



SLOVENSKI STANDARD

SIST EN 300 175-5 V2.7.1:2018

01-februar-2018

**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: **ETSI EN 300 175-5 V2.7.1 (2017-11)**

SIST EN 300 175-5 V2.7.1:2018
<https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018>

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 V2.7.1:2018	en
--------------------------------------	-----------

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 300 175-5 V2.7.1:2018

<https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018>

ETSI EN 300 175-5 V2.7.1 (2017-11)



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

[SIST EN 300 175-5 V2.7.1:2018](https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018)

<https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018>

ReferenceREN/DECT-00307-5

KeywordsDECT, 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)

Important notice

<https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78c4b9b672/sist-en-300-175-5-v2-7-1-2018>
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

<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

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.

© ETSI 2017.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.

3GPP™ and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M logo is protected for the benefit of its Members.

GSM® and the GSM logo are trademarks 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	28
5 Overview of procedures	29
5.1 General	29
5.2 Overview of Call Control (CC).....	30
5.2.1 General.....	30
5.2.2 Call establishment.....	30
5.2.2.1 Call setup	30
5.2.2.2 Service negotiation.....	31
5.2.3 Call connect	31
5.2.4 Call information.....	31
5.2.5 Service change	31
5.2.6 Call release.....	32
5.3 Overview of Supplementary Services (SS).....	32
5.3.1 General.....	32
5.3.2 Keypad protocol.....	33
5.3.3 Feature key management protocol.....	33
5.3.4 Functional protocol.....	33
5.4 Overview of Connection Oriented Message Service (COMS).....	33
5.4.1 General.....	33
5.4.2 COMS establishment.....	34
5.4.3 Service negotiation	34
5.4.4 COMS connect.....	34
5.4.5 COMS data transfer	34
5.4.6 COMS suspend and resume	34
5.4.7 COMS release.....	35
5.5 Overview of ConnectionLess Message Service (CLMS)	35
5.5.0 General.....	35
5.5.1 Fixed length message service.....	35
5.5.2 Variable length message service.....	35
5.6 Overview of Mobility Management (MM)	35
5.6.1 General.....	35
5.6.2 Identity procedures	36
5.6.3 Authentication procedures	36
5.6.4 Location procedures.....	37
5.6.5 Access rights procedures	37
5.6.6 Key allocation procedure	37
5.6.7 Parameter retrieval procedure.....	38
5.6.8 Cipherring related procedure.....	38
5.6.9 External protocol information procedure.....	38
5.7 Overview of Link Control Entity (LCE)	38
5.7.1 General.....	38
5.7.2 Data Link Endpoint Identifier (DLEI)	38
5.7.3 Data link establishment.....	39
5.7.4 Data link re-establishment	39

5.7.5	Data link release	39
5.7.6	Data link suspend and resume.....	40
5.7.7	Queuing of messages	40
5.7.8	Request paging.....	40
6	Message functional definitions.....	40
6.1	Overview of message structures	40
6.1.1	Messages.....	40
6.1.2	Information elements	41
6.2	Message summaries.....	42
6.2.1	Summary of CC messages	42
6.2.2	Summary of CISS messages	42
6.2.3	Summary of COMS messages	43
6.2.4	Summary of CLMS messages.....	43
6.2.5	Summary of MM messages	44
6.2.6	Summary of LCE messages	44
6.3	S-FORMAT message functional contents.....	45
6.3.1	S-FORMAT message overview.....	45
6.3.2	CC-messages.....	45
6.3.2.1	{CC-SETUP}	45
6.3.2.2	{CC-INFO}	47
6.3.2.3	{CC-SETUP-ACK}	48
6.3.2.4	{CC-CALL-PROC}	49
6.3.2.5	{CC-ALERTING}	50
6.3.2.6	{CC-CONNECT}	51
6.3.2.7	{CC-CONNECT-ACK}.....	52
6.3.2.8	{CC-RELEASE}.....	52
6.3.2.9	{CC-RELEASE-COM}.....	53
6.3.2.10	{CC-SERVICE-CHANGE}.....	54
6.3.2.11	{CC-SERVICE-ACCEPT}.....	55
6.3.2.12	{CC-SERVICE-REJECT}	55
6.3.2.13	{CC-NOTIFY}.....	56
6.3.2.14	{IWU-INFO}.....	57
6.3.3	SS-messages (call related and call independent).....	58
6.3.3.1	{FACILITY}.....	58
6.3.3.2	{HOLD}.....	59
6.3.3.3	{HOLD-ACK}	59
6.3.3.4	{HOLD-REJECT}	60
6.3.3.5	{RETRIEVE}	60
6.3.3.6	{RETRIEVE-ACK}	61
6.3.3.7	{RETRIEVE-REJECT}	61
6.3.3.8	{CISS-REGISTER}	62
6.3.3.9	{CISS-RELEASE-COM}	63
6.3.4	COMS-messages.....	63
6.3.4.1	{COMS-SETUP}	63
6.3.4.2	{COMS-INFO}	64
6.3.4.3	{COMS-ACK}	64
6.3.4.4	{COMS-CONNECT}	65
6.3.4.5	{COMS-RELEASE}.....	65
6.3.4.6	{COMS-RELEASE-COM}	66
6.3.4.7	{COMS-NOTIFY}.....	66
6.3.5	CLMS-message.....	67
6.3.5.1	{CLMS-VARIABLE}	67
6.3.6	MM-messages	68
6.3.6.1	{ACCESS-RIGHTS-ACCEPT}	68
6.3.6.2	{ACCESS-RIGHTS-REJECT}.....	68
6.3.6.3	{ACCESS-RIGHTS-REQUEST}	69
6.3.6.4	{ACCESS-RIGHTS-TERMINATE-ACCEPT}	69
6.3.6.5	{ACCESS-RIGHTS-TERMINATE-REJECT}	70
6.3.6.6	{ACCESS-RIGHTS-TERMINATE-REQUEST}.....	70
6.3.6.7	{AUTHENTICATION-REJECT}	71
6.3.6.8	{AUTHENTICATION-REPLY}	71

6.3.6.9	{ AUTHENTICATION-REQUEST }	72
6.3.6.10	{ CIPHER-REJECT }	73
6.3.6.11	{ CIPHER-REQUEST }	73
6.3.6.12	{ CIPHER-SUGGEST }	74
6.3.6.13	{ DETACH }	74
6.3.6.14	{ IDENTITY-REPLY }	75
6.3.6.15	{ IDENTITY-REQUEST }	75
6.3.6.16	{ KEY-ALLOCATE }	76
6.3.6.17	{ LOCATE-ACCEPT }	77
6.3.6.18	{ LOCATE-REJECT }	77
6.3.6.19	{ LOCATE-REQUEST }	78
6.3.6.20	{ MM-INFO-ACCEPT }	79
6.3.6.21	{ MM-INFO-REJECT }	79
6.3.6.22	{ MM-INFO-REQUEST }	80
6.3.6.23	{ MM-INFO-SUGGEST }	80
6.3.6.24	{ TEMPORARY-IDENTITY-ASSIGN }	81
6.3.6.25	{ TEMPORARY-IDENTITY-ASSIGN-ACK }	82
6.3.6.26	{ TEMPORARY-IDENTITY-ASSIGN-REJ }	82
6.3.6.27	{ MM-IWU }	83
6.3.6.28	{ MM-NOTIFY }	83
6.3.7	LCE-messages	84
6.3.7.1	{ LCE-PAGE-RESPONSE }	84
6.3.7.2	{ LCE-PAGE-REJECT }	84
6.4	B-FORMAT message functional contents	85
6.4.1	B-FORMAT message overview	85
6.4.2	{ LCE-REQUEST-PAGE }	85
6.4.3	{ CLMS-FIXED }	86
7	S-FORMAT message structures	86
7.1	Overview	86
7.2	Protocol Discrimination (PD) element	87
7.3	Transaction Identifier (TI) element	87
7.4	Message type element	88
7.4.0	General	88
7.4.1	Messages for CC	89
7.4.2	Messages for SS	89
7.4.3	Messages for COMS	89
7.4.4	Messages for CLMS	90
7.4.5	Messages for MM	90
7.4.6	Messages for LCE	90
7.5	Other information elements	91
7.5.1	Coding rules	91
7.5.2	Extensions of codesets	93
7.5.3	Locking shift procedure	93
7.5.4	Non-locking shift procedure	94
7.5.5	Display and keypad elements	94
7.5.6	Repeated elements	94
7.6	Fixed length information elements	95
7.6.1	Summary	95
7.6.2	Sending complete, delimiter request and use TPUI	95
7.6.3	Repeat indicator	96
7.6.4	Basic service	96
7.6.5	Single display	97
7.6.6	Single keypad	97
7.6.7	Release reason	97
7.6.8	Signal	99
7.6.9	Timer restart	100
7.6.10	Test hook control	100
7.7	Variable length information elements	100
7.7.1	Summary	100
7.7.2	Allocation type	102
7.7.3	Alphanumeric	103

STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/300-175-5-v2-7-1-2018>

<https://standards.iteh.ai/catalog/standards/sist/300-175-5-v2-7-1-2018>

<https://standards.iteh.ai/catalog/standards/sist/300-175-5-v2-7-1-2018>

7.7.4	Auth type	104
7.7.5	Call attributes.....	106
7.7.6	Call identity	110
7.7.7	Called party number.....	110
7.7.8	Called party subaddress	111
7.7.9	Calling party number	112
7.7.10	Cipher info	113
7.7.11	Connection attributes	114
7.7.12	Connection identity.....	117
7.7.13	Duration	118
7.7.14	End-to-end compatibility	119
7.7.15	Facility	122
7.7.16	Feature activate	122
7.7.17	Feature indicate.....	124
7.7.18	Fixed identity	126
7.7.19	Identity type.....	127
7.7.20	Info type.....	128
7.7.21	InterWorking Unit (IWU) attributes	130
7.7.22	IWU packet	134
7.7.23	IWU to IWU	135
7.7.24	Key.....	137
7.7.25	Location area	138
7.7.26	Multi-display.....	139
7.7.27	Multi-keypad.....	139
7.7.28	NetWorK (NWK) assigned identity.....	140
7.7.29	Network parameter	140
7.7.30	Portable identity.....	142
7.7.31	Progress indicator	146
7.7.32	RAND	147
7.7.33	Rate parameters	148
7.7.34	Reject reason.....	149
7.7.35	RES	150
7.7.36	RS	150
7.7.37	Segmented info	151
7.7.38	Service change info.....	151
7.7.39	Service class.....	153
7.7.40	Setup capability	153
7.7.41	Terminal capability	155
7.7.42	Transit delay	161
7.7.43	Window size	162
7.7.44	ZAP field	163
7.7.45	Escape to proprietary	163
7.7.46	Model identifier	164
7.7.47	MMS Generic Header.....	165
7.7.48	MMS Object Header.....	165
7.7.49	MMS Extended header	165
7.7.50	Time-Date	165
7.7.51	Ext h/o indicator	167
7.7.52	Called party Name	168
7.7.53	Calling party Name.....	169
7.7.54	Codec List.....	169
7.7.55	Events notification	171
7.7.55.1	General structure	171
7.7.55.2	Event types.....	172
7.7.56	Call information.....	176
7.7.57	List change details	180
7.7.58	ULE MAC Configuration Info.....	182
8	B-FORMAT message structures	182
8.1	General	182
8.2	LCE request paging messages	183
8.2.0	General.....	183

STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 300.175-5 V2.7.1:2018](https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018)

[https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-](https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018)

[78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018](https://standards.iteh.ai/catalog/standards/sist/8b4618d6-ba18-4f27-9d49-78ed69bbcf72/sist-en-300-175-5-v2-7-1-2018)

8.2.1	Short format message.....	183
8.2.2	Full format message.....	184
8.2.3	Long format message.....	186
8.2.4	Message elements.....	186
8.2.4.1	LCE paging header.....	186
8.2.4.2	Info fields (Full format).....	187
8.2.4.3	Default setup behaviour.....	188
8.2.4.4	Address elements in collective or group ringing.....	189
8.3	CLMS-FIXED messages.....	190
8.3.1	General message structure.....	190
8.3.2	Message elements.....	190
8.3.3	Standard message structures.....	192
8.3.3.1	General.....	192
8.3.3.2	Messages using 4-bit characters.....	192
8.3.3.3	Messages using 8-bit characters.....	192
9	Call Control (CC) procedures.....	193
9.1	General.....	193
9.2	Call Control (CC) states.....	196
9.2.1	States at PT.....	196
9.2.1.0	General.....	196
9.2.1.1	State T-00: "NULL".....	196
9.2.1.2	State T-19: "RELEASE PENDING".....	196
9.2.1.3	State T-10: "ACTIVE".....	196
9.2.1.4	State T-01: "CALL INITIATED".....	196
9.2.1.5	State T-02: "OVERLAP SENDING".....	196
9.2.1.6	State T-03: "CALL PROCEEDING".....	196
9.2.1.7	State T-04: "CALL DELIVERED".....	196
9.2.1.8	State T-06: "CALL PRESENT".....	196
9.2.1.9	State T-07: "CALL RECEIVED".....	196
9.2.1.10	State T-08: "CONNECT PENDING".....	196
9.2.2	States at FT.....	197
9.2.2.0	General.....	197
9.2.2.1	State F-00: "NULL".....	197
9.2.2.2	State F-19: "RELEASE PENDING".....	197
9.2.2.3	State F-10: "ACTIVE".....	197
9.2.2.4	State F-01: "CALL-INITIATED".....	197
9.2.2.5	State F-02: "OVERLAP SENDING".....	197
9.2.2.6	State F-03: "CALL PROCEEDING".....	197
9.2.2.7	State F-04: "CALL DELIVERED".....	197
9.2.2.8	State F-06: "CALL PRESENT".....	197
9.2.2.9	State F-07: "CALL RECEIVED".....	197
9.2.3	Optional states (PT and FT).....	198
9.2.3.0	General.....	198
9.2.3.1	States T-22 and F-22: "OVERLAP RECEIVING".....	198
9.2.3.2	States T-23 and F-23: "INCOMING CALL PROCEEDING".....	198
9.3	Call establishment procedures.....	198
9.3.1	PT initiated call establishment (outgoing call).....	198
9.3.1.0	General.....	198
9.3.1.1	Call request.....	198
9.3.1.2	Call accept or reject.....	199
9.3.1.3	Selection of lower layer resources.....	199
9.3.1.4	Connection of U-plane.....	200
9.3.1.5	Overlap sending.....	200
9.3.1.6	Call proceeding.....	201
9.3.1.7	Call confirmation.....	201
9.3.1.8	Call connection.....	202
9.3.1.9	Expiry of timer <CC.04>.....	202
9.3.2	FT initiated call establishment (incoming call).....	202
9.3.2.0	General.....	202
9.3.2.1	Call request.....	202
9.3.2.2	Call accept or reject.....	203

9.3.2.3	Selection of lower layer resources	203
9.3.2.4	Connection of U-plane	204
9.3.2.5	Overlap receiving	204
9.3.2.6	Call proceeding	204
9.3.2.7	Call confirmation	204
9.3.2.8	Call connection	205
9.3.2.9	Sending of <<TERMINAL-CAPABILITY>>	205
9.3.2.10	Expiry of timer <CC.04>	205
9.4	Call information procedures	205
9.5	Call release procedures	206
9.5.1	Normal call release	206
9.5.2	Abnormal call release	206
9.5.2.1	Definitions	206
9.5.2.2	Abnormal release general description (PT or FT)	207
9.5.2.3	Abnormal release in case of call setup collisions	208
9.5.3	Release collisions	211
9.6	Service change procedures	211
9.6.1	General	211
9.6.2	Change of Bandwidth parameters (including changes in connection type)	212
9.6.3	Service rerouting	212
9.6.4	NWK layer service suspension and resumption	212
9.6.5	Modulation scheme change	213
9.7	NWK layer Packet mode procedures	213
9.7.1	General	213
9.7.2	PT initiated access	214
9.7.3	FT initiated access	214
9.7.4	NWK layer suspend and resume	214
9.7.4.1	General	214
9.7.4.2	C-plane NWK layer suspend and resume	215
9.7.4.3	U-plane NWK layer suspend and resume	215
9.8	Emergency call procedure	215
9.9	Segmentation of information in CC procedures	216
10	Supplementary Services procedures	217
10.1	General	217
10.2	Keypad protocol	218
10.3	Feature key management protocol	218
10.4	Functional protocol	219
10.4.0	General	219
10.4.1	Separate messages approach	219
10.4.1.0	General	219
10.4.1.1	Hold procedures	219
10.4.1.2	Retrieve procedures	219
10.4.1.3	Auxiliary states for hold and retrieve	220
10.4.2	Common information element approach	220
10.4.2.0	General	220
10.4.2.1	Call Related Supplementary Services (CRSS) procedures	220
10.4.2.2	Call Independent Supplementary Services (CISS) procedures	220
10.4.2.2.0	General	220
10.4.2.2.1	Transport of CISS	221
10.4.2.3	Connectionless Supplementary Service (CLSS) procedure	221
10.5	Co-existence of multiple protocols	222
10.6	Application protocols	222
10.6.1	DECT standard functional supplementary services	222
10.6.2	DECT specific supplementary services	223
10.6.2.0	General	223
10.6.2.1	Queue management	223
10.6.2.2	Indication of subscriber number	223
10.6.2.3	Control of echo control functions	224
10.6.2.4	Cost information	224
11	Connection Oriented Message Service (COMS)	225

11.1	General	225
11.2	COMS states.....	225
11.2.1	States at PT	225
11.2.1.1	State TS-0: "NULL"	225
11.2.1.2	State TS-1: "CONNECT PENDING"	225
11.2.1.3	State TS-2: "RELEASE PENDING"	225
11.2.1.4	State TS-3: "ACTIVE"	225
11.2.2	States at FT	225
11.2.2.1	State FS-0: "NULL"	225
11.2.2.2	State FS-1: "CONNECT PENDING"	225
11.2.2.3	State FS-2: "RELEASE PENDING"	225
11.2.2.4	State FS-3: "ACTIVE"	226
11.3	COMS establishment procedures	226
11.3.1	PT initiated COMS establishment	226
11.3.1.1	COMS request.....	226
11.3.1.2	COMS connection.....	226
11.3.2	FT initiated COMS establishment	227
11.3.2.1	COMS request.....	227
11.3.2.2	COMS connection.....	227
11.4	COMS data transfer procedures	227
11.4.1	Procedure at the sending side.....	227
11.4.2	Procedure at the receiving side	228
11.5	COMS NWK layer suspend and resume procedures.....	229
11.6	COMS release procedures	229
11.6.1	Normal COMS release.....	229
11.6.2	Release collisions.....	229
12	ConnectionLess Message Service (CLMS).....	230
12.1	General	230
12.2	CLMS states	230
12.3	CLMS message transmission procedures	230
12.3.1	Fixed length messages	230
12.3.1.0	General	230
12.3.1.1	Procedure in the Fixed radio Termination (FT)	230
12.3.1.2	Procedure in the Portable radio Termination (PT)	231
12.3.2	Variable length messages.....	231
12.3.2.0	General	231
12.3.2.1	Procedure at the sending side	231
12.3.2.2	Procedure at the receiving side.....	231
12.3.2.3	Restrictions for portable side initiated messages.....	232
13	Mobility Management (MM) procedures.....	232
13.1	General	232
13.2	Identity procedures	233
13.2.0	General.....	233
13.2.1	Procedure for identification of PT	233
13.2.2	Procedure for temporary identity assignment	234
13.3	Authentication procedures.....	235
13.3.0	General.....	235
13.3.1	Authentication of a PT	235
13.3.2	Authentication of the user.....	237
13.3.3	Authentication of a FT	238
13.4	Location procedures	239
13.4.0	General.....	239
13.4.1	Location registration	239
13.4.2	Detach.....	241
13.4.3	Location update	241
13.5	Access rights procedure.....	242
13.5.1	Obtaining the access rights	242
13.5.2	Termination of access rights	243
13.5.3	Modification of access rights.....	245
13.6	Key allocation procedure.....	245

13.7	Parameter retrieval procedure.....	247
13.8	Ciphering related procedure	248
13.9	External protocol information procedure	251
13.9.0	General.....	251
13.9.1	Procedure for external protocol information initiated by the FT	251
13.9.2	Procedure for external protocol information initiated by the PT	251
13.9.3	Segmentation of information in MM procedures.....	252
14	Link Control Entity (LCE) procedures.....	253
14.1	General	253
14.2	Connection oriented link control procedures.....	254
14.2.1	Link establishment.....	254
14.2.2	Direct PT initiated link establishment.....	254
14.2.3	Indirect (paged) FT initiated link establishment	255
14.2.4	Direct FT initiated link establishment.....	256
14.2.5	Link maintenance.....	257
14.2.6	Link suspend and resume.....	257
14.2.6.0	General	257
14.2.6.1	Link suspend	257
14.2.6.2	Link resume.....	258
14.2.7	Link release.....	258
14.2.7.0	General	258
14.2.7.1	NLR notification without "partial release" as release reason	258
14.2.7.2	NLR notification with "partial release" as release reason	259
14.3	Connectionless link control procedures.....	259
14.3.1	Message routing.....	259
14.3.2	Broadcast announce procedure.....	260
14.3.3	LCE paging codes for connectionless service.....	260
14.4	Procedure for collective and group ringing.....	260
14.5	LCE paging procedures for DPRS.....	261
14.5.1	DPRS initial setup paging.....	261
14.5.1.0	General	261
14.5.1.1	Assumptions for Short paging format or for Full format with IPUI.....	261
14.5.1.2	Coding for Full paging format with TPUI.....	262
14.5.2	DPRS Resume paging.....	262
14.5.2.0	General	262
14.5.2.1	Assumptions for Short paging format or for Full format with IPUI.....	262
14.5.2.2	Coding for Full paging format with TPUI.....	262
14.5.2.3	LCE Resume Procedure description.....	263
14.5.3	Special cases	263
14.5.3.1	Rule for DPRS Class 1 devices	263
14.5.3.2	Rule for backcompatibility with former A/B 1 devices	263
15	Management procedures.....	264
15.1	Lower Layer Management Entity (LLME)	264
15.2	Service mapping and negotiation	264
15.2.1	General.....	264
15.2.2	Prioritized list negotiation.....	265
15.2.3	Exchanged attribute negotiation	265
15.2.4	Operating parameter negotiation.....	265
15.2.5	Peer attribute negotiation	266
15.3	Service modification procedures	266
15.4	Resource management.....	266
15.5	Management of MM procedures	266
15.6	Call ciphering management.....	268
15.7	External Handover.....	268
15.7.0	General.....	268
15.7.1	Handover candidate procedures	269
15.7.1.1	General	269
15.7.1.2	Handover candidate indication.....	269
15.7.1.3	Handover candidate retrieval	269
15.7.1.4	Target FP selection.....	270

15.7.2	Handover reference procedure	270
15.7.2.1	General	270
15.7.2.2	Handover reference indication	270
15.7.2.3	Handover reference retrieval	271
15.7.3	External handover suggested by FP	271
15.7.4	NWK layer set up procedure	271
15.7.4.0	General	271
15.7.4.1	Handover request	271
15.7.4.2	Handover confirm	272
15.7.4.3	Handover accept	272
15.7.4.4	Handover reject	272
15.7.4.5	Release of old connection	272
15.7.4.6	Handover Fall Back	272
15.7.5	U-plane handling	273
15.7.6	Ciphering procedure	273
15.7.7	Interaction with location registration	274
15.8	Test management procedures	274
15.8.0	General	274
15.8.1	Test call back procedure	274
15.8.2	Test hook control procedures	275
15.8.3	Upper tester procedure	275
15.9	Application assistance procedures	276
15.9.1	DECT Identity Resolution (Retrieval) Procedure	276
15.9.1.0	General	276
15.9.1.1	FT (or HyP) initiated Connectionless Identity Resolution procedure	276
15.9.1.2	PT initiated Connectionless Identity Resolution procedure	276
15.9.1.3	Connection oriented Identity Resolution procedure	277
15.9.2	Application Address Resolution (Retrieval) Procedure	277
15.9.3	Application Parameter Allocation Procedure	277
15.9.3.0	General	277
15.9.3.1	FT initiated application parameter allocation procedure	277
15.9.3.2	PT initiated application parameter allocation procedure	277
15.9.4	Application parameter information procedure	278
15.9.4.0	General	278
15.9.4.1	FT initiated connection oriented Application parameter information procedure	278
15.9.4.2	PT initiated connection oriented Application parameter information procedure	278
15.9.4.3	FT initiated connectionless Application parameter information procedure	278
15.9.4.4	PT initiated connectionless Application parameter information procedure	279
15.9.5	Application Parameter Indication procedure	279
16	Primitives	280
16.1	Primitive types	280
16.2	Primitives to lower layer (DLC layer)	280
16.3	Primitives to IWU	280
16.3.0	General	280
16.3.1	Parameter definitions	280
16.3.2	MNCC primitives	281
16.3.2.0	List of primitives	281
16.3.2.1	MNCC_SETUP primitive	282
16.3.2.2	MNCC_SETUP_ACK primitive	282
16.3.2.3	MNCC_REJECT primitive	283
16.3.2.4	MNCC_CALL_PROC primitive	283
16.3.2.5	MNCC_ALERT primitive	284
16.3.2.6	MNCC_CONNECT primitive	284
16.3.2.7	MNCC_RELEASE primitive	285
16.3.2.8	MNCC_FACILITY primitive	285
16.3.2.9	MNCC_INFO primitive	286
16.3.2.10	MNCC_MODIFY primitive	286
16.3.2.11	MNCC_HOLD primitive	286
16.3.2.12	MNCC_RETRIEVE primitive	287
16.3.2.13	MNCC_IWU_INFO primitive	287
16.3.3	MNSS primitives	287

16.3.3.0	List of primitives	287
16.3.3.1	MNSS_SETUP primitive	287
16.3.3.2	MNSS_FACILITY primitive	288
16.3.3.3	MNSS_RELEASE primitive	288
16.3.4	MNCO primitives	288
16.3.4.0	List of primitives	288
16.3.4.1	MNCO_SETUP primitive	289
16.3.4.2	MNCO_CONNECT primitive	289
16.3.4.3	MNCO_INFO primitive	289
16.3.4.4	MNCO_ACK primitive	289
16.3.4.5	MNCO_RELEASE primitive	290
16.3.4.6	MNCO_REJECT primitive	290
16.3.5	MNCL primitives	290
16.3.5.0	List of primitives	290
16.3.5.1	MNCL_UNITDATA primitive	290
16.3.6	MM primitives	291
16.3.6.0	List of primitives	291
16.3.6.1	MM_IDENTITY primitive	291
16.3.6.2	MM_IDENTITY_ASSIGN primitive	291
16.3.6.3	MM_AUTHENTICATE primitive	292
16.3.6.4	MM_LOCATE primitive	292
16.3.6.5	MM_DETACH primitive	292
16.3.6.6	MM_ACCESS_RIGHTS primitive	293
16.3.6.7	MM_ACCESS_RIGHTS_TERMINATE primitive	293
16.3.6.8	MM_KEY_ALLOCATE primitive	293
16.3.6.9	MM_INFO primitive	294
16.3.6.10	MM_CIPHER primitive	294
16.3.6.11	MM_IWU primitive	294
17	Handling of error and exception conditions	295
17.0	General	295
17.1	Protocol discrimination error	295
17.2	Message too short	295
17.3	Transaction identifier error	295
17.3.1	Illegal and unsupported transaction identifier value	295
17.3.2	Transaction identifier procedural errors and exception conditions	295
17.3.2.1	Unknown active CC call	295
17.3.2.2	Unknown active CISS call	296
17.3.2.3	Unknown active COMS call	296
17.3.2.4	Unknown active CLMS call	296
17.3.2.5	Unknown active MM transaction	296
17.3.2.6	Unknown active LCE transaction	296
17.3.3	Call Resource Contention	296
17.4	Message type or message sequence errors	297
17.4.1	CC message error	297
17.4.2	CISS message error	297
17.4.3	COMS or CLMS message error	297
17.4.4	MM message error	297
17.4.5	LCE message error	297
17.5	General information element errors	297
17.5.0	General	297
17.5.1	Information element out of sequence	297
17.5.2	Duplicated information elements	298
17.6	Mandatory information element errors	298
17.6.1	Mandatory information element missing in CC messages	298
17.6.2	Mandatory information element content error in CC messages	298
17.6.3	Mandatory information element error in COMS or CLMS messages	298
17.6.4	Mandatory information element error in MM messages	299
17.6.5	Mandatory information element error in LCE messages	299
17.7	Non-mandatory information element errors	299
17.7.0	General	299
17.7.1	Unrecognized information element	299

17.7.2	Non-mandatory information element content error	299
17.8	Data link reset.....	300
17.9	Data link failure.....	300
Annex A (normative):	System parameters.....	301
A.1	CC timers.....	301
A.2	SS timers	302
A.3	COMS timers.....	302
A.4	CLMS timer.....	303
A.5	MM timers.....	303
A.6	LCE timers	306
A.7	NWK layer constants.....	306
A.8	Restart.....	307
Annex B (normative):	CC state transition tables.....	308
B.1	CC state transitions at PT side.....	308
B.1.1	CC state table at PT side.....	308
B.1.2	CC transition procedures at PT side	309
B.2	CC state transitions at FT side.....	311
B.2.1	CC state table at FT side.....	311
B.2.2	CC transition procedures at FT side	311
Annex C (informative):	DLC states as viewed by the LCE	314
Annex D (normative):	DECT standard character sets	315
D.1	General	315
D.2	DECT standard 8-bit characters.....	315
D.2.1	General	315
D.2.2	Control codes.....	316
D.2.3	Standard IA5 codes	317
D.2.4	extended codes and escape to alternative character sets.....	317
D.3	DECT standard 4-bit characters	317
Annex E (normative):	Default coding of information elements.....	318
E.1	Default coding of <<IWU-ATTRIBUTES>> and <<CALL-ATTRIBUTES>> information elements for basic speech.....	318
E.2	Default coding of <<IWU-ATTRIBUTES>>, <<CALL-ATTRIBUTES>> and <<CONNECTION-ATTRIBUTES>> information elements for wideband speech	318
E.2.0	General	318
E.2.1	Default setup attributes for basic service wideband speech	319
Annex F (normative):	Broadcast attributes coding	320
F.1	Higher layer capabilities.....	320
F.2	Extended higher layer capabilities	321
F.3	Extended higher layer capabilities (part 2).....	321
Annex G (normative):	Use of <<IWU-PACKET>> and <<IWU-TO-IWU>> information elements	324
G.1	General	324
G.2	Sending of <<IWU-PACKET>> elements.....	324