



SLOVENSKI STANDARD
SIST EN 301 649 V1.4.1:2005
01-julij-2005

8][]HJbY]nVc`'yUbYVfYnj f j] bYHYY_ca i b]_UWYfB97 HLE!`DU_YhbUfUX]`g_U
gfcf]HjYj '897 H'fB DF GŁ

Digital Enhanced Cordless Telecommunications (DECT); DECT Packet Radio Service (DPRS)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 301 649 V1.4.1:2005](#)

<https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005>

Ta slovenski standard je istoveten z: **EN 301 649 Version 1.4.1**

ICS:

33.070.30 Öð ãæ} ^ Á à[|bzæ} ^ Digital Enhanced Cordless
à| ^: c|çã } ^ Á| ^ [{ ` } ã æ} ^ Telecommunications (DECT)
ÖÖÖVD

SIST EN 301 649 V1.4.1:2005 en

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 301 649 V1.4.1:2005
[https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-
25196be58bbf/sist-en-301-649-v1-4-1-2005](https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005)

ETSI EN 301 649 V1.4.1 (2004-12)

European Standard (Telecommunications series)

Digital Enhanced Cordless Telecommunications (DECT); DECT Packet Radio Service (DPRS)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 301 649 V1.4.1:2005](https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005)
<https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005>



Reference

REN/DECT-000237

Keywords

data, DECT, multimedia, packet mode, profile

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse 06 N° 7303/88

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 301 649 V1.4.1:2005](#)
<https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be584f4/standards/sist/en/02632220-50e1-4427-bff5-25196be584f4/v1-4-1-2005>
Important notice

Individual copies of the present document can be downloaded from:
<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.
Information on the current status of this and other ETSI documents is available at
<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:
http://portal.etsi.org/chaircor/ETSI_support.asp

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 2004.
All rights reserved.

DECT™, PLUGTESTS™ and UMTS™ are Trade Marks of ETSI registered for the benefit of its Members.
TIPHON™ and the **TIPHON logo** are Trade Marks currently being registered by ETSI for the benefit of its Members.
3GPP™ is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

Contents

Intellectual Property Rights	11
Foreword.....	11
1 Scope	12
2 References	12
3 Definitions, symbols and abbreviations	14
3.1 Definitions	14
3.2 Symbols	15
3.3 Abbreviations	16
4 Description of services	18
4.1 Data services structure.....	18
4.2 Service objectives.....	19
4.3 Service definitions	20
4.3.1 PHL service definitions	20
4.3.2 MAC service definitions	20
4.3.3 DLC service definitions	21
4.3.4 NWK feature definitions	22
4.3.5 Application service definitions	24
4.3.6 Distributed Communication.....	24
4.3.7 Management Entity.....	24
4.4 General Class/Service/Interworking support.....	25
5 PHL requirements	25
5.1 General requirements	25
5.2 Modulation schemes.....	25
6 MAC layer requirements.....	26
6.1 MAC services.....	26
6.2 MAC service to procedure mapping.....	26
7 DLC-layer requirements.....	28
7.1 DLC services	28
7.2 DLC feature to procedure mapping.....	29
8 NWK layer requirements.....	30
8.1 NWK features.....	30
8.2 NWK feature to procedure mapping	31
8.3 Application features	34
8.4 Application feature to procedure mapping	34
8.5 Distributed Communications.....	34
9 Management Entity Requirements	35
9.1 Introduction	35
9.2 Description of the DPRS operation principles.....	35
9.2.1 General.....	35
9.2.2 Service class 1.....	35
9.2.3 Service class 2.....	36
9.3 Resource and physical connection management	36
9.3.1 Requirements applicable to the Fixed Part (FP)	36
9.3.1.1 Conditions for resumption and management procedures	36
9.3.1.1.1 General	36
9.3.1.1.2 ME procedures for FT initiated connection resumption	36
9.3.1.2 Connection Suspension conditions.....	37
9.3.1.2.1 General	37
9.3.1.2.2 Connection suspension due to no data activity	38
9.3.1.2.3 Connection suspension due to violation of the minimum number of bearers (MAC Bandwidth command)	38

9.3.1.2.4	Connection suspension by loss of all received bearers.....	38	
9.3.1.2.5	Activation of Fast Scan mode after Connection suspension.....	38	
9.3.1.3	Conditions for Bandwidth modification.....	38	
9.3.1.3.1	General	38	
9.3.2	Requirements applicable to the Portable Part (PP)	38	
9.3.2.1	Conditions for connection resumption	38	
9.3.2.1.1	Procedure for PT initiated Connection resumption	39	
9.3.2.1.2	"RFP-busy-for-data" flag.....	39	
9.3.2.1.3	Waiting time for collision avoidance after deactivation of "RFP-busy-for-data" flag.....	39	
9.3.2.1.4	Bandwidth after resumption	39	
9.3.2.1.5	Resumption rejection by the FP.....	39	
9.3.2.2	Conditions for Connection Suspension	39	
9.3.2.2.1	General	39	
9.3.2.2.2	Connection suspension due to no data activity.....	40	
9.3.2.2.3	Connection suspension due to violation of the minimum number of bearers (MAC Bandwidth command).....	40	
9.3.2.2.4	Connection suspension by loss of all received bearers.....	40	
9.3.2.2.5	Activation of fast scan mode after Connection suspension	40	
9.3.2.3	Conditions for Bandwidth modification.....	40	
9.3.2.3.1	General	40	
9.4	Logical Connection management	40	
9.4.1	Requirements for class 1 devices.....	41	
9.4.2	Requirements for class 2 devices.....	41	
9.4.2.1	General Description	41	
9.4.2.2	Normal procedures of virtual call set-up and release	41	
9.4.2.3	Abnormal release of Virtual Calls.....	41	
9.4.2.4	Release of Logical Connection	41	
9.4.3	The handshake (stay alive) procedure.....	41	
10	MAC layer procedures	(standards.iteh.ai)	42
10.1	General	42	
10.1.1	Frame and multiframe structure.....	42	
10.1.2	Bit mappings.....	42	
10.1.3	Time multiplexers	43	
10.1.4	Scrambling	43	
10.1.5	Error control.....	43	
10.1.6	A-tail identifications	43	
10.1.7	B-field identifications	43	
10.1.8	RFP idle receiver scan sequence	43	
10.1.9	PT receiver scan sequence	44	
10.1.10	PP states and state transitions	44	
10.1.11	Identities	44	
10.2	Non continuous broadcast	44	
10.2.1	Request for specific Q channel information.....	44	
10.2.2	Request for a new dummy	44	
10.3	Downlink broadcast.....	45	
10.3.1	N _T messages.....	45	
10.3.2	Q _T messages.....	45	
10.3.2.1	Q _T - static system information.....	45	
10.3.2.2	Q _T - FP capabilities	46	
10.3.2.2.1	Standard FP Capabilities	46	
10.3.2.2.2	Extended FP Capabilities.....	47	
10.3.2.3	Q _T - SARI list contents.....	47	
10.3.2.4	Multiframe number	47	
10.4	Paging broadcast	48	
10.4.1	Paging message formats.....	48	
10.4.1.1	Long or full page message format.....	48	
10.4.1.2	Short page message format	48	
10.4.1.3	Zero length page message format.....	49	
10.4.1.4	MAC resume page message format	49	
10.4.1.5	MAC layer information in zero and short length paging messages.....	50	
10.4.1.5.1	RFP status.....	50	

10.4.2	MAC layer information messages procedures	51
10.4.2.1	Blind slot information for circuit mode service	51
10.4.2.2	Bearer handover/replacement information	51
10.4.2.3	Other bearer position.....	51
10.4.2.4	Recommended other bearer position.....	51
10.4.2.5	Dummy or C/L bearer position	51
10.4.2.6	C/L bearer position.....	51
10.4.2.7	RFP-status and Modulation Types	52
10.4.2.8	Blind slot information for packet mode service	52
10.4.3	Normal paging	52
10.4.4	Fast paging.....	52
10.4.5	Low duty cycle paging.....	52
10.4.6	MAC paging	52
10.5	Logical Connection Setup	52
10.6	Logical Connection Release	52
10.7	Connection Modification.....	53
10.7.1	Connection Modification to change bandwidth	53
10.7.1.1	Bandwidth negotiation	53
10.7.1.2	Bandwidth modification.....	55
10.7.1.3	Suspend	55
10.7.1.4	Resume.....	57
10.7.1.5	Bandwidth modification rejection	57
10.7.2	Connection modification to change service type	58
10.7.3	Connection modification to change the modulation scheme	58
10.7.4	ATTRIBUTES_T.req/cfm	59
10.8	Physical Connection Setup	59
10.8.1	Single bearer physical connection setup	59
10.8.2	Multibearer Physical Connection setup	59
10.9	Physical Connection Release.....	60
10.10	Bearer Setup	60
10.10.1	Single duplex bearer setup	60
10.10.1.1	PT initiated Single duplex bearer setup <small>SIST EN 301 649 V1.4.1:2005</small>	61
10.10.1.2	FT initiated Single duplex bearer setup <small>http://standards.iteh.ai/standards/sist/02632220-50e1-4427-bff5-001000000005</small>	61
10.10.1.3	Usage of channel list messages for single duplex bearer setup <small>001000000005</small>	62
10.10.2	Double simplex bearer setup.....	62
10.11	Bearer Release.....	64
10.11.1	Unacknowledged release	64
10.11.2	Acknowledged release	64
10.11.3	Fast release.....	65
10.12	Advanced connection handover	65
10.13	I channel operation	65
10.13.1	Protected I channel error_detect mode.....	65
10.13.2	Protected I channel error_correct mode	66
10.13.2.1	Unilateral jump	66
10.13.2.2	Bearer reset	66
10.13.3	Connectionless SI _P mode	66
10.14	C channel operation.....	66
10.14.1	C _S channel.....	66
10.14.2	C _F channel.....	67
10.15	Encryption	67
10.15.1	Encryption process - initialization and synchronization	67
10.15.2	Encryption mode control	68
10.15.2.1	M _T message	69
10.15.2.2	PT procedure for enabling encryption.....	69
10.15.2.3	PT procedure for disabling encryption	69
10.15.3	Handover encryption process.....	69
10.16	Quality control.....	69
10.16.1	RFPI handshake	69
10.16.2	PT frequency correction.....	69
10.16.3	Bearer quality report	70
10.16.4	Bearer and connection control	70
10.16.5	A-CRC handshake	71

10.17	Physical channel selection.....	71
10.18	Bearer replacement.....	71
10.19	Bearer handover request.....	71
10.20	G _F channel	72
10.20.1	G _F channel data	72
11	DLC layer procedures	72
11.1	LU10 Enhanced Frame RELay service (EFREL)	72
11.1.1	Window size	72
11.1.2	U-plane transmission class 2.....	73
11.1.2.1	Sending side procedures.....	73
11.1.2.2	Receiving side procedure	73
11.2	FU 10 framing (FU10a, FU10b, FU10c).....	73
11.2.1	FU10a	73
11.2.2	FU10b	73
11.2.3	FU10c	74
11.3	Class A operation	74
11.3.1	Class A link establishment.....	74
11.3.1.1	Lower Layer Management Entity (LLME) establishment of a MAC connection.....	74
11.3.2	Class A acknowledged information transfer	76
11.3.3	Class A link release.....	76
11.3.4	Class A link re-establishment	76
11.4	Class U operation	76
11.4.1	Class U use of LLN for unacknowledged information transfer	77
11.4.2	Class U link establishment.....	77
11.4.3	Class U unacknowledged information transfer	77
11.4.4	Class U unacknowledged release	77
11.5	Lc frame delimiting and sequencing service	77
11.5.1	C _S channel fragmentation and recombination	77
11.5.2	C _F channel fragmentation and recombination	77
11.5.3	Selection of logical channels (C _S and C _F)	77
11.6	Broadcast Lb service	77
11.6.1	Normal broadcast.....	77
11.6.2	Expedited broadcast.....	79
11.7	Connection handover.....	79
11.7.1	Class A connection handover.....	79
11.7.1.1	Voluntary handover.....	80
11.7.1.2	Associated procedure	80
11.7.1.2.1	LLME connection handover management.....	80
11.7.1.3	Exceptional case.....	80
11.7.1.3.1	Receipt of a request for link release	80
11.8	Connection modification	80
11.9	Encryption switching.....	82
11.9.1	Associated procedure.....	82
11.9.1.1	Providing Encryption key to the MAC layer.....	82
11.9.2	Exceptional cases.....	82
11.9.2.1	Encryption fails	82
11.9.2.2	Connection handover of ciphered connections.....	82
11.10	Connectionless point-to-multipoint transmission	82
12	NWK layer procedures	83
12.1	Outgoing call request.....	83
12.2	Incoming call request	83
12.3	Terminal capability indication.....	84
12.4	Internal call keypad	85
12.5	Call Resources/Parameters negotiation	85
12.5.1	Default values	92
12.5.2	Exceptional cases	94
12.6	Bandwidth Change	94
12.6.1	Associated procedures	97
12.6.1.1	Timer F/P < CC_service > management	97
12.6.2	Exceptional cases	97

12.6.2.1	Service change request is rejected.....	97
12.6.3	Examples	97
12.7	IWU-attributes change	98
12.8	Dynamic Parameters Allocation.....	99
12.8.1	Default Dynamic Parameters Allocation	103
12.9	Cipher-switching initiated by PT.....	103
12.10	Temporary Identity Assign.....	104
12.10.1	Associated procedures	104
12.10.1.1	Timer F-< MM_ident.1 > management.....	104
12.10.2	Exceptional cases.....	105
12.10.2.1	PT rejects the identity assignment.....	105
12.11	Indirect FT initiated link establishment.....	105
12.12	Fast paging	106
12.13	Collective and Group Ringing.....	106
12.14	Direct FT initiated link establishment.....	106
12.14.1	Exceptional case	108
12.14.1.1	Link establishment failure	108
12.15	LCE Resume Paging	108
12.16	Broadcast attributes management.....	109
12.17	U-plane handling	110
12.18	Management of MM procedures	111
12.19	Management - PMID	111
12.20	Length of NWK layer messages.....	111
12.21	Identities	111
12.22	Application media protocol support indication	111
13	Distributed Communications.....	112
13.1	Void.....	112
13.2	General Requirements	112
13.2.1	DCDL-net	112
13.2.2	Subscription	112
13.2.3	Communication.....	113
13.3	Procedure description.....	113
13.3.1	<i>https://standards.iteh.ai/catalog/standards/sist/02632220-50c1-4427-bf95</i>	113
13.3.2	HyP Identities	113
13.3.3	Membership Access Rights Allocation.....	113
13.3.4	Re-initialization of membership access rights	113
13.3.5	Members Data Transfer	113
13.3.6	Presence/Absence Indication	113
13.3.7	Bandwidth management	113
13.3.8	Direct Link Establishment	113
13.3.9	Indirect Link Establishment	114
13.3.9.1	MASTER management	114
13.3.9.2	MASTER assign	114
13.3.9.3	MASTER Change	114
13.3.10	DCDL-net System bearer management.....	114
13.3.11	Common Subscription Database management.....	114
13.4	Handover issues	114
13.5	Elements of Messages/Information Elements	114
	Usage of PPs or FPs in DCDL-net	114
Annex A (normative):	Operating parameters	115
A.1	ME operating parameters	115
A.1.1	Constants (applicable to class 1 and class 2 devices)	115
A.1.2	Equations	115
A.1.2.1	Waiting time for collision avoidance (WtA).....	115
A.1.2.1.1	Description	115
A.1.2.1.2	Formula	115
A.1.2.2	Waiting time for congestion avoidance (WtB)	116
A.1.2.2.1	Description	116
A.1.2.2.2	Formula	116
A.1.3	Variable parameters (class 2 systems only).....	116
A.1.3.1	Parameters set by the FP (class 2 systems only)	116

A.1.3.2	Negotiable parameters between FP and PP (class 2 systems only).....	117
A.1.3.2.1	Conditions of negotiation	117
A.2	Configuration capabilities for class 1 devices	118
Annex B (normative):	Interworking conventions for the Frame Relay (FREL) service.....	119
B.1	Scope of this annex.....	119
B.1.1	Typical configuration for the Frame Relay service	119
B.2	Specific codings for mobility class 2	120
B.2.1	IWU-ATTRIBUTES information element coding	120
B.2.1.1	Profile subtype attributes (octet 6) of IWU-ATTRIBUTES information element.....	121
B.2.1.1.1	ISO/IEC 8802-3/Ethernet.....	121
B.2.1.1.2	ISO/IEC 8802-5 (Token-Ring).....	122
B.2.1.1.3	DECT Generic media encapsulation	122
B.2.2	IWU attributes implemented	123
B.3	Generic Frame Relay service interworking conventions.....	123
B.3.1	DLC U-plane service.....	123
B.3.2	Transmission bit order.....	123
B.3.3	Support of SDU size.....	123
B.3.4	SI _P connectionless downlink	123
B.4	ISO/IEC 8802-3/Ethernet	124
B.4.1	Typical configuration	124
B.4.1.1	Examples of implementation of the external transport network	124
B.4.2	Specific interworking conventions	124
B.4.2.1	Use of the connectionless downlink SI _P service	125
B.4.2.2	Special conventions for mobility class 1 systems	125
B.5	ISO/IEC 8802-5 (Token Ring)	125
B.5.1	Typical configuration	125
B.5.1.1	Examples of implementation of the external transport network	126
B.5.2	Specific interworking conventions	126
B.5.2.1	Special conventions for mobility class 1 systems	126
B.5.2.2	Use of the connectionless downlink SI _P service	127
B.6	Internet protocol	127
B.6.1	Typical configuration	127
B.6.1.1	Examples of implementation of the external transport network	127
B.6.2	Specific interworking conventions	127
B.6.2.1	Special conventions for mobility class 1 systems	127
B.7	Point-to-Point Protocol	128
B.7.1	Typical configuration	128
B.7.1.1	Examples of implementation of the external transport network	128
B.7.2	Specific interworking conventions	128
B.7.2.1	Special conventions for mobility class 1 systems	128
B.8	Interworking conventions for DECT generic media encapsulation transport mechanism	128
B.8.1	General	128
B.8.2	Interworking Requirements	129
B.8.3	Application protocols implementation requirements.....	131
B.8.3.1	HTTP	131
B.8.3.2	Electronic mail.....	132
B.8.3.3	ODAP interworking	132
Annex C (normative):	Interworking conventions character-oriented services	134
C.1	Scope	134
C.1.1	Scenario A	136
C.1.2	Scenario B	136
C.2	Specific coding for mobility class 2	137
C.2.1	IWU-Attribute coding	137

C.2.2	Default-values	139
C.2.3	Negotiation of the V.24-parameters	140
C.3	Generic interworking conventions	140
C.3.1	PAD functionality.....	140
C.3.1.1	Character formatting	140
C.3.2	Support of SDU size.....	141
C.4	V.24 circuits	141
C.4.1	General	141
C.4.2	Encapsulation	142
C.4.2.1	Description.....	142
C.4.2.2	Framing.....	142
C.4.2.3	Coding of encapsulation	142
C.4.2.3.1	DCE-emulation side interpretation.....	142
C.4.2.3.2	DTE-emulation side interpretation.....	143
C.4.2.4	SDU Structure.....	143
C.4.3	Interworking procedures and conventions.....	144
C.4.3.1	General.....	144
C.4.3.1.1	Data forwarding conditions	144
C.4.3.1.2	Dataflow Control.....	144
C.4.3.1.2.1	Software dataflow control	144
C.4.3.1.2.2	Hardware dataflow control	144
C.4.3.1.3	Transmission of U-plane data procedure.....	144
C.4.3.1.4	Receive of U-plane data procedure	144
C.4.3.1.5	V.24 signalling	145
C.4.3.1.6	Configuration a V.24 interface during a Connection	145
C.4.3.2	Fall back procedure	145
C.4.3.3	Procedure at the DCE-emulation side IWU	145
C.4.3.3.1	DTE-initiated VC establishment	145
C.4.3.3.2	DCE-initiated VC establishment	145
C.4.3.3.3	V.24 call release	146
C.4.3.4	Procedure at the DTE-emulation side IWU	146
C.4.3.4.1	https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005	146
C.4.3.4.2	DCE-initiated VC establishment	146
C.4.3.4.3	V.24 call release	146
C.5	Definition of User Control Information Elements.....	146
C.5.1	Mandatory UIEs	146
C.5.2	Optional UIEs.....	147
C.5.3	Information Element Identifier.....	147
Annex D (normative):	Double slot support.....	148
D.1	General	148
D.2	Requirements.....	148
D.2.1	Frame structure and slot numbering	148
D.2.2	Multibearer connections	148
D.2.3	Modulation schemes.....	148
D.2.4	Connection Services	148
D.2.5	Bit MAPs.....	148
D.2.6	C-MUX	148
D.2.7	Scrambling	148
D.2.8	CRC.....	149
D.2.9	B-field type identification	149
D.2.10	Fixed Part capabilities	149
D.2.11	Portable Part capabilities	149
D.2.12	Blind slot information	149
D.2.13	Advanced connection control.....	149
D.2.14	C _F channel	149
D.2.15	Call establishment	149
D.2.16	Slot type modification during a call	149

Annex E (informative):	Bibliography	150
History		151

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 301 649 V1.4.1:2005
<https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005>

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://webapp.etsi.org/IPR/home.asp>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This European Standard (Telecommunications series) has been produced by ETSI Project Digital Enhanced Cordless Telecommunications (DECT).

National transposition dates	
Date of adoption of this EN:	10 December 2004
Date of latest announcement of this EN (doa):	31 March 2005
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 September 2005
Date of withdrawal of any conflicting National Standard (dow):	30 September 2005

SIST EN 301 649 V1.4.1:2005
<https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005>

1 Scope

The present document defines the standard for packet radio services for Digital Enhanced Cordless Telecommunications (DECT) systems conforming to EN 300 175, parts 1 [1] to 7 [7]. It is the basis of profiles, which define more specific applications (Application Specific Access Profiles ASAPs), aimed at the connection of terminals supporting packet data services to a fixed infrastructure, both private and public.

The present document defines a basic service, with the service classes 1 or 2. Service class 1 provides for applications in closed user groups, whereas service class 2 is intended for use in private and public roaming applications.

The annexes to the present document contain the conventions for interworking of the frame-relay and character oriented services, as well as, other relevant information.

The present document defines the additional requirements on the Physical Layer (PHL), Medium Access Control (MAC) layer, Data Link Control (DLC) layer and Network (NWK) layer of DECT. The standard also specifies Management Entity (ME) requirements, which ensure the efficient use of the DECT spectrum.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

SIST EN 301 649 V1.4.1:2005
Referenced documents which are not found to be publicly available in the expected location might be found at
<https://standards.iteh.ai/catalog/standards/sist/02632220-50e1-4427-bff5-25196be58bbf/sist-en-301-649-v1-4-1-2005>

- [1] ETSI EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] ETSI EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".
- [3] ETSI EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] ETSI EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] ETSI EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] ETSI EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] ETSI EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".
- [8] ETSI EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [9] ETSI EN 300 824: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP)".

- [10] ISO/IEC 8802-3: "Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications".
- [11] ISO/IEC 8802-5: "Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 5: Token ring access method and physical layer specifications".
- [12] IETF RFC 791 (1981): "Internet Protocol", J. Postel.
- [13] IETF RFC 1661 (1994): "The Point-to-Point Protocol (PPP)", W. Simpson.
- [14] IETF RFC 1662 (1994): "PPP in HDLC-like Framing", W. Simpson.
- [15] ITU-T Recommendation V.24 (2000): "List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)".
- [16] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [17] IETF RFC 768: "User Datagram Protocol".
- [18] IETF RFC 793: "Transmission Control Protocol".
- [19] IETF RFC 1939: "Post Office Protocol - Version 3".
- [20] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".
- [21] IETF RFC 2046: "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types".
- [22] IETF RFC 2049: "Multipurpose Internet Mail Extensions (MIME) Part Five: Conformance Criteria and Examples".
- [23] IETF <https://tools.ietf.org/html/rfc2326#rfc.section.5.1>
- [24] IETF RFC 2616: "Hypertext Transfer Protocol -- HTTP/1.1".
- [25] IETF RFC 2633: "S/MIME Version 3 Message Specification".
- [26] IETF RFC 2821: "Simple Mail Transfer Protocol".
- [27] IETF RFC 2822: "Internet Message Format".
- [28] IETF RFC 3261: "SIP: Session Initiation Protocol".
- [29] IETF RFC 3232: "Assigned Numbers".
- [30] IETF RFC 3550: "RTP: A Transport Protocol for Real-Time Applications".
- [31] Void.
- [32] ETSI TS 102 342: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Multimedia Communication System; Open Data Access Profile (ODAP)".
- [33] ETSI TS 102 265: "Digital Enhanced Cordless Telecommunications (DECT); DECT Access to IP networks".