ALERTING – {CC–ALERTING}.....	59
	6.1.6.1.9     CALL–PROC – {CC–CALL–PROC}.....	60
	6.1.6.1.10     CONNECT – {CC–CONNECT} .....	60
	6.1.6.1.11     SETUP – {CC–SETUP}.....	60
	6.1.6.1.12     DISCONNECT – {CC–RELEASE} .....	61
	6.1.6.1.13     RELEASE – {CC–RELEASE–COM} ....	61
	6.1.6.1.14     RELEASE COMPLETE – {CC– RELEASE–COM} .....	61
	6.1.6.1.15     CM SERVICE REJECT – {CC– RELEASE–COM} .....	62
	6.1.6.1.16     ABORT – {CC–RELEASE–COM} .....	62
	6.1.6.1.17     CONNECT–ACK to {CC–CONNECT– ACK}.....	62
	6.1.6.1.18     PROGRESS – {CC–INFO}.....	62
	6.1.6.1.19     PROGRESS – {CC–NOTIFY}.....	63
	6.1.6.1.20     DISCONNECT – {CC–INFO} .....	63
	6.1.6.1.21     RELEASE – {CC–RELEASE}.....	64
	6.1.6.1.22     START–DTMF–ACK – {CC–INFO}.....	64
	6.1.6.1.23     START–DTMF–REJECT – {CC– INFO} .....	64
	6.1.6.1.24     STOP–DTMF–ACK – {CC–INFO}.....	64

**iTeh STANDARD PREVIEW****(standards.iteh.ai)**<https://standards.iteh.ai/catalog/standards/sist/ets-300-370-1999/e37810cfabdb3/sist-ets-300-370-1999>

	6.1.6.1.25	CM SERVICE ACCEPT – {CC–SETUP–ACK} .....	65
	6.1.6.1.26	Handover Command – {MM–INFO–ACCEPT} .....	65
	6.1.6.1.27	Clear Command – {CC–RELEASE} ....	65
	6.1.6.1.28	Handover Required Reject – {MM–INFO–REJECT} .....	65
	6.1.6.1.29	Handover Command – {MM–INFO–SUGGEST} .....	66
	6.1.6.1.30	NOTIFY – {CC–INFO} .....	66
6.1.6.2	DECT to GSM.....		67
	6.1.6.2.1	{LOCATE–REQUEST} – LOCATION–UPDATING–REQUEST.....	68
	6.1.6.2.2	{LCE–PAGE–RESPONSE} – PAGING RESPONSE .....	69
	6.1.6.2.3	{AUTHENTICATION–REPLY} – AUTHENTICATION RESPONSE .....	69
	6.1.6.2.4	{DETACH} – IMSI DETACH INDICATION .....	70
	6.1.6.2.5	{TEMPORARY–IDENTITY–ASSIGN–ACK} – TMSI REALLOCATION COMPLETE .....	70
	6.1.6.2.6	{CC–SETUP} – CM SERVICE REQUEST .....	70
	6.1.6.2.7	{IDENTITY–REPLY} – IDENTITY RESPONSE .....	71
	6.1.6.2.8	{CC–ALERTING} – ALERTING .....	71
	6.1.6.2.9	{CC–CONNECT} – CONNECT .....	72
	6.1.6.2.10	{CC–INFO} (F–02) – SETUP .....	72
	6.1.6.2.11	{CC–RELEASE} – DISCONNECT .....	73
	6.1.6.2.12	{CC–RELEASE} – RELEASE .....	73
	6.1.6.2.13	CC–RELEASE–COM – RELEASE .....	73
	6.1.6.2.14	{CC–RELEASE–COM} – RELEASE–COMPLETE .....	74
	6.1.6.2.15	{CC–SETUP} – SETUP .....	75
	6.1.6.2.16	{CC–SETUP} – EMERGENCY–SETUP .....	76
	6.1.6.2.17	{CC–RELEASE} – CM SERVICE ABORT .....	76
	6.1.6.2.18	{CC–INFO} – START–DTMF .....	77
	6.1.6.2.19	{CC–INFO} – STOP–DTMF .....	77
	6.1.6.2.20	{MM–INFO–REQUEST} – Handover required.....	77
	6.1.6.2.21	{CC–SETUP} – Handover detect .....	78
	6.1.6.2.22	{CC–CONNECT–ACK} – handover complete .....	78
	6.1.6.2.23	{MM–INFO–REQUEST} – handover failure .....	78
6.1.7	Information element mappings.....		79
6.1.7.1	GSM to DECT .....		79
	6.1.7.1.1	Mobile identity – NWK assigned identity .....	79
	6.1.7.1.2	Authentication parameter RAND – RAND .....	79
	6.1.7.1.3	Cipher key sequence number – auth type .....	80
	6.1.7.1.4	Location area identification – location area .....	80
	6.1.7.1.5	Identity type – identity type .....	81
	6.1.7.1.6	Reject cause – reject reason .....	81
	6.1.7.1.7	Bearer capabilities 1 – basic service ....	81
	6.1.7.1.8	Progress indicator – progress indicator .....	81

**iTeh STANDARD PREVIEW**  
**(standard.iteh.ai)**

SIST ETS 300 370:1999  
<https://standards.iteh.ai/catalog/standards/sist/de0445e6-ea05-4d02-87af-e37810cfabd3/sist-ets-300-370-1999>

	6.1.7.1.9	Cause – release reason .....	82
	6.1.7.1.10	Reject cause – release reason.....	82
	6.1.7.1.11	Signal – signal .....	82
	6.1.7.1.12	Keypad facility – multi display.....	82
	6.1.7.1.13	Cause – multi display .....	83
	6.1.7.1.14	Layer 3 information – fixed identity.....	83
	6.1.7.1.15	Layer 3 information – network parameter.....	84
	6.1.7.1.16	Notification indicator – multi display .....	84
6.1.7.2	DECT to GSM .....		85
	6.1.7.2.1	Portable identity – mobile identity.....	85
	6.1.7.2.2	Network assigned identity– mobile identity .....	85
	6.1.7.2.3	Location area – location area identification .....	85
	6.1.7.2.4	Cipher info – cipher key sequence number.....	86
	6.1.7.2.5	RES – Auth. parameter SRES .....	86
	6.1.7.2.6	Portable identity– mobile identity .....	86
	6.1.7.2.7	Basic service – CM service type .....	87
	6.1.7.2.8	Basic service – bearer capabilities.....	87
	6.1.7.2.9	Called–party–number – called–party– number.....	87
	6.1.7.2.10	Multi keypad – called–party–number....	88
	6.1.7.2.11	Multi keypad – keypad facility (F=10) ...	88
	6.1.7.2.12	Release reason – cause .....	88
	6.1.7.2.13	Info type – cause .....	89
	6.1.7.2.14	Model identifier– Mobile identity .....	89
6.1.8	Fields in information element coding.....		89
6.1.8.1	GSM to DECT .....		89
	6.1.8.1.1	Protocol discriminator – protocol discriminator.....	89
	6.1.8.1.2	Transaction identifier – transaction identifier.....	90
	6.1.8.1.3	Message type – message type.....	90
	6.1.8.1.4	Id for info element (IEI) – id for info element .....	90
	6.1.8.1.5	Length of contents – length of contents.....	90
	6.1.8.1.6	Type, (Mobile identity, NWK assigned identity).....	90
	6.1.8.1.7	Identity value, (mobile identity, NWK assigned identity) .....	91
	6.1.8.1.8	Y/N bit (encryption information – cipher info) .....	91
	6.1.8.1.9	RAND field (RAND – RAND).....	91
	6.1.8.1.10	Cipher key number (key sequence – cipher key number) .....	91
	6.1.8.1.11	Extended location information (location area identification – location area).....	92
	6.1.8.1.12	Identity group (identity type – identity type) .....	92
	6.1.8.1.13	Type (identity type – identity type) .....	92
	6.1.8.1.14	Type, (mobile identity, portable identity).....	93
	6.1.8.1.15	Portable user type, (mobile identity, portable identity).....	93
	6.1.8.1.16	Identity value, (mobile identity – portable identity) .....	93
	6.1.8.1.17	Reject cause value – reject reason code.....	93
	6.1.8.1.18	Coding–standard – coding–standard ...	94

**iTech STANDARD PREVIEW**  
**(standards.iteh.ai)**

<https://standards.iteh.ai/catalog/standards/sist/ets/00445eb-ead5-4dca-82af-e37810cfab3/sist-ets-300-370-1999>

	6.1.8.1.19	Information transfer capability – basic service.....	94
	6.1.8.1.20	Location – location .....	94
	6.1.8.1.21	Progress–description – progress–description.....	95
	6.1.8.1.22	Cause–value – release–reason–code ..	95
	6.1.8.1.23	Signal value – signal value .....	95
	6.1.8.1.24	Skip indicator – transaction identifier .....	96
	6.1.8.1.25	Reject cause value – release reason code .....	96
6.1.8.2	DECT to GSM.....		96
	6.1.8.2.1	Protocol discriminator –protocol discriminator .....	96
	6.1.8.2.2	Transaction identifier – transaction identifier .....	96
	6.1.8.2.3	Message type – message type .....	96
	6.1.8.2.4	Id for info element – id for info element (IEI) .....	96
	6.1.8.2.5	Length of contents – length of contents .....	96
	6.1.8.2.6	Length of identity value (portable identity – mobile identity).....	97
	6.1.8.2.7	Type, (portable identity – mobile identity) .....	97
	6.1.8.2.8	Portable user type, (portable identity – mobile identity) .....	97
	6.1.8.2.9	Identity value, (portable identity – mobile identity) .....	97
	6.1.8.2.10	Type (NWK assigned identity – mobile identity) .....	97
	6.1.8.2.11	Identity value, (NWK assigned identity – mobile identity) .....	98
	6.1.8.2.12	SIST ETS 300 370:1999 <a href="https://standards.iteh.ai/catalog/standards/sist/de0445e6-ea05-40ca-82a1-e37810cfabd3/sist-ets-300-370-1999">https://standards.iteh.ai/catalog/standards/sist/de0445e6-ea05-40ca-82a1-e37810cfabd3/sist-ets-300-370-1999</a>	98
	6.1.8.2.13	Extended location information, (location area – location area identification).....	98
	6.1.8.2.14	Cipher key number, (cipher info – cipher key sequence number) .....	98
	6.1.8.2.15	RES field (RES – auth. parameter SRES) .....	98
	6.1.8.2.16	Type, (portable identity – mobile identity) .....	99
	6.1.8.2.17	Call class, (basic service – CM service type) .....	99
	6.1.8.2.18	Basic service – information transfer capability .....	99
	6.1.8.2.19	Number-type – type-of-number .....	99
	6.1.8.2.20	Numbering-plan identification – numbering-plan identification .....	100
	6.1.8.2.21	Release–reason–code – cause–value ..	100
	6.1.8.2.22	Transaction identifier – skip indicator ..	100
6.2	FP U–Plane IWU procedures .....		101
6.2.1	Service activation .....		101
6.3	PP C–Plane IWU mappings.....		102
6.3.1	Call handling IWU procedures .....		102
6.3.1.1	Call establishment procedure .....		102
6.3.1.1.1	Outgoing call .....		102
6.3.1.1.2	Emergency call .....		102
6.3.1.1.3	Incoming call .....		102
6.3.1.2	Call release/reject procedures .....		102
6.3.2	Other IWU procedures .....		103
6.3.2.1	Authentication procedure.....		103

6.3.2.2	Identity procedure .....	104
6.3.2.3	Location registration procedure .....	104
6.3.2.3.1	General.....	104
6.3.2.3.2	Normal location updating .....	105
6.3.2.3.3	Periodic location updating .....	105
6.3.2.3.4	IMSI attach procedure.....	105
6.3.2.3.5	Generic location updating procedure .	106
6.3.2.3.5.1	Location updating initiation by the PP	106
6.3.2.3.5.2	Attempt counter.....	108
6.3.2.3.5.3	Location updating not accepted by the network.....	108
6.3.2.4	Detach procedure .....	109
6.3.2.5	Temporary identity assignment procedure.....	109
6.3.2.6	Ciphering related procedure.....	110
6.3.2.7	External handover procedure.....	110
6.3.2.7.1	Handover candidate procedure.....	110
6.3.2.7.2	Handover reference retrieval.....	111
6.3.2.7.3	Handover execution by PP .....	111
6.3.2.7.4	Handover request.....	111
6.3.2.7.5	Handover request to FP-2 .....	111
6.3.2.7.6	Handover accept by PP .....	111
6.3.2.7.7	Ciphering procedure.....	112
6.3.2.7.8	Release of old connection.....	112
6.3.2.7.9	Handover reject.....	112
6.3.2.7.10	Support of external handover due to O&M activities .....	112
6.3.2.7.11	Handling of transaction identifiers during and after external handover ....	112
6.3.3	Paging related IWU procedure .....	114
6.3.4	Message mappings.....	114
6.3.5	Information element mappings.....	115
6.3.6	Stopping of CC timers.....	115
7	Interworking connection type definitions..... <a href="https://standards.ieee.org/catalog/standards/sist/dc0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999">https://standards.ieee.org/catalog/standards/sist/dc0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999</a>	115
Annex A (normative): Derivation of the DECT ciphering key CK.....		117
A.1	Introduction .....	117
A.2	Algorithm to calculate the DECT CK from Kc .....	117
Annex B (normative): Deletion of the GSM Kc, CKSN, TMSI and LAI .....		118
Annex C (normative): Mapping of equipment identities .....		119
Annex D (informative): Physical attachment models for the FP .....		120
D.1	Introduction .....	120
D.2	Physical attachment to the MSC.....	120
D.3	Physical attachment to the BSC .....	120
D.4	Physical attachment to the BTS.....	120
Annex E (informative): Bibliography .....		121
History .....		122

## Foreword

This second edition European Telecommunication Standard (ETS) has been produced by the Digital Enhanced Cordless Telecommunications (DECT) Project of the European Telecommunications Standards Institute (ETSI).

Transposition dates	
Date of adoption of this ETS:	23 January 1998
Date of latest announcement of this ETS (doa):	31 May 1998
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	30 November 1998
Date of withdrawal of any conflicting National Standard (dow):	30 November 1998

## Introduction

This ETS is a part of a set of standards for the Digital Enhanced Cordless Telecommunications / Global System for Mobile communications (DECT/GSM) Interworking Profile (IWP) concept that includes:

- general description of service requirements, functional capabilities and information flows, ETS 300 466 [12];
- **access and mapping (protocol/procedure description for 3.1 kHz speech service), (this ETS);**
- GSM Phase 2 supplementary services implementation, ETS 300 703 [21];
- GSM Mobile Switching Centre (MSC) - DECT Fixed Part (FP), Fixed Interconnection, ETS 300 499 [13];
- implementation of bearer services, ETS 300 756 [22];
- implementation of short message services, point to point and cell broadcast, ETS 300 764 [23];
- implementation of facsimile group 3 (ETS 300 792 [24]).

This ETS is based on DECT Common Interface (CI) specification ETS 300 175, parts 1 to 8 [1] to [8] to enable DECT terminals to interwork in the public and private environment with DECT systems which are connected to a GSM core infrastructure.

In addition, this ETS is based on the DECT Generic Access Profile (GAP), EN 300 444 [10] to enable the same DECT/GSM terminal to interwork with a DECT FP complying to the GAP requirements, irrespective of whether this FP provides residential, business or public access services. General attachment requirements and speech attachment requirements are based on TBR 6 [26] and TBR 10 [27].

This ETS utilizes, in addition to the GAP only related features and procedures, the following:

- GSM authentication;
- derivation of the DECT ciphering key from the respective GSM cipher key;
- the GSM International Mobile Subscriber Identity (IMSI) and Temporary Mobile Subscriber Identity (TMSI);
- the GSM Location Area Identity (LAI);
- subscription management by use of Subscriber Identity Module (SIM); and
- adding/deleting a Public Land Mobile Network (PLMN) in the SIM forbidden PLMN list.

This ETS defines a general purpose, but strict, mobility profile in terms of features, procedures, data structures, information elements and fields within the information elements at the DECT air interface in order to achieve full inter-operability between equipment, i.e. DECT systems and terminals, which fulfil the requirements of this ETS. This ETS also fulfils the minimum requirements of the GAP enabling backwards compatibility with the respective equipment.

Information on DECT access to the GSM PLMN may be found in ETR 159 [33]. Further details on the DECT system may be found in ETR 015 [29], ETR 043 [30], and ETR 056 [31], and in ETS 300 176 [9].

Blank page

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST ETS 300 370:1999

<https://standards.iteh.ai/catalog/standards/sist/de0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999>

## 1 Scope

This European Telecommunication Standard (ETS) specifies the Digital Enhanced Cordless Telecommunications (DECT) access protocols and Fixed Part (FP) and Portable Part (PP) interworking/mappings necessary to ensure that the Global System for Mobile communications (GSM) basic voice telephony service can be provided over DECT. To enable DECT terminals to interwork with DECT systems which are connected to the GSM infrastructure, from the DECT side this ETS is based on EN 300 444 [10] and on the DECT Common Interface specification ETS 300 175 parts 1 to 8 [1] to [8] (for the cases not covered by Generic Access Profile (GAP)), from GSM side this ETS assumes interworking with GSM Public Land Mobile Network (PLMN) phase 2.

An air-interface profile is specified for a particular set of GSM services so that inter-operability of DECT equipment for these services can be achieved. Interworking functions/mappings are specified for Mobile Switching Centre (MSC) attachment for the DECT FP as the FP is using the A-interface towards the GSM MSC in the respect that the FP emulates a GSM Base Station Controller (BSC) with regards to the GSM messages which are relevant to this ETS. Interworking functions/mappings for the PP are specified for MSC environment.

The provision of the GSM Subscriber Identity Module (SIM) and DECT Authentication Module (DAM) with the GSM Application (GA) within the DECT portable are also considered.

This ETS covers a subset of ETS 300 557 [18] (GSM 04.08) and ETS 300 590 [20] (GSM 08.08) procedures as far as mapping is concerned and as far as this is required for support of 3,1 kHz speech service.

GSM functions of ETS 300 590 [20] (GSM 08.08) which, in a DECT/GSM context, are relevant at the A-interface only, are out of the scope of this ETS, as well as interfaces to non GSM networks.

## iTeh STANDARD PREVIEW

Specific interworking procedures/mappings for the support of supplementary services, data services, short message services and other GSM services are out of the scope of this ETS. Basic support for service initiation/invocation is however supported by this ETS.

A PP conforming to this ETS should be capable of distinguishing a FP conforming to this ETS from a FP conforming to the GAP and shall be able to access and react upon it accordingly.

e37810cfabd3/sist-ets-300-370-1999

## 2 Normative references

This ETS incorporates, by dated or 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] ETS 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] ETS 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".
- [3] ETS 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] ETS 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] ETS 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] ETS 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] ETS 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".
- [8] ETS 300 175-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech coding and transmission".
- [9] ETS 300 176: "Digital Enhanced Cordless Telecommunications (DECT); Approval test specification".  
*SIST ETS 300 370:1999  
<https://standards.itel.it/calcylex/standards/sist/de0445e6-ead5-4dca-82af-e37810cfabd3/sist-ets-300-370-1999>*
- [10] EN 300 444: "Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [11] ETS 300 331: "Digital European Cordless Telecommunications (DECT); DECT Authentication Module (DAM)".
- [12] ETS 300 466: "Digital European Cordless Telecommunications/Global System for Mobile Communications (DECT/GSM) interworking profile; General description of service requirements; Functional capabilities and information flows".
- [13] ETS 300 499: "Digital Enhanced Cordless Telecommunications / Global System for Mobile Communications (DECT/GSM) interworking profile; Mobile services Switching Centre (MSC) - Fixed Part (FP) interconnection".
- [14] ETS 300 508: "European digital cellular telecommunications system (Phase 2); International Mobile station Equipment Identities (IMEI) (GSM 02.16)".
- [15] ETS 300 522: "Digital cellular telecommunications system (Phase 2); Network architecture (GSM 03.02)".
- [16] ETS 300 523: "European digital cellular telecommunications system (Phase 2); Numbering, addressing and identification (GSM 03.03)".
- [17] ETS 300 551: "European digital cellular telecommunications system (Phase 2); GSM Public Land Mobile Network (PLMN) access reference configuration (GSM 04.02)".

- [18] ETS 300 557: "Digital cellular telecommunications system (Phase 2); Mobile radio interface layer 3 specification (GSM 04.08)".
- [19] ETS 300 580-1: "European digital cellular telecommunications system (Phase 2); Full rate speech processing functions (GSM 06.01)".
- [20] ETS 300 590: "Digital cellular telecommunications system (Phase 2); Mobile - services Switching Centre - Base Station System (MSC - BSS) interface; Layer 3 specification (GSM 08.08)".
- [21] ETS 300 703: "Digital Enhanced Cordless Telecommunications / Global System for Mobile communications (DECT/GSM) Inter-Working Profile (IWP); GSM phase 2 supplementary services implementation".
- [22] ETS 300 756: "Digital Enhanced Cordless Telecommunications / Global System for Mobile communications (DECT/GSM) interworking profile; Implementation of bearer services".
- [23] ETS 300 764: "Digital Enhanced Cordless Telecommunications / Global System for Mobile communications (DECT/GSM) Interworking Profile (IWP); Implementation of short message service, point-to-point and cell broadcast".
- [24] ETS 300 792: "Digital Enhanced Cordless Telecommunications / Global System for Mobile communications (DECT/GSM); DECT/GSM interworking profile; Implementation of facsimile group 3".
- [25] ISO/IEC 9646-6: "Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 6: Protocol profile test specification".  
**iTel STANDARD PREVIEW**  
**(standards.iteh.ai)**
- [26] TBR 6: "Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements".  
[SIST ETS 300 370:1999](https://standards.iteh.ai/itel/standards/tbr/17204156)
- [27] TBR 10: "Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements; telephony applications".  
[SIST ETS 300 370:1999](https://standards.iteh.ai/itel/standards/tbr/17204156)
- [28] 91/263/EEC: "Council Directive of 29 April 1991 on the approximation of the laws of the Member states concerning telecommunications terminal equipment, including the mutual recognition of their conformity". (Terminal Directive).
- [29] ETR 015: "Digital European Cordless Telecommunications (DECT); Reference document".
- [30] ETR 043: "Digital European Cordless Telecommunications (DECT); Common interface; Services and facilities requirements specification".
- [31] ETR 056: "Digital European Cordless Telecommunications (DECT); System description document".
- [32] ETR 100: "European digital cellular telecommunications system (Phase 2); Abbreviations and acronyms (GSM 01.04)".
- [33] ETR 159: "Digital European Cordless Telecommunications (DECT); Wide area mobility using the Global System for Mobile communications (GSM)".
- [34] ETR 206: "Public Switched Telephone Network (PSTN); Multifrequency signalling system to be used for push-button telephones [CEPT Recommendation T/CS 46-02 E (1985)]".