



SLOVENSKI STANDARD

DSIST ETS 300 476-6:1999

01!jUbi Uf-1999

8][]HJbY]nVc`ýUbYVfYnj fj] bYHfY_ca i b]_UWfYfB97HL!'G_i db]`j a Ygb] `f7 4!
DfcZcfa U]nUj Yc`g`UXbcgh]`nj YXVYdfcfc_c`UfD=7 GL!* "XY. D`Ugh_fa]`YbU
XcghcdUXc`dfYbcgbY[Ua YX]UfA57L!'Z_gbUfUX]g_UnU`f]Hj`fi HL

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI);
Protocol Implementation Conformance Statement (PICS) proforma; Part 6: Medium
Access Control (MAC) layer - Fixed radio Termination (FT)

Ta slovenski standard je istoveten z: ETS 300 476-6 E1.% - *!\$,

ICS:

33.070.30 Öä åæ } ^ Á à [|za } ^
à!^: ç|cã } ^ Á | ^ \ [{ ~ } ä æ å
ÖÖÖVD Digital Enhanced Cordless
Telecommunications (DECT)

DSIST ETS 300 476-6:1999 en



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 476-6

August 1996

Source: ETSI TC-RES

Reference: DE/RES-03042-6

ICS: 33.020, 33.060.50

Key words: DECT, CI, PICS

**Radio Equipment and Systems (RES);
Digital Enhanced Cordless Telecommunications (DECT);
Common Interface (CI);
Protocol Implementation Conformance Statement (PICS)
proforma;
Part 6: Medium Access Control (MAC) layer -
Fixed radio Termination (FT)**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

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

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

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

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

© European Telecommunications Standards Institute 1996. All rights reserved.

Contents

Foreword	13
1 Scope	15
2 Normative references	15
3 Definitions and abbreviations	16
3.1 Definitions	16
3.2 Abbreviations	16
4 Conformance requirement to this PICS proforma specification	16
Annex A (normative): PICS proforma for DECT MAC FT	17
A.1 Introduction for completing the PICS proforma	17
A.1.1 Purposes and structure	17
A.1.2 Symbols, abbreviations and conventions	17
A.1.3 Guidances for completing the PICS	18
A.2 Identification of the implementation	19
A.2.1 Date of statement	19
A.2.2 Implementation Under Test (IUT) identification	19
A.2.3 System Under Test (SUT) identification	19
A.2.4 Product supplier	19
A.2.5 Client identification	20
A.2.6 Contact person	20
A.3 Identification of the protocol	20
A.4 Global statement of conformance	20
A.5 Capabilities	21
A.5.1 Services	21
A.5.1.1 Connection oriented control services	21
A.5.1.2 Broadcast control services	22
A.5.1.3 Connectionless control services	22
A.5.1.3.1 Downlink connectionless services	22
A.5.1.3.2 Uplink connectionless services	23
A.5.1.4 Multiplexing services	23
A.5.1.5 Management services	24
A.5.2 Procedures	25
A.5.2.1 Connection procedures	25
A.5.2.1.1 Connection setup procedures	25
A.5.2.1.2 Connection modification procedures	26
A.5.2.1.3 Connection data transfer procedures	26
A.5.2.1.4 Connection handover procedures	27
A.5.2.1.5 Connection release procedures	27
A.5.2.2 Broadcast procedures	27
A.5.2.3 Connectionless procedures	27
A.5.2.3.1 Downlink connectionless procedures	27
A.5.2.3.2 Uplink connectionless procedures	28
A.5.2.4 CSF multiplexing procedures	28
A.5.2.5 Layer management procedures	28
A.5.3 Other capabilities	28
A.6 Protocol parameters	29

A.6.1	Timer support.....	29
A.6.2	Protocol constants.....	29
A.6.3	Channel selection parameters	30
A.6.4	Channels supported	30
A.6.5	Bearer types supported.....	30
A.6.6	Slot types supported.....	30
A.7	Messages	31
A.7.1	A - field header.....	31
A.7.1.1	A - field header - Tail Identification	31
A.7.1.2	A - field header - "Q1/BCK" bit.....	31
A.7.1.3	A - field header - B-field identification	32
A.7.1.4	A - field header - "Q2" bit	32
A.7.2	A - field identities information (N _T) message	33
A.7.3	A - field system information (Q _T) messages.....	33
A.7.4	A - field paging tail (P _T) messages	33
A.7.4.1	Paging tail messages supported.....	33
A.7.4.2	P _T messages information type	34
A.7.5	A - field MAC control (M _T) messages	35
A.7.5.1	Mac control messages supported.....	35
A.7.5.2	Basic connection control messages	36
A.7.5.3	MAC layer test messages.....	36
A.7.5.4	Advanced connection control messages	37
A.7.5.5	Quality control messages	38
A.7.5.6	Broadcast and connectionless (BCL) messages.....	39
A.7.5.7	Encryption control (EC) messages	40
A.7.6	B - Field Messages.....	40
A.7.6.1	B - Field Messages supported.....	40
A.7.6.2	B - Field Advanced connection control messages.....	41
A.7.6.3	B - Field - Null messages.....	42
A.7.6.4	B - Field - Quality control messages.....	43
A.7.6.5	B - Field - GF-channel data packet messages	44
A.8	MAC messages format and field value.....	44
A.8.1	A - field identities information (N _T) message	44
A.8.2	A - field system information (Q _T) messages.....	45
A.8.2.1	QT - Static system information	45
A.8.2.2	QT - Extended RF carrier information	45
A.8.2.3	QT - Fixed part capability.....	46
A.8.2.4	QT - Extended fixed part capabilities.....	46
A.8.2.5	QT - Secondary access rights identities	46
A.8.2.6	QT - Multi-frame number	47
A.8.2.7	QT - escape.....	47
A.8.3	A - field paging tail (P _T) messages	47
A.8.3.1	P _T message - Full page	47
A.8.3.2	P _T message - Long page	47
A.8.3.3	P _T message - Short page.....	48
A.8.3.4	P _T message - Zero length page	48
A.8.3.5	P _T messages - MAC info. element.....	48
A.8.3.5.1	MAC info. element - Fill bits	48
A.8.3.5.2	MAC info. element - Blind full slot	48
A.8.3.5.3	MAC info. element - Other bearer	49
A.8.3.5.4	MAC info. element - Recommended other bearer	49
A.8.3.5.5	MAC info. element - Good RFP bearer.....	49
A.8.3.5.6	MAC info. element - Dummy or C/L bearer position	49
A.8.3.5.7	MAC info. element - RFP identity.....	49
A.8.3.5.8	MAC info. element - Escape	50
A.8.3.5.9	MAC info. element - Dummy or C/L bearer marker	50
A.8.3.5.10	MAC info. element - Bearer handover information.....	50
A.8.3.5.11	MAC info. element - RFP status	50
A.8.4	A - field MAC control (M _T) messages	51
A.8.4.1	Basic connection control messages	51
A.8.4.1.1	Basic CC - access request.....	51

	A.8.4.1.2	Basic CC - bearer handover request	51
	A.8.4.1.3	Basic CC - connection handover request	51
	A.8.4.1.4	Basic CC - unconfirmed access request	51
	A.8.4.1.5	Basic CC - bearer confirm	52
	A.8.4.1.6	Basic CC - wait	52
	A.8.4.1.7	Basic CC - release.....	52
A.8.4.2		MAC layer test messages	53
	A.8.4.2.1	MAC test - force transmit.....	53
	A.8.4.2.2	MAC test - loopback data	54
	A.8.4.2.3	MAC test - defeat antenna diversity.....	54
	A.8.4.2.4	MAC test - force bearer handover	54
	A.8.4.2.5	MAC test - escape	55
	A.8.4.2.6	MAC test - network test	55
	A.8.4.2.7	MAC test - clear test modes	56
A.8.4.3		Advanced connection control messages.....	56
	A.8.4.3.1	Advanced CC - access request	56
	A.8.4.3.2	Advanced CC - bearer handover request.....	57
	A.8.4.3.3	Advanced CC - connection handover request.....	57
	A.8.4.3.4	Advanced CC - unconfirmed access request	57
	A.8.4.3.5	Advanced CC - bearer confirm	58
	A.8.4.3.6	Advanced CC - wait.....	58
	A.8.4.3.7	Advanced CC - Attributes_T request.....	59
	A.8.4.3.8	Advanced CC - Attributes_T confirm.....	60
	A.8.4.3.9	Advanced CC - Bandwidth_T request	60
	A.8.4.3.10	Advanced CC - Bandwidth_T confirm	61
	A.8.4.3.11	Advanced CC - Channel List	62
	A.8.4.3.12	Advanced CC - Unconfirmed_dummy.....	62
	A.8.4.3.13	Advanced CC - Unconfirmed_handover.....	63
	A.8.4.3.14	Advanced CC - release.....	63
A.8.4.4		Quality control messages.....	64
	A.8.4.4.1	QC - antenna switch single bearer request	64
	A.8.4.4.2	QC - antenna switch all bearers request	64
	A.8.4.4.3	QC - bearer handover request.....	65
	A.8.4.4.4	QC - connection handover request.....	65
	A.8.4.4.5	QC - frequency control single bearer request.....	66
	A.8.4.4.6	QC - frequency control all bearers request.....	66
A.8.4.5		Broadcast and connectionless (BCL) messages	67
	A.8.4.5.1	BCL - CLF, first of 2 transmissions, half slot	67
	A.8.4.5.2	BCL - CLF, first of 2 transmissions, full slot	67
	A.8.4.5.3	BCL - CLF, first of 2 transmissions, double slot	67
	A.8.4.5.4	BCL - CLF, last transmissions, half slot.....	68
	A.8.4.5.5	BCL - CLF, last transmissions, full slot.....	68
	A.8.4.5.6	BCL - CLF, last transmissions, double slot.....	68
	A.8.4.5.7	BCL - C/L single transmissions, no CF or CLS	68
	A.8.4.5.8	BCL - CLS service, first transmissions	69
	A.8.4.5.9	BCL - change dummy bearer position	69
	A.8.4.5.10	BCL - extended system info., A-field procedure	69
	A.8.4.5.11	BCL - extended system info., B-field procedure	70
A.8.4.6		Encryption control (EC) messages.....	70
	A.8.4.6.1	EC - Encryption start.....	70
	A.8.4.6.2	EC - Encryption stop.....	71
A.8.4.7		M _T message - B - field setup	73
A.8.4.8		M _T message - Escape	73
A.8.4.9		M _T message - TARI	73
A.8.5		B - Field Messages	74
	A.8.5.1	B - Field - Advanced CC messages	74
	A.8.5.1.1	B-field Advanced CC - Access request	74
	A.8.5.1.2	B-field Advanced CC - Bearer handover request	75
	A.8.5.1.3	B-field Advanced CC - Connection handover request.....	76
	A.8.5.1.4	B-field Advanced CC - Unconfirmed access request	77
	A.8.5.1.5	B-field Advanced CC - Bearer confirm	78
	A.8.5.1.6	B-field Advanced CC - Wait.....	78
	A.8.5.1.7	B-field Advanced CC - Attributes_B request	79

	A.8.5.1.8	B-field Advanced CC - Attributes_B confirm	80
	A.8.5.1.9	B-field Advanced CC - Bandwidth_B request	81
	A.8.5.1.10	B-field Advanced CC - Bandwidth_B confirm	82
	A.8.5.1.11	B-field Advanced CC - Channel List.....	83
	A.8.5.1.12	B-field Advanced CC - Unconfirmed_Dummy	84
	A.8.5.1.13	B-field Advanced CC - Unconfirmed_Handover	85
	A.8.5.1.14	B-field Advanced CC - Release	85
A.8.5.2		B-field - Null Messages (NM).....	86
	A.8.5.2.1	B-field - NM No C _F or CL _F data in the B-field.....	86
	A.8.5.2.2	B-field - NM One B-subfield contains C _F or CL _F data	87
	A.8.5.2.3	B-field - NM Two B-subfield contain C _F or CL _F data	87
	A.8.5.2.4	B-field - NM Three B-subfield contain C _F or CL _F data	88
	A.8.5.2.5	B-field - NM Four B-subfield contain C _F or CL _F data	89
	A.8.5.2.6	B-field - NM Five B-subfield contain C _F or CL _F data	89
	A.8.5.2.7	B-field - NM Six B-subfield contain C _F or CL _F data.....	90
	A.8.5.2.8	B-field - NM Seven B-subfield contain C _F or CL _F data	91
	A.8.5.2.9	B-field - NM Eight B-subfield contain C _F or CL _F data	91
	A.8.5.2.10	B-field - NM Nine B-subfield contain C _F or CL _F data	92
A.8.5.3		B - Field - Quality control (QC) messages	93
	A.8.5.3.1	B - Field - QC Antenna switch single bearer	93
	A.8.5.3.2	B - Field - QC Antenna switch all bearers	93
	A.8.5.3.3	B - Field - QC Bearer handover	94
	A.8.5.3.4	B - Field - QC Connection handover	95
	A.8.5.3.5	B - Field - QC Frequency control single bearer.....	95
	A.8.5.3.6	B - Field - QC Frequency control all bearers.....	96
	A.8.5.3.7	B - Field - QC Reset request first TDMA half frame	97
	A.8.5.3.8	B - Field - QC Reset request second TDMA half frame.....	97
	A.8.5.3.9	B - Field - QC Reset request both TDMA half frames	98
	A.8.5.3.10	B - Field - QC Reset confirm first TDMA half frame	99
	A.8.5.3.11	B - Field - QC Reset confirm second TDMA half frame.....	99
	A.8.5.3.12	B - Field - QC Reset confirm both TDMA half frames	100
	A.8.5.3.13	B - Field - QC MOD2 ACK	101
A.8.5.4		B - Field - Extended system information (ES) messages.....	101
	A.8.5.4.1	B - Field - ES TARI message.....	101
A.8.5.5		B - Field - GF-channel data packet messages	102
	A.8.5.5.1	B - Field - GF-No C _F data in the B-field.....	102
	A.8.5.5.2	B - Field - GF-One B-subfield contains C _F data	102
	A.8.5.5.3	B - Field - GF-Two B-subfield contain C _F data	103
	A.8.5.5.4	B - Field - GF-Three B-subfield contain C _F data	103
	A.8.5.5.5	B - Field - GF-Four B-subfield contain C _F data	103
	A.8.5.5.6	B - Field - GF-Five B-subfield contain C _F data	104
	A.8.5.5.7	B - Field - GF-Six B-subfield contain C _F data.....	104
	A.8.5.5.8	B - Field - GF-Seven B-subfield contain C _F data.....	105
	A.8.5.5.9	B - Field - GF-Eight B-subfield contain C _F data.....	105
	A.8.5.5.10	B - Field - GF-Nine B-subfield contain C _F data	105
A.8.5.6		B - Field - Escape message	106
	History		107