



SLOVENSKI STANDARD
SIST EN 300 175-5 V2.6.1:2015
01-november-2015

**Digitalne izboljšane brezvrvične telekomunikacije (DECT) - Skupni vmesnik (CI) - 5.
del: Omrežna plast (NWK)**

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5:
Network (NWK) layer

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: **EN 300 175-5 V2.6.1**
<https://standards.iteh.ai/catalog/standards/sist/221791bf-e25c-416f-a834-188642ce4769/sist-en-300-175-5-v2-6-1-2015>

ICS:

33.070.30	Digitalne izboljšane brezvrvične telekomunikacije (DECT)	Digital Enhanced Cordless Telecommunications (DECT)
-----------	--	---

35.100.30	Omrežni sloj	Network layer
-----------	--------------	---------------

SIST EN 300 175-5 V2.6.1:2015	en,fr,de
--------------------------------------	-----------------

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 300 175-5 V2.6.1:2015

<https://standards.iteh.ai/catalog/standards/sist/22f79fbf-e25c-416f-a834-188642ce4769/sist-en-300-175-5-v2-6-1-2015>

ETSI EN 300 175-5 V2.6.1 (2015-07)



Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer

[SIST EN 300 175-5 V2.6.1:2015](https://standards.iteh.ai/catalog/standards/sist/22f79fbf-e25c-416f-a834-188642ce4769/sist-en-300-175-5-v2-6-1-2015)

<https://standards.iteh.ai/catalog/standards/sist/22f79fbf-e25c-416f-a834-188642ce4769/sist-en-300-175-5-v2-6-1-2015>

Reference

REN/DECT-000304-5

Keywords

DECT, IMT-2000, mobility, radio, TDD, TDMA**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° 7803/88

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 300 175-5 V2.6.1:2015<https://standards.iteh.ai/catalog/standards/sist/22f79bf-e25c-416f-a834-188642ce4740/etsi-en-300-175-5-v2-6-1-2015>**Important notice**

The present document can be downloaded from:

<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (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:

<https://portal.etsi.org/People/CommiteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2015.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP™** and **LTE™** are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	16
Foreword.....	16
Modal verbs terminology.....	16
1 Scope	17
2 References	17
2.1 Normative references	17
2.2 Informative references.....	22
3 Definitions, symbols and abbreviations	23
3.1 Definitions.....	23
3.2 Symbols and abbreviations.....	23
4 Overview of the NWK layer	27
5 Overview of procedures	29
5.1 General	29
5.2 Overview of Call Control (CC).....	29
5.2.1 General.....	29
5.2.2 Call establishment.....	30
5.2.2.1 Call setup	30
5.2.2.2 Service negotiation.....	30
5.2.3 Call connect	30
5.2.4 Call information.....	31
5.2.5 Service change.....	31
5.2.6 Call release.....	31
5.3 Overview of Supplementary Services (SS)	31
5.3.1 General.....	31
5.3.2 Keypad protocol.....	32
5.3.3 Feature key management protocol.....	32
5.3.4 Functional protocol.....	32
5.4 Overview of Connection Oriented Message Service (COMS).....	33
5.4.1 General.....	33
5.4.2 COMS establishment	33
5.4.3 Service negotiation	33
5.4.4 COMS connect.....	33
5.4.5 COMS data transfer	33
5.4.6 COMS suspend and resume	34
5.4.7 COMS release	34
5.5 Overview of ConnectionLess Message Service (CLMS)	34
5.5.0 General.....	34
5.5.1 Fixed length message service.....	34
5.5.2 Variable length message service.....	34
5.6 Overview of Mobility Management (MM)	35
5.6.1 General.....	35
5.6.2 Identity procedures	35
5.6.3 Authentication procedures	35
5.6.4 Location procedures.....	36
5.6.5 Access rights procedures	36
5.6.6 Key allocation procedure	37
5.6.7 Parameter retrieval procedure.....	37
5.6.8 Cipherring related procedure.....	37
5.6.9 External protocol information procedure.....	37
5.7 Overview of Link Control Entity (LCE)	37
5.7.1 General.....	37
5.7.2 Data Link Endpoint Identifier (DLEI)	38
5.7.3 Data link establishment.....	38
5.7.4 Data link re-establishment	38

5.7.5	Data link release	39
5.7.6	Data link suspend and resume.....	39
5.7.7	Queuing of messages	39
5.7.8	Request paging.....	39
6	Message functional definitions.....	40
6.1	Overview of message structures	40
6.1.1	Messages.....	40
6.1.2	Information elements	40
6.2	Message summaries.....	41
6.2.1	Summary of CC messages	41
6.2.2	Summary of CISS messages	41
6.2.3	Summary of COMS messages	41
6.2.4	Summary of CLMS messages.....	42
6.2.5	Summary of MM messages	42
6.2.6	Summary of LCE messages	42
6.3	S-FORMAT message functional contents.....	43
6.3.1	S-FORMAT message overview.....	43
6.3.2	CC-messages.....	43
6.3.2.1	{CC-SETUP}	43
6.3.2.2	{CC-INFO}	45
6.3.2.3	{CC-SETUP-ACK}	46
6.3.2.4	{CC-CALL-PROC}	47
6.3.2.5	{CC-ALERTING}	48
6.3.2.6	{CC-CONNECT}	49
6.3.2.7	{CC-CONNECT-ACK}	50
6.3.2.8	{CC-RELEASE}	50
6.3.2.9	{CC-RELEASE-COM}	51
6.3.2.10	{CC-SERVICE-CHANGE}	52
6.3.2.11	{CC-SERVICE-ACCEPT}	53
6.3.2.12	{CC-SERVICE-REJECT}	53
6.3.2.13	{CC-NOTIFY}	54
6.3.2.14	{IWU-INFO}	54
6.3.3	SS-messages (call related and call independent).....	55
6.3.3.1	{FACILITY}	55
6.3.3.2	{HOLD}	56
6.3.3.3	{HOLD-ACK}	56
6.3.3.4	{HOLD-REJECT}	57
6.3.3.5	{RETRIEVE}	57
6.3.3.6	{RETRIEVE-ACK}	58
6.3.3.7	{RETRIEVE-REJECT}	58
6.3.3.8	{CISS-REGISTER}	59
6.3.3.9	{CISS-RELEASE-COM}	60
6.3.4	COMS-messages.....	60
6.3.4.1	{COMS-SETUP}	60
6.3.4.2	{COMS-INFO}	61
6.3.4.3	{COMS-ACK}	61
6.3.4.4	{COMS-CONNECT}	62
6.3.4.5	{COMS-RELEASE}	62
6.3.4.6	{COMS-RELEASE-COM}	63
6.3.4.7	{COMS-NOTIFY}	63
6.3.5	CLMS-message.....	64
6.3.5.1	{CLMS-VARIABLE}	64
6.3.6	MM-messages	65
6.3.6.1	{ACCESS-RIGHTS-ACCEPT}	65
6.3.6.2	{ACCESS-RIGHTS-REJECT}	65
6.3.6.3	{ACCESS-RIGHTS-REQUEST}	66
6.3.6.4	{ACCESS-RIGHTS-TERMINATE-ACCEPT}	66
6.3.6.5	{ACCESS-RIGHTS-TERMINATE-REJECT}	67
6.3.6.6	{ACCESS-RIGHTS-TERMINATE-REQUEST}	67
6.3.6.7	{AUTHENTICATION-REJECT}	68
6.3.6.8	{AUTHENTICATION-REPLY}	68

6.3.6.9	{ AUTHENTICATION-REQUEST }	69
6.3.6.10	{ CIPHER-REJECT }	70
6.3.6.11	{ CIPHER-REQUEST }	70
6.3.6.12	{ CIPHER-SUGGEST }	71
6.3.6.13	{ DETACH }	71
6.3.6.14	{ IDENTITY-REPLY }	72
6.3.6.15	{ IDENTITY-REQUEST }	72
6.3.6.16	{ KEY-ALLOCATE }	73
6.3.6.17	{ LOCATE-ACCEPT }	73
6.3.6.18	{ LOCATE-REJECT }	74
6.3.6.19	{ LOCATE-REQUEST }	74
6.3.6.20	{ MM-INFO-ACCEPT }	75
6.3.6.21	{ MM-INFO-REJECT }	75
6.3.6.22	{ MM-INFO-REQUEST }	76
6.3.6.23	{ MM-INFO-SUGGEST }	76
6.3.6.24	{ TEMPORARY-IDENTITY-ASSIGN }	77
6.3.6.25	{ TEMPORARY-IDENTITY-ASSIGN-ACK }	78
6.3.6.26	{ TEMPORARY-IDENTITY-ASSIGN-REJ }	78
6.3.6.27	{ MM-IWU }	79
6.3.6.28	{ MM-NOTIFY }	79
6.3.7	LCE-messages	80
6.3.7.1	{ LCE-PAGE-RESPONSE }	80
6.3.7.2	{ LCE-PAGE-REJECT }	80
6.4	B-FORMAT message functional contents	80
6.4.1	B-FORMAT message overview	80
6.4.2	{ LCE-REQUEST-PAGE }	81
6.4.3	{ CLMS-FIXED }	81
7	S-FORMAT message structures	82
7.1	Overview	82
7.2	Protocol Discrimination (PD) element	82
7.3	Transaction Identifier (TI) element	83
7.4	Message type element	84
7.4.0	General	84
7.4.1	Messages for CC	84
7.4.2	Messages for SS	84
7.4.3	Messages for COMS	85
7.4.4	Messages for CLMS	85
7.4.5	Messages for MM	85
7.4.6	Messages for LCE	86
7.5	Other information elements	86
7.5.1	Coding rules	86
7.5.2	Extensions of codesets	88
7.5.3	Locking shift procedure	88
7.5.4	Non-locking shift procedure	89
7.5.5	Display and keypad elements	89
7.5.6	Repeated elements	90
7.6	Fixed length information elements	90
7.6.1	Summary	90
7.6.2	Sending complete, delimiter request and use TPUI	90
7.6.3	Repeat indicator	91
7.6.4	Basic service	91
7.6.5	Single display	92
7.6.6	Single keypad	93
7.6.7	Release reason	93
7.6.8	Signal	94
7.6.9	Timer restart	95
7.6.10	Test hook control	95
7.7	Variable length information elements	96
7.7.1	Summary	96
7.7.2	Allocation type	97
7.7.3	Alphanumeric	98

STANDARD PREVIEW
(standards.ietf.ai)

SIST EN 300 175-5 V2.6.1:2015
<https://standards.ietf.ai/catalog/standards/sist/22f79bf7e25c416fa834-188642cc4769/sist-en-300-175-5-v2-6-1-2015>

7.7.4	Auth type	99
7.7.5	Call attributes.....	100
7.7.6	Call identity	104
7.7.7	Called party number.....	105
7.7.8	Called party subaddress	106
7.7.9	Calling party number	106
7.7.10	Cipher info	107
7.7.11	Connection attributes	108
7.7.12	Connection identity.....	112
7.7.13	Duration	113
7.7.14	End-to-end compatibility	113
7.7.15	Facility	116
7.7.16	Feature activate.....	117
7.7.17	Feature indicate.....	119
7.7.18	Fixed identity	121
7.7.19	Identity type.....	122
7.7.20	Info type.....	123
7.7.21	InterWorking Unit (IWU) attributes	124
7.7.22	IWU packet.....	128
7.7.23	IWU to IWU	130
7.7.24	Key.....	132
7.7.25	Location area	132
7.7.26	Multi-display.....	133
7.7.27	Multi-keypad.....	133
7.7.28	NetWorK (NWK) assigned identity.....	134
7.7.29	Network parameter	135
7.7.30	Portable identity.....	137
7.7.31	Progress indicator	141
7.7.32	RAND.....	142
7.7.33	Rate parameters	142
7.7.34	Reject reason.....	144
7.7.35	RES	145
7.7.36	RS	145
7.7.37	Segmented info	146
7.7.38	Service change info.....	146
7.7.39	Service class.....	148
7.7.40	Setup capability	148
7.7.41	Terminal capability	149
7.7.42	Transit delay	155
7.7.43	Window size	156
7.7.44	ZAP field	157
7.7.45	Escape to proprietary	157
7.7.46	Model identifier	158
7.7.47	MMS Generic Header.....	159
7.7.48	MMS Object Header.....	159
7.7.49	MMS Extended header	159
7.7.50	Time-Date	159
7.7.51	Ext h/o indicator	161
7.7.52	Called party Name	162
7.7.53	Calling party Name.....	163
7.7.54	Codec List.....	163
7.7.55	Events notification	165
7.7.55.1	General structure	165
7.7.55.2	Event types.....	166
7.7.56	Call information.....	170
7.7.57	List change details	173
7.7.58	ULE MAC Configuration Info.....	175
8	B-FORMAT message structures	176
8.1	General	176
8.2	LCE request paging messages	176
8.2.0	General.....	176

ITeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 300 175-5 V2.6.1:2015

[https://standards.iteh.ai/catalog/standards/sist/22f79fbf-e25c-416f-a834-](https://standards.iteh.ai/catalog/standards/sist/22f79fbf-e25c-416f-a834-188642ce4769/sist-en-300-175-5-v2-6-1-2015)

[188642ce4769/sist-en-300-175-5-v2-6-1-2015](https://standards.iteh.ai/catalog/standards/sist/22f79fbf-e25c-416f-a834-188642ce4769/sist-en-300-175-5-v2-6-1-2015)

8.2.1	Short format message.....	177
8.2.2	Full format message.....	178
8.2.3	Long format message.....	179
8.2.4	Message elements.....	179
8.2.4.1	LCE paging header.....	179
8.2.4.2	Info fields (Full format).....	181
8.2.4.3	Default setup behaviour.....	182
8.2.4.4	Address elements in collective or group ringing.....	183
8.3	CLMS-FIXED messages.....	183
8.3.1	General message structure.....	183
8.3.2	Message elements.....	184
8.3.3	Standard message structures.....	186
8.3.3.1	General.....	186
8.3.3.2	Messages using 4-bit characters.....	186
8.3.3.3	Messages using 8-bit characters.....	186
9	Call Control (CC) procedures.....	186
9.1	General.....	186
9.2	Call Control (CC) states.....	189
9.2.1	States at PT.....	189
9.2.1.0	General.....	189
9.2.1.1	State T-00: "NULL".....	189
9.2.1.2	State T-19: "RELEASE PENDING".....	189
9.2.1.3	State T-10: "ACTIVE".....	189
9.2.1.4	State T-01: "CALL INITIATED".....	189
9.2.1.5	State T-02: "OVERLAP SENDING".....	189
9.2.1.6	State T-03: "CALL PROCEEDING".....	189
9.2.1.7	State T-04: "CALL DELIVERED".....	189
9.2.1.8	State T-06: "CALL PRESENT".....	189
9.2.1.9	State T-07: "CALL RECEIVED".....	189
9.2.1.10	State T-08: "CONNECT PENDING".....	189
9.2.2	States at FT.....	189
9.2.2.0	General.....	189
9.2.2.1	State F-00: "NULL".....	189
9.2.2.2	State F-19: "RELEASE PENDING".....	190
9.2.2.3	State F-10: "ACTIVE".....	190
9.2.2.4	State F-01: "CALL-INITIATED".....	190
9.2.2.5	State F-02: "OVERLAP SENDING".....	190
9.2.2.6	State F-03: "CALL PROCEEDING".....	190
9.2.2.7	State F-04: "CALL DELIVERED".....	190
9.2.2.8	State F-06: "CALL PRESENT".....	190
9.2.2.9	State F-07: "CALL RECEIVED".....	190
9.2.3	Optional states (PT and FT).....	190
9.2.3.0	General.....	190
9.2.3.1	States T-22 and F-22: "OVERLAP RECEIVING".....	190
9.2.3.2	States T-23 and F-23: "INCOMING CALL PROCEEDING".....	190
9.3	Call establishment procedures.....	191
9.3.1	PT initiated call establishment (outgoing call).....	191
9.3.1.0	General.....	191
9.3.1.1	Call request.....	191
9.3.1.2	Call accept or reject.....	191
9.3.1.3	Selection of lower layer resources.....	192
9.3.1.4	Connection of U-plane.....	193
9.3.1.5	Overlap sending.....	193
9.3.1.6	Call proceeding.....	194
9.3.1.7	Call confirmation.....	194
9.3.1.8	Call connection.....	194
9.3.1.9	Expiry of timer <CC.04>.....	194
9.3.2	FT initiated call establishment (incoming call).....	194
9.3.2.0	General.....	194
9.3.2.1	Call request.....	195
9.3.2.2	Call accept or reject.....	195

9.3.2.3	Selection of lower layer resources	196
9.3.2.4	Connection of U-plane	196
9.3.2.5	Overlap receiving	196
9.3.2.6	Call proceeding	197
9.3.2.7	Call confirmation	197
9.3.2.8	Call connection	197
9.3.2.9	Sending of <<TERMINAL-CAPABILITY>>	197
9.3.2.10	Expiry of timer <CC.04>	197
9.4	Call information procedures	197
9.5	Call release procedures	198
9.5.1	Normal call release	198
9.5.2	Abnormal call release	199
9.5.2.1	Definitions	199
9.5.2.2	Abnormal release general description (PT or FT)	199
9.5.2.3	Abnormal release in case of call setup collisions	200
9.5.3	Release collisions	203
9.6	Service change procedures	203
9.6.1	General	203
9.6.2	Change of Bandwidth parameters (including changes in connection type)	204
9.6.3	Service rerouting	204
9.6.4	NWK layer service suspension and resumption	204
9.6.5	Modulation scheme change	205
9.7	NWK layer Packet mode procedures	205
9.7.1	General	205
9.7.2	PT initiated access	205
9.7.3	FT initiated access	206
9.7.4	NWK layer suspend and resume	206
9.7.4.1	General	206
9.7.4.2	C-plane NWK layer suspend and resume	206
9.7.4.3	U-plane NWK layer suspend and resume	207
9.8	Emergency call procedure	207
9.9	Segmentation of information in CC procedures	208
10	Supplementary Services procedures	209
10.1	General	209
10.2	Keypad protocol	209
10.3	Feature key management protocol	210
10.4	Functional protocol	210
10.4.0	General	210
10.4.1	Separate messages approach	210
10.4.1.0	General	210
10.4.1.1	Hold procedures	211
10.4.1.2	Retrieve procedures	211
10.4.1.3	Auxiliary states for hold and retrieve	211
10.4.2	Common information element approach	211
10.4.2.0	General	211
10.4.2.1	Call Related Supplementary Services (CRSS) procedures	212
10.4.2.2	Call Independent Supplementary Services (CISS) procedures	212
10.4.2.2.0	General	212
10.4.2.2.1	Transport of CISS	212
10.4.2.3	Connectionless Supplementary Service (CLSS) procedure	212
10.5	Co-existence of multiple protocols	213
10.6	Application protocols	213
10.6.1	DECT standard functional supplementary services	213
10.6.2	DECT specific supplementary services	214
10.6.2.0	General	214
10.6.2.1	Queue management	215
10.6.2.2	Indication of subscriber number	215
10.6.2.3	Control of echo control functions	215
10.6.2.4	Cost information	216
11	Connection Oriented Message Service (COMS)	216

11.1	General	216
11.2	COMS states.....	217
11.2.1	States at PT	217
11.2.1.1	State TS-0: "NULL"	217
11.2.1.2	State TS-1: "CONNECT PENDING"	217
11.2.1.3	State TS-2: "RELEASE PENDING"	217
11.2.1.4	State TS-3: "ACTIVE"	217
11.2.2	States at FT	217
11.2.2.1	State FS-0: "NULL"	217
11.2.2.2	State FS-1: "CONNECT PENDING"	217
11.2.2.3	State FS-2: "RELEASE PENDING"	217
11.2.2.4	State FS-3: "ACTIVE"	217
11.3	COMS establishment procedures	217
11.3.1	PT initiated COMS establishment	217
11.3.1.1	COMS request.....	217
11.3.1.2	COMS connection.....	218
11.3.2	FT initiated COMS establishment	218
11.3.2.1	COMS request.....	218
11.3.2.2	COMS connection.....	219
11.4	COMS data transfer procedures	219
11.4.1	Procedure at the sending side.....	219
11.4.2	Procedure at the receiving side	219
11.5	COMS NWK layer suspend and resume procedures.....	220
11.6	COMS release procedures	220
11.6.1	Normal COMS release.....	220
11.6.2	Release collisions.....	221
12	ConnectionLess Message Service (CLMS).....	221
12.1	General	221
12.2	CLMS states	221
12.3	CLMS message transmission procedures	221
12.3.1	Fixed length messages	221
12.3.1.0	General	221
12.3.1.1	Procedure in the Fixed radio Termination (FT)	221
12.3.1.2	Procedure in the Portable radio Termination (PT)	222
12.3.2	Variable length messages.....	222
12.3.2.0	General	222
12.3.2.1	Procedure at the sending side	222
12.3.2.2	Procedure at the receiving side.....	222
12.3.2.3	Restrictions for portable side initiated messages.....	223
13	Mobility Management (MM) procedures.....	223
13.1	General	223
13.2	Identity procedures	224
13.2.0	General.....	224
13.2.1	Procedure for identification of PT	224
13.2.2	Procedure for temporary identity assignment	225
13.3	Authentication procedures.....	226
13.3.0	General.....	226
13.3.1	Authentication of a PT	226
13.3.2	Authentication of the user.....	228
13.3.3	Authentication of a FT	228
13.4	Location procedures	229
13.4.0	General.....	229
13.4.1	Location registration	230
13.4.2	Detach.....	231
13.4.3	Location update	232
13.5	Access rights procedure.....	232
13.5.1	Obtaining the access rights	232
13.5.2	Termination of access rights	233
13.5.3	Modification of access rights	235
13.6	Key allocation procedure.....	236

13.7	Parameter retrieval procedure.....	237
13.8	Ciphering related procedure	239
13.9	External protocol information procedure	241
13.9.0	General.....	241
13.9.1	Procedure for external protocol information initiated by the FT	241
13.9.2	Procedure for external protocol information initiated by the PT	241
13.9.3	Segmentation of information in MM procedures.....	242
14	Link Control Entity (LCE) procedures.....	243
14.1	General	243
14.2	Connection oriented link control procedures.....	244
14.2.1	Link establishment.....	244
14.2.2	Direct PT initiated link establishment.....	244
14.2.3	Indirect (paged) FT initiated link establishment	245
14.2.4	Direct FT initiated link establishment.....	246
14.2.5	Link maintenance.....	247
14.2.6	Link suspend and resume.....	247
14.2.6.0	General	247
14.2.6.1	Link suspend	247
14.2.6.2	Link resume.....	248
14.2.7	Link release.....	248
14.2.7.0	General	248
14.2.7.1	NLR notification without "partial release" as release reason	248
14.2.7.2	NLR notification with "partial release" as release reason	249
14.3	Connectionless link control procedures.....	249
14.3.1	Message routing.....	249
14.3.2	Broadcast announce procedure.....	249
14.3.3	LCE paging codes for connectionless service.....	250
14.4	Procedure for collective and group ringing.....	250
14.5	LCE paging procedures for DPRS	251
14.5.1	DPRS initial setup paging.....	251
14.5.1.0	General	251
14.5.1.1	Assumptions for Short paging format or for Full format with IPUI.....	251
14.5.1.2	Coding for Full paging format with TPUI.....	251
14.5.2	DPRS Resume paging.....	252
14.5.2.0	General	252
14.5.2.1	Assumptions for Short paging format or for Full format with IPUI.....	252
14.5.2.2	Coding for Full paging format with TPUI.....	252
14.5.2.3	LCE Resume Procedure description.....	252
14.5.3	Special cases	253
14.5.3.1	Rule for DPRS Class 1 devices	253
14.5.3.2	Rule for backcompatibility with former A/B 1 devices	253
15	Management procedures.....	253
15.1	Lower Layer Management Entity (LLME)	253
15.2	Service mapping and negotiation	254
15.2.1	General.....	254
15.2.2	Prioritized list negotiation.....	254
15.2.3	Exchanged attribute negotiation	254
15.2.4	Operating parameter negotiation.....	255
15.2.5	Peer attribute negotiation	255
15.3	Service modification procedures	256
15.4	Resource management.....	256
15.5	Management of MM procedures	256
15.6	Call ciphering management.....	257
15.7	External Handover.....	258
15.7.0	General.....	258
15.7.1	Handover candidate procedures	258
15.7.1.1	General	258
15.7.1.2	Handover candidate indication.....	258
15.7.1.3	Handover candidate retrieval	259
15.7.1.4	Target FP selection.....	259

15.7.2	Handover reference procedure	260
15.7.2.1	General	260
15.7.2.2	Handover reference indication	260
15.7.2.3	Handover reference retrieval	260
15.7.3	External handover suggested by FP	260
15.7.4	NWK layer set up procedure.....	261
15.7.4.0	General	261
15.7.4.1	Handover request	261
15.7.4.2	Handover confirm	261
15.7.4.3	Handover accept.....	261
15.7.4.4	Handover reject	261
15.7.4.5	Release of old connection	261
15.7.4.6	Handover Fall Back.....	262
15.7.5	U-plane handling	262
15.7.6	Ciphering procedure	263
15.7.7	Interaction with location registration	263
15.8	Test management procedures	263
15.8.0	General.....	263
15.8.1	Test call back procedure	264
15.8.2	Test hook control procedures.....	264
15.8.3	Upper tester procedure.....	264
15.9	Application assistance procedures.....	265
15.9.1	DECT Identity Resolution (Retrieval) Procedure	265
15.9.1.0	General	265
15.9.1.1	FT (or HyP) initiated Connectionless Identity Resolution procedure	265
15.9.1.2	PT initiated Connectionless Identity Resolution procedure	266
15.9.1.3	Connection oriented Identity Resolution procedure	266
15.9.2	Application Address Resolution (Retrieval) Procedure.....	266
15.9.3	Application Parameter Allocation Procedure	266
15.9.3.0	General	266
15.9.3.1	FT initiated application parameter allocation procedure	266
15.9.3.2	PT initiated application parameter allocation procedure	267
15.9.4	Application parameter information procedure	267
15.9.4.0	General	267
15.9.4.1	FT initiated connection oriented Application parameter information procedure	267
15.9.4.2	PT initiated connection oriented Application parameter information procedure	267
15.9.4.3	FT initiated connectionless Application parameter information procedure	268
15.9.4.4	PT initiated connectionless Application parameter information procedure	268
15.9.5	Application Parameter Indication procedure	268
16	Primitives	269
16.1	Primitive types.....	269
16.2	Primitives to lower layer (DLC layer).....	269
16.3	Primitives to IWU	269
16.3.0	General.....	269
16.3.1	Parameter definitions	269
16.3.2	MNCC primitives	270
16.3.2.0	List of primitives	270
16.3.2.1	MNCC_SETUP primitive	271
16.3.2.2	MNCC_SETUP_ACK primitive	271
16.3.2.3	MNCC_REJECT primitive	272
16.3.2.4	MNCC_CALL_PROC primitive.....	272
16.3.2.5	MNCC_ALERT primitive	273
16.3.2.6	MNCC_CONNECT primitive.....	273
16.3.2.7	MNCC_RELEASE primitive	273
16.3.2.8	MNCC_FACILITY primitive	274
16.3.2.9	MNCC_INFO primitive	274
16.3.2.10	MNCC_MODIFY primitive.....	275
16.3.2.11	MNCC_HOLD primitive	275
16.3.2.12	MNCC_RETRIEVE primitive	275
16.3.2.13	MNCC_IWU_INFO primitive	275
16.3.3	MNSS primitives	276

16.3.3.0	List of primitives	276
16.3.3.1	MNSS_SETUP primitive	276
16.3.3.2	MNSS_FACILITY primitive	276
16.3.3.3	MNSS_RELEASE primitive	276
16.3.4	MNCO primitives	277
16.3.4.0	List of primitives	277
16.3.4.1	MNCO_SETUP primitive	277
16.3.4.2	MNCO_CONNECT primitive	277
16.3.4.3	MNCO_INFO primitive	277
16.3.4.4	MNCO_ACK primitive	278
16.3.4.5	MNCO_RELEASE primitive	278
16.3.4.6	MNCO_REJECT primitive	278
16.3.5	MNCL primitives	278
16.3.5.0	List of primitives	278
16.3.5.1	MNCL_UNITDATA primitive	279
16.3.6	MM primitives	279
16.3.6.0	List of primitives	279
16.3.6.1	MM_IDENTITY primitive	279
16.3.6.2	MM_IDENTITY_ASSIGN primitive	280
16.3.6.3	MM_AUTHENTICATE primitive	280
16.3.6.4	MM_LOCATE primitive	280
16.3.6.5	MM_DETACH primitive	281
16.3.6.6	MM_ACCESS_RIGHTS primitive	281
16.3.6.7	MM_ACCESS_RIGHTS_TERMINATE primitive	281
16.3.6.8	MM_KEY_ALLOCATE primitive	282
16.3.6.9	MM_INFO primitive	282
16.3.6.10	MM_CIPHER primitive	282
16.3.6.11	MM_IWU primitive	283
17	Handling of error and exception conditions	283
17.0	General	283
17.1	Protocol discrimination error	283
17.2	Message too short	283
17.3	Transaction identifier error	283
17.3.1	Illegal and unsupported transaction identifier value	283
17.3.2	Transaction identifier procedural errors and exception conditions	284
17.3.2.1	Unknown active CC call	284
17.3.2.2	Unknown active CISS call	284
17.3.2.3	Unknown active COMS call	284
17.3.2.4	Unknown active CLMS call	284
17.3.2.5	Unknown active MM transaction	284
17.3.2.6	Unknown active LCE transaction	284
17.3.3	Call Resource Contention	284
17.4	Message type or message sequence errors	285
17.4.1	CC message error	285
17.4.2	CISS message error	285
17.4.3	COMS or CLMS message error	285
17.4.4	MM message error	285
17.4.5	LCE message error	285
17.5	General information element errors	285
17.5.0	General	285
17.5.1	Information element out of sequence	285
17.5.2	Duplicated information elements	286
17.6	Mandatory information element errors	286
17.6.1	Mandatory information element missing in CC messages	286
17.6.2	Mandatory information element content error in CC messages	286
17.6.3	Mandatory information element error in COMS or CLMS messages	286
17.6.4	Mandatory information element error in MM messages	286
17.6.5	Mandatory information element error in LCE messages	287
17.7	Non-mandatory information element errors	287
17.7.0	General	287
17.7.1	Unrecognized information element	287

17.7.2	Non-mandatory information element content error	287
17.8	Data link reset.....	287
17.9	Data link failure.....	288
Annex A (normative): System parameters.....		289
A.1	CC timers.....	289
A.2	SS timers	290
A.3	COMS timers.....	290
A.4	CLMS timer.....	291
A.5	MM timers.....	291
A.6	LCE timers	294
A.7	NWK layer constants.....	295
A.8	Restart.....	295
Annex B (normative): CC state transition tables.....		296
B.1	CC state transitions at PT side.....	296
B.1.1	CC state table at PT side.....	296
B.1.2	CC transition procedures at PT side	296
B.2	CC state transitions at FT side.....	298
B.2.1	CC state table at FT side.....	298
B.2.2	CC transition procedures at FT side	299
Annex C (informative): DLC states as viewed by the LCE		301
Annex D (normative): DECT standard character sets		302
D.1	General	302
D.2	DECT standard 8-bit characters	302
D.2.1	General	302
D.2.2	Control codes.....	303
D.2.3	Standard IA5 codes	304
D.2.4	extended codes and escape to alternative character sets.....	304
D.3	DECT standard 4-bit characters	304
Annex E (normative): Default coding of information elements.....		305
E.1	Default coding of <<IWU-ATTRIBUTES>> and <CALL-ATTRIBUTES>> information elements for basic speech.....	305
E.2	Default coding of <<IWU-ATTRIBUTES>>, <<CALL-ATTRIBUTES>> and <<CONNECTION-ATTRIBUTES>> information elements for wideband speech	305
E.2.0	General	305
E.2.1	Default setup attributes for basic service wideband speech	306
Annex F (normative): Broadcast attributes coding		307
F.1	Higher layer capabilities.....	307
F.2	Extended higher layer capabilities	308
F.3	Extended higher layer capabilities (part 2).....	308
Annex G (normative): Use of <<IWU-PACKET>> and <<IWU-TO-IWU>> information elements		311
G.1	General	311
G.2	Sending of <<IWU-PACKET>> elements.....	311