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Radio Equipment and Systems (RES);
Attachment requirements for terminal equipment for
Digital Enhanced Cordless Telecommunications (DECT)
Generic Access Profile (GAP) applications

ETSI

Contents

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Foreword

This final draft Technical Basis for Regulation (TBR) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Voting phase of the ETSI standards approval procedures.

Details of the Digital Enhanced Cordless Telecommunications (DECT) Common Interface (CI) may be found in ETS 300 175, Parts 1 - 9 [1] to [9].

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1   Scope

This TBR specifies the technical characteristics which shall be provided by terminal equipment which is capable of connection to a public telecommunications network (see note) and which uses DECT cordless communications. These requirements shall apply to equipment providing any DECT telephony application. The cordless transmissions for such terminal equipment operate within the frequency band 1880-1900 MHz.

This TBR shall apply in addition to the attachment requirements for the appropriate public network; and in addition to the CTRs for DECT General attachmemt requirements and for telephony applications.

DECT comprises two equipment elements, referred to as Fixed Part (FP) and Portable Part (PP).

The objective of this TBR is to ensure the air interface interoperability of DECT equipment capable of telephony applications, in such a way that any DECT PP conforming to the procedures described in this TBR shall be capable of interoperability with any DECT FP conforming to the procedures described in this TBR.

The FP and /or the PP shall conform to the requirements and tests in this TBR. This TBR is structured to allow type approval of the FP and PP as separate items. Where the DECT FP is connected to a PSTN, and where there are specific national variations in the requirements for voice telephony, these shall be accommodated within the FP so that the PP shall be common.

> NOTE: CTR for basic ISDN, CTR for primary rate ISDN, or national regulations (implementing ETS 300 001) for PSTN. Interconnection of DECT terminal to GSM network is still under study; in due course, the scope statement may need amending to reflect this point.

This TBR is based on the radio and protocol provisions of ETS 300 175, Parts 1 to 8 [1] - [8].

2   Normative references

This TBR incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this TBR only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

[1]   ETS 300 175-1: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".

[2]   ETS 300 175-2: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer".

[3]   ETS 300 175-3: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".

[4]   ETS 300 175-4: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".

[5]   ETS 300 175-5: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".

[6]   ETS 300 175-6: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".

[7]   ETS 300 175-7: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".

[8]   ETS 300 175-8: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech coding and transmission".

[9]   ETS 300 175-9: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 9: Public Access Profile (PAP)".

[10]   ETS 300 444 (1995): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP)".

[11]   prETS 300 476-1 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 1: Network (NWK) layer - Portable radio Termination (PT)".

[12]   prETS 300 476-2 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 2: Data Link Control (DLC) layer - Portable radio Termination (PT)".

[13]   prETS 300 476-3 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 3: Medium Access Control (MAC) layer - Portable radio Termination (PT)".

[14]   prETS 300 476-4 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 4: Network (NWK) layer - Fixed radio Termination (FT)".

[15]   prETS 300 476-5 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 5: Data Link Control (DLC) layer - Fixed radio Termination (FT)".

[16]   prETS 300 476-6 (1996): "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)".

[17]   prETS 300 476-7 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 7: Physical layer".

[18]   prETS 300 474-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 1: Portable radio Termination (PT)".

[19]   prETS 300 474-2: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 2: Fixed radio Termination (FT)".

[20]   Reserved value.

[21]   ISO/IEC 9646-1 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts". (See also CCITT Recommendation X.290 (1991)).

[22]   ISO/IEC 9646-2 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification". (See also CCITT Recommendation X.291 (1991)).

[23]   ISO/IEC 9646-3 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The tree and tabular combined notation". (See also CCITT Recommendation X.292 (1992)).

[24]   ISO/IEC 9646-4 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 4: Test realisation". (See also CCITT Recommendation X.292 (1992)).

[25]   ISO/IEC 9646-5 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 5: Requirements on test laboratories and clients for the conformance assessment process". (See also CCITT Recommendation X.292 (1992)).

[26]   ISO/IEC 9646-6 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".

[27]   ISO/IEC 9646-7 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statement".

[28]   91/263/EEC: "Council Directive of 29 April 1991 on the approximation of the laws of the Member states concerning telecommunications terminal equipment, including the mutual recognition of their conformity. (Terminal Directive)".

[29..40]   Reserved values.

[41]   I-ETS 300 176: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Approval test specification".

[42]   TBR 6: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); General terminal attachment requirements".

[43]   TBR 10: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); General terminal attachment requirements: Telephony applications".

[44 .. 46]   Reserved values.

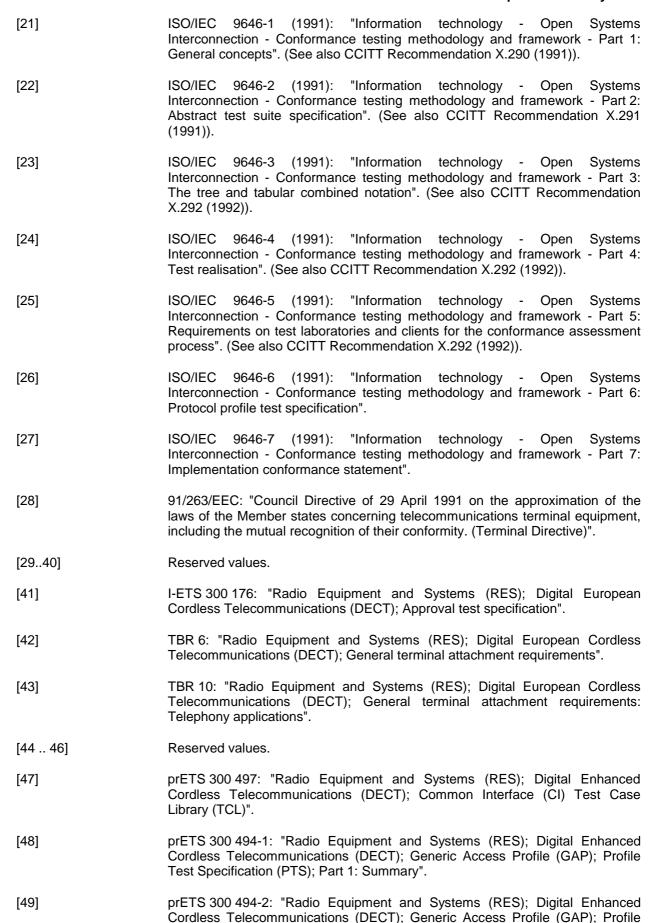[47]   prETS 300 497: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL)".

[48]   prETS 300 494-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 1: Summary".

[49]   prETS 300 494-2: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 2: Profile Specific Test Specification (PSTS) - Portable radio Termination (PT)".

[50]   prETS 300 494-3: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 3: Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".

3   Definitions and abbreviations

3.1   Definitions

For the purposes of this TBR, the following definitions given in ETS 300 444 [10] and ETS 300 175, Parts 1 to 7 [1] to [7] apply:

3.2   Abbreviations

For the purposes of this TBR, the following abbreviations apply:

AC	Authentication Code
ATS	Abstract Test Suit
C	Category
CC	Call Control
CI	Common Interface
CTR	Common Technical Regulation
Cxxx	Conditional under number "xxx"
DCK	Derived Cipher Key
DECT	Digital Enhanced Cordless Telecommunications
DLC	Data Link Control
FP	Fixed Part
FT	Fixed radio Termination
GAP	Generic Access Profile
I	Out of scope
ICS	Implementation Conformance Statement
IPUI	International Portable User Identity
IUT	Implementation Under Test
IXIT	Implementation eXtra Information for Testing
LCE	Link Control Entity
LLME	Lower Layer Management Entity
LLN	Logical Link Number
M	Mandatory
MAC	Medium Access Control
MM	Mobility Management
N/A	Not Applicable
NLF	New Link Flag
NWK	NetWorK
O	Optional
PARK	Portable Access Rights Key
PH	PHysical
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
PP	Portable Part
PSTN	Public Switched Telephone Network
PSTS	Profile Specific Test Specification
PT	Portable radio Termination
PTS	Profile Test Specification
RT	Requirements Tables
SARI	Secondary Access Rights Identity
Sp	Support
St	Status
SUT	System Under Test
TBR	Technical Basis for Regulation
TPUI	Temporary Portable User Identity
TS	Test System
TSS&TP	Test Suit Structure & Test Purposes

4   How to use this TBR

This TBR contains one set of tables for the PP and one set of tables for the FP. Each set of tables is divided in subsets dependant on the particular DECT layer comprising:

-        a Test suit structure table;

-        a Test case index table;

-        a TBR-RT feature table;

-        a TBR-RT procedure table;

-        a messages/frames table;

-        a information elements table; and

-        a timer table.

If a particular feature, procedure, message, information element or timer specified in DECT CI ETS 300 175 1 to 8 [1] to [8] is not listed in any table it shall be considered as out of scope of this TBR and shall not be tested.

5   Requirements

The GAP features, services and requirements as defined in ETS 300 444 [10] are considered to fall under the essential requirements specified in Article 4 of the Council directive 91/263/EEC [28] applying to terminal equipment, given in the following subclauses. The column TD Cat (Terminal Directive Category) identifies the applicable clauses of Article 4 of directive 91/263/EEC [28].

NOTE 1:   This clause does not specify the exact status (e.g. mandatory or optional) of the listed features, services and requirements. This is specified in annex A.

NOTE 2:   When a feature relates to business environment it has been considered that the particular private network (e.g. PBX) is to be connected to public network, therefore that feature has been qualified as implicitly relating to item (f).

5.1 Network (NWK) layer features

Table 1: Network layer requirements and justifications

ETS 300 444 Item	DESCRIPTION	TBR JUSTIFICATION	TD Cat
6.2	Outgoing call	To ensure the terminal can establish an outgoing call to ensure correct interworking with the network	f
6.2	Off hook	To ensure the terminal can establish an outgoing call and answer an incoming call to ensure correct interworking with the network	f
6.2	On hook (full release)	To ensure the terminal can release a call, to ensure correct interworking with the network	f
6.2	Dialled digits (basic)	To ensure the terminal can send call address information to the network during an outgoing call, to ensure correct interworking with the network	f
6.2	Register recall	To ensure the terminal can correctly invoke network features to modify a call	f
6.2	Go to DTMF signalling (defined tone length)	To ensure the terminal can send call address information to the network during an outgoing call, to ensure correct interworking with the network	f
6.2	Pause (dialling pause)	To ensure the terminal can send call address information to the network during an outgoing call, to ensure correct interworking with the network	f
6.2	Incoming call	To ensure the terminal behaves correctly on receiving an incoming call, to ensure correct interworking with the network	f
6.2	Authentication of PP	To ensure the correct authentication of a terminal for call establishment and access to other services (e.g. charging)	d, f
6.2	Authentication of User	To ensure correct authentication of a terminal and user for call establishment and access to other services (e.g. charging)	d, f
6.2	Location registration	To ensure the correct location of a terminal for call establishment and access to other services (e.g. charging)	d, f
6.2	On air key allocation	To ensure the correct and secure authentication of a terminal for call establishment and access to other services (e.g. charging)	d, f
6.2	Identification of a PP	To ensure the correct identification of a terminal for call establishment and access to other services (e.g. charging)	d, f
6.2	Service class indication/assignment	To ensure the correct authentication of a terminal for call establishment and access to other services (e.g. charging)	d, f
6.2	Alerting	To ensure the terminal behaves correctly on receiving an incoming call, to ensure correct interworking with the network	f
6.2	ZAP	To ensure the correct authentication of a terminal for call establishment and charging purposes	d, f
6.2	Encryption activation FT initiated	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g
6.2	Subscription registration procedure on-air	To ensure the correct identification of a terminal for call establishment and access to other services (e.g. charging)	d, f

(continued)

Table 1 (concluded): Network layer requirements and justifications

ETS 300 444 Item	DESCRIPTION	TBR JUSTIFICATION	TD Cat
6.2	Link control	To ensure the terminal can establish and release a call, to ensure correct interworking with the network	f
6.2	Terminate access rights FT initiated	To ensure the correct authentication of a terminal for call establishment and access to other services (e.g. charging)	d, f
6.2	Partial release	To ensure correct interworking with the network when clearing a call, also to ensure effective use of radio spectrum - if implemented incorrectly and a call is left established, this wastes spectrum resources	e, f
6.2	Go to DTMF (infinite tone length)	If incorrectly implemented, could interfere with sending call address information to the network during an outgoing call; to ensure correct interworking with the network	f
6.2	Go to Pulse	If incorrectly implemented, could interfere with sending call address information to the network during an outgoing call; to ensure correct interworking with the network	f
6.2	Signalling of display characters	If incorrectly implemented, user may be misled as to what network/FT he is connected to, and therefore what he is being charged; to ensure interworking with the network for establishment and access to other services (e.g. charging)	f
6.2	Display control characters	If incorrectly implemented, user may be misled as to what network/FT he is connected to, and therefore what he is being charged; to ensure interworking with the network for establishment and access to other services (e.g. charging)	f
6.2	Authentication of FT	If incorrectly implemented, authentication of a terminal and interworking with the network for establishing a call may not be possible	f
6.2	Encryption activation PT initiated	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g
6.2	Encryption deactivation FT initiated	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g
6.2	Encryption deactivation PT initiated	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g
6.2	Calling Line Identification Presentation (CLIP)	To ensure the terminal behaves correctly on receiving an incoming call, to ensure correct interworking with the network. If incorrectly supported, interworking may not be possible	f
6.2	Internal call	If incorrectly supported, could prevent effective use of radio spectrum, and terminal could misuse network resources	d, e

5.2   Data Link Control (DLC) layer services

Table 2: Data link control layer requirements and justifications

ETS 300 444 Item	DESCRIPTION	TBR JUSTIFICATION	TD Cat
6.3	LAPC class A service and Lc	Required to enable the terminal to correctly interwork with the network at Network layer	f
6.3	Cs channel fragmentation and recombination	Required to enable the terminal to correctly interwork with the network at Network layer	f
6.3	Broadcast Lb service	Required to enable the terminal to correctly interwork with the network at Network layer, for the purpose of establishing a call	f
6.3	Intracell voluntary connection handover	To ensure effective use of spectrum resources, and to ensure establishment, modification and holding of a call when interworking with the network	e, f
6.3	Intercell voluntary connection handover	To ensure effective use of spectrum resources, and to ensure establishment, modification and holding of a call when interworking with the network	e, f
6.3	Encryption activation (DLC)	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g
6.3	LU1 TRUP Class 0 / min_delay	To ensure interworking through the network	g
6.3	FU1	To ensure interworking through the network	g
6.3	Encryption deactivation (DLC)	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g

5.3 Medium Access Control (MAC) layer services

Table 3: Medium access control layer requirements and justifications

ETS 300 444 Item	DESCRIPTION	TBR JUSTIFICATION	TD Cat
6.4	MAC Service	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
6.4	Continuous broadcast	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers for the purpose of establishing a call	e, f
6.4	Paging broadcast	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers for the purpose of establishing a call	e, f
6.4	Basic connections	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
6.4	Cs higher layer signalling	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
6.4	Quality control	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
6.4	Encryption activation (MAC)	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g
6.4	Extended frequency allocation	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
6.4	Bearer Handover, intra-cell	To ensure effective use of spectrum resources, and to ensure establishment, modification and holding of a call when interworking with the network	e, f
6.4	Bearer Handover, inter-cell	To ensure effective use of spectrum resources, and to ensure establishment, modification and holding of a call when interworking with the network	e, f
6.4	Connection Handover, intra-cell	To ensure effective use of spectrum resources, and to ensure establishment, modification and holding of a call when interworking with the network	e, f
6.4	Connection Handover, inter-cell	To ensure effective use of spectrum resources, and to ensure establishment, modification and holding of a call when interworking with the network	e, f
6.4	SARI support	To ensure the correct authentication of a terminal for call establishment and access to other services (e.g. charging), and for effective use of the radio spectrum	d, e, f
6.4	Encryption deactivation (MAC)	To ensure interworking with and through the network when encryption is supported. If encryption is incorrectly supported, interworking will not be possible	f, g

5.4 Application features

Table 4: Application requirements and justifications

ETS 300 444 Item	DESCRIPTION	TBR JUSTIFICATION	TD Cat
6.6	AC bitstring mapping	To ensure the correct authentication of a terminal for call establishment and access to other services (e.g. charging), to ensure interworking with the network	d, f
6.6	Multiple subscription registration	Required for effective use of the radio spectrum to reduce the signalling required on subscription, required for interworking with the network for establishment of a call	e, f
6.6	Manual entry of the PARK	If implemented incorrectly, may prevent effective use of the radio spectrum by increasing the signalling required on subscription, required for interworking with the network for establishment of a call	e, f

5.5 PHysical (PH) layer requirements

In addition to the requirements defined in TBR 6 [42] and TBR 10 [43] the following GAP specific requirement apply.

Table 5: Physical layer requirements and justifications

ETS 300 444 Item	DESCRIPTION	TBR JUSTIFICATION	TD Cat
11.1	Full slot for speech information	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
11.2	Minimum Normal Trasmit Power (NTP)	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
11.3	Radio receiver sensitivity	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
11.4	Z-field transmission	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
11.5	Sliding collision detection	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
11.6	Physical channel availability	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f
11.7	Synchronisation window	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers	e, f

6 Test specification

6.1 Portable Part (PP)

This subclause includes lists of the test groups and abstract test cases relevant for GAP TBR derived from ETS 300 494-2 [49].

6.1.1 NWK layer

6.1.1.1 Test suit structure

Table 6

TBR 22: Test Suite Structure PP	
Suite Name : nwk_pt	
Standards Ref : ETS 300 444 [10]; ETS 300 497-7 [47]	
Profile ICS Ref: ETS 300 474-1 [18]	
Profile IXIT Ref: ETS 300 494-2 [49]	
Test Method : remote	
Comments :	
Test Group Reference	**Test Group Objective**
PT/	To check the behaviour of the NWK layer of the PT(IUT)
PT/CC/	To check the IUT CC-state machine behaviour
PT/CC/IT/	To check that the IUT CC-state machine provides sufficient conformance for possible interconnection without trying to perform thorough testing
PT/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
PT/CC/BV/	To tests the CC entity of the IUT in response to syntactically and contextual correct behaviour of the test system
PT/CC/BV/OC/	To check the IUT's behaviours to setup an outgoing call
PT/CC/BV/IC/	To check the IUT's behaviours to setup an incoming call
PT/CC/BV/CI/	To check the IUT's behaviour in information transfer procedures
PT/CC/BV/CR/	To check the IUT's behaviours to release an outgoing/incoming call
PT/CC/BV/RS/	To check the IUT's behaviour during call related supplementary service procedures
PT/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
PT/CC/BI/	To check the behaviour of the CC entity of the IUT in response to invalid messages
PT/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
PT/MM/	To check the behaviour of the Mobility Management entity of the IUT
PT/MM/IT/	To check that the MM entity of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing
PT/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
PT/MM/BV/	To tests the MM entity of the IUT in response to syntactically and contextual correct behaviour of the test system
	(continued)

Table 6 (concluded)

TBR 22: Test Suite Structure PP	
Test Group Reference	**Test Group Objective**
PT/MM/BV/ID/	To check the IUT's behaviour concerning identity procedures
PT/MM/BV/AU/	To check the IUT's behaviour concerning the authentication procedures
PT/MM/BV/LO/	To check the IUT's behaviour concerning the location procedures
PT/MM/BV/AR/	To check the IUT's behaviour concerning the access rights procedures
PT/MM/BV/KA/	To check the IUT's behaviour concerning the key allocation procedure
PT/MM/BV/CH/	To check the IUT's behaviour concerning the ciphering related procedures
PT/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
PT/MM/BI/	To check the IUT in response to invalid MM messages
PT/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
PT/ME/	To check the behaviour of the LLME of the IUT
PT/ME/IT/	To check that LLME of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing
PT/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
PT/ME/BV/	To tests the LLME of the IUT in response to syntactically and contextual correct behaviour of the test system
PT/ME/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 LLME managed procedures
PT/LC/	To check the behaviour of the LCE of the IUT
PT/LC/IT/	To check that LCE of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing
PT/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
PT/LC/BV/	To tests the LCE of the IUT in response to syntactically and contextual correct behaviour of the test system
PT/LC/BV/LE/	To check the IUT's behaviour concerning the connection oriented link establishment procedures
PT/LC/BV/LR/	To check the IUT's behaviour concerning the connection oriented link release procedures
PT/LC/BI/	To check the IUT in response to invalid LCE messages
PT/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

Detailed Comments:

1.   The sub-sub-groups with identifiers PT/xx/IT/ and PT/xx/CA/ do not include their own test cases but only list an appropriate selection of tests from the relevant sub-group with identifier PT/xx/.

6.1.1.2   Test case index

Table 7

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
PT/CC/BV/OC/	TC_PT_CC_BV_OC_01	Outgoing call; T-00, T-01, T-02, T-03, T-04, T-10; piece wise dialling in T-02
	TC_PT_CC_BV_OC_02	Outgoing call; states T-00, T-01, T-10; piece wise dialling in T-10
	TC_PT_CC_BV_OC_03	Outgoing call; states T-00, T-01, T-02, T-10; piece wise dialling in T-02
	TC_PT_CC_BV_OC_04	Outgoing call; U-plane connection upon <<Progress ind.>> in {CC-SETUP-ACK}
PT/CC/BV/IC/	TC_PT_CC_BV_IC_01	Incoming call; T-01, T-06, T-07, T-08, T-10; <<SIGNAL>> in T-07
	TC_PT_CC_BV_IC_02	Incoming call; T-01, T-06, T-07, T-08, T-10; <<SIGNAL>> in {CC-SETUP}
PT/CC/BV/CI/	TC_PT_CC_BV_CI_01	Alerting the user; Incoming call; <<SIGNAL>> in {CC-SETUP}
	TC_PT_CC_BV_CI_02	Go to pulse invocation in T-02; Outgoing call
	TC_PT_CC_BV_CI_03	Go to pulse invocation in T-10; Outgoing call
	TC_PT_CC_BV_CI_04	Dialling pause indication in T-02; Outgoing call
	TC_PT_CC_BV_CI_05	Dialling pause indication in T-10; Outgoing call
	TC_PT_CC_BV_CI_06	Go to DTMF invocation in T-02; defined tone length; Outgoing call
	TC_PT_CC_BV_CI_07	Go to DTMF invocation in T-10; defined tone length; Outgoing call
	TC_PT_CC_BV_CI_08	Go to DTMF invocation in T-02; infinite tone length; Outgoing call
	TC_PT_CC_BV_CI_09	Go to DTMF invocation in T-10; infinite tone length; Outgoing call
	TC_PT_CC_BV_CI_10	Outgoing normal call; T-02; {CC-INFO}, sending <<Multi keypad>>, "0-9, star, hash mark"
	TC_PT_CC_BV_CI_11	Internal call
	TC_PT_CC_BV_CI_12	T-10; {CC-INFO}, <<Multi display>> standard characters handling

(continued)

Table 7 (continued)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
	TC_PT_CC_BV_CI_13	T-10; {CC-INFO}, <<Multi display>> control characters handling
	TC_PT_CC_BV_CI_14	T-10; invocation of "Register recall"; {CC-INFO}, <<Multi keypad>>
PT/CC/BV/CR/	TC_PT_CC_BV_CR_01	Outgoing normal call; T-02; FT initiated normal release
	TC_PT_CC_BV_CR_02	Outgoing normal call; T-03; FT initiated normal release
	TC_PT_CC_BV_CR_03	Outgoing normal call; T-04; FT initiated normal release
	TC_PT_CC_BV_CR_04	Incoming call; T-08; FT initiated normal release
	TC_PT_CC_BV_CR_05	T-10; FT initiated normal release
	TC_PT_CC_BV_CR_06	T-10; IUT initiated normal release
	TC_PT_CC_BV_CR_07	T-01; FT initiated abnormal release
	TC_PT_CC_BV_CR_08	T-02; FT initiated abnormal release
	TC_PT_CC_BV_CR_09	T-10; FT initiated abnormal release
	TC_PT_CC_BV_CR_10	T-10; FT initiated partial release
	TC_PT_CC_BV_CR_11	T-10; IUT initiated partial release
PT/CC/BV/RS/	TC_PT_CC_BV_RS_01	T-00; Incoming call; {CC-SETUP} with <<Calling party number>>; CLIP handling
PT/CC/BO/	TC_PT_CC_BO_01	T-08; unexpected message {CC-CALL-PROC}; ignore
	TC_PT_CC_BO_02	T-19; receipt of {CC-RELEASE}; release collision; clear the call
PT/CC/BI/	TC_PT_CC_BI_01	T-00; {CC-SETUP} mandatory I.E. missing; answer upon with {CC-RELEASE-COM}
	TC_PT_CC_BI_02	T-00; {CC-SETUP} wrong mandatory I.E.; answer upon with {CC-RELEASE-COM}
	TC_PT_CC_BI_03	T-00; {CC-SETUP} message with bit error in the message type; ignore
	TC_PT_CC_BI_04	T-00; to short message to contain the complete <<Message type>>; ignore
PT/CC/TI/	TC_PT_CC_TI_01	T-19; timer P-<CC.02> expiry (± 5% margin); IUT sends {CC-RELEASE-COM}

(continued)

Table 7 (continued)

Test Group Reference	Test Case Id	Description
		TBR 22: Test Case Index
	TC_PT_CC_TI_02	Outgoing call; T-01; timer P-<CC.03> expiry (± 5% margin); IUT sends {CC-RELEASE-COM}
	TC_PT_CC_TI_03	T-01; restarts P-<CC.03> upon {CC-NOTIFY}
	TC_PT_CC_TI_04	Outgoing call; T-08; timer P-<CC.05> expiry (± 5% margin); IUT sends {CC-RELEASE}
PT/MM/BV/ID/	TC_PT_MM_BV_ID_01	Identity request; IPUI type requested; active IPUI returned
	TC_PT_MM_BV_ID_02	Identity request; unavailable id. type requested; no identity in the reply
	TC_PT_MM_BV_ID_08	Identity request; PARK requested; active PARK returned
PT/MM/BV/AU/	TC_PT_MM_BV_AU_01	Authentication of PT; IUT(PT) has no stored ZAP value and service class info
	TC_PT_MM_BV_AU_02	Authentication of PT; unacceptable algorithm requested; reject
	TC_PT_MM_BV_AU_03	Authentication of PT; IUT(PT) has stored ZAP value; IUT includes ZAP value in the replay
	TC_PT_MM_BV_AU_04	Authentication of PT; ZAP increment handling
	TC_PT_MM_BV_AU_05	Authentication of PT; ZAP increment handling; unsuccessful authentication of FT; ZAP is not incremented
	TC_PT_MM_BV_AU_06	Authentication of PT; storage of DCK handling
	TC_PT_MM_BV_AU_07	Authentication of user
	TC_PT_MM_BV_AU_08	Authentication of FT; IUT initiated
	TC_PT_MM_BV_AU_09	Authentication of PT; IUT(PT) has stored service class info; IUT includes service class info in the replay
PT/MM/BV/LO/	TC_PT_MM_BV_LO_01	Location registration after obtain access rights; a44 and a38=1 at locking; no TPUI assignment
	TC_PT_MM_BV_LO_02	Location registration after obtain access rights; a44 and a38=1 at locking; TPUI assignment

(continued)

Table 7 (continued)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
	TC_PT_MM_BV_LO_03	Location registration after obtain access rights; a44=1 and a38=0 at locking; IUT does not perform location registration
	TC_PT_MM_BV_LO_04	Location registration; no CC activities; location area changes; a38=1 at locking and at the beginning of the procedure; no TPUI assignment
	TC_PT_MM_BV_LO_05	No CC activities; power off; power on; Location registration request
	TC_PT_MM_BV_LO_06	Location registration; unacceptable TPUI assignment; reject
	TC_PT_MM_BV_LO_07	Location registration; entering new location area; IUT deletes old TPUI
	TC_PT_MM_BV_LO_08	Location update suggested by FT; Location registration initiated by IUT; a38=1 at locking and at the beginning of the procedure
	TC_PT_MM_BV_LO_09	Location update suggested by FT; Location registration initiated by IUT; even when a38 was set to '0'
PT/MM/BV/AR/	TC_PT_MM_BV_AR_01	Obtain access rights; a44=1; both sides use AC
	TC_PT_MM_BV_AR_03	Obtain access rights; a44=0; IUT does not initiate obtain access rights procedure
	TC_PT_MM_BV_AR_05	Terminate access rights; FT initiated; IUT(PT) may authenticate FT
	TC_PT_MM_BV_AR_06	Terminate access rights; FT initiated; IUT(PT) authenticates FT; authentication fails; termination rejected
	TC_PT_MM_BV_AR_09	Obtain access rights; FT assigns ZAP field; IUT stores it
	TC_PT_MM_BV_AR_10	Obtain access rights; FT assigns service class; IUT stores it
PT/MM/BV/KA/	TC_PT_MM_BV_KA_01	Key allocation
	TC_PT_MM_BV_KA_02	Key allocation; <<Auth type>> unacceptable; reject

(continued)

Table 7 (continued)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
	TC_PT_MM_BV_KA_03	Key allocation; implicit authentication of FT fails; key is not allocated
PT/MM/BV/CH/	TC_PT_MM_BV_CH_01	Cipher switching; IUT(PT) initiated; "cipher-off" to "cipher-on"
	TC_PT_MM_BV_CH_02	Cipher switching; IUT(PT) initiated; "cipher-on" to "cipher-off"
	TC_PT_MM_BV_CH_03	Cipher switching; FT initiated; "cipher-off" to "cipher-on"
	TC_PT_MM_BV_CH_04	Cipher switching; FT initiated; "cipher-on" to "cipher-off"
	TC_PT_MM_BV_CH_05	Cipher switching; FT initiated; "cipher-off" to "cipher-on"; unacceptable algorithm or key; reject
PT/MM/BO/	TC_PT_MM_BO_01	Location registration request; receipt of {ACCESS-RIGHTS-ACCEPT}; unexpected, ignore
PT/MM/BI/	TC_PT_MM_BI_01	Unrecognised message type; ignore
	TC_PT_MM_BI_02	"Cipher off"; {CIPHER-REQUEST}, with invalid <<Cipher info>>; reject
	TC_PT_MM_BI_03	Authentication of PT; {AUTHENTICATION-REQUEST} missing <<RAND>>; reject
	TC_PT_MM_BI_04	Obtain access rights; {ACCESS-RIGHTS-ACCEPT}, wrong <<Portable id>>; ignore
PT/MM/TI/	TC_PT_MM_TI_01	Key allocation; timer P-<MM_auth.1> expiry (± 5% margin)
	TC_PT_MM_TI_02	Authentication of FT; timer P-<MM_auth.1> expiry (± 5% margin)
	TC_PT_MM_TI_03	Location registration; timer P-<MM_locate.1> expiry (± 5% margin)
	TC_PT_MM_TI_04	Obtain access rights; timer P-<MM_access.1> expiry (± 5% margin)
	TC_PT_MM_TI_05	Cipher switching; IUT(PT) initiated; timer P-<MM_cipher.2> expiry (± 5% margin)

(continued)

Table 7 (continued)

Test Group Reference	Test Case Id	Description
TBR 22: Test Case Index		
PT/ME/BV/	TC_PT_ME_BV_01	Outgoing call; T-01; Authentication of IUT(PT) performed before answering the setup request
	TC_PT_ME_BV_02	Cipher switching IUT(PT) initiated; Locate update; location registration initiation after "cipher off"
	TC_PT_ME_BV_03	Obtain access rights; Interrupted by Authentication of user
	TC_PT_ME_BV_04	Obtain access rights; Interrupted by Authentication of IUT(PT)
	TC_PT_ME_BV_05	Outgoing call and authentication of IUT(PT) in parallel
	TC_PT_ME_BV_06	Outgoing call and cipher switching FT initiated in parallel
	TC_PT_ME_BV_07	Outgoing call; T-01; Cipher switching FT initiated performed before answering the setup request
	TC_PT_ME_BV_08	Outgoing call; T-01; Authentication of user performed before answering the setup request; {CC-NOTIFY} restart timer handling
	TC_PT_ME_BV_09	Cipher on; Store DCK; new DCK not used in the current ciphering
	TC_PT_ME_BV_10	T-10; a38=1; location area changes; location registration request during the call or in T-00
	TC_PT_ME_BV_11	Outgoing call; T-01; Terminate access rights FT initiated performed before answering the setup request
	TC_PT_ME_BV_12	T-10; link fails; IUT clears the call
	TC_PT_ME_BV_13	Obtain access rights interrupted by key allocation
PT/ME/BO/	TC_PT_ME_BO_01	Authentication of FT interrupted by {AUTHENTICATION-REQUEST} from FT; ignore
PT/LC/BV/LE/	TC_PT_LC_BV_LE_01	Direct link establishment; IUT initiated
	TC_PT_LC_BV_LE_02	Indirect FT initiated link establishment
PT/LC/BV/LR/	TC_PT_LC_BV_LR_01	Link exists; MM entity ceases to use the link; no other entity uses the link; IUT maintains the link <LCE.02> time
	TC_PT_LC_BV_LR_02	Link exists; CC entity ceases to use the link; no other entity uses the link; normal release

(continued)

Table 7 (concluded)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
	TC_PT_LC_BV_LR_03	Link exists; CC entity ceases to use the link; partial release agreed; no other entity uses the link; IUT maintains the link <LCE.02> time
PT/LC/BI/	TC_PT_LC_BI_01	Protocol discriminator value error - unsupported service; IUT ignores
	TC_PT_LC_BI_03	{IDENTITY-REQUEST} with illegal transaction id.; ignore
	TC_PT_LC_BI_04	Obtain access rights; {ACCESS-RIGHTS-ACCEPT} with transaction id. flag '0'; ignore
PT/LC/TI/	TC_PT_LC_TI_02	MM ceases to use the link; no other entity uses the link; timer <LCE.02> expiry (± 5% margin)
Detailed Comments: 1. The PT is the IUT.		

6.1.2   DLC layer

6.1.2.1   Test suit structure

Table 8

TBR 22: Test Suite Structure PP	
Suite Name: DLC	
Standards Ref: ETS 300 444 [10]; ETS 300 497-5 [47];	
Profile ICS Ref: ETS 300 474-1 [18]	
Profile IXIT Ref: ETS 300 494-2 [49]	
Test Method: remote	
Comments:	
Test Group Reference	**Test Group Objective**
DLC/	Verify the correct implementation of the FT (IUT) DLC layer
DLC/C_Plane/	Verify the correct implementation of the C-plane data link services
DLC/C_Plane/ClassA/	Verify the correct implementation of the LAPC's class A acknowledged transfer operation
DLC/C_Plane/ClassA/CA/	Limited testing that the observable capabilities of the IUT concerning the LAPC's class A acknowledged transfer operation are in accordance with the static conformance requirements and the additional capabilities claimed in the PICS/PIXIT
DLC/C_Plane/ClassA/BV/	To tests the behaviour of the IUT in response to syntactically and contextual correct behaviour of the test system
DLC/C_Plane/ClassA/BI/	To check the behaviour of the of the IUT in response to invalid frames
DLC/C_Plane/ClassA/BO/	To check the behaviour of the IUT in response to the messages that are syntactically correct but not allowed to occur in some states of the LAPC's class A acknowledged transfer operation
DLC/C_Plane/Lb/	Verify the correct implementation of the Lb (C-plane broadcast control) entity
DLC/C_Plane/Lb/CA/	Limited testing that the observable capabilities of the IUT concerning the Lb (C-plane broadcast control) entity are in accordance with the static conformance requirements and the additional capabilities claimed in the PICS/PIXIT
DLC/U_Plane/	Verify the correct implementation of the U-plane services
DLC/U_Plane/Class0/	Verify the correct implementation of the class 0 transmission class
DLC/U_Plane/Class0/CA/	Limited testing that the observable capabilities of the IUT concerning the class 0 transmission class service are in accordance with the static conformance requirements and the additional capabilities claimed in the PICS/PIXIT
Detailed Comments:	

6.1.2.2 Test case index

Table 9

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
DLC/C_Plane/ClassA/CA/	TC_A_CA_000	re-transmission of the link establishment I-Frame request N250 times
	TC_A_CA_001	link establishment request; receipt of a valid RR frame; enters established state
	TC_A_CA_005	I-Frame acknowledgement within timer <DL-04>
	TC_A_CA_006	re-transmission of an I-Frame N250 times
DLC/C_Plane/ClassA/BV/	TC_A_BV_002	I-Frame acknowledgement; sending RR response frame with correct N(R)
	TC_A_BV_003	I-Frame acknowledgement; accepting an I-Frame command with correct N(S) and N(R) values as an acknowledgement
	TC_A_BV_005	timer re transmission phase; acceptance of a RR response frame with correct N(R) value as an acknowledgement
	TC_A_BV_006	timer re transmission phase; acceptance of an I-Frame command with correct N(S) and N(R) values as an acknowledgement
	TC_A_BV_007	connection handover; PT initiated intracell
	TC_A_BV_008	connection handover; PT initiated intercell
DLC/C_Plane/ClassA/BI/	TC_A_BI_000	Class A establishment pending state; discarding RR class B response frame with NLF bit set to '1'; re-transmitting the establishment request
	TC_A_BI_001	establishment pending state; discarding RR response frame with NLF bit set to '1' and invalid N(R); re-transmitting the establishment request
	TC_A_BI_002	Class A re-establishment pending state; discarding RR class B response frame with NLF bit set to '1'; re-transmits the re-establishment request
	TC_A_BI_003	re-establishment pending state; discarding RR response frame, NLF bit set to '1', invalid N(R); re-transmitting the re-establishment request
	TC_A_BI_004	Class A established; information transfer phase; discarding of RR class B response frame, NLF='0'; re-transmission the unacknowledged I-Frame
	TC_A_BI_005	information transfer phase; discarding RR response frame, NLF='0', invalid N(R); re-transmission the unacknowledged I-Frame
	TC_A_BI_006	received I-Frame with invalid N(R); <DL-04> expiry; re-transmission the unacknowledged I-Frame with updated N(R)
	TC_A_BI_007	receipt of an I-Frame with invalid N(S); sending RR response frame with the expected N(S); stops, if necessary, DL_04 according to the received N(R)
	TC_A_BI_008	receipt of an I-Frame with invalid N(S) and invalid N(R); RR response frame transmission; unacknowledged I-Frame re-transmission
		(continued)

Table 9 (concluded)

Test Group Reference	Test Case Id	Description
		TBR 22: Test Case Index
	TC_A_BI_009	timer re transmission phase; discarding RR class B response frame, NLF= '0'; re-transmits the unacknowledged I-Frame
	TC_A_BI_011	timer re transmission phase; accepting I-Frame with invalid N(R);<DL-04> expiry; re-transmits the unacknowledged I-Frame with updated N(R)
	TC_A_BI_012	timer re transmission phase; receipt of an I-Frame with invalid N(S); RR response frame, expected N(S); leaves timer re transmission phase
	TC_A_BI_013	re transmission phase; receipt of an I-Frame with invalid N(S) and invalid N(R);sending a RR response frame, expected N(S); re-transmits the unacknowledged I-Frame
DLC/C_Plane/ClassA/BO/	TC_A_BO_000	establishment pending state; discarding a received I-Frame, NLF='0'; re-transmits the establishment request
	TC_A_BO_001	establishment pending state; discarding a RR response frame with NLF='0'; re-transmits the establishment request
	TC_A_BO_002	re-establishment pending state; discarding a received I-Frame, NLF='0'; re-transmits the establishment request
	TC_A_BO_003	re-establishment pending state; discarding a RR response frame with NLF='0'; re-transmits the establishment request
DLC/C_Plane/Lb/CA/	TC_L_CA_000	receive a short broadcast frame (3 octets)
DLC/U_Plane/Class0/CA/	TC_0_CA_000	IUT transmission of a correct U-plane Class 0 frame
	TC_0_CA_001	IUT reception of a correct U-plane Class 0 frame

Detailed Comments:
1.   The PT is the IUT.

6.1.3 MAC layer

6.1.3.1 Test suit structure

Table 10

TBR 22: Test Suite Structure PP	
Suite Name: mac_pt	
Standards Ref: ETS 300 444 [10]; ETS 300 497-2 [47]	
Profile ICS Ref: ETS 300 474-1 [18]	
Profile IXIT Ref: ETS 300 494-2 [49]	
Test Method: remote (modified)	
Comments:	
Test Group Reference	**Test Group Objective**
PT/	Verify the correct implementation of the PT (IUT) MAC layer
PT/DB/	Verify the correct implementation of the Downlink broadcast services handling
PT/DB/BV/	To tests the behaviour of the IUT in response to syntactically and contextual correct behaviour of the test system
PT/PG/	Verify the correct implementation of the paging services handling
PT/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
PT/PG/BV/	To tests the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system
PT/BS/	Verify the correct implementation of connection oriented bearer setup procedures
PT/BS/CA/	Limited testing that the observable capabilities of the IUT concerning the connection oriented bearer setup procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
PT/BS/BV/	To tests the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system
PT/BH/	Verify the correct implementation of connection oriented bearer handover procedures
PT/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
PT/BH/BV/	To tests the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system
PT/BR/	Verify the correct implementation of connection oriented bearer release procedures
PT/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
PT/DT/	Verify the correct implementation of connection oriented data transfer procedures
PT/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

(continued)

Table 10 (concluded)

TBR 22: Test Suite Structure PP	
Test Group Reference	**Test Group Objective**
PT/DT/BV/	To test the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system
PT/DT/BI/	To check the behaviour of the of the IUT in response to invalid messages
PT/LM/	Verify the correct implementation of the LLME MAC layer management procedures
PT/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:	

6.1.3.2 Test case index

Table 11

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
PT/DB/BV/	TC_PT_DB_BV_01	Idle_locked; receipt of QT extended RF carrier information; bearer establishment
PT/PG/CA/	TC_PT_PG_CA_00	Idle_locked; paging; short page message reception
	TC_PT_PG_CA_01	Idle_locked; zero page message reception
PT/PG/BV/	TC_PT_PG_BV_02	Idle_locked; receipt of PT blind full slot information; do not setup bearer on blind slot
	TC_PT_PG_BV_03	Idle_locked; receipt of PT zero length messages indicating "other bearer", "dummy or C/L bearer position"; keep being locked
PT/BS/CA/	TC_PT_BS_CA_00	Idle_locked; PT initiated single bearer setup; no WAIT messages
	TC_PT_BS_CA_01	Idle_locked; PT initiated single bearer setup; with WAIT messages
PT/BS/BV/	TC_PT_BS_BV_00	Active_locked; duplex bearer; T201 expiry; bearer release
PT/BH/CA/	TC_PT_BH_CA_00	Active_locked; PT initiated intracell bearer handover using basic setup
	TC_PT_BH_CA_01	Active_locked; PT initiated intercell bearer handover using basic setup
PT/BH/BV/	TC_PT_BH_BV_00	Active_locked; encryption enabled; PT initiated intracell bearer handover
	TC_PT_BH_BV_01	Active_locked; encryption enabled; PT initiated intercell bearer handover
PT/BR/CA/	TC_PT_BR_CA_00	Active_locked; unacknowledged release; FT sends release message
PT/DT/CA/	TC_PT_DT_CA_00	Active_locked; CS segment re-transmission till acknowledgement in the same ARQ window
	TC_PT_DT_CA_01	Active_locked; no transmission of new CS segment before acknowledgement
	TC_PT_DT_CA_02	Active_locked; numbering of the CS segments
	TC_PT_DT_CA_03	Active_locked; basic connection; switch on encryption mode
	TC_PT_DT_CA_04	Active_locked; basic connection; switch off encryption mode
PT/DT/BV/	TC_PT_DT_BV_00	Active_locked; basic connection; switch on encryption mode failure; connection release
	TC_PT_DT_BV_01	Active_locked; basic connection; switch off encryption mode failure; connection release
PT/DT/BI/	TC_PT_DT_BI_00	Active_locked; IN_minimum_delay data, A-field R-CRC error handling; respond Q2=0
		(continued)

Table 11 (concluded)

TBR 22: Test Case Index		
Test Group Reference	Test Case Id	Description
PT/LM/CA/	TC_PT_LM_CA_00	Idle_locked; N200 management
	TC_PT_LM_CA_01	Idle_locked; T200 management
	TC_PT_LM_CA_02	Idle_locked; T207 management
	TC_PT_LM_CA_03	Idle_locked; T208 management
	TC_PT_LM_CA_04	Active_locked; T202 and N201 management; bearer handover on one particular bearer
Detailed Comments: 1. The PT is the IUT.		

6.1.4 PH layer

For PH layer capabilities testing documents TBR 6 [42] and TBR 10 [43] shall fully apply with the modifications and the additions given in this subclause.

6.1.4.1 Normal Transmitted Power (NTP)

In addition to the test described TBR 6 [42], clause 10 the following requirements shall apply.

In the verdict criteria for IUTs with an integral antenna, the NTP, as measured, shall be greater than 80 mW per simultaneously active transceiver at both nominal and extreme temperatures. The test method is described in TBR 6 [42], subclause 10.2.

In the verdict criteria for IUTs with external antenna connection(s), the NTP, as measured, shall be greater than 80 mW per simultaneously active transceiver at both nominal and extreme temperatures. The test method is described in TBR 6 [42], subclause 10.3.

6.1.4.2 PP radio receiver sensitivity

The following additional requirement applies to TBR 6 [42], subclause 13.1.3 item b):

"The LT shall be programmed to set its RF transmission to a power level such that - 86 dBm shall be present at the input of the IUT receiver".

6.1.4.3 Radio receiver interference performance

The following modification applies to TBR 6 [42], subclause 13.3.3 item f):

Table 12

Interferer on RF channel "Y"	Interferer signal strength	
	(dBµV/m)	(dBm)
Y = M ± 1	83	- 60

6.1.4.4 Receiver intermodulation performance

The following modification applies to TBR 6 [42], subclause 13.6.3 item g):

The level of carriers "B" and "A" shall be set to - 47 dBm at the receiver input of the IUT.

6.1.4.5   User controlled volume control

The following modification applies to TBR 10 [43], subclause 7.10:

Condition for executing: If IUT does not incorporates an adaptive volume control in the PP.

When adjusting the volume control from nominal to maximum setting, the decrease in RLR_H shall not be less than 6 dB.

6.1.4.6   Additional test cases

The following test cases are defined in ETS 300 494-2 [49], subclause 5.2.4, with their corresponding test purposes in ETS 300 494-2 [49] subclause 5.1.4.

Table 13

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
GAP/PH/	GAP_PH_1	Receive operation on maximum and minimum transmitter deviation
	GAP_PH_2	Related to its reference timer, the PP synchronisation window shall be at least ± 4 bits for bearers to the RFP to which the reference timer is synchronised, and at least ± 10 bits for other bearers
	GAP_PH_3	IUT transmits the Z-field
Detailed Comments:		

6.2 Fixed Part (FP)

This subclause includes lists of the test groups and abstract test cases relevant for GAP TBR derived from ETS 300 494-3 [50].

6.2.1 NWK layer

6.2.1.1 Test suit structure

Table 14

TBR 22: Test Suite Structure FP	
Suite Name: nwk_ft	
Standards Ref: ETS 300 444 [10]; ETS 300 497-9 [47]	
Profile ICS Ref: ETS 300 474-2 [19]	
Profile IXIT Ref: ETS 300 494-3 [49]	
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 tests 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 setup an outgoing call
FT/CC/BV/IC/	To check the IUT's behaviours to setup an incoming call
T/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/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 tests 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

(continued)

Table 14 (concluded)

TBR 22: Test Suite Structure FP	
Test Group Reference	**Test Group Objective**
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 tests the LLME of the IUT in response to syntactically and contextual correct behaviour of the test system
FT/ME/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 LLME managed procedures
FT/LC/	To check the behaviour of the LCE of the IUT
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 tests 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

Detailed Comments:

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/.

6.2.1.2   Test case index

Table 15

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
FT/CC/BV/OC/	TC_FT_CC_BV_OC_01	Outgoing normal call; F-00 to F-10; piece-wise dialling
FT/CC/BV/IC/	TC_FT_CC_BV_IC_01	Incoming call; F-00, F-06, F-07 to F-10
FT/CC/BV/CI/	TC_FT_CC_BV_CI_01	Incoming call; <<Signal>> either in {CC-SETUP} or in {CC-INFO}
	TC_FT_CC_BV_CI_02	Outgoing normal call; F-02; {CC-INFO}, <<Multi keypad>>, "Go to pulse" handling
	TC_FT_CC_BV_CI_04	Outgoing normal call; F-02; {CC-INFO}, <<Multi keypad>>, "dialling pause" handling
	TC_FT_CC_BV_CI_05	Outgoing normal call; F-10; {CC-INFO}, <<Multi keypad>>, "Dialling pause" handling
	TC_FT_CC_BV_CI_06	Outgoing normal call; F-02; {CC-INFO}, <<Multi keypad>>, "Go to DTMF defined tone length" handling
	TC_FT_CC_BV_CI_07	Outgoing normal call; F-10; {CC-INFO}, <<Multi keypad>>, "Go to DTMF defined tone length" handling
	TC_FT_CC_BV_CI_08	Outgoing normal call; F-02; {CC-INFO}, <<Multi keypad>>, "Go to DTMF infinite tone length" handling
	TC_FT_CC_BV_CI_09	Outgoing normal call; F-10; {CC-INFO}, <<Multi keypad>>, "Go to DTMF infinite tone length" handling
	TC_FT_CC_BV_CI_10	Outgoing normal call; F-10; {CC-INFO}, <<Multi keypad>>, "0-9, star, hash mark" handling

(continued)

Table 15 (continued)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
FT/CC/BV/CR/	TC_FT_CC_BV_CR_01	Outgoing normal call; F-02; IUT initiated normal release
	TC_FT_CC_BV_CR_02	F-10; IUT initiated normal release
	TC_FT_CC_BV_CR_03	Incoming call; F-07; IUT initiated normal release
	TC_FT_CC_BV_CR_04	Outgoing call; F-02; PT initiated normal release
	TC_FT_CC_BV_CR_05	F-10; PT initiated normal release
	TC_FT_CC_BV_CR_06	Incoming call; F-07; PT initiated normal release
	TC_FT_CC_BV_CR_07	Incoming call; F-07; PT initiated abnormal release
	TC_FT_CC_BV_CR_08	F-10; PT initiated abnormal release
	TC_FT_CC_BV_CR_09	Incoming call; F-06; PT initiated abnormal release
	TC_FT_CC_BV_CR_10	F-10; PT initiated partial release
FT/CC/RS/	TC_FT_CC_RS_07	Incoming call; T-00; {CC-SETUP}, <<Calling party number>> provision (CLIP support)
FT/CC/BO/	TC_FT_CC_BO_01	F-10; unexpected {CC-ALERTING}
	TC_FT_CC_BO_02	F-19; receipt of {CC-RELEASE}; release collisions handling
FT/CC/BI/	TC_FT_CC_BI_01	F-00; {CC-SETUP} mandatory I.E. missing; answer upon with {CC-RELEASE-COM}
	TC_FT_CC_BI_02	F-00; {CC-SETUP} wrong mandatory I.E.; answer upon with {CC-RELEASE-COM}
	TC_FT_CC_BI_03	F-00; {CC-SETUP}-like message, non {CC-SETUP} unrecognised message type; ignore

(continued)

Table 15 (continued)

Test Group Reference	Test Case Id	Description
		TBR 22: Test Case Index
	TC_FT_CC_BI_04	F-00; to short message to contain the complete <<Message type>>; ignore
FT/CC/TI/	TC_FT_CC_TI_01	Outgoing call; F-02; timer F-<CC.01> expiry (± 5% margin); IUT sends {CC-RELEASE}
	TC_FT_CC_TI_02	Outgoing call; F-02; restart of timer F-<CC.01> on receipt of {CC-INFO}
	TC_FT_CC_TI_03	Outgoing call; F-19; timer F-<CC.02> expiry (± 5% margin); IUT sends {CC-RELEASE-COM}
	TC_FT_CC_TI_04	Outgoing call; F-06; timer F-<CC.03> expiry (± 5% margin); IUT sends {CC-RELEASE-COM}
FT/MM/BV/ID/	TC_FT_MM_BV_ID_01	Identity request procedure; IUT initiated
FT/MM/BV/AU/	TC_FT_MM_BV_AU_01	Authentication of PT; PT has no stored ZAP value and service class info
	TC_FT_MM_BV_AU_02	Authentication of PT; ZAP increment; PT has stored ZAP value and service class info; PT authenticates FT before answering
	TC_FT_MM_BV_AU_03	Authentication of user; PT has no stored ZAP value and service class info
	TC_FT_MM_BV_AU_04	Authentication of FT
	TC_FT_MM_BV_AU_05	Authentication of FT; Unsupported key requested; IUT rejects
	TC_FT_MM_BV_AU_06	Authentication of PT; store DCK; PT has no stored ZAP value and service class info
FT/MM/BV/LO/	TC_FT_MM_BV_LO_01	Location registration; a38=1 at locking and at the beginning of the procedure; request with IPUI
	TC_FT_MM_BV_LO_02	Location registration; a38=1 at locking and at the beginning of the procedure; request with unknown IPUI; reject
	TC_FT_MM_BV_LO_03	Location registration; a38=1 at locking and at the beginning of the procedure; request with IPUI; IUT assigns TPUI
	TC_FT_MM_BV_LO_05	Location update; a38=1 at locking; {MM-INFO-SUGGEST};

(continued)

Table 15 (continued)

Test Group Reference	Test Case Id	Description
	TC_FT_MM_BV_LO_06	Location registration; a38=1 at locking; a38=0 at the beginning of the procedure; request with IPUI
FT/MM/BV/AR/	TC_FT_MM_BV_AR_01	Obtain access rights; both sides use AC indication; IUT sends the whole PARK
	TC_FT_MM_BV_AR_02	Obtain access rights; service class assign
	TC_FT_MM_BV_AR_03	Terminate access rights; IUT(FT) initiated; PT authenticates FT
	TC_FT_MM_BV_AR_06	Obtain access rights; both sides use UAK indication; IUT sends the whole PARK
	TC_FT_MM_BV_AR_07	Obtain access rights; ZAP value assign
FT/MM/BV/KA/	TC_FT_MM_BV_KA_01	Key allocate; IUT initiated
	TC_FT_MM_BV_KA_02	Key allocate; IUT initiated; "implicit PT authentication" failure; IUT rejects
	TC_FT_MM_BV_KA_03	Key allocate; IUT initiated; PT rejects; IUT keeps AC
FT/MM/BV/CH/	TC_FT_MM_BV_CH_01	Cipher switching; PT initiated; "cipher-off" to "cipher-on"
	TC_FT_MM_BV_CH_02	Cipher switching; PT initiated; "cipher-on" to "cipher-off"
	TC_FT_MM_BV_CH_03	Cipher switching; IUT(FT) initiated; "cipher-off" to "cipher-on"
	TC_FT_MM_BV_CH_04	Cipher switching; IUT(FT) initiated; "cipher-on" to "cipher-off"
	TC_FT_MM_BV_CH_05	Cipher switching; PT initiated with "unsupported cipher key"; IUT rejects
FT/MM/BO/	TC_FT_MM_BO_01	Cipher switching; IUT(FT) initiated; ignoring unexpected {IDENTITY-REPLY}
FT/MM/BI/	TC_FT_MM_BI_01	Identity request; PT sends unrecognised message; IUT ignores
	TC_FT_MM_BI_02	Obtain access rights; {ACCESS-RIGHTS-REQUEST} missing <<Auth type>>; IUT sends {ACCESS-RIGHTS-REJECT}

(continued)

Table 15 (continued)

	TBR 22: Test Case Index	
Test Group Reference	**Test Case Id**	**Description**
	TC_FT_MM_BI_03	Obtain access rights; {ACCESS-RIGHTS-REQUEST} with <<Auth type>> exceeding the max. allowed length; IUT sends {ACCESS-RIGHTS-REJECT}
FT/MM/TI/	TC_FT_MM_TI_01	Identity request; timer F-<MM_ident.2> expiry (± 5% margin)
	TC_FT_MM_TI_02	Authentication of PT; timer F-<MM_auth.1> expiry (± 5% margin)
	TC_FT_MM_TI_03	Authentication of user; timer F-<MM_auth.2> expiry (± 5% margin)
	TC_FT_MM_TI_04	Terminate access rights; IUT(FT) initiated; timer F-<MM_access.2> expiry (± 5% margin)
	TC_FT_MM_TI_05	Key allocation; timer F-<MM_key.1> expiry (± 5% margin)
	TC_FT_MM_TI_06	Cipher switching; IUT(FT) initiated; timer F-<MM_cipher.1> expiry (± 5% margin)
	TC_FT_MM_TI_07	Location registration with TPUI assignment; timer F-<MM_ident.1> expiry (± 5% margin)
FT/ME/BV/	TC_FT_ME_BV_01	Incoming call and authentication of FT handled in parallel
	TC_FT_ME_BV_02	Authentication of user interrupted by Authentication of FT
	TC_FT_ME_BV_03	CC call and location registration in parallel
FT/ME/BO/	TC_FT_ME_BO_01	Authentication of PT; Ignoration of {LOCATE-REQUEST} (lower priority)
FT/LC/BV/LE/	TC_FT_LC_BV_LE_01	Indirect IUT(FT) link establishment procedure; correct PT answer
	TC_FT_LC_BV_LE_02	Indirect IUT(FT) link establishment procedure; {LCE-PAGE-RESPONSE} with mismatching IPUI; IUT rejects and release the link
	TC_FT_LC_BV_LE_03	Direct PT initiated link establishment procedure

(continued)

Table 15 (concluded)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
FT/LC/BV/LR/	TC_FT_LC_BV_LR_01	Link exists; PT initiated "normal" link release
	TC_FT_LC_BV_LR_02	Link exists; MM entity ceases to use the link; no other entity uses the link; IUT maintains the link <LCE.02> time
	TC_FT_LC_BV_LR_03	Link exists; CC call is terminated; FT initiated link release
	TC_FT_LC_BV_LR_04	Link exists; CC entity ceases to use the link partial release agreed; no other entity uses the link; IUT maintains the link <LCE.02> time
FT/LC/BI/	TC_FT_LC_BI_01	Protocol discriminator value error - unsupported service; IUT ignores
	TC_FT_LC_BI_04	{AUTHENTICATION-REQUEST} with illegal transaction id.; ignore
	TC_FT_LC_BI_05	Identity request procedure; {IDENTITY-REPLY} with transaction id. flag='0'; ignore
	TC_FT_LC_BI_07	F-10; link fails; IUT clears the call
FT/LC/TI/	TC_FT_LC_TI_02	MM ceases to use the link; no other entity uses the link; timer <LCE.02> expiry (± 5% margin)
	TC_FT_LC_TI_03	Indirect IUT(FT) initiated link establishment; no answer; timer <LCE.03> expiry (± 5% margin)
Detailed Comments: 1. The FT is the IUT.		

6.2.2   **DLC layer**

6.2.2.1   **Test suit structure**

Table 16

TBR 22: Test Suite Structure FP	
Suite Name: DLC	
Standards Ref: ETS 300 444 [10]; ETS 300 497-5 [47]	
Profile ICS Ref: ETS 300 474-2 [19]	
Profile IXIT Ref: ETS 300 494-3 [49]	
Test Method: remote	
Comments:	
Test Group Reference	**Test Group Objective**
DLC/	Verify the correct implementation of the FT (IUT) DLC layer
DLC/C_Plane/	Verify the correct implementation of the C-plane data link services
DLC/C_Plane/ClassA/	Verify the correct implementation of the LAPC's class A acknowledged transfer operation
DLC/C_Plane/ClassA/CA/	Limited testing that the observable capabilities of the IUT concerning the LAPC's class A acknowledged transfer operation are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
DLC/C_Plane/ClassA/BV/	To tests the behaviour of the IUT in response to syntactically and contextual correct behaviour of the test system
DLC/C_Plane/ClassA/BI/	To check the behaviour of the of the IUT in response to invalid frames
DLC/C_Plane/Lb/	Verify the correct implementation of the Lb (C-plane broadcast control) entity
DLC/C_Plane/Lb/CA/	Limited testing that the observable capabilities of the IUT concerning the Lb (C-plane broadcast control) entity are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
DLC/U_Plane/	Verify the correct implementation of the U-plane services
DLC/U_Plane/Class0/	Verify the correct implementation of the class 0 transmission class
DLC/U_Plane/Class0/CA/	Limited testing that the observable capabilities of the IUT concerning the class 0 transmission class service are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
Detailed Comments:	

6.2.2.2 Test case index

Table 17

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
DLC/C_Plane/ClassA/CA/	TC_A_CA_005	I-Frame acknowledgement within timer <DL-04>
	TC_A_CA_006	re-transmission of an I-Frame N250 times.
	TC_A_CA_007	refusal of a Class B link establishment RR response frame with the reserved LLN value "Class A operation" and NLF bit set to '1'; Class A established state
	TC_A_CA_008	Class-A establishment request; responding and entering into Class A established state
DLC/C_Plane/ClassA/BV/	TC_A_BV_002	I-Frame acknowledgement; sending RR response frame with correct N(R)
	TC_A_BV_003	I-Frame acknowledgement; accepting an I-Frame command with correct N(S) and N(R) values as an acknowledgement
	TC_A_BV_004	re-establishment request acceptance; Class A established state
	TC_A_BV_005	timer re transmission phase; acceptance of a RR response frame with correct N(R) value as an acknowledgement
	TC_A_BV_006	timer re transmission phase; acceptance of an I-Frame command with correct N(S) and N(R) values as an acknowledgement
	TC_A_BV_007	connection handover; PT initiated intracell
	TC_A_BV_008	connection handover; PT initiated intercell
DLC/C_Plane/ClassA/BI/	TC_A_BI_004	information transfer phase; discarding RR response frame, LLN indicates B-class, invalid N(R); re-transmission the unacknowledged I-Frame
	TC_A_BI_005	information transfer phase; discarding RR response frame, NLF='0', invalid N(R); re-transmission the unacknowledged I-Frame
	TC_A_BI_006	received I-Frame with invalid N(R); <DL-04> expiry; re-transmission the unacknowledged I-Frame with updated N(R)
	TC_A_BI_007	receipt of an I-Frame with invalid N(S); sending RR response frame with the expected N(S); stops, if necessary, DL_04 according to the received N(R)
		(continued)

Table 17 (concluded)

	TC_A_BI_008	receipt of an I-Frame with invalid N(S) and invalid N(R); RR response frame transmission; unacknowledged I-Frame re-transmission
	TC_A_BI_009	timer re transmission phase; discarding RR response frame, LLN indicates class-B, NLF='0', invalid N(R); re-transmission the unacknowledged I-Frame
	TC_A_BI_011	timer re transmission phase; accepting I-Frame with invalid N(R);<DL-04> expiry; re-transmits the unacknowledged I-Frame with updated N(R)
	TC_A_BI_012	timer re transmission phase; receipt of an I-Frame with invalid N(S); RR response frame, expected N(S); leaves timer re transmission phase
	TC_A_BI_013	re transmission phase; receipt of an I-Frame with invalid N(S) and invalid N(R);sending a RR response frame, expected N(S); re-transmits the unacknowledged I-Frame
DLC/C_Plane/Lb/CA/	TC_L_CA_000	generate a short broadcast frame (3 octets)
DLC/U_Plane/Class0/CA/	TC_0_CA_000	IUT transmission of a correct U-plane Class 0 frame
	TC_0_CA_001	IUT reception of a correct U-plane Class 0 frame
Detailed Comments: 1. The FT is the IUT.		

6.2.3   MAC layer

6.2.3.1   Test suit structure

Table 18

TBR 22: Test Suite Structure FP	
Suite Name: mac_ft	
Standards Ref: ETS 300 444 [10]; ETS 300 497-3 [47]	
Profile ICS Ref: ETS 300 474-2 [19]	
Profile IXIT Ref: ETS 300 494-3 [49]	
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 tests 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 tests 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 setup procedures
FT/BS/CA/	Limited testing that the observable capabilities of the IUT concerning the connection oriented bearer setup procedures are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
FT/BS/BV/	To tests 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/BH/BV/	To tests the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system
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
(continued)	

Table 18 (concluded)

FT/DT/BV/	To tests the behaviour of the IUT in relation to syntactically and contextual correct behaviour of the test system
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:	

6.2.3.2 Test case index

Table 19

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
FT/DB/CA/	TC_FT_DB_CA_00	Active_idle; NT message in frame 14
	TC_FT_DB_CA_01	Active_idle; NT message in frame 0 every T205 seconds
	TC_FT_DB_CA_02	Active_idle; QT message in frame 8; each multiframe
	TC_FT_DB_CA_03	Active_idle; static system information in QT message in frame 8; each 8 multiframes
	TC_FT_DB_CA_04	Active_idle; fixed part capabilities in QT message in frame 8; each 8 multiframes
	TC_FT_DB_CA_05	Active_idle; multiframe number in QT message in frame 8; each 8 multiframes
	TC_FT_DB_CA_06	Active_idle; SARI list in QT message in frame 8; each 4 multiframes
	TC_FT_DB_CA_07	Active_idle; Extended carrier information in QT message in frame 8; multiframe after the one containing the Static system information
FT/DB/BV/	TC_FT_DB_BV_03	Active_idle; SARI exists; NT message; E-bit indicating SARI available
FT/PG/CA/	TC_FT_PG_CA_00	Active_idle; paging; short page message transmission
	TC_FT_PG_CA_01	Active_idle; zero page message transmission
		(continued)

Table 19 (concluded)

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
FT/PG/BV/	TC_FT_PG_BV_01	Active_idle; blind slot announcement every 10s
FT/BS/CA/	TC_FT_BS_CA_00	Active_idle; PT initiated single bearer setup
FT/BS/BV/	TC_FT_BS_BV_00	Active_traffic/Active_traffic_and_idle; duplex bearer; T201 expiry; bearer release
FT/BH/CA/	TC_FT_BH_CA_00	Active_traffic/Active_traffic_and_idle; PT initiated intracell bearer handover
	TC_FT_BH_CA_01	Active_traffic/Active_traffic_and_idle; PT initiated intercell bearer handover
FT/BH/BV/	TC_FT_BH_BV_00	Active_traffic/Active_traffic_and_idle; encryption enabled; PT initiated intracell bearer handover
	TC_FT_BH_BV_01	Active_traffic/Active_traffic_and_idle; encryption enabled; PT initiated intercell bearer handover
FT/BR/CA/	TC_FT_BR_CA_00	Active_traffic/Active_traffic_and_idle; unacknowledged release; release message received
FT/DT/CA/	TC_FT_DT_CA_00	Active_traffic/Active_traffic_and_idle; CS segment re-transmission till acknowledgement in the same ARQ window
	TC_FT_DT_CA_01	Active_traffic/Active_traffic_and_idle; no transmission of new CS segment before acknowledgement
	TC_FT_DT_CA_02	Active_traffic/Active_traffic_and_idle; numbering of the CS segments
	TC_FT_DT_CA_03	Active_traffic/Active_traffic_and_idle; basic connection; switch on encryption mode
	TC_FT_DT_CA_04	Active_traffic/Active_traffic_and_idle; basic connection; switch off encryption mode
FT/DT/BV/	TC_FT_DT_BV_00	Active_traffic/Active_traffic_and_idle; basic connection; switch on encryption mode failure; connection release
	TC_FT_DT_BV_01	Active_traffic/Active_traffic_and_idle; basic connection; switch off encryption mode failure; connection release
FT/DT/BI/	TC_FT__DT_BI_00	Active_traffic/Active_traffic_and_idle; IN_minimum_delay data, A-field R-CRC error handling; respond Q2=0
	TC_FT_DT_BI_01	Active_traffic/Active_traffic_and_idle; IN_minimum_delay data transfer; Z-field error; Q1&Q2 setting
FT/LM/CA/	TC_FT_LM_CA_05	Active_traffic/Active_traffic_and_idle; bearer handover; bearer release within T203 sec
Detailed Comments: 1. The FT is the IUT.		

6.2.4 PH layer

For all environments, PH layer capabilities testing documents TBR 6 [42] and TBR 10 [43] shall fully apply with the modifications and the additions given in this subclause.

6.2.4.1 Normal Transmitted Power (NTP)

In addition to the test described TBR 6 [42], clause 10 the following requirements shall apply.

In the verdict criteria for IUTs with an integral antenna, the NTP, as measured, shall be greater than 80 mW per simultaneously active transceiver at both nominal and extreme temperatures. The test method is described in TBR 6 [42], subclause 10.2.

In the verdict criteria for IUTs with external antenna connection(s), the NTP, as measured, shall be greater than 80 mW per simultaneously active transceiver at both nominal and extreme temperatures. The test method is described in TBR 6 [42], subclause 10.3.

6.2.4.2 RFP radio receiver sensitivity

The following additional requirement applies to TBR 6 [42], subclause 13.1.3 item b):

"The LT shall be programmed to set its RF transmission to a power level such that - 86 dBm shall be present at the input of the IUT receiver".

6.2.4.3 Radio receiver interference performance

The following modification applies to TBR 6 [42], subclause 13.3.3 item f):

Interferer on RF channel "Y"	Interferer signal strength	
	(dBµV/m)	(dBm)
Y = M ± 1	83	- 60

6.2.4.4 Receiver intermodulation performance

The following modification applies to I-ETS 300 176 [41], subclause 13.6.3 item g):

The level of carriers "B" and "A" shall be set to - 47 dBm at the receiver input of the IUT.

6.2.4.5 Additional test cases

The following test cases are defined in ETS 300 494-3 [50], subclause 5.2.4, with their corresponding test purposes in ETS 300 494-3 [50] subclause 5.1.4.

Table 20

TBR 22: Test Case Index		
Test Group Reference	**Test Case Id**	**Description**
GAP/PH/	GAP_PH_1	Receive operation on maximum and minimum transmitter deviation
	GAP_PH_3	IUT transmits the Z-field
Detailed Comments:		

Annex A (normative):   Requirements Tables (RT)

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

A.1   Introduction

The TBR-RT tables indicate which features and procedures are Mandatory (M), Optional (O) or Conditional (C). The features and procedures are referenced via an existing profile ICS document.

The following table headers are applicable to TBR-RT.

Item   is a number unique in the table to be used for references. Each table carries the table number of the corresponding PICS table in ETS 300 476, therefore in order to have matching item numbers, item numbering in these tables may not be continuous.

C   the category in which the relative item falls under the Article 4 in the Council directive 91/263/EEC [28].

Reference   references to ETS 300 444, the GAP profile specification, unless otherwise specified.

Status (St)   contains the status required for implementation conforming to this GAP TBR.

Support (Sp)   is the column for the manufacturer's statement of whether the particular item is supported by the implementation.

Send   specifies whether the support of sending a message, frame or information element is required;

Receive   specifies whether the support of receiving a message, frame or information element is required.

The interpretation of status columns in all tables is as follows:

m or M   mandatory - the capability is required to be supported.

o or O   optional - the capability may be supported or not.

n/a or N/A   not applicable - in the given context, it is impossible to use the capability.

x or X   prohibited (excluded) - there is a requirement not to use this capability in the given context.

o.i or O.i   qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.

ci or Ci   conditional - the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table or which is defined in the general condition table below.

i or I   out-of-scope - this capability is outside the scope of the given specification, and hence irrelevant and not subject to conformance testing. This status is in particular applicable for data fields which are reserved for future use. The structure of such fields has to be supported, but the value is undefined and thus to be ignored.

If a procedure, message/frame, information element or timer/constant are not explicitly listed in any of the following tables these shall be considered as i.

The interpretation of C(ategory) column in all tables is as follows:

d   falls under item (d) from Article 4 of Council directive 91/263/EEC [28];

e   falls under item (e) from Article 4 of Council directive 91/263/EEC [28];

f   falls under item (f) from Article 4 of Council directive 91/263/EEC [28].

g   falls under item (g) from Article 4 of Council directive 91/263/EEC [28];

A.2   Portable Part (PP)

Tables listed in this clause are valid for PPs complying to GAP in all environments: business, residential and public.

A.2.1   Tables for PP NWK layer

A.2.1.1   Major Capabilities

A.2.1.1.1   Entities

Table A.1: ETS 300 476-1 [11] Table A.12 Entity supported

Item	C	Entity name	Reference	Status	Support
1	d,e,f	Call control (CC)	6.2	m	
2		Call Independent Supplementary Services (CISS)	-	i	
3		Connection oriented message services (COMS)	-	i	
4		Connectionless message services (CLMS)	-	i	
5	d,f,g	Mobility management (MM)	6.2	m	
6	f	Link control entity (LCE)	6.2	m	
7	d,f,g	Management (LLME)	13	m	

A.2.1.1.2 CC features

Table A.2: ETS 300 476-1 [11] Table A.13 CC features supported

Item	C	Call Control features	Reference	Status	Support
1	f	Bell off (Alerting)	6.2	m	
2	f	Bell on (Alerting)	6.2	m	
3		Control of supervisory tones	-	i	
4		Dial tone detection indication	-	i	
5	f	Dialled digits (basic)	6.2	m	
6		Dialled digits additional	-	i	
7		Dialling delimiter	-	i	
8		Dialling delimiter request	-	i	
9	f	Display control characters	6.2	o	
10		Emergency service access request	-	i	
11		External Handover (inter-cell)	-	i	
12		Fixed part/portable part capability exchange	-	i	
13	f	Go to DTMF (infinite tone length)	6.2	o	
14	f	Go to DTMF signalling (defined tone length)	6.2	m	
15	f	Go to Pulse	6.2	o	
16		Group address	-	i	
17	f	Incoming call	6.2	m	
18	f	Internal call	6.2	o	
19	f	Off hook	6.2	m	
20	f	On hook (full release)	6.2	m	
21	f	Outgoing call	6.2	m	
22		Packet mode	-	i	
23	e, f	Partial release	6.2	o	
24	f	Pause (dialling pause)	6.2	m	
25	f	Register recall	6.2	m	
26	f	Signalling of display characters	6.2	o	
27		Selection of bearer service	-	i	
28		Service call	-	i	
29		Service change	-	i	

A.2.1.1.3 MM features

Table A.3: ETS 300 476-1 [11] Table A.14 MM features supported

Item	C	Mobility Management features	Reference	Status	Support
1	f	Authentication of FT	6.2	o	
2	d, f	Authentication of PT	6.2	m	
3	d, f	Authentication of user	6.2	m	
4	f, g	Encryption activation FT initiated	6.2	o	
5	f, g	Encryption activation PT initiated	6.2	o	
6	f, g	Encryption deactivation FT initiated	6.2	o	
7	f, g	Encryption deactivation PT initiated	6.2	o	
8	d, f	Identification of PP	6.2	m	
9		Inter-operator roaming registration	-	i	
10		Location de-registration	-	i	
11	d, f	Location registration	6.2	m	
12	e, f	Multiple subscription registration	6.6	m	
13	d, f	On air key allocation	6.2	m	
14	d, f	Service class indication/assignment	6.2	m	
15		Silent polling	-	i	
16	d, f	Subscription registration procedure on-air	6.2	m	
17		Subscription registration user procedure with DECT authentication module	-	i	
18		Subscription registration user procedures keypad (digit entry only)	-	i	
19	d, f	Terminate access rights FT initiated	6.2	m	
20		Terminate access rights PT initiated	-	i	
21	d, f	ZAP	6.2	m	
22	e, f	MM Partial release (Link control)	6.2	m	
23		Temporary identity assign	-	i	

A.2.1.1.4 SS features (services)

Table A.4: ETS 300 476-1 [11] Table A.15 SS features (services) supported

Item	C	CC(CRSS) and CISS features	Reference	Status	Support
8	f	Calling Line Identification Presentation (CLIP)	6.2	o	

A.2.1.1.5 LCE features

Table A.5: ETS 300 476-1 [11] Table A.16 LCE features supported

Item	C	LCE features	Reference	Status	Support
1	f	Connection oriented Link control (Link control)	6.2	m	
2		Connectionless oriented Link control	-	i	

A.2.1.1.6 Procedures

Table A.6: ETS 300 476-1 [11] Table A.18 CC procedures supported

Item	CC procedures	Reference	Status	Support
1	cc_outgoing_normal_call_request	8.2	m	
4	cc_outgoing_selection_of_lower_layer_resources	-	i	
5	cc_outgoing_connection_of_U_plane	8.3, 8.4, 8.5, 8.6	m	
6	cc_outgoing_overlap_sending	8.3	m	
7	cc_outgoing_call_proceeding	8.4	m	
8	cc_outgoing_call_confirmation	8.5	m	
9	cc_outgoing_call_connection	8.6	m	
10	cc_incoming_call_request	8.12	m	
11	cc_incoming_selection_of_lower_layer_resources	-	i	
12	cc_incoming_connection_of_U_plane	8.15	m	
13	cc_incoming_overlap_receiving	-	i	
14	cc_incoming_call_proceeding	-	i	
15	cc_incoming_call_confirmation	8.13	m	
16	cc_incoming_call_connection	8.15	m	
17	cc_sending_terminal_capability	-	i	
18	cc_sending_keypad_info	8.10	m	
19	cc_call_information	8.10	m	
20	cc_normal_call_release	8.7	m	
21	cc_partial_release	8.9	c601	
22	cc_abnormal_call_release	8.8	m	
23	cc_release_collisions	8.7.2.1	m	
31	cc_timer_p_cc_02_mgt	8.7	m	
32	cc_timer_p_cc_03_mgt	8.2	m	
33	cc_timer_p_cc_04_mgt	-	i	
34	cc_timer_p_cc_05_mgt	8.15	m	
35	cc_internal_call_setup	8.18	c602	
39	cc_internal_call_keypad	8.19	c602	
40	pt_alerting	8.14	m	
41	display	8.16	c603	

c601: IF A.2/23 THEN m ELSE n/a
c602: IF A.2/18 THEN o.601 ELSE n/a
c603: IF A.2/9 OR A.2/26 THEN m ELSE n/a
o.601: It is mandatory to support at least one of these options

Table A.7: ETS 300 476-1 [11] Table A.19 MM procedures supported

Item	Mobility Management procedures	Reference	Status	Support
1	mm_identification_of_pt	8.22	m	
2	mm_temporary_identity_assignment	-	i	
3	mm_authentication_of_pt	8.24	m	
4	mm_authentication_of_user	8.25	m	
5	mm_authentication_of_ft	8.23	c701	
6	mm_location_registration	8.28	m	
8	mm_location_update	8.29	m	
9	mm_obtain_access_rights	8.30	m	
10	mm_pt_init_terminate_access_rights	-	i	
11	mm_ft_init_terminate_access_rights	8.31	m	
12	mm_key_allocation	8.32	m	
13	mm_pt_init_parameter_retrieval	-	i	
14	mm_ft_init_parameter_retrieval	-	i	
15	mm_pt_init_cipher_switching	8.34	c702	
16	mm_ft_init_cipher_switching	8.33	c703	
17	mm_zap_increment	8.26	m	
18	mm_dck_storing	8.27	c704	
19	mm_dck_sending	-	i	
20	mm_service_class_mgt	8.30, 8.24	m	
21	mm_partial_release	8.39	m	
22	mm_timer_p_mm_access_1_mgt	8.30.1.1	m	
23	mm_timer_p_mm_access_2_mgt	-	i	
24	mm_timer_p_mm_auth_1_mgt	8.32.1.2	m	
25	mm_timer_p_mm_cipher_2_mgt	8.34.1.1	c702	
26	mm_timer_p_mm_locate_1_mgt	8.28.1.1	m	
27	mm_timer_p_mm_wait_mgt	-	i	

c701: IF A.3/1 THEN m
       ELSE IF A.3/19 OR A.3/21 THEN o
       ELSE n/a
c702: IF A.3/5 OR A.3/7 THEN m ELSE n/a
c703: IF A.3/4 OR A.3/6 THEN m ELSE n/a
c704: IF A.3/4 OR A.3/5 OR A.3/6 OR A.3/7 THEN o ELSE n/a

Table A.8: ETS 300 476-1 [11] Table A.20 SS protocols supported

Item	SS protocol name	Reference	Status	Support
1	crss_keypad_protocol	8.10	m	

Table A.9: ETS 300 476-1 [11] Table A.23 LCE procedures supported

Item	LCE procedures	Reference	Status	Support
1	lce_direct_pt_init_link_establishment	8.36	m	
2	lce_indirect_ft_init_link_establishment	8.35	m	
3	lce_direct_ft_init_link_establishment	-	i	
5	lce_link_suspend	-	i	
6	lce_link_resume	-	i	
7	lce_link_release	8.37, 8.38	m	
8	lce_link_partial_release	8.39	m	
9	lce_cl_message_routing	-	i	
10	lce_cl_broadcast_announce	-	i	
11	lce_timer_lce_01_mgt	8.37.1.1	m	
12	lce_timer_lce_02_mgt	8.39.1.1	m	
13	lce_timer_lce_04_mgt	-	i	

A.2.1.2   Messages

A.2.1.2.1   Call control messages

Table A.10: ETS 300 476-1 [11] Table A.25 CC sending (P to F) messages supported

Item	CC sending (P to F) Message name	Reference	Status	Support
1	CC-SETUP	8.2	m	
2	CC-INFOrmation	8.10	m	
5	CC-ALERTING	8.13	m	
6	CC-CONNECT	8.15	m	
8	CC-RELEASE	8.7, 8.9	m	
9	CC-RELEASE-COMplete	8.7, 8.8	m	
14	IWU-INFOrmation	-	i	

Table A.11: ETS 300 476-1 [11] Table A.26 CC receiving (F to P) messages supported

Item	CC receiving (F to P) Message name	Reference	Status	Support
1	CC-SETUP	8.2	m	
2	CC-INFOrmation	8.16	m	
3	CC-SETUP-ACKnowledge	8.3	m	
4	CC-CALL-PROCeeding	8.4	m	
5	CC-ALERTING	8.5	m	
6	CC-CONNECT	8.6	m	
7	CC-CONNECT-ACKnowledge	8.15	m	
8	CC-RELEASE	8.7, 8.9	m	
9	CC-RELEASE-COMplete	8.7, 8.8	m	
13	CC-NOTIFY	6.9.6	m	
14	IWU-INFOrmation	-	i	

A.2.1.2.2   Mobility management messages

Table A.12: ETS 300 476-1 [11] Table A.51 MM message sending (P to F) supported

Item	MM message sending (P to F) Message name	Reference	Status	Support
3	ACCESS-RIGHTS-REQUEST	8.30	m	
4	ACCESS-RIGHTS-TERMINATE-ACCEPT	8.31	m	
5	ACCESS-RIGHTS-TERMINATE-REJECT	8.31.2.1	m	
6	ACCESS-RIGHTS-TERMINATE-REQUEST	-	i	
7	AUTHENTICATION-REJECT	8.23.2.1, 8.32.2.4	m	
8	AUTHENTICATION-REPLY	8.24, 8.25	m	
9	AUTHENTICATION-REQUEST	8.32, 8.23	m	
10	CIPHER-REJECT	8.33.2.1	c1201	
12	CIPHER-SUGGEST	8.34	c1202	
13	DETACH	-	i	
14	IDENTITY-REPLY	8.22	m	
19	LOCATE-REQUEST	8.28	m	
22	MM-INFO-REQUEST	-	i	
25	TEMPORARY-IDENTITY-ASSIGN-ACKNOWLEDGE	8.28	m	
26	TEMPORARY-IDENTITY-ASSIGN-REJECT	8.28.2.3	m	

c1201: IF A.7/15 OR A.7/16 THEN m ELSE n/a
c1202: IF A.7/15 THEN m ELSE n/a

Table A.13: ETS 300 476-1 [11] Table A.52 MM message receiving (F to P) supported

Item	MM message receiving (F to P) Message name	Reference	Status	Support
1	ACCESS-RIGHTS-ACCEPT	8.30	m	
2	ACCESS-RIGHTS-REJECT	8.30.2.1	m	
4	ACCESS-RIGHTS-TERMINATE-ACCEPT	-	i	
5	ACCESS-RIGHTS-TERMINATE-REJECT	-	i	
6	ACCESS-RIGHTS-TERMINATE-REQUEST	8.31	m	
7	AUTHENTICATE-REJECT	8.32.2.3, 8.23.2.1	m	
8	AUTHENTICATE-REPLY	8.23, 8.32	m	
9	AUTHENTICATE-REQUEST	8.24, 8.25, 8.26, 8.27	m	
10	CIPHER-REJECT	8.34.2.1	c1301	
11	CIPHER-REQUEST	8.33	c1302	
15	IDENTITY-REQUEST	8.22	m	
16	KEY-ALLOCATE	8.32	m	
17	LOCATE-ACCEPT	8.28	m	
18	LOCATE-REJECT	8.28.2.1	m	
20	MM-INFO-ACCEPT	-	i	
21	MM-INFO-REJECT	-	i	
23	MM-INFO-SUGGEST	8.29	m	
24	TEMPORARY-IDENTITY-ASSIGN	-	i	

c1301: IF A.7/15 THEN m ELSE n/a
c1302: IF A.7/15 OR A.7/16 THEN m ELSE n/a

A.2.1.2.3   Link control entity messages

Table A.14: ETS 300 476-1 [11] Table A.126 LCE message sending (P to F) supported

Item	LCE message sending (P to F) Message name	Reference	Status	Support
1	LCE-PAGE-RESPONSE	8.35	m	

Table A.15: ETS 300 476-1 [11] Table A.127 LCE message receiving (F to P) supported

Item	LCE message receiving (F to P) Message name	Reference	Status	Support
2	LCE-PAGE-REJECT	8.35.2.1	m	
3	LCE-REQUEST-PAGE short	8.35	m	
4	LCE-REQUEST-PAGE long	-	i	

A.2.2   Tables for PP DLC layer

A.2.2.1   Capabilities

A.2.2.1.1   Services

Table A.16: ETS 300 476-2 [12] Table A.9 Data link services

Item	C	Data link services	Reference	Status	Support
1	f	C-plane services	6.3	m	
2	g	U-plane services	6.3	m	

Table A.17: ETS 300 476-2 [12] Table A.10 C-plane services

Item	C	C-plane services	Reference	Status	Support
1		Class U service	-	i	
2	f	Class A service (LAPC class A service and Lc; Cs channel fragmentation and recomendation)	6.3	m	
3		Class B service	-	i	
4	f	Broadcast service (Broadcast Lb service)	6.3	m	

Table A.18: ETS 300 476-2 [12] Table A.11 U-plane services

Item	C	U-plane services	Reference	Status	Support
1	g	LU1 - Transparent Unprotected service	6.3	m	

Table A.19: ETS 300 476-2 [12] Table A.12 Management services

Item		Management services	Reference	Status	Support
1	e, f	MAC connection management	6.3, 6.4	m	
2	f	DLC C-plane management	6.3	m	
3	g	DLC U-plane management	6.3	m	
4	e, f	Connection handover management (Intracell/intercell voluntary)	6.3	Intra-cell: m	
			6.3	Inter-cell: m	
5	f, g	Connection ciphering management	6.3	Encryption activation: c1901	
		(Encryption activation/deactivation)	6.3	Encryption deactivation: c1902	

c1901: IF A.3/4 OR A.3/5 THEN m ELSE i
c1902: IF A.3/6 OR A.3/7 THEN m ELSE i

A.2.2.1.2 Procedures

Table A.20: ETS 300 476-2 [12] Table A.13 Generic signalling procedures

Item	Generic signalling procedures	Reference	Status	Support
1	Segmentation of NWK information	9.2.3	o	
2	C_S channel fragmentation and recombination	9.5	m	
3	C_F channel fragmentation and recombination	-	i	

Table A.21: ETS 300 476-2 [12] Table A.14 Class A procedures

Item	Class A procedures	Reference	Status	Support
1	Class A link establishment	9.1	m	
2	Class A acknowledged information transfer	9.2	m	
3	Class A link release	9.3	m	
4	Class A link re-establishment	9.4	m	
5	Class A (basic) connection handover	9.7	m	

Table A.22: ETS 300 476-2 [12] Table A.16 Broadcast procedures

Item	Broadcast procedures	Reference	Status	Support
1	Normal operation (broadcast)	9.6	m	
2	Expedited operation	-	i	

Table A.23: ETS 300 476-2 [12] Table A.17 LU1 procedures

Item	LU1 procedures	Reference	Status	Support
1	U plane Class 0/min_delay	9.9	m	
2	U plane Class 0	-	i	
3	FU1 frame operation	9.10	m	

Table A.24: ETS 300 476-2 [12] Table A.28 Management procedures

Item	Management procedures	Reference	Status	Support
1	MAC connection management	9.1.1.4	m	
2	DLC C-plane management	9.1 to 9.8	m	
3	DLC U-plane management	9.9.1.1	m	
4	Connection handover management	9.7.2.1	m	
5	Connection ciphering management (Encryption switching)	9.8	Encryption Activation: c2401	
			Encryption Deactivation: c2402	

c2401: IF A.3/4 OR A.3/5 THEN m ELSE i
c2402: IF A.3/6 OR A.3/7 THEN m ELSE i

Table A.25: ETS 300 476-2 [12] Table A.29 MAC connection management procedures

Item	MAC connection management procedures	Reference	Status	Support
5	Selection of logical channels (only C_S) (Cs channel fragmentation and recomendation)	9.5	m	

Table A.26: ETS 300 476-2 [12] Table A.32 Connection ciphering management procedures

Prerequisite: A.24/5				
Item	Connection ciphering management procedures	Reference	Status	Support
1	Providing a key to the MAC layer	9.8.1.1	m	
2	Starting the ciphering	9.8	m	
3	Stopping the ciphering	9.8	o	
4	Connection handover of ciphered connection	9.8.2.2	m	

A.2.2.2   Protocol PDUs

A.2.2.2.1   C-plane PDUs

Table A.27: ETS 300 476-2 [12] Table A.54 Broadcast service frame structure (Receiving F to P)

Item	Frame elements	Reference	Status	Support
1	Short frame format (3 octets)	9.6	m	
2	Long frame format (5 octets)	-	i	

A.2.2.2.2 C-plane messages

Table A.28: ETS 300 476-2 [12] Table A.55 Class A messages support (Sending P to F)

Item	Class A messages	Reference	Status	Support
1	I-command	9.1, 9.2.1	m	
2	RR-command/response	9.1, 9.2.2	m	

Table A.29: ETS 300 476-2 [12] Table A.56 Class A messages support (Receipt F to P)

Item	Class A messages	Reference	Status	Support
1	I-command	9.1, 9.2.1	m	
2	RR-command/response	9.1, 9.2.2	m	

A.2.2.2.3 U-plane PDUs

Table A.30: ETS 300 476-2 [12] Table A.127 U-plane frames (Sending P to F)

Item	U-plane frames	Reference	Status	Support
1	FU1 frame structure	9.10	m	

Table A.31: ETS 300 476-2 [12] Table A.128 U-plane frames (Receipt F to P)

Item	U-plane frames	Reference	Status	Support
1	FU1 frame structure	12.2.1	m	

A.2.3 Tables for PP MAC layer

A.2.3.1 Major Capabilities

A.2.3.1.1 Services

Table A.32: ETS 300 476-3 [13] Table A.9 Service groups supported

Item	C	Name of service	Reference	Status	Support
1	e, f	Connection oriented control	6.4	m	
2	e, f	Broadcast control	6.4	m	
3		Connectionless control	-	i	
4	e, f	Multipexing (General)	6.4	m	
5	e, f	Management (General)	6.4	m	

A.2.3.1.1.1 Connection oriented control services

Table A.33: ETS 300 476-3 [13] Table A.10 Connection oriented control services

Item	C	Connection oriented control services	Reference	Status	Support
1	e, f	Basic connections	6.4	m	
2		Advanced symmetric connections	-	i	
3		Advanced asymmetric connections	-	i	

Table A.34: ETS 300 476-3 [13] Table A.14 C-plane connection services

Item	C	C-plane connection services	Reference	Status	Support
1	e, f	Only C_S channel supported (Cs higher layer signalling)	6.4	m	
2		C_S and C_F channels supported	-	i	
3		Only C_F channel supported	-	i	

A.2.3.1.1.2 Broadcast control services

Table A.35: ETS 300 476-3 [13] Table A.15 Broadcast control services

Item	C	Broadcast services	Reference	Status	Support
1	e, f	Continuous broadcast	6.4	m	
2		Non-continuous broadcast	-	i	
3	e, f	Paging broadcast	6.4	m	

A.2.3.1.1.3 Multiplexing services

Table A.36: ETS 300 476-3 [13] Table A.19 CSF multiplexing services

Item	C	CSF multiplexing services	Reference	Status	Support
7	f, g	Encryption activation	6.4	c3601	
8	f, g	Encryption deactivation	6.4	c3602	

c3601: IF A.3/4 OR IF A.3/5 THEN m ELSE i
c3602: IF A.3/6 OR IF A.3/7 THEN m ELSE i

A.2.3.1.1.4 Management services

Table A.37: ETS 300 476-3 [13] Table A.24 Management services

Item	C	Management services	Reference	Status	Support
5	e, f	In-connection quality control (Quality control)	6.4	m	
9	d, e, f	SARI support	6.4	m	

Table A.38: ETS 300 476-3 [13] Table A.25 Handover services management

Item	C	Handover services	Reference	Status	Support
1	e, f	Connection handover	6.4	intra-cell: m	
		(intra/inter cell)	6.4	inter-cell: m	
2	e, f	Bearer handover	6.4	intra-cell: m	
		(intra/inter cell)	6.4	inter-cell: m	

A.2.3.2 Procedures

A.2.3.2.1 Connection setup procedures

Table A.39: ETS 300 476-3 [13] Table A.25 C/O single bearer setup procedures

Item	Name of procedure	Reference	Status	Support
1	Basic setup, single bearer basic connection of known service (Setup of basic connection, basic bearer setup (A-field))	10.4	m	
2	Normal setup, single bearer duplex connection known service	-	i	
3	Fast setup, single bearer duplex connection known service	-	i	

Table A.40: ETS 300 476-3 [13] Table A.29 C/O bearer setup procedures

Item	Name of procedure	Reference	Status	Support
1	Basic bearer setup	10.4	m	

A.2.3.2.2 Connection data transfer procedures

Table A.41: ETS 300 476-3 [13] Table A.31 C/O data transfer procedures

Item	Name of procedure	Reference	Status	Support
2	Cs - channel data	10.8	m	
3	Q1/Q2 setting for sliding collision / A-,B-field check (FT to PT) (Sliding collision detection)	10.12	o	
4	Antenna diversity (React on Q1 bit in direction PT to FT)	10.11	i	
5	Q2 bit settings	10.9	m	
6	Antenna diversity - Q1 bit settings	10.11	m	

A.2.3.2.3 Connection handover procedures

Table A.42: ETS 300 476-3 [13] Table A.32 C/O connection handover procedures

Item	Name of procedure	Reference	Status	Support
1	Connection handover (request)	10.7	m	
2	Duplex bearer handover (request)	10.6	m	
3	Double simplex bearer handover	-	i	

A.2.3.2.4 Connection release procedures

Table A.43: ETS 300 476-3 [13] Table A.33 C/O connection release procedures

Item	Name of procedure	Reference	Status	Support
1	Unacknowledged bearer release (Connection/bearer release)	10.5	m	

A.2.3.2.5 Broadcast procedures

Table A.44: ETS 300 476-3 [13] Table A.34 Broadcast procedures

Item	Name of procedure	Reference	Status	Support
1	Normal paging (Paging broadcast)	10.3	m	
2	Fast paging	-	i	
3	Downlink broadcast	10.2	m	

A.2.3.2.6 CSF multiplexing procedures

Table A.45: ETS 300 476-3 [13] Table A.37 CSF multiplexing procedures

Item	CSF multiplexing procedures	Reference	Status	Support
1	Encryption	10.13	Encryption process - initialisation and synchronisation: c4501	
		10.14	Encryption mode control: c4502	
		10.15	Handover encryption process: c4501	
2	Scrambling (General)	10.1	m	
3	R-CRC generation (General)	10.1	m	
4	R-CRC checking (General)	10.1	m	
5	X-CRC generation (General)	10.1	m	
6	X-CRC checking (General)	10.1	m	

c4501: IF A.36/7 THEN m ELSE i
c4502: IF A.36/7 OR A.36/8 THEN m ELSE i

A.2.3.2.7 Layer management procedures

Table A.46: ETS 300 476-3 [13] Table A.38 Layer management procedures

Item	Name of procedure	Reference	Status	Support
5	RFPI handshake	10.10	m	
7	RFP idle receiver scan sequence (General)	10.1	m	

A.2.3.3 Other capabilities

Table A.47: ETS 300 476-3 [13] Table A.39 Extended RF carriers supported

Item	Extended RF Carriers	Reference	Status	Support
1	Extended RF carriers (Extended frequency allocation)	10.16	m	

Table A.48: ETS 300 476-3 [13] Table A.40 Operation modes in Idle_locked state supported

Item	Operation mode	Reference	Status	Support
2	High duty cylce Idle_locked mode	-	i	
3	Normal cylce Idle_locked mode (General)	10.1	m	
4	Low cylce Idle_locked mode	-	i	

A.2.4 Tables for PP PHL layer

A.2.4.1 Physical layer procedures

Table A.49: ETS 300 476-7 [17] Table A.15 Physical layer procedures

Item	C	Procedure name	Reference	Status	Support
2	e, f	Addition of Z-field	11.4	m	
4	e, f	Receipt of Z-field	11.4	m	
9	e, f	Basic physical channel R32 management	10.1, 11.1	m	
10		The low-rate physical channel R08j management	10.1, 11.1	i	
11		The high capacity physical channel R80 management	10.1, 11.1	i	
12	e, f	Sliding collision detection	11.5	m	

Table A.50: ETS 300 474-1 [18] Table B.17 GAP specific PH requirements

Item	C	Requirement	Reference	Status	Support	Allowed values	Supported values
1	e, f	Full Slots shall be used	11.1, 12.1	m		n/a	
2	e, f	Minimum Normal Transmit Power (NTP)	11.2	m		> 80 mW per simultaneously active transmitter	
3	e, f	Radio receiver sensitivity	11.3	m		at least - 86 dBm	
4	e, f	Physical channel availability	11.6	m		n/a	
5	e, f	Synchronisation window (synchronised reference timer)	11.7	m		at least ± 4 bits	
6	e, f	Synchronisation window (not synchronised reference timer)	11.7	m		at least ± 10 bits	
7	e, f	User controlled volume control	12.2	c50 01		RLR_H decrease < 6 dB	

c5001: IF NOT Adaptive Volume Control THEN m ELSE i

A.2.5 Tables for PP Application requirements

A.2.5.1 Application features

Table A.51: Table B.12 Application features supported

Item	C	Name of feature	Reference	Status	Support
1	d, f	AC_bitstring_mapping	6.6	m	
2	e, f	Multiple subscription registration	6.6	m	
3	e, f	Manual entry of the PARK	6.6	o	

A.2.5.2 Application Procedures

Table A.52: ETS 300 474-1 [18] Table B.13 Application procedures supported

Item	Name of procedure	Reference	Status	Support
1	Subscription control	14.1	m	
2	AC to bitstring mapping	14.2	m	
3	Manual entry of the PARK	14.3	c5201	

c5201: IF A.51/3 THEN m ELSE n/a.

A.3 Fixed Part (FP)

Tables listed in this clause are valid for FPs complying to GAP in all environments: business, residential and public, except where indicated in the table header.

A.3.1 Tables for FP NWK layer

A.3.1.1 Major capabilities

A.3.1.1.1 Entities

Table A.53: ETS 300 476-4 [14] Table A.12 Entity supported

Item	C	Entity name	Reference	Status	Support
1	d,e,f	Call control (CC)	6.2	m	
2		Call Independent Supplementary Services (CISS)	-	i	
3		Connection oriented message services (COMS)	-	i	
4		Connectionless message services (CLMS)	-	i	
5	d,f,g	Mobility management (MM)	6.2	m	
6	f	Link control entity (LCE)	6.2	m	
7	d,f,g	Management (LLME)	13	m	

A.3.1.1.2 CC features

Table A.54: ETS 300 476-4 [14] Table A.13 CC features supported

Item	C	Call Control features, Residential/Business	Reference	Status	Support
1	f	Bell off (Alerting)	6.2	m	
2	f	Bell on (Alerting)	6.2	m	
3		Control of supervisory tones	-	i	
4		Dial tone detection indication	-	i	
5	f	Dialled digits (basic)	6.2	m	
6		Dialled digits additional	-	i	
7		Dialling delimiter	-	i	
8		Dialling delimiter request	-	i	
9	f	Display control characters	6.2	o	
10		Emergency service access request	-	i	
11		External Handover (inter-cell)	-	i	
12		Fixed part/portable part capability exchange	-	i	
13	f	Go to DTMF (infinite tone length)	6.2	o	
14	f	Go to DTMF signalling (defined tone length)	6.2	o	
15	f	Go to Pulse	6.2	o	
16		Group address	-	i	
17	f	Incoming call	6.2	m	
18	f	Internal call	6.2	o	
19	f	Off hook	6.2	m	
20	f	On hook (full release)	6.2	m	
21	f	Outgoing call	6.2	m	
22		Packet mode	-	i	
23	e, f	Partial release	6.2	o	
24	f	Pause (dialling pause)	6.2	o	
25	f	Register recall	6.2	o	
26	f	Signalling of display characters	6.2	o	
27		Selection of bearer service	-	i	
28		Service call	-	i	
29		Service change	-	i	

Table A.55: ETS 300 476-4 [14] Table A.13 CC features supported

Item	C	Call Control features, Public	Reference	Status	Support
1	f	Bell off (Alerting)	6.2	m	
2	f	Bell on (Alerting)	6.2	m	
3		Control of supervisory tones	-	i	
4		Dial tone detection indication	-	i	
5	f	Dialled digits (basic)	6.2	m	
6		Dialled digits additional	-	i	
7		Dialling delimiter	-	i	
8		Dialling delimiter request	-	i	
9	f	Display control characters	6.2	o	
10		Emergency service access request	-	i	
11		External Handover (inter-cell)	-	i	
12		Fixed part/portable part capability exchange	-	i	
13	f	Go to DTMF (infinite tone length)	6.2	o	
14	f	Go to DTMF signalling (defined tone length)	6.2	m	
15	f	Go to Pulse	6.2	o	
16		Group address	-	i	
17	f	Incoming call	6.2	m	
18	f	Internal call	6.2	o	
19	f	Off hook	6.2	m	
20	f	On hook (full release)	6.2	m	
21	f	Outgoing call	6.2	m	
22		Packet mode	-	i	
23	e, f	Partial release	6.2	o	
24	f	Pause (dialling pause)	6.2	o	
25	f	Register recall	6.2	o	
26	f	Signalling of display characters	6.2	o	
27		Selection of bearer service	-	i	
28		Service call	-	i	
29		Service change	-	i	

A.3.1.1.3 MM features

Table A.56: ETS 300 476-4 [14] Table A.14 MM features supported

Item	C	Mobility Management features, Residential/Business	Reference	Status	Support
1	f	Authentication of FT	6.2	o	
2	d, f	Authentication of PT	6.2	o	
3	d, f	Authentication of user	6.2	o	
4	f, g	Encryption activation FT initiated	6.2	o	
5	f, g	Encryption activation PT initiated	6.2	o	
6	f, g	Encryption deactivation FT initiated	6.2	o	
7	f, g	Encryption deactivation PT initiated	6.2	o	
8	d, f	Identification of PP	6.2	o	
9		Inter-operator roaming registration	-	i	
10		Location de-registration	-	i	
11	d, f	Location registration	6.2	o	
12	e, f	Multiple subscription registration	6.6	n/a	
13	d, f	On air key allocation	6.2	o	
14	d, f	Service class indication/assignment	6.2	o	
15		Silent polling	-	i	
16	d, f	Subscription registration procedure on-air	6.2	m	
17		Subscription registration user procedure with DECT authentication module	-	i	
18		Subscription registration user procedures keypad (digit entry only)	-	i	
19	d, f	Terminate access rights FT initiated	6.2	o	
20		Terminate access rights PT initiated	-	i	
21	d, f	ZAP	6.2	o	
22	e, f	MM Partial release (Link control)	8.39	m	
23		Temporary identity assign	-	i	

Table A.57: ETS 300 476-4 [14] Table A.14 MM features supported

Item	C	Mobility Management features, Public	Reference	Status	Support
1	f	Authentication of FT	6.2	o	
2	d, f	Authentication of PT	6.2	m	
3	d, f	Authentication of user	6.2	o	
4	f, g	Encryption activation FT initiated	6.2	o	
5	f, g	Encryption activation PT initiated	6.2	o	
6	f, g	Encryption deactivation FT initiated	6.2	o	
7	f, g	Encryption deactivation PT initiated	6.2	o	
8	d, f	Identification of PP	6.2	o	
9		Inter-operator roaming registration	-	i	
10		Location de-registration	-	i	
11	d, f	Location registration	6.2	m	
12	e, f	Multiple subscription registration	6.6	n/a	
13	d, f	On air key allocation	6.2	o	
14	d, f	Service class indication/assignment	6.2	m	
15		Silent polling	-	i	
16	d, f	Subscription registration procedure on-air	6.2	m	
17		Subscription registration user procedure with DECT authentication module	-	i	
18		Subscription registration user procedures keypad (digit entry only)	-	i	
19	d, f	Terminate access rights FT initiated	6.2	o	
20		Terminate access rights PT initiated	-	i	
21	d, f	ZAP	6.2	o	
22	e, f	MM Partial release (Link control)	8.39	m	
23		Temporary identity assign	-	i	

A.3.1.1.4   SS features (services)

Table A.58: ETS 300 476-4 [14] Table A.15 SS features (services) supported

Item	C	CC(CRSS) and CISS features	Reference	Status	Support
8	f	Calling Line Identification Presentation (CLIP)	6.2	o	

A.3.1.1.5   LCE features

Table A.59: ETS 300 476-4 [14] Table A.16 LCE features supported

Item	C	LCE features	Reference	Status	Support
1	f	Connection oriented Link control (Link control)	6.2	m	
2		Connectionless oriented Link control	-	i	

A.3.1.1.6   Procedures

Table A.60: ETS 300 476-4 [14] Table A.18 CC procedures supported

Item	CC procedures	Reference	Status	Support
1	cc_outgoing_normal_call_request	8.2	m	
4	cc_outgoing_selection_of_lower_layer_resources	-	i	
5	cc_outgoing_connection_of_U_plane	8.3, 8.4, 8.5, 8.6	m	
6	cc_outgoing_overlap_sending	8.3	o	
7	cc_outgoing_call_proceeding	8.4	o	
8	cc_outgoing_call_confirmation	8.5	o	
9	cc_outgoing_call_connection	8.6	m	
10	cc_incoming_call_request	8.12	m	
11	cc_incoming_selection_of_lower_layer_resources	-	i	
12	cc_incoming_connection_of_U_plane	8.15	m	
13	cc_incoming_overlap_receiving	-	i	
14	cc_incoming_call_proceeding	-	i	
15	cc_incoming_call_confirmation	8.13	m	
16	cc_incoming_call_connection	8.15	m	
17	cc_sending_terminal_capability	-	i	
18	cc_sending_keypad_info	8.10	m	
19	cc_call_information	8.10	i	
20	cc_normal_call_release	8.7	m	
21	cc_partial_release	8.9	c6001	
22	cc_abnormal_call_release	8.8	m	
23	cc_release_collisions	8.7.2.1	m	
31	cc_timer_f_cc_02_mgt	8.7	m	
32	cc_timer_f_cc_03_mgt	8.2	m	
33	cc_timer_f_cc_04_mgt	-	i	
34	cc_timer_f_cc_01_mgt	8.3	c6002	
35	cc_internal_call_setup	8.18	c6003	
39	cc_internal_call_keypad	8.19	c6004	
40	pt_alerting	8.14	m	
41	display	8.16	c6005	

c6001: IF A.55/23 THEN m ELSE n/a
c6002: IF A.60/6 THEN m ELSE n/a
c6003: IF A.55/18 THEN m ELSE n/a
c6004: IF A.55/18 THEN o ELSE n/a
c6005: IF A.55/9 OR A.55/26 THEN m ELSE n/a

Table A.61: ETS 300 476-4 [14] Table A.19 MM procedures supported

Item	Mobility Management procedures, Residential/Business	Reference	Status	Support
1	mm_identification_of_pt	8.22	c6101	
2	mm_temporary_identity_assignment	-	i	
3	mm_authentication_of_pt	8.24	c6102	
4	mm_authentication_of_user	8.25	c6103	
5	mm_authentication_of_ft	8.23	c6104	
6	mm_location_registration	8.28	c6105	
8	mm_location_update	8.29	c6106	
9	mm_obtain_access_rights	8.30	m	
10	mm_pt_init_terminate_access_rights	-	i	
11	mm_ft_init_terminate_access_rights	8.31	c6109	
12	mm_key_allocation	8.32	c6110	
13	mm_pt_init_parameter_retrieval	-	i	
14	mm_ft_init_parameter_retrieval	-	i	
15	mm_pt_init_cipher_switching	8.34	c6111	
16	mm_ft_init_cipher_switching	8.33	c6112	
17	mm_zap_increment	8.26	c6113	
18	mm_dck_storing	8.27	c6114	
19	mm_dck_sending	-	i	
20	mm_service_class_mgt	8.30, 8.24	c6115	
21	mm_partial_release	8.39	m	
23	mm_timer_f_mm_ident_1_mgt	8.28.1.2	c6119	
24	mm_timer_f_mm_access_2_mgt	8.31.1.1	c6109	
25	mm_timer_f_mm_auth_1_mgt	8.32.1.2	c6102	
26	mm_timer_f_mm_cipher_1_mgt	8.33.1.1	c6120	
27	mm_timer_f_mm_key_1_mgt	8.32.2.1	c6110	
28	mm_timer_f_mm_ident.2_mgt	8.28	c6101	
29	mm_timer_f_mm_auth_2_mgt	8.25.1.1	c6103	

c6101: IF A.56/8 OR A.56/9 OR A.56/15 THEN m ELSE n/a
c6102: IF A.56/2 THEN m
    ELSE IF A.56/9 OR A.56/14 OR A.56/20 THEN o
    ELSE n/a
c6103: IF A.56/3 THEN m
    ELSE IF A.56/9 OR A.56/14 THEN o
    ELSE n/a
c6104: IF A.56/1 THEN m
    ELSE IF A.56/19 OR A.56/21 THEN o
    ELSE n/a
c6105: IF A.56/11 THEN m ELSE n/a
c6106: IF A.56/11 THEN o ELSE i
c6109: IF A.56/19 THEN m ELSE n/a
c6110: IF A.56/13 THEN m ELSE n/a
c6111: IF A.56/5 OR A.56/7 THEN m ELSE n/a
c6112: IF A.56/4 OR A.56/6 THEN m ELSE n/a
c6113: IF A.56/21 THEN m ELSE n/a
c6114: IF A.56/4 OR A.56/5 OR A.56/6 OR A.56/7 THEN o ELSE n/a
c6115: IF A.56/14 THEN m ELSE n/a
c6119: IF A.56/23 OR A.56/11 THEN m ELSE n/a
c6120: IF A.56/4 OR A.56/5 OR A.56/6 OR A.56/7 THEN m ELSE n/a

Table A.62: ETS 300 476-4 [14] Table A.19 MM procedures supported

Item	Mobility Management procedures, Public	Reference	Status	Support
1	mm_identification_of_pt	8.22	c6201	
2	mm_temporary_identity_assignment	-	i	
3	mm_authentication_of_pt	8.24	m	
4	mm_authentication_of_user	8.25	c6203	
5	mm_authentication_of_ft	8.23	c6204	
6	mm_location_registration	8.28	m	
8	mm_location_update	8.29	o	
9	mm_obtain_access_rights	8.30	m	
10	mm_pt_init_terminate_access_rights	-	i	
11	mm_ft_init_terminate_access_rights	8.31	c6209	
12	mm_key_allocation	8.32	c6210	
13	mm_pt_init_parameter_retrieval	-	i	
14	mm_ft_init_parameter_retrieval	-	i	
15	mm_pt_init_cipher_switching	8.34	c6211	
16	mm_ft_init_cipher_switching	8.33	c6212	
17	mm_zap_increment	8.26	c6213	
18	mm_dck_storing	8.27	c6214	
19	mm_dck_sending	-	i	
20	mm_service_class_mgt	8.30, 8.24	c6215	
21	mm_partial_release	8.39	m	
23	mm_timer_f_mm_ident_1_mgt	8.28.1.2	c6219	
24	mm_timer_f_mm_access_2_mgt	8.31.1.1	c6209	
25	mm_timer_f_mm_auth_1_mgt	8.32.1.2	c6202	
26	mm_timer_f_mm_cipher_1_mgt	8.33.1.1	c6220	
27	mm_timer_f_mm_key_1_mgt	8.32.2.1	c6210	
28	mm_timer_f_mm_ident.2_mgt	8.28	c6201	
29	mm_timer_f_mm_auth_2_mgt	8.25.1.1	c6203	

c6201: IF A.57/8 OR A.57/9 OR A.57/15 THEN m ELSE n/a
c6202: IF A.57/2 THEN m
     ELSE IF A.57/9 OR A.57/14 OR A.57/20 THEN o
     ELSE n/a
c6203: IF A.57/3 THEN m
     ELSE IF A.57/9 OR A.57/14 THEN o
     ELSE n/a
c6204: IF A.57/1 THEN m
     ELSE IF A.57/19 OR A.57/21 THEN o
     ELSE n/a
c6209: IF A.57/19 THEN m ELSE n/a
c6210: IF A.57/13 THEN m ELSE n/a
c6211: IF A.57/5 OR A.57/7 THEN m ELSE n/a
c6212: IF A.57/4 OR A.57/6 THEN m ELSE n/a
c6213: IF A.57/21 THEN m ELSE n/a
c6214: IF A.57/4 OR A.57/5 OR A.57/6 OR A.57/7 THEN o ELSE n/a
c6215: IF A.57/14 THEN m ELSE n/a
c6219: IF A.57/23 OR A.57/11 THEN m ELSE n/a
c6220: IF A.57/4 OR A.57/5 OR A.57/6 OR A.57/7 THEN m ELSE n/a

Table A.63: ETS 300 476-4 [14] Table A.20 SS protocols supported

Item	SS protocol name	Reference	Status	Support
1	crss_keypad_protocol	8.10	m	

Table A.64: ETS 300 476-4 [14] Table A.23 LCE procedures supported

Item	LCE procedures	Reference	Status	Support
1	lce_direct_pt_init_link_establishment	8.36	m	
2	lce_indirect_ft_init_link_establishment	8.35	m	
3	lce_direct_ft_init_link_establishment	-	i	
4	lce_link_maintenance	8.39	m	
5	lce_link_suspend	-	i	
6	lce_link_resume	-	i	
7	lce_link_release	8.37, 8.38	m	
8	lce_link_partial_release	8.39	m	
9	lce_cl_message_routing	-	i	
10	lce_cl_broadcast_announce	-	i	
11	lce_timer_lce_01_mgt	8.37.1.1	m	
12	lce_timer_lce_02_mgt	8.39.1.1	m	
13	lce_timer_lce_03_mgt	8.35.1.1	m	
14	lce_timer_lce_04_mgt	-	i	

A.3.1.2 Messages

A.3.1.2.1 Call control messages

Table A.65: ETS 300 476-4 [14] Table A.25 CC receiving (P to F) messages supported

Item	CC receiving (P to F) Message name	Reference	Status	Support
1	CC-SETUP	8.2	m	
2	CC-INFOrmation	8.10	m	
5	CC-ALERTING	8.13	m	
6	CC-CONNECT	8.15	m	
8	CC-RELEASE	8.7, 8.8	m	
9	CC-RELEASE-COMplete	8.7, 8.9	m	
14	IWU-INFOrmation	-	i	

Table A.66: ETS 300 476-4 [14] Table A.26 CC sending (F to P) messages supported

Item	CC sending (F to P) Message name	Reference	Status	Support
1	CC-SETUP	8.2	m	
2	CC-INFOrmation	8.16	c6601	
3	CC-SETUP-ACKnowledge	8.3	o	
4	CC-CALL-PROCeeding	8.4	o	
5	CC-ALERTING	8.5	o	
6	CC-CONNECT	8.6	m	
7	CC-CONNECT-ACKnowledge	8.15	m	
8	CC-RELEASE	8.7, 8.9	m	
9	CC-RELEASE-COMplete	8.7, 8.8	m	
13	CC-NOTIFY	6.9.6	o	
14	IWU-INFOrmation	-	i	

c6601: IF A.60/18 OR A.60/19 THEN m
ELSE IF A.60/40 OR A.60/41 OR A.63/1 THEN o
ELSE n/a

A.3.1.2.2 Mobility management messages

Table A.67: ETS 300 476-4 [14] Table A.51 MM message receiving (P to F) supported

Item	MM message sending (P to F) Message name	Reference	Status	Support
3	ACCESS-RIGHTS-REQUEST	8.30	m	
4	ACCESS-RIGHTS-TERMINATE-ACCEPT	8.31	c6702	
5	ACCESS-RIGHTS-TERMINATE-REJECT	8.31.2.1	c6702	
6	ACCESS-RIGHTS-TERMINATE-REQUEST	-	i	
7	AUTHENTICATION-REJECT	8.23.2.1, 8.32.2.4	c6704	
8	AUTHENTICATION-REPLY	8.24, 8.25	c6705	
9	AUTHENTICATION-REQUEST	8.32, 8.23	c6706	
10	CIPHER-REJECT	8.33.2.1	c6707	
12	CIPHER-SUGGEST	8.34	c6708	
13	DETACH	-	i	
14	IDENTITY-REPLY	8.22	c6710	
19	LOCATE-REQUEST	8.28	c6711	
22	MM-INFO-REQUEST	-	i	
25	TEMPORARY-IDENTITY-ASSIGN-ACKNOWLEDGE	8.28	c6713	
26	TEMPORARY-IDENTITY-ASSIGN-REJECT	8.28.2.3	c6713	

c6702: IF A.62/11 OR A.61/11 THEN m ELSE n/a
c6704: IF A.62/3 OR A.62/4 OR A.62/12 OR A.61/3 OR A.61/4 OR A.61/12 THEN m ELSE n/a
c6705: IF A.62/3 OR A.62/4 OR A.61/3 OR A.61/4 THEN m ELSE n/a
c6706: IF A.62/5 OR A.62/12 OR A.61/5 OR A.61/12 THEN m ELSE n/a
c6707: IF A.62/15 OR A.62/16 OR A.61/15 OR A.61/16 THEN m ELSE n/a
c6708: IF A.62/15 OR A.61/15 THEN m ELSE n/a
c6710: IF A.62/1 OR A.61/1 THEN m ELSE n/a
c6711: IF A.62/6 OR A.61/6 THEN m ELSE n/a
c6713: IF A.62/6 OR A.62/2 OR A.61/6 OR A.61/2 THEN m ELSE n/a

Table A.68: ETS 300 476-4 [14] Table A.52 MM message sending (F to P) supported

Item	MM message receiving (F to P) Message name	Reference	Status	Support
1	ACCESS-RIGHTS-ACCEPT	8.30	m	
2	ACCESS-RIGHTS-REJECT	8.30.2.1	m	
4	ACCESS-RIGHTS-TERMINATE-ACCEPT	-	i	
5	ACCESS-RIGHTS-TERMINATE-REJECT	-	i	
6	ACCESS-RIGHTS-TERMINATE-REQUEST	8.31	c6803	
7	AUTHENTICATE-REJECT	8.32.2.3, 8.23.2.1	c6804	
8	AUTHENTICATE-REPLY	8.23, 8.32	c6804	
9	AUTHENTICATE-REQUEST	8.24, 8.25, 8.26, 8.27	c6805	
10	CIPHER-REJECT	8.34.2.1	c6806	
11	CIPHER-REQUEST	8.33	c6807	
15	IDENTITY-REQUEST	8.22	c6808	
16	KEY-ALLOCATE	8.32	c6809	
17	LOCATE-ACCEPT	8.28	c6810	
18	LOCATE-REJECT	8.28.2.1	c6810	
20	MM-INFO-ACCEPT	-	i	
21	MM-INFO-REJECT	-	i	
23	MM-INFO-SUGGEST	8.29	c6812	
24	TEMPORARY-IDENTITY-ASSIGN	-	i	

c6803: IF A.62/11 OR A.61/11 THEN m ELSE n/a
c6804: IF A.62/5 OR A.62/12 OR A.61/5 OR A.61/12 THEN m ELSE n/a
c6805: IF A.62/3 OR A.62/4 OR A.61/3 OR A.61/4 THEN m ELSE n/a
c6806: IF A.62/15 OR A.61/15 THEN m ELSE n/a
c6807: IF A.62/15 OR A.62/16 OR A.61/15 OR A.61/16 THEN m ELSE n/a
c6809: IF A.62/12 OR A.61/12 THEN m ELSE n/a
c6808: IF A.62/1 OR A.61/1 THEN m ELSE n/a
c6810: IF A.62/6 OR A.61/6 THEN m ELSE n/a
c6812: IF A.62/14 OR A.61/14 THEN m ELSE n/a

A.3.1.2.3 Link control entity messages

Table A.69: ETS 300 476-4 [14] Table A.126 LCE message receiving (P to F) supported

Item	LCE message sending (P to F) Message name	Reference	Status	Support
1	LCE-PAGE-RESPONSE	8.35	m	

Table A.70: ETS 300 476-4 [14] Table A.127 LCE message sending (F to P) supported

Item	LCE message receiving (F to P) Message name	Reference	Status	Support
2	LCE-PAGE-REJECT	8.35.2.1	m	
3	LCE-REQUEST-PAGE short	8.35	m	
4	LCE-REQUEST-PAGE long	-	i	

A.3.2 Tables for FP DLC layer

A.3.2.1 Capabilities

A.3.2.1.1 Services

Table A.71: ETS 300 476-5 [15] Table A.9 Data link services

Item	C	Data link services	Reference	Status	Support
1	f	C-plane services	6.3	m	
2	g	U-plane services	6.3	m	

Table A.72: ETS 300 476-5 [15] Table A.10 C-plane services

Item	C	C-plane services	Reference	Status	Support
1		Class U service	-	i	
2	f	Class A service (LAPC class A service and Lc; Cs channel fragmentation and recomendation)	6.3	m	
3		Class B service	-	i	
4	f	Broadcast service (Broadcast Lb service)	6.3	m	

Table A.73: ETS 300 476-5 [15] Table A.11 U-plane services

Item	C	U-plane services	Reference	Status	Support
1	g	LU1 - Transparent Unprotected service	6.3	m	

Table A.74: ETS 300 476-5 [15] Table A.12 Management services

Item		Management services	Reference	Status	Support
1	e, f	MAC connection management	6.3, 6.4	m	
2	f	DLC C-plane management	6.3	m	
3	g	DLC U-plane management	6.3	m	
4	e, f	Connection handover management (Intracell/intercell voluntary)	6.3	Intra-cell: c7401	
			6.3	Inter-cell: o	
5	f, g	Connection ciphering management (Encryption activation/deactivation)	6.3	Encryption activation: c7402	
			6.3	Encryption deactivation: c7403	

c7401: IF A.93/2 THEN o ELSE m
c7402: IF A.56/4 OR A.56/5 OR A.57/4 OR A.57/5 THEN m ELSE i
c7403: IF A.56/6 OR A.56/7 OR A.57/6 OR A.57/7 THEN m ELSE i

A.3.2.1.2 Procedures

Table A.75: ETS 300 476-5 [15] Table A.13 Generic signalling procedures

Item	Generic signalling procedures	Reference	Status	Support
2	C_S channel fragmentation and recombination	9.5	m	
3	C_F channel fragmentation and recombination	-	i	

Table A.76: ETS 300 476-5 [15] Table A.14 Class A procedures

Item	Class A procedures	Reference	Status	Support
1	Class A link establishment	9.1	m	
2	Class A acknowledged information transfer	9.2	m	
3	Class A link release	9.3	m	
4	Class A link re-establishment	9.4	m	
5	Class A (basic) connection handover	9.7	c7601	

c7601: IF A.74/4 THEN m ELSE i

Table A.77: ETS 300 476-5 [15] Table A.16 Broadcast procedures

Item	Broadcast procedures	Reference	Status	Support
1	Normal operation (broadcast)	9.6	m	
2	Expedited operation	-	i	

Table A.78: ETS 300 476-5 [15] Table A.17 LU1 procedures

Item	LU1 procedures	Reference	Status	Support
1	U plane Class 0/min_delay	9.9	m	
2	U plane Class 0	-	i	
3	FU1 frame operation	9.10	m	

Table A.79: ETS 300 476-5 [15] Table A.28 Management procedures

Item	Management procedures	Reference	Status	Support
1	MAC connection management	9.1.1.4	m	
2	DLC C-plane management	9.1 to 9.8	m	
3	DLC U-plane management	9.9.1.1	m	
4	Connection handover management	9.7.2.1	Intra-cell: c7901	
			Inter-cell: o	
5	Connection ciphering management (Encryption switching)	9.8	Encryption Activation: c7902	
			Encryption Deactivation: c7903	

c7901: IF A.93/2 THEN o ELSE m
c7902: IF A.56/4 OR A.56/5 OR A.57/4 OR A.57/5 THEN m ELSE i
c7903: IF A.56/6 OR A.56/7 OR A.57/6 OR A.57/7 THEN m ELSE i

Table A.80: ETS 300 476-5 [15] Table A.29 MAC connection management procedures

Item	MAC connection management procedures	Reference	Status	Support
5	Selection of logical channels (only C_S) (Cs channel fragmentation and recomendation)	9.5	m	

Table A.81: ETS 300 476-5 [15] Table A.32 Connection ciphering management procedures

Prerequisite: A.79/5				
Item	**Connection ciphering management procedures**	**Reference**	**Status**	**Support**
1	Providing a key to the MAC layer	9.8.1.1	m	
2	Starting the ciphering	9.8	m	
3	Stopping the ciphering	9.8	o	
4	Connection handover of ciphered connection	9.8.2.2	m	

A.3.2.2 Protocol PDUs

A.3.2.2.1 C-plane PDUs

Table A.82: ETS 300 476-5 [15] Table A.54 Broadcast service frame structure (Sending F to P)

Item	**Frame elements**	**Reference**	**Status**	**Support**
1	Short frame format (3 octets)	9.6	m	
2	Long frame format (5 octets)	-	i	

A.3.2.2.2 C-plane messages

Table A.83: ETS 300 476-5 [15] Table A.55 Class A messages support (Receiving P to F)

Item	**Class A messages**	**Reference**	**Status**	**Support**
1	I-command	9.1, 9.2.1	m	
2	RR-command/response	9.1, 9.2.2	m	

Table A.84: ETS 300 476-5 [15] Table A.56 Class A messages support (Sending F to P)

Item	**Class A messages**	**Reference**	**Status**	**Support**
1	I-command	9.1, 9.2.1	m	
2	RR-command/response	9.1, 9.2.2	m	

A.3.2.2.3 U-plane PDUs

Table A.85: ETS 300 476-5 [15] Table A.127 U-plane frames (Receiving P to F)

Item	**U-plane frames**	**Reference**	**Status**	**Support**
1	FU1 frame structure	9.10	m	

Table A.86: ETS 300 476-5 [15] Table A.128 U-plane frames (Sending F to P)

Item	**U-plane frames**	**Reference**	**Status**	**Support**
1	FU1 frame structure	12.2.1	m	

A.3.3 Tables for FP MAC layer

A.3.3.1 Major Capabilities

A.3.3.1.1 Services

Table A.87: ETS 300 476-6 [16] Table A.9 Service groups supported

Item	C	Name of service	Reference	Status	Support
1	e, f	Connection oriented control	6.4	m	
2	e, f	Broadcast control	6.4	m	
3		Connectionless control	-	i	
4	e, f	Multipexing (General)	6.4	m	
5	e, f	Management (General)	6.4	m	

A.3.3.1.1.1 Connection oriented control services

Table A.88: ETS 300 476-6 [16] Table A.10 Connection oriented control services

Item	C	Connection oriented control services	Reference	Status	Support
1	e, f	Basic connections	6.4	m	
2		Advanced symmetric connections	-	i	
3		Advanced asymmetric connections	-	i	

Table A.89: ETS 300 476-6 [16] Table A.14 C-plane connection services

Item	C	C-plane connection services	Reference	Status	Support
1	e, f	Only C_S channel supported (Cs higher layer signalling)	6.4	m	
2		C_S and C_F channels supported	-	i	
3		Only C_F channel supported	-	i	

A.3.3.1.1.2 Broadcast control services

Table A.90: ETS 300 476-6 [16] Table A.15 Broadcast control services

Item	C	Broadcast services	Reference	Status	Support
1	e, f	Continuous broadcast	6.4	m	
2		Non-continuous broadcast	-	i	
3	e, f	Paging broadcast	6.4	m	

A.3.3.1.1.3 Multiplexing services

Table A.91: ETS 300 476-6 [16] Table A.19 CSF multiplexing services

Item	C	CSF multiplexing services	Reference	Status	Support
7	f, g	Encryption activation	6.4	c9101	
8	f, g	Encryption deactivation	6.4	c9102	

c9101: IF A.56/4 OR A.56/5 OR A.57/4 OR A.57/5 THEN m ELSE i
c9102: IF A.56/6 OR A.56/7 OR A.57/6 OR A.57/7 THEN m ELSE i

A.3.3.1.1.4 Management services

Table A.92: ETS 300 476-6 [16] Table A.24 Management services

Item	C	Management services	Reference	Status	Support
5	e, f	In-connection quality control (Quality control)	6.4	m	
9	d, e, f	SARI support	6.4	o	

Table A.93: ETS 300 476-6 [16] Table A.25 Handover services management

Item	C	Handover services	Reference	Status	Support
1	e, f	Connection handover	6.4	intra-cell: o9301	
		(intra/inter cell)	6.4	inter-cell: o	
2	e, f	Bearer handover	6.4	intra-cell: o9301	
		(intra/inter cell)	6.4	inter-cell: o	

o9301: It is mandatory to support at least one of these options.

A.3.3.2 Procedures

A.3.3.2.1 Connection setup procedures

Table A.94: ETS 300 476-6 [16] Table A.25 C/O single bearer setup procedures

Item	Name of procedure	Reference	Status	Support
1	Basic setup, single bearer basic connection of known service (Setup of basic connection, basic bearer setup (A-field))	10.4	m	
2	Normal setup, single bearer duplex connection known service	-	i	
3	Fast setup, single bearer duplex connection known service	-	i	

Table A.95: ETS 300 476-6 [16] Table A.29 C/O bearer setup procedures

Item	Name of procedure	Reference	Status	Support
1	Basic bearer setup	10.4	m	

A.3.3.2.2 Connection data transfer procedures

Table A.96: ETS 300 476-6 [16] Table A.31 C/O data transfer procedures

Item	Name of procedure	Reference	Status	Support
2	Cs - channel data	10.8	m	
3	Q1/Q2 setting for sliding collision / A-,B-field check (FT to PT) (Sliding collision detection)	10.12	m	
4	Antenna diversity (React on Q1 bit in direction PT to FT)	10.11	o	
5	Q2 bit settings	10.9	m	
6	Antenna diversity - Q1 bit settings	10.11	o	

A.3.3.2.3   Connection handover procedures

Table A.97: ETS 300 476-6 [16] Table A.32 C/O connection handover procedures

Item	Name of procedure	Reference	Status	Support
1	Connection handover (request)	10.7	c9701	
2	Duplex bearer handover (request)	10.6	c9702	
3	Double simplex bearer handover	-	i	

c9701: IF A.93/1 THEN m ELSE i
c9702: IF A.93/2 THEN m ELSE i

A.3.3.2.4   Connection release procedures

Table A.98: ETS 300 476-6 [16] Table A.33 C/O connection release procedures

Item	Name of procedure	Reference	Status	Support
1	Unacknowledged bearer release (Connection/bearer release)	10.5	m	

A.2.3.2.5   Broadcast procedures

Table A.99: ETS 300 476-6 [16] Table A.34 Broadcast procedures

Item	Name of procedure	Reference	Status	Support
1	Normal paging (Paging broadcast)	10.3	m	
2	Fast paging	-	i	
3	Downlink broadcast	10.2	m	

A.2.3.2.6   CSF multiplexing procedures

Table A.100: ETS 300 476-6 [16] Table A.37 CSF multiplexing procedures

Item	CSF multiplexing procedures	Reference	Status	Support
1	Encryption	10.13	Encryption process - initialisation and synchronisation: c10001	
		10.14	Encryption mode control: c10002	
		10.15	Handover encryption process: c10001	
2	Scrambling (General)	10.1	m	
3	R-CRC generation (General)	10.1	m	
4	R-CRC checking (General)	10.1	m	
5	X-CRC generation (General)	10.1	m	
6	X-CRC checking (General)	10.1	m	

c10001: IF A.91/7 THEN m ELSE i
c10002: IF A.91/7 OR A.91/8 THEN m ELSE i

A.3.3.2.7   Layer management procedures

Table A.101: ETS 300 476-6 [16] Table A.38 Layer management procedures

Item	Name of procedure	Reference	Status	Support
5	RFPI handshake	10.10	m	
7	RFP idle receiver scan sequence (General)	10.1	m	

A.3.3.3   Other capabilities

Table A.102: ETS 300 476-6 [16] Table A.39 Extended RF carriers supported

Item	Extended RF Carriers	Reference	Status	Support
1	Extended RF carriers (Extended frequency allocation)	10.16	o	

A.3.4   Tables for FP PHL layer

A.3.4.1   Physical layer procedures

Table A.103: ETS 300 476-7 [17] Table A.15 Physical layer procedures

Item	C	Procedure name	Reference	Status	Support
2	e, f	Addition of Z-field	11.4	m	
4	e, f	Receipt of Z-field	11.4	m	
9	e, f	Basic physical channel R32 management	10.1, 11.1	m	
10		The low-rate physical channel R08j management	10.1, 11.1	i	
11		The high capacity physical channel R80 management	10.1, 11.1	i	
12	e, f	Sliding collision detection	11.5	m	

Table A.104: ETS 300 474-2[19] Table B.16 GAP specific PH requirements

Item	C	Requirement	Reference	Status	Support	Allowed values	Supported values
1	e, f	Full Slots shall be used	11.1, 12.1	m		n/a	
2	e, f	Minimum Normal Transmit Power (NTP)	11.2	m		> 80 mW per simultaneously active transmitter	
3	e, f	Radio receiver sensitivity	11.3	m		at least - 86 dBm	
4	e, f	Physical channel availability	11.6	m		n/a	

A.3.5   Tables for FP Application requirements

A.3.5.1   Application features

Table A.105: Table B.12 Application features supported

Item	C	Name of feature	Reference	Status	Support
1	d, f	AC_bitstring_mapping	6.6	c10501	

c10501: IF A.57/2 OR A.57/3 OR A.57/13 OR A.57/1 OR A.56/2 OR A.56/3 OR A.56/13 OR A.56/1 THEN m ELSE i

A.2.5.2   Application Procedures

Table A.106: ETS 300 474-2 [19] Table B.13 Application procedures supported

Item	Name of procedure	Reference	Status	Support
1	AC to bitstring mapping	14.2	c10601	

c10601: IF A.**Error! Bookmark not defined.**/1 THEN m ELSE i

Annex B (normative): Declarations on features supported

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B.1 Introduction

The following tables contain extracts from the PICS documents ETS 300 476-1 [11] and ETS 300 476-4 [14]. These tables do not form part of the TBR Requirements Tables. The information contained within them is requred for parameterisation of the test cases referred to in this TBR. The entries in the status column in each table are either those in the PICS documents referred to above, or are taken from ETS 300 474-1 [18] or ETS 300 474-2 [19]. If the status of an item is dependent on another item not included in the tables in this TBR, it is listed as being optional.

The abbreviations used in the following tables have the same meaning as those used in annex A above. The references are to ETS 300 444 [10], unless otherwise specified.

B.2 Declarations for portable part

B.2.1 Network layer

Table B.1: ETS 300 476-1 [11] Table A.15 SS features (services) supported

Item	CC(CRSS) and CISS features	Reference to ETS 300 175-5	Status	Support
17	Cost information	10.6.2.4	o	
32	Queue management	10.6.2.1	o	

Table B.2: ETS 300 476-1 [11] Table A.20 SS protocols supported

Item	SS protocol name	Reference to ETS 300 175-5	Status	Support
4	ciss_keypad_protocol	10.2	o	

Table B.3: ETS 300 476-1 [11] Table A.22 CLMS procedures supported

Prerequisite: A.1/4				
Item	**CLMS procedures**	**Reference to ETS 300 175-5**	**Status**	**Support**
1	clms_fixed	12.3.1	o.301	
2	clms_variable	12.3.2	o.301	

o.301: It is mandatory to support at least one of these options.

Table B.4: ETS 300 476-1 [11] Table A.24 LLME procedures supported

Item	Procedure name	Reference	Status	Support
5	mgt_mm_procedures_prioriry_mgt	13.1	m	
6	mgt_mm_cc_coexistance	6.9.6	m	

Table B.5: ETS 300 476-1 [11] Table A.27 {CC-SETUP} sending (P to F) supported

Item	{CC-SETUP} sending (P to F) Information element name	Reference to ETS 300 175-5	Status	Support
30	Called party number	7.7.7	o	

Table B.6: ETS 300 476-1 [11] Table A.28 {CC-SETUP} receiving (F to P) supported

Item	{CC-SETUP} receiving (F to P) Information element name	Reference to ETS 300 175-5	Status	Support
17	Progress Indicator	7.7.31	c601	
20	Signal	7.6.8	c602	

c601: IF A.6/5 OR A.6/12 THEN m ELSE n/a
c602: IF A.6/40 THEN o ELSE n/a

Table B.7: ETS 300 476-1[11] Table A.30 {CC-INFO} receiving (F to P) supported

Item	{CC-INFO} receiving (F to P) Information element name	Reference to ETS 300 175-5	Status	Support
5	Progress Indicator	7.7.31	c701	
8	Signal	7.6.8	c702	

c701: IF A.6/5 OR A.6/12 THEN m ELSE n/a
c702: IF A.6/40 THEN o ELSE n/a

Table B.8: ETS 300 476-1 [11] Table A.73 IDENTITY-REPLY sending (P to F) supported

Item	IDENTITY-REPLY sending (P to F) Information element name	Reference to ETS 300 175-5	Status	Support
2	Repeat Indicator "non-prioritised"	7.6.3	o	
6	Repeat Indicator "non-prioritised"	7.6.3	o	
10	Repeat Indicator "non-prioritised"	7.6.3	o	

Table B.9: ETS 300 476-1 [11] Table A.264 Multi-display supported

It.	Multi-display Name of field	Reference to ETS 300 175-5	Stat.	Sp.	Value allowed	Value sp.
3	Display information (group of octets)	7.7.26, annex D	o		len_o: 1 .. 255 val: 00,02,03,05-0F,11-14,16,19-1B, 20-7F (Hex)	

B.3 Declarations for fixed part

B.3.1 Network layer

Table B.10: ETS 300 476-4 [14] Table A.15 SS features (services) supported

Item	CC(CRSS) and CISS features	Reference to ETS 300 175-5	Status	Support
17	Cost information	10.6.2.4	o	
32	Queue management	10.6.2.1	o	

Table B.11: ETS 300 476-4 [14] Table A.22 CLMS procedures supported

Prerequisite: A.1/4				
Item	CLMS procedures	Reference to ETS 300 175-5	Status	Support
1	clms_fixed	12.3.1	o.1101	
2	clms_variable	12.3.2	o.1101	

o.1101:   It is mandatory to support at least one of these options.

Table B.12: ETS 300 476-4 [14] Table A.24 LLME procedures supported

Item	Procedure name	Reference	Status	Support
5	mgt_mm_procedures_prioriry_mgt	13.1	m	
6	mgt_mm_cc_coexistance	6.9.6	m	

Table B.13: ETS 300 476-4 [14] Table A.27 {CC-SETUP} sending (P to F) supported

Item	{CC-SETUP} sending (P to F) Information element name	Reference to ETS 300 175-5	Status	Support
30	Called party number	7.7.7	o	

Annex C (informative): Bibliography

1)   EWOS/ETSI Project Team No 5: "Project Report and Technical Report. OSI Conformance Testing Methodology and Procedures in Europe".

2)   ETR 022 (1991): "Advanced Testing Methods (ATM); Vocabulary of terms used in communications protocols conformance testing".

3)   ETR 141: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; The Tree and Tabular Combined Notation (TTCN) style guide".

4)   CEPT Recommendation T/SGT SF2 (89) 6/0: "Draft Recommendation T/SF Services and Facilities of Digital European Cordless Telecommunications".

5)   ETR 015: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Reference document".

6)   ETR 041 "Transmission and Multiplexing (TM); Digital European Cordless Telecommunications (DECT); Transmission aspects 3,1 kHz telephony Interworking with other networks".

7)   ETR 042 "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); A Guide to DECT features that influence the traffic capacity and the maintenance of high radio link transmission quality, including the results of simulations".

8)   ETR 043: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common interface; Services and Facilities requirements specification".

9)   ETR 056: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); System description document".

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