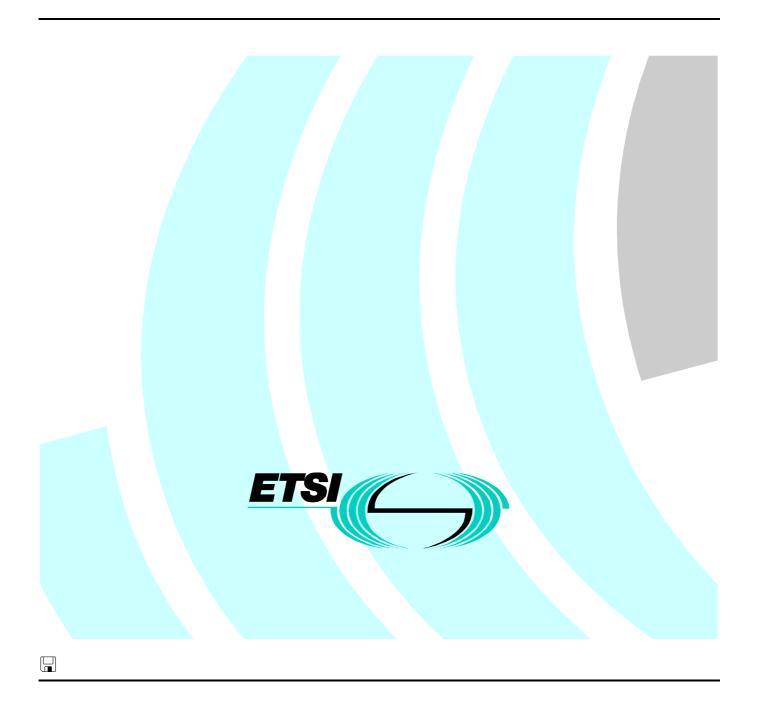Final draft **EN 301 371-3** V0.0.3 (1999-06)

*European Standard (Telecommunications series)*

# Digital Enhanced Cordless Telecommunications (DECT);
# Cordless Terminal Mobility (CTM);
# CTM Access Profile (CAP);
# Profile Test Specification (PTS);
# Part 3: Profile Specific Test Specification (PSTS) -
# Fixed radio Termination (FT)

**ETSI**

Reference

DEN/DECT-040120-3 (cp0r0020.PDF)

Keywords

CAP, CTM, DECT, FT, testing

*ETSI*

Postal address

F-06921 Sophia Antipolis Cedex - FRANCE

Office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - 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

Internet

secretariat@etsi.fr
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# Contents

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# Foreword

This European Standard (Telecommunications series) has been produced by ETSI Project Digital Enhanced Cordless Telecommunications (DECT), and is now submitted for the Voting phase of the ETSI standards Two-step Approval Procedure.

The CTM Access Profile (CAP) Profile Test Specification (PTS) comprises three parts:

Part 1:     "Summary";

Part 2:     "Profile Specific Test Specification (PSTS) - Portable radio Termination (PT)";

**Part 3:     "Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".**

| Proposed national transposition dates | |
|---|---|
| Date of latest announcement of this EN (doa): | 3 months after ETSI publication |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 6 months after doa |
| Date of withdrawal of any conflicting National Standard (dow): | 6 months after doa |

# 1 Scope

The present document contains the test specification for Digital Enhanced Cordless Telecommunications (DECT) CTM Access Profile (CAP) Fixed Part (FP) applications.

The main objective of the CAP test specification is to provide approval tests giving a high probability of air interface inter-operability between different manufacturer's equipment in different environments (i.e. public, business and residential).

The ISO standard for the methodology of conformance testing ISO/IEC 9646 Parts 1 [24] to 7 [30] is used as the basis for the test methodology, and as the basis for the test case specification. This is considered to be unsuitable for Physical layer testing, and therefore a text description is used.

The test cases listed in the present document have been derived from the DECT Common Interface (CI) Test Case Library (TCL) [14] to [22]. In addition as far as the Physical layer is concerned EN 300 176 [10] applies. Additional CAP specific test cases are included where required. The Profile IXIT is based on the DECT CI PIXITs specified in EN 300 497 [14] to [22].

# 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, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1]     EN 301 371-1: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP); Profile Test Specification (PTS); Part 1: Summary".

[2]     EN 301 371-3: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP); Profile Test Specification (PTS); Part 3: Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".

[3]     EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".

[4]     EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer (PHL)".

[5]     EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".

[6]     EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".

[7]     EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".

[8]     EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".

[9]     EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".

[10]        EN 300 176: "Digital Enhanced Cordless Telecommunications (DECT); Approval test specification".

[11]        EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".

[12]        ETS 300 476 (all parts): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma".

[13]        EN 300 494-3: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Part 3: Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".

[14]        EN 300 497-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 1: Test Suite Structure (TSS) and Test Purposes (TP) for Medium Access Control (MAC) layer".

[15]        EN 300 497-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 2: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Portable radio Termination (PT)".

[16]        EN 300 497-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 3: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Fixed radio Termination (FT)".

[17]        EN 300 497-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 4: Test Suite Structure (TSS) and Test Purposes (TP) - Data Link Control (DLC) layer".

[18]        EN 300 497-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 5: Abstract Test Suite (ATS) - Data Link Control (DLC) layer".

[19]        EN 300 497-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 6: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Portable radio Termination (PT)".

[20]        EN 300 497-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 7: Abstract Test Suite (ATS) for Network (NWK) layer - Portable radio Termination (PT)".

[21]        EN 300 497-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 8: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Fixed radio Termination (FT)".

[22]        EN 300 497-9: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Test Case Library (TCL); Part 9: Abstract Test Suite (ATS) for Network (NWK) layer - Fixed radio Termination (FT)".

[23]        EN 300 824: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP)".

[24]        ISO/IEC 9646-1: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 1: General concepts".

[25]        ISO/IEC 9646-2: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 2: Abstract Test Suite Specification".

[26]        ISO/IEC 9646-3: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 3: The Tree and Tabular Combined Notation (TTCN)".

[27]        ISO/IEC 9646-4: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 4: Test realization".

[28]        ISO/IEC 9646-5: "Information technology; Open Systems Interconnection; Conformance testing
            methodology and framework; Part 5: Requirements on test laboratories and clients for the
            Conformance Assessment process".

[29]        ISO/IEC 9646-6: "Information technology; Open Systems Interconnection; Conformance testing
            methodology and framework; Part 6: Protocol Profile Test Specification".

[30]        ISO/IEC 9646-7: "Information technology; Open Systems Interconnection; Conformance testing
            methodology and framework; Part 7: Implementation Conformance statement".

# 3          Definitions and abbreviations

## 3.1   Definitions

For the purposes of the present document, the following definitions apply:

-   terms defined in ISO/IEC 9646 Parts 1 to 7 [24] to [30];

-   definitions in EN 300 175 Parts 1 to 7 [3] to [9];

-   definitions in EN 300 444 [11];

-   definitions in EN 300 824 [23].

## 3.2   Abbreviations

For the purposes of the present document, the following abbreviations apply:

| | |
|---|---|
| ATS | Abstract Test Suite |
| CAP | CTM Access Profile |
| CC | Call Control |
| CI | Common Interface |
| CTM | Cordless Terminal Mobility |
| DECT | Digital Enhanced Cordless Telecommunications |
| DLC | Data Link Control |
| FT | Fixed radio Termination |
| GAP | Generic Access Profile |
| ICS | Implementation Conformance Statement |
| IUT | Implementation Under Test |
| IXIT | Implementation eXtra Information for Testing |
| LCE | Link Control Entity |
| LLME | Lower Layer Management Entity |
| MAC | Medium Access Control |
| MM | Mobility Management |
| NWK | Network |
| PH | Physical |
| PICS | Protocol Implementation Conformance Statement |
| PIXIT | Protocol Implementation eXtra Information for Testing |
| PT | Portable radio Termination |
| PSTS | Profile Specific Test Specification |
| PTS | Profile Test Specification |
| SUT | System Under Test |

# 4        Relevant test cases list

## 4.1      Network (NWK) layer

This subclause includes lists of the test groups and abstract test cases relevant for CAP Profile Test Specification (PTS) - NWK layer Fixed Termination (FT) derived from EN 300 497-9 [22]. In addition all the test groups and abstract test cases relevant for GAP PTS, contained in EN 300 494-3 [13] shall apply.

NOTE:     References when necessary shall be made based on the particular test case name unique through all test specification EN 300 497 [14] to [22].

## 4.1.1    Test suite structure (TSS)

**Table 1**

| Test Suite Structure | |
|---|---|
| **Suite Name:** | nwk_ft |
| **Standards Ref:** | EN 300 824 [23]; EN 300 497-9 [22] |
| **Profile ICS Ref:** | DEN/DECT-040121 |
| **Profile IXIT Ref:** | EN 300 494-3 [13] |
| **Test Method:** | remote |
| **Comments:** | |

| Test Group Reference | Test Group Objective |
|---|---|
| FT/ | To check the behaviour of the NWK layer of the FT(IUT) |
| FT/CC/ | To check the IUT CC-state machine behaviour |
| FT/CC/IT/ | To check that the IUT CC-state machine provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/CC/CA/ | Limited testing that the observable capabilities of the CC entity of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/CC/BV/ | To test the CC entity of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/CC/BV/OC/ | To check the IUT's behaviours to set-up an outgoing call |
| FT/CC/BV/IC/ | To check the IUT's behaviours to set-up an incoming call |
| FT/CC/BV/CI/ | To check the IUT's behaviour in information transfer procedures |
| FT/CC/BV/CR/ | To check the IUT's behaviours to release an outgoing/incoming call |
| FT/CC/BV/HP/ | To check the IUT's behaviour during external handover procedures |
| FT/CC/RS | To check the IUT's behaviour during call related supplementary service procedures. |
| FT/CC/BO/ | To check the behaviour of the CC entity of the IUT in response to the messages that are syntactically correct but not allowed to occur in some states of the CC procedures |
| FT/CC/BI/ | To check the behaviour of the CC entity of the IUT in response to invalid messages |
| FT/CC/TI/ | To verify that the IUT CC timers are with correct values and the IUT is reacting properly to the expiry of a timer |
| FT/MM/ | To check the behaviour of the Mobility Management entity of the IUT |
| FT/MM/IT/ | To check that the MM entity of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/MM/CA/ | Limited testing that the observable capabilities of the MM entity of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/MM/BV/ | To test the MM entity of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/MM/BV/ID/ | To check the IUT's behaviour concerning identity procedures |
| FT/MM/BV/AU/ | To check the IUT's behaviour concerning the authentication procedures |
| FT/MM/BV/LO/ | To check the IUT's behaviour concerning the location procedures |
| FT/MM/BV/AR/ | To check the IUT's behaviour concerning the access rights procedures |
| FT/MM/BV/KA/ | To check the IUT's behaviour concerning the key allocation procedure |
| FT/MM/BV/CH/ | To check the IUT's behaviour concerning the ciphering related procedures |
| FT/MM/BV/HP/ | To check the IUT's behaviour during external handover procedures |
| FT/MM/BO/ | To check the IUT behaviour in response to the messages that are syntactically correct but not allowed to occur in some phase of the MM procedures |
| FT/MM/BI/ | To check the IUT in response to invalid MM messages |
| FT/MM/TI/ | To verify that the IUT MM timers are with correct values and the IUT is reacting properly to the expiry of a timer |
| FT/ME/ | To check the behaviour of the LLME of the IUT |
| FT/ME/IT/ | To check that LLME of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/ME/CA/ | Limited testing that the observable capabilities of the LLME of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/ME/BV/ | To test the LLME of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/LC/ | To check the behaviour of the LCE of the IUT |

| Test Suite Structure | |
|---|---|
| **Suite Name:** nwk_ft | |
| **Standards Ref:** EN 300 824 [23]; EN 300 497-9 [22] | |
| **Profile ICS Ref:** DEN/DECT-040121 | |
| **Profile IXIT Ref:** EN 300 494-3 [13] | |
| **Test Method:** remote | |
| **Comments:** | |
| **Test Group Reference** | **Test Group Objective** |
| FT/LC/IT/ | To check that LCE of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing |
| FT/LC/CA/ | Limited testing that the observable capabilities of the LCE of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/LC/BV/ | To test the LCE of the IUT in response to syntactically and contextual correct behaviour of the test system |
| FT/LC/BV/LE/ | To check the IUT's behaviour concerning the connection oriented link establishment procedures |
| FT/LC/BV/LR/ | To check the IUT's behaviour concerning the connection oriented link release procedures |
| FT/LC/BI/ | To check the IUT in response to invalid LCE messages |
| FT/LC/TI/ | To verify that the IUT LCE timers are with correct values and the IUT is reacting properly to the expiry of a timer |
| FT/IS | To check the IUT's behaviour during call independent supplementary service procedures |
| FT/IS/BV | To test the CISS entity of the IUT in response to syntactically and contextual correct behaviour of the test system |
| **Detailed Comments:**<br>1) The sub-sub-groups with identifiers FT/xx/IT/ and FT/xx/CA/ do not include their own test cases but only list an appropriate selection of tests from the relevant sub-group with identifier FT/xx/. | |

## 4.1.2    Test case index

**Table 2**

| Test Case Index | | |
|---|---|---|
| **Test Group Reference** | **Test Case Id** | **Description** |
| FT/CC/BV/OC/ | TC_FT_CC_BV_OC_03 | Verify that the IUT is able, prior to subscription, to perform a CC-state transition from state F-00 to state F-10 for an outgoing emergency call set-up |
| | TC_FT_CC_BV_OC_04 | Verify that the IUT is able, when it has a subscription record for the requesting PT, to perform a CC-state transition from the F-00 state to F-10 state for an outgoing emergency call set-up |
| | TC_FT_CC_BV_OC_50 | Verify that the IUT can correctly establish a following outgoing call from the LT when the LT has use TARI as the means to lock to the IUT |
| FT/CC/BV/CR/ | TC_FT_CC_BV_CR_50 | Verify that after completing the external handover call set-up procedure, the IUT can successfully perform the PT initiated normal CC release procedure |
| | TC_FT_CC_BV_CR_51 | Verify that after completing the external handover call set-up procedure, the IUT can successfully perform the FT initiated normal CC release procedure |
| FT/CC/BV/HP/ | TC_FT_CC_BV_HP_50 | Verify that during the establishment of an outgoing call, the IUT transmits a valid <<Ext h/o indicator>> information element in a CC message |
| | TC_FT_CC_BV_HP_51 | Verify that during the establishment of an incoming call, the IUT transmits a valid <<Ext h/o indicator>> information element in a CC message |
| | TC_FT_CC_BV_HP_52 | Verify that during the establishment of an outgoing call, the IUT transmits a valid <<network parameter>> information element in a CC message |
| | TC_FT_CC_BV_HP_53 | Verify that during the establishment of an incoming call, the IUT transmits a valid <<network parameter>> information element in a CC message |
| | TC_FT_CC_BV_HP_54 | Verify that the IUT is able to perform the external handover call set-up procedure and successfully establishes the U-plane on the new connection |
| FT/MM/BV/LO/ | TC_FT_MM_BV_LO_51 | Verify that the IUT(FP) is able to transmit a LOCATE-ACCEPT message indicating <Lock limits> and <Time limits> within a <<DURATION>> information element |
| FT/MM/BV/AR/ | TC_FT_MM_BV_AR_50 | Verify that the IUT is able to successfully perform the On-air modification of user parameters procedure |
| FT/MM/BV/HP/ | TC_FT_MM_BV_HP_50 | Verify that the IUT responds with a valid MM_INFO-ACCEPT message to an MM-INFO-REQUEST message requesting "external handover parameters |
| | TC_FT_MM_BV_HP_51 | Verify that the IUT responds with a valid MM_INFO-ACCEPT message to an MM-INFO-REQUEST message requesting "handover reference" |
| | TC_FT_MM_BV_HP_52 | Verify that after performing the external handover call set-up procedure on a ciphered connection, the IUT is able to successfully perform the PT initiated ciphering procedure on the new connection |
| | TC_FT_MM_BV_HP_53 | Verify that after performing the external handover call set-up procedure on a ciphered connection, the IUT releases the new connection if ciphering fails on the new connection |
| | TC_FT_MM_BV_HP_54 | Verify that after performing the external handover call set-up procedure, the IUT initiates and successfully performs the FT initiated ciphering procedure on the new connection |
| FT/IS/BV/ | TC_FT_IS_BV_50 | Verify that the IUT as part of a Message waiting indication activation procedure sends correctly a notification for message waiting |
| | TC_FT_IS_BV_51 | Verify that the IUT as part of a Message waiting indication deactivation procedure sends correctly a notification with <numberOfMessages> equal to zero |
| **Detailed Comments:** | | |
| 1)      The FT is the IUT. | | |

## 4.2     Data Link Control (DLC) layer

All test groups and test cases contained in the GAP PTS EN 300 494-3 [13] shall apply. There are no additional test groups and abstract test cases.

## 4.3     Medium Access Control (MAC) layer

This subclause includes lists of the test groups and the abstract test cases relevant for CAP PTS - MAC layer FT derived from EN 300 497-3 [16]. In addition all the test groups and abstract test cases relevant for GAP PTS, contained in EN 300 494-3 [13] shall apply.

### 4.3.1     Test suite structure

**Table 3**

| Test Suite Structure | |
|---|---|
| **Suite Name:** | mac_ft |
| **Standards Ref:** | EN 300 824 [23]; EN 300 497-3 [16] |
| **Profile ICS Ref:** | DEN/DECT-040121 |
| **Profile IXIT Ref:** | EN 300 494-3 [13] |
| **Test Method:** | remote (modified) |
| **Comments:** | |
| **Test Group Reference** | **Test Group Objective** |
| FT/ | Verify the correct implementation of the FT (IUT) MAC layer |
| FT/DB/ | Verify the correct implementation of the Downlink broadcast services |
| FT/DB/CA/ | Limited testing that the observable capabilities of the IUT concerning the downlink broadcast service are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/DB/BV/ | To test the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system |
| FT/PG/ | Verify the correct implementation of the paging services |
| FT/PG/CA/ | Limited testing that the observable capabilities of the IUT concerning the paging services are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/PG/BV/ | To test the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system |
| FT/BS/ | Verify the correct implementation of connection oriented bearer set-up procedures |
| FT/BS/CA/ | Limited testing that the observable capabilities of the IUT concerning the connection oriented bearer set-up procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/BS/BV/ | To test the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system |
| FT/BH/ | Verify the correct implementation of connection oriented bearer handover procedures |
| FT/BH/CA/ | Limited testing that the observable capabilities of the IUT concerning the connection oriented bearer handover procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/BR/ | Verify the correct implementation of connection oriented bearer release procedures |
| FT/BR/CA/ | Limited testing that the observable capabilities of the IUT concerning the connection oriented bearer release procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/DT/ | Verify the correct implementation of connection oriented data transfer procedures |
| FT/DT/CA/ | Limited testing that the observable capabilities of the IUT concerning the connection oriented data transfer procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| FT/DT/BI/ | To check the behaviour of the of the IUT in response to invalid messages |
| FT/LM/ | Verify the correct implementation of the LLME MAC layer management procedures |
| FT/LM/CA/ | Limited testing that the observable capabilities of the IUT concerning the LLME MAC layer management procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT |
| **Detailed Comments:** | |

## 4.3.2     Test case index

**Table 4**

| Test Group Reference | Test Case Id | Description |
|---|---|---|
| FT/DB/CA/ | TC_FT_DB_CA_50 | Check that the IUT indicates correctly TARI support and successfully performs the non-continuous broadcast procedure when asked for a TARI which it does support |
| | TC_FT_DB_CA_51 | Check that the IUT broadcasts the RFP status message at least once every 10 seconds |
| | TC_FT_DB_CA_52 | Check that the IUT broadcasts the extended fixed part capabilities message at least once in every 8 multi frames |
| | TC_FT_DB_CA_53 | Check that the IUT broadcasts the extended fixed part capabilities message with bit a40 set to 1 |
| FT/BS/CA/ | TC_FT_BS_CA_50 | Verify the IUT is capable of performing a bearer set-up for emergency call using the emergency PMID |
| **Detailed Comments:** 1)          The FT is the IUT. | | |

# 4.4      Physical (PH) layer

The GAP PTS contained in EN 300 494-3 [13] shall apply.

# 5          Additional test cases list

## 5.1      Test purposes

This subclause includes all the test purposes developed for covering the CAP behaviour not included in the EN 300 497, Parts 1, 4 and 8 [14], [17], and [21], EN 300 176 [10] and EN 300 494-3 [13].

### 5.1.1     NWK layer

No additional test purposes.

### 5.1.2     DLC layer

No additional test purposes.

### 5.1.3     MAC layer

No additional test purposes.

### 5.1.4     PH layer

No additional test purposes.

## 5.2      Test cases

This subclause includes all test cases developed for covering the CAP behaviour not included in the EN 300 497, Parts 3, 5 and 9 [16], [18] and [22], EN 300 176 [10] and EN 300 494-3 [13].

### 5.2.1     NWK layer

No additional test cases.

### 5.2.2     DLC layer

No additional test cases.

### 5.2.3     MAC layer

No additional test cases.

### 5.2.4     PH layer

No additional test cases.

# Annex A (normative):
# Profile Implementation eXtra Information for Testing (IXIT) proforma

## A.1     General

This annex specifies restrictions on answers, and additional questions to (and is intended to be used with) the PIXIT proformas specified in EN 300 497, Parts 2, 3, 5, 8 and 9 [15], [16], [18], [21], and [22] and the GAP PTS PIXIT specified in EN 300 494-3 [13].

## A.2     Profile IXIT Requirements List (XRL)

This subclause specifies restrictions on answers relevant to CAP PTS. If a question exists in the relevant DECT CI PIXIT or the GAP PTS PIXIT but is not listed in the tables of this subclause this means that such a question does not need modifications and is fully applicable for CAP.

### A.2.1    NWK layer protocol

**Table A.1**

| No. | Name | Parameter type | Explanation | Value |
|-----|------|----------------|-------------|-------|
| 1 | TSPX_cap_min_sync | BOOLEAN | Is CAP profile feature N1 supported with minimum sync. between FP? | |
| 2 | TSPX_complete_fixed_id_park_value_2 | FIXED_ID_VALUE_TYPE | Value of fixed_id to be used for simulating a second FP | |
| 3 | TSPX_emergency_number | DECT_1_255 | Emergency number to be sent by the LT for emergency call. (1 to 4 digits long) | |
| 4 | TSPX_emergency_number_length | INTEGER | Length of the emergency number to be sent by the LT | |

### A.2.2    DLC layer protocol

The GAP PTS PIXIT shall apply.

### A.2.3    MAC layer protocol

**Table A.2**

| No. | Name | Parameter type | Explanation | Value |
|-----|------|----------------|-------------|-------|
| 1 | TSPX_pmid_emergency | B_20 | Emergency PMID of the lower tester | |

### A.2.4    PH layer protocol

The GAP PTS PIXIT shall apply.

# A.3          Profile specific IXIT

This subclause contains additional information to the DECT CI PIXIT's and GAP PTS PIXIT's questions related to the requirements of the CAP Profile Specific Test Specification (PSTS).

## A.3.1     NWK layer

No additions required.

## A.3.2     DLC layer

No additions required.

## A.3.3     MAC layer

No additions required.

## A.3.4     PH layer

No additions required.

## A.3.5     Configuration constraints

This subclause includes constraints on the configuration of the IUT to restrict its operation to the CAP Profile only.

No constraints on the configuration of the IUT required.

# Annex B (normative):
# Profile Conformance Test Report (PCTR) proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the Profile CTR proforma in this annex so that it can be used for its intended purposes and may further publish the completed Profile CTR.

# B.1      Identification summary

## B.1.1    Profile CTR

| | |
|---|---|
| PCTR Number | |
| PCTR Date | |
| Test Laboratory | |
| Accreditation Status | |
| Accreditation Reference | |
| Technical Authority | |
| Job Title | |
| Signature | |
| Test Laboratory Manager | |
| Signature | |

## B.1.2    Implementation Under Test (IUT)

| | |
|---|---|
| Name | |
| Version | |
| Protocol Specification | EN 300 824 |
| Profile ICS | DEN/DECT-040121 |

## B.1.3    Testing environment

| Profile IXIT | EN 301 371-3 |
|---|---|
| Profile Specific Test Specification | EN 301 371-3 |
| ATM | Remote |
| MOT | |
| Period of testing | |
| Conformance Log reference | |
| Retention Date of Log reference | |

## B.1.4    Limits and reservations

The order of test cases listed in clause B.6 (if any) of this annex corresponds to the ordering of test cases defined in the PSTS referenced in subclause B.1.3. This does not indicate that the test cases were executed in this order.

The test results presented in this test report apply only to the particular IUT declared in subclause B.1.2, as presented for test in the period declared in subclauses B.1.3, and configured as declared in the relevant IXIT attached to this PCTR. This report shall not be reproduced except in full together with its attached ICS and IXIT.

NOTE:    Additional information relevant to the technical contents or further use of the test report, or to the rights and obligations of the test laboratory and the client, may be given here. Such information may include restrictions on the publication of the report.

## B.1.5    Comments

Additional comments may be given by either the client or test laboratory on any of the contents of the PCTR, for example, to note disagreement between the two parties.

| **Additional comments reference in annex:** | |
|---|---|
| | |

## B.2    IUT conformance status

| **IUT conformance status** | **Yes/No** |
|---|---|
| The IUT conformance to the referenced base specification | |

NOTE:    For further details see ISO 9646-5, annex B, clause 2.

*ETSI*

# B.3      Static conformance summary

| Static conformance summary | Yes/No |
|---|---|
| The ICS for this IUT consistency with the static conformance requirements in the referenced base specification. | |

NOTE:     For further details see ISO 9646-5, annex B, clause 3.

# B.4      Dynamic conformance summary

| Dynamic conformance summary | Yes/No |
|---|---|
| Errors in the IUT revealed by the test campaign. | |

NOTE:     For further details see ISO 9646-5, annex B, clause 4.

# B.5      Static conformance review report

If clause B.3 indicates non-conformance, this section itemizes the mismatches between the ICS and the static conformance requirements of the referenced base specifications: ETS 300 476 and DEN/DECT-040121.

| Non-conformance indication | | Comment |
|---|---|---|
| Item in ETS 300 476 | Item in DEN/DECT-040121 | |
| | | |
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# B.6     Test campaign report

The following table lists all the Test Cases (TC) referenced in clause 4 and required by the present document. The abbreviations used in the verdict column stand for Pass (P), Fail (F) and Inconclusive (I). In addition, all test cases for GAP in EN 300 494-3 shall apply.

    NOTE:     For further details see ISO 9646-5, annex B, clause 6.

## B.6.1     NWK layer

| TC Name | Selected [Yes/No] | Run [Yes/No] | Verdict [P/F/I] | Observation |
|---|---|---|---|---|
| TC_FT_CC_BV_OC_03 | | | | |
| TC_FT_CC_BV_OC_04 | | | | |
| TC_FT_CC_BV_OC_50 | | | | |
| TC_FT_CC_BV_CR_50 | | | | |
| TC_FT_CC_BV_CR_51 | | | | |
| TC_FT_CC_BV_HP_50 | | | | |
| TC_FT_CC_BV_HP_51 | | | | |
| TC_FT_CC_BV_HP_52 | | | | |
| TC_FT_CC_BV_HP_53 | | | | |
| TC_FT_CC_BV_HP_54 | | | | |
| TC_FT_MM_BV_LO_51 | | | | |
| | | | | |
| TC_FT_MM_BV_AR_50 | | | | |
| TC_FT_MM_BV_HP_50 | | | | |
| TC_FT_MM_BV_HP_51 | | | | |
| TC_FT_MM_BV_HP_52 | | | | |
| TC_FT_MM_BV_HP_53 | | | | |
| TC_FT_MM_BV_HP_54 | | | | |
| TC_FT_IS_BV_50 | | | | |
| TC_FT_IS_BV_51 | | | | |

## B.6.2     DLC layer

There are no additional test cases for CAP.

## B.6.3     MAC layer

| TC Name | Selected [Yes/No] | Run [Yes/No] | Verdict [P/F/I] | Observation |
|---|---|---|---|---|
| TC_FT_DB_CA_50 | | | | |
| TC_FT_DB_CA_51 | | | | |
| TC_FT_DB_CA_52 | | | | |
| TC_FT_DB_CA_53 | | | | |
| TC_FT_BS_CA_50 | | | | |

## B.6.4     PH layer

There are no additional test cases for CAP.

# B.7     Observations

NOTE:     Additional information relevant to the technical content of the PCTR may be given here.

# Annex C (normative):
# System Conformance Test Report (SCTR) proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the SCTR proforma in this annex so that it can be used for its intended purposes and may further publish the completed SCTR.

# C.1     Identification summary

## C.1.1    System Conformance Test Report (SCTR)

| | |
|---|---|
| SCTR Number | |
| SCTR Date | |
| Test Laboratory Manager | |
| Signature | |

## C.1.2    Test laboratory

| | |
|---|---|
| Identification | |
| Address | |
| Postal code/city | |
| Country | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-Mail | |

## C.1.3   Client

| | |
|---|---|
| Identification | |
| Address | |
| Postal code/city | |
| Country | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-Mail | |

## C.1.4   System Under Test (SUT)

| | |
|---|---|
| Name | |
| Version | |
| Supplier | |
| Dates of testing | |
| Date of receipt of SUT | |
| Location of SUT for Testing | |
| SCS Identifier | |

## C.1.5   Profile

| | |
|---|---|
| Profile Identification | EN 300 824 |
| Profile Version | |
| Profile ICS | DEN/DECT-040121 |
| Profile Specific IXIT | EN 301 371-3 |
| PTS-Summary | EN 301 371-1 |
| PSTS | EN 301 371-3 |

## C.1.6    Nature of conformance testing

The purpose of conformance testing is to increase the probability that different implementations can interwork in different environments. However, the complexity of OSI protocols makes exhaustive testing impractical on both technical and economic grounds. Furthermore, there is no guarantee that a SUT which has passed all the relevant test cases conforms to a specification. Neither is there any guarantee that such an SUT will interwork with other real open systems. Rather, passing the test cases gives confidence that the SUT has the stated capabilities and that its behaviour conforms consistently in representative instances of communication.

## C.1.7    Limits and reservations

The test results presented in this test report apply only to the particular SUT and component IUTs declared in subclause C.1.4 and C.1.8, for the functionality described in the referenced SCS and in the ICS referenced in each PCTR, as presented for test in the period declared in subclause C.1.4 and configured as declared in the relevant IXIT referenced in each PCTR. This SCTR may not be reproduced except in full, together with its SCS.

NOTE:    Additional information may be given here relevant to the technical contents or further use of the test report, or to the rights and obligations of the test laboratory and the client. Such information may include restrictions on the publication of the report.

## C.1.8    Record of agreement

A definition of what parts of the SUT were considered to be the IUT during testing, and of the abstract test method and abstract test suite that were used:

| IUT Definition Reference | Protocol | ATM | ATS |
|---|---|---|---|
| | DECT NWK layer FT | Remote | EN 301 371-3 |
| | DECT DLC layer FT | Not applicable | EN 301 371-3 |
| | DECT MAC layer FT | Remote (modified) | EN 301 371-3 |
| | DECT PH layer FT | Not applicable | EN 301 371-3 |

## C.1.9    Comments

| Additional comments reference in annex: | |
|---|---|
| | |

NOTE:    Additional comments may be given by either the client or test laboratory on any of the contents of the SCTR, for example, to note disagreement between the two parties.

# C.2      System report summary

## C.2.1     Profile testing summary for CAP NWK layer FT

| | |
|---|---|
| Accreditation status | |
| Accreditation reference | |
| Implementation identifier | |
| IUT definition reference | |
| Protocol specification | EN 300 175-5<br>EN 300 824 |
| Profile ICS | DEN/DECT-040121 |
| Profile IXIT | EN 301 371-3 |
| PCTR Number | |
| PCTR Date | |
| PSTS | EN 301 371-3 |
| ATM | Remote |
| Means of Testing identifier | |
| Conformance Status | |
| Conformance Status<br>Static conformance errors<br>Dynamic conformance errors | <br>Yes / No<br>Yes / No |
| Test cases all | |
| Selected | |
| Run | |
| Passed | |
| Inconclusive | |
| Failed | |
| Observations | |

NOTE:     If the SUT is not statically and dynamically conforming to this protocol, an additional summary may be given on aspect of non conformance. Any difficulties encountered may be reported here.

## C.2.2     Profile testing summary for CAP DLC layer FT

There is no additional profile testing for CAP DLC layer FT.

## C.2.3  Profile testing summary for CAP MAC layer FT

| | |
|---|---|
| Accreditation status | |
| Accreditation reference | |
| Implementation identifier | |
| IUT definition reference | |
| Protocol specification | EN 300 175-3<br>EN 300 824 |
| Profile ICS | DEN/DECT-040121 |
| Profile IXIT | EN 301 371-3 |
| PCTR Number | |
| PCTR Date | |
| PSTS | EN 301 371-3 |
| ATM | Remote (modified) |
| Means of Testing identifier | |
| Conformance Status | |
| Conformance Status<br>Static conformance errors<br>Dynamic conformance errors | <br>Yes / No<br>Yes / No |
| Test cases all | |
| Selected | |
| Run | |
| Passed | |
| Inconclusive | |
| Failed | |
| Observations | |

NOTE:   If the SUT is not statically and dynamically conforming to this protocol, an additional summary may be given on aspect of non conformance. Any difficulties encountered may be reported here.

## C.2.4  Profile testing summary for CAP PH layer FT

There is no additional profile testing for CAP PH layer FT.

# Annex D (normative):
# System Conformance Statement (SCS) proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the SCS proforma in this annex so that it can be used for its intended purposes and may further publish the completed SCS.

# D.1          Identification summary

## D.1.1     SCS identification

| SCS Serial Number | |
|-------------------|--|
| SCS Date | |

## D.1.2     IUT identification

| Trade Name | |
|------------|--|
| Type | |
| Version | |
| Serial Number | |

## D.1.3    Client identification

| Company | |
|---|---|
| Street Number | |
| Postal Code / City | |
| Country | |
| Contact Person Name | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-Mail | |

## D.1.4    Supplier identification

| Company | |
|---|---|
| Street Number | |
| Postal Code / City | |
| Country | |
| Contact Person Name | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-Mail | |

## D.1.5    Manufacturer identification

(if different from client)

| | |
|---|---|
| Company | |
| Street Number | |
| Postal Code / City | |
| Country | |
| Contact Person Name | |
| Telephone | |
| Telefax | |
| Telex | |
| Teletex | |
| E-Mail | |

## D.1.6    Protocols identification

| Protocol Name | Specification Reference | PICS Reference | PCTR Reference | PCTR Reference from previous campaign |
|---|---|---|---|---|
| DECT NWK layer | EN 300 175-5 | ETS 300 476 | - | |
| DECT DLC layer | EN 300 175-4 | ETS 300 476 | - | |
| DECT MAC layer | EN 300 175-3 | ETS 300 476 | - | |
| DECT PH layer | EN 300 175-2 | ETS 300 476 | - | |

## D.1.7    Profile identification

| Profile Identifier | Specification Reference | Profile ICS Specific Reference | SCTR Reference | SCTR reference from previous campaign |
|---|---|---|---|---|
| CTM Access Profile (CAP) | EN 300 824 | DEN/DECT-040121 | EN 301 371-1 | |

# D.2 Miscellaneous system information

## D.2.1 Configuration

| Environment | Which one |
|---|---|
| CPU Type | |
| Bus-System | |
| Operating System Name | |
| Additional | |

## D.2.2 Other information

# Bibliography

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

- DEN/DECT-040121-1: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 1: Portable radio Termination (PT)".

- DEN/DECT-040121-2: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 2: Fixed radio Termination (FT)".

- EN 301 371-2: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM); CTM Access Profile (CAP); Profile Test Specification (PTS); Part 2: Portable radio Termination (PT)".

# History

| Document history | | | | |
|---|---|---|---|---|
| V0.0.1 | September 1998 | Public Enquiry | PE 9901: | 1998-09-04 to 1999-01-01 |
| V0.0.3 | June 1999 | Vote | V 9934: | 1999-06-07 to 1999-08-20 |
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