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**Digital Enhanced Cordless Telecommunications (DECT);  
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Attachment requirements for terminal equipment for  
DECT/ISDN interworking profile applications**

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## Foreword

This final draft Technical Basis for Regulation (TBR) has been produced by the Digital Enhanced Cordless Telecommunications (DECT) Project of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Voting phase of the ETSI standards approval procedure.

Details of the Digital Enhanced Cordless Telecommunications (DECT) Common Interface (CI) may be found in EN 300 175, parts 1 to 8 [1] to [8].

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## 1 Scope

The present document specifies the technical characteristics to be provided by terminal equipment which is capable of connection to an Integrated Services Digital Network (ISDN) and which uses Digital European Cordless Telecommunications (DECT) for network access. The cordless transmissions for such terminal equipment operate within the frequency band 1 880 MHz to 1 900 MHz.

A DECT terminal equipment comprises two elements, referred to as a Fixed Part (FP) and a Portable Part (PP). The objective of the present document is to ensure air-interface interoperability between a FP and PP following the DECT/ISDN Interworking Profile (IWP) (see note 2), where these parts are capable of 3,1 kHz telephony applications, and where the FP is connected to the ISDN in order to provide ISDN services (according to TBR 3 [34] and TBR 4 [35]), over the DECT air interface.

For functional parts of a FP, that are terminal equipment and which are declared to conform to the basic Common Technical Regulations (CTRs) for DECT (see note 1) and to the DECT/ISDN IWP, the requirements of the present document shall apply, in addition to the attachment requirements for the appropriate ISDN.

The requirements of the present document are also applicable for the complete set of functionality of a PP declared to conform to the DECT/ISDN IWP. For a PP, the present document is in addition to the basic CTRs for DECT (see note 1).

Where a feature is indicated as optional it need not be provided, but where such a feature is provided, the FP and/or PP shall conform to the requirements and tests of the present document. The present document is structured to allow type approval of the FP and PP as separate items. For each requirement in the present document, a test is given, including measurement methods where applicable. The terminal equipment may be stimulated to perform the tests by additional equipment if necessary.

The present document does not apply to FPs where they form a part of the ISDN.

The present document consists of two parts (A and B) referring to the end system configuration and intermediate system configuration respectively, where the part B (intermediate system configuration) is expected to be amended at a later stage.

NOTE 1: The basic CTRs for DECT are the general attachment requirements (CTR 6), requirements for telephony applications (CTR 10) and requirements for Generic Access Profile (GAP) (CTR 22). These CTRs are derived from their respective TBRs (TBR 6 [36], TBR 10 [37], and TBR 22 [38]).

NOTE 2: In the respect of the present document, the DECT/ISDN IWP is based on the provision of access mappings/interworking requirements of the end system configuration (EN 300 434-1 [9] and EN 300 434-2 [10]) and of the intermediate system configuration (ETS 300 822 [33]).

NOTE 3: The DECT/ISDN IWP consists of two separate standards, the "end system configuration" (EN 300 434-1 [9] and EN 300 434-2 [10]) and the "intermediate system configuration" (ETS 300 822 [33]). The end system configuration describes how ISDN services are offered via a DECT radio interface, when the ISDN is terminated in the DECT FP. The intermediate system configuration describes how ISDN is provided over DECT radio interface, with a regenerated ISDN "S" interface in the DECT PP.

## 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] EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".
- [3] EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".
- [8] EN 300 175-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech coding and transmission".
- [9] EN 300 434-1: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration; Part 1: Interworking specification".
- [10] EN 300 434-2: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration; Part 2: Access profile".
- [11] EN 300 444: "Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [12] ETS 300 476-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 1: Network (NWK) layer - Portable radio Termination (PT)".
- [13] ETS 300 476-2: "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)".
- [14] ETS 300 476-3: "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)".
- [15] ETS 300 476-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 4: Network (NWK) layer - Fixed radio Termination (FT)".

- [16] ETS 300 476-5: "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)".
- [17] ETS 300 476-6: "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)".
- [18] ETS 300 476-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 7: Physical layer".
- [19] ETS 300 497-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 1: Test Suite Structure (TSS) and Test Purposes (TP) for Medium Access Control (MAC) layer".
- [20] ETS 300 497-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 2: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Portable radio Termination (PT)".
- [21] ETS 300 497-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 3: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Fixed radio Termination (FT)".
- [22] ETS 300 497-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 4: Test Suite Structure (TSS) and Test Purposes (TP) - Data Link Control (DLC) layer".
- [23] ETS 300 497-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 5: Abstract Test Suite (ATS) - Data Link Control (DLC) layer".
- [24] ETS 300 497-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 6: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Portable radio Termination (PT)".
- [25] ETS 300 497-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 7: Abstract Test Suite (ATS) for Network (NWK) layer - Portable radio Termination (PT)".
- [26] ETS 300 497-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 8: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Fixed radio Termination (FT)".
- [27] ETS 300 497-9: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 9: Abstract Test Suite (ATS) for Network (NWK) layer - Fixed radio Termination (FT)".
- [28] ETS 300 705-1: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration; Profile Implementation Conformance Statement (ICS); Part 1: Portable radio Termination (PT)".
- [29] ETS 300 705-2: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration; Profile Implementation Conformance Statement (ICS); Part 2: Fixed radio Termination (FT)".

- [30] ETS 300 758-1: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration; Profile Test Specification (PTS); Part 1: Summary".
- [31] ETS 300 758-2: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration Profile Test Specification (PTS); Part 2: Profile Specific Test Specification (PSTS) for Portable radio Termination (PT)".
- [32] ETS 300 758-3: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration Profile Test Specification (PTS); Part 3: Profile Specific Test Specification (PSTS) for Fixed radio Termination (FT)".
- [33] ETS 300 822: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for intermediate system configuration; Interworking and profile specification".
- [34] TBR 3: "Integrated Services Digital Network (ISDN); Attachment requirements for terminal equipment to connect to an ISDN using ISDN basic access".
- [35] TBR 4: "Integrated Services Digital Network (ISDN); Attachment requirements for terminal equipment to connect to an ISDN using ISDN primary rate access".
- [36] TBR 6: "Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements".
- [37] TBR 10: "Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements; Telephony applications".
- [38] TBR 22: "Radio Equipment and Systems (RES); Attachment requirements for terminal equipment for Digital Enhanced Cordless Telecommunications (DECT) Generic Access Profile (GAP) applications".
- [39] 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).

### 3 Definitions and abbreviations

#### 3.1 Definitions

For the purposes of the present document, the definitions given in EN 300 434-1 [9], EN 300 434-2 [10], EN 300 444 [11] and EN 300 175, parts 1 to 7 [1] to [7] apply.

#### 3.2 Abbreviations

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

Cat	Category
CC	Call Control
CI	Common Interface
CTR	Common Technical Regulation
DECT	Digital Enhanced Cordless Telecommunications
DLC	Data Link Control
FP	Fixed Part
FT	Fixed radio Termination
GAP	Generic Access Profile
IAP	Interworking Access Profile (for end system configuration)
ICS	Implementation Conformance Statement
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test

IWP	Interworking Profile
IWU	Interworking Unit
LCE	Link Control Entity
LLME	Lower Layer Management Entity
LLN	Logical Link Number
MAC	Medium Access Control
NLF	New Link Flag
NWK	Network
PH	Physical
PP	Portable Part
PT	Portable radio Termination
RFP	Radio Fixed Part
RFPI	Radio Fixed Part Identity
RT	Requirements Tables
TD Cat	Terminal Directive Category

#### **4 How to use the present document**

The present document currently contains the requirements, test specification and Requirements Tables (RT) for terminal equipment which claim conformance to the DECT/ISDN IWP for end system configuration. It is intended to add, in a later edition, the corresponding clauses for the DECT/ISDN IWP for intermediate system configuration. The requirements applicable to a terminal equipment are only those related to the DECT/ISDN profile to which the terminal equipment claims conformance. The present document contains one set of tables for the PP and one set of tables for the FP. Each set of tables is divided into subsets depending on the particular DECT layer. Each set of tables comprises:

- a test suite structure table;
- a test case index table;
- a TBR-RT features table;
- a TBR-RT procedures table;
- a messages/frames table.

If a particular feature, procedure or message specified in DECT Common Interface (CI) (EN 300 175, parts 1 to 8 [1] to [8]) is not listed in any table, it shall be considered as out of scope of the present document and shall not be tested.

#### **5 Requirements for DECT/ISDN interworking for end system configuration**

The DECT/ISDN Interworking Access Profile (IAP) features, services and requirements as defined in EN 300 434-1 [9] and EN 300 434-2 [10] are considered to fall under the essential requirements specified in Article 4 of the Council Directive 91/263/EEC [39] applying to terminal equipment, given in this clause. The column Terminal Directive Category (TD Cat) identifies the applicable clauses of Article 4 of Council Directive 91/263/EEC [39].

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

## 5.1 Interworking Unit (IWU) features

Table 1: IWU requirements and justifications

Reference	Description	TBR justification	TD Cat
EN 300 434-1 [9], subclause 5.2.1.1	Call Control (CC) - Call establishment procedures	To ensure the terminal can handle call establishment covering the ISDN procedures to ensure correct interworking with the ISDN network.	f, g
EN 300 434-1 [9], subclause 5.2.1.2	CC - Call Information Procedures	To ensure the terminal can handle call information covering the ISDN procedures to ensure correct interworking with the ISDN network.	f, g
EN 300 434-1 [9], subclause 5.2.1.3	CC - Call Release Procedures	To ensure the terminal can handle call release covering the ISDN procedures to ensure correct interworking with the ISDN network.	f, g
EN 300 434-1 [9], subclause 5.2.2.1	Keypad Protocol Procedures for CRSS	To ensure the terminal can handle generic procedures for supplementary services, in order to correctly interwork with the ISDN network.	f
EN 300 434-1 [9], subclause 5.2.2.3	Functional protocol IWU procedures for CRSS	To ensure the terminal can handle generic procedures for supplementary services, in order to correctly interwork with the ISDN network.	f
EN 300 434-1 [9], subclause 5.2.2.4	Functional protocol IWU procedures for CISS	To ensure the terminal can handle generic procedures for supplementary services, in order to correctly interwork with the ISDN network.	f
EN 300 434-1 [9], subclause 5.2.2.6	Error handling for supplementary services	To ensure the terminal can handle generic procedures for supplementary services, in order to correctly interwork with the ISDN network.	f
EN 300 434-1 [9], subclause 5.2.3.2	Identity mapping procedures	To ensure the terminal can correctly interwork with the ISDN network, using correctly mapped identities from the DECT interface to the ISDN interface.	f

5.2 Network (NWK) layer features

Table 2: NWK layer requirements and justifications

Reference	Description	TBR justification	TD Cat
EN 300 434-2 [10], subclause 4.1.1	Outgoing call (including overlap sending)	To ensure the terminal can establish an outgoing call covering the ISDN procedure and outgoing call initiation to ensure correct interworking with the ISDN network.	f, g
EN 300 434-2 [10], subclause 4.1.2	Duplex speech - 32 kbit/s ADPCM	To ensure the terminal can support the procedures for speech information transfer with and through the network, to ensure it does not use the 64 kbit/s service.	e, f, g
EN 300 434-2 [10], subclause 4.1.3	Off hook	To ensure the terminal can establish an outgoing call and answer an incoming call to ensure correct interworking with the network.	f, g
EN 300 434-2 [10], subclause 4.1.4	On hook (full release)	To ensure the terminal can release a call, to ensure correct interworking with the network.	f
EN 300 434-2 [10], subclause 4.1.5	Dialled digits (basic)	To ensure the terminal can send digits 0-9, *, # to the network during a call, to ensure correct interworking with the network.	f
EN 300 434-2 [10], subclause 4.1.6	Dialled digits additional	To ensure the terminal can send digits A, B, C, D (in addition to the basic digits), to ensure correct interworking with the network.	f
EN 300 434-2 [10], subclause 4.1.7	Dialling delimiter	To ensure the terminal can generate or otherwise indicate "end-of-destination-address" when dialling or transmitting dialled digits.	f
EN 300 434-2 [10], subclause 4.1.8	Incoming call	To ensure the terminal behaves correctly on receiving an incoming call, to ensure correct interworking with the ISDN network.	f, g
EN 300 434-2 [10], subclause 4.1.9	Control of supervisory tones	To ensure the network supervisory signals are made available in-band to the PP by the FP, to ensure correct interworking with the network.	f
EN 300 434-2 [10], subclause 4.1.10	Signalling of display characters	If incorrectly implemented, user may be misled as to what network/Fixed radio Termination (FT) the user is connected to, and therefore what the user is being charged; to ensure interworking with the network for establishment and access to other services (e.g. charging).	f
EN 300 434-2 [10], subclause 4.1.12	Selection of bearer service	To ensure the terminal has the ability to select a particular bearer service for a particular application for the duration or part of the duration of an individual call.	f
EN 300 434-2 [10], subclause 4.1.15	64 kbit/s unrestricted digital information	To ensure the terminal has the ability to establish, maintain and release 64 kbit/s unrestricted digital communication channel.	f
EN 300 434-1 [9], subclause 5.2.4.1	Call Independent Supplementary Services (CISS)	To ensure the terminal can handle generic procedures for supplementary services, in order to correctly interwork with the ISDN network.	f
EN 300 434-2 [10], subclause 5.2	Link Control Entity (LCE)	To ensure the terminal can correctly interwork with the network, in controlling the links required for NWK layer communication.	f
EN 300 434-2 [10], subclause 4.1.11	Selection of required teleservice	To ensure the terminal has the ability to select a particular teleservice for a particular application for the duration or part of the duration of an individual call.	f

5.3 DLC layer services

Table 3: DLC layer requirements and justifications

Reference	Description	TBR justification	TD Cat
EN 300 434-1 [9], subclause 5.2	C-plane services	To ensure the correct interworking with the network.	f
EN 300 434-1 [9], subclause 5.4	U-plane services	To ensure LU1 and LU7 services are supported. That means to ensure interworking through the network, for voice calls.	g
EN 300 175-4 [4], subclause 10.2	Medium Access Control (MAC) connection management	Required for effective use of the radio spectrum and to enable the terminal to correctly interwork with the network at upper layers.	e, f
EN 300 175-4 [4], subclause 10.3	DLC C-plane management	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
EN 300 175-4 [4], subclause 10.4	DLC U-plane management	To ensure interworking through the network, for voice calls.	g

5.4 MAC layer services

Table 4: MAC layer requirements and justifications

Reference	Description	TBR justification	TD Cat
EN 300 434-2 [10], subclause 7.1.1	Connection oriented control	To ensure the terminal can support the procedures for speech information transfer with and through the network, to ensure the terminal has the ability to establish, maintain and release 64 kbit/s unrestricted digital communication channel.	e, f
EN 300 434-2 [10], subclause 7.1.2	Broadcast control	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
EN 300 175-3 [3], clause 6	Multiplexing	Required for effective use of the radio spectrum.	e
EN 300 175-3 [3], clause 11	Management	Required for effective use of the radio spectrum.	e

5.5 Physical (PH) layer requirements

In addition to the requirements for PH layer as defined in TBR 6 [36] no DECT/ISDN IAP specific requirements apply.



## 6 Test specification for DECT/ISDN interworking for end system configuration

### 6.1 PP

#### 6.1.1 IWU layer

##### 6.1.1.1 Test suite structure

The test suite structure and the abstract test method described in ETS 300 758-2 [31] respectively in subclauses 10.1 and 10.3 shall fully apply for testing the IWU layer of the PP.

Table 5 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 5: PP - IWU test groups and test group objectives**

Test Group Reference	Test Group Objective
IAP/	To check the behaviour of the IAP IWU of the Portable radio Termination (PT) (the Implementation Under Test (IUT)).
IAP/IWU/	To check the specific behaviours of the IWU of the IUT.
IAP/IWU/FPIS/	To check the behaviour for CISS functional protocol of the IUT.
IAP/IWU/FPIS/CA/	Limited testing of the observable capabilities of the IUT concerning the test group IWU/FPIS.
IAP/NWK/	To check the specific behaviours of the NWK layer of the IUT for IAP profile.
IAP/NWK/CC/	To check the behaviour for NWK CC procedure of the IUT.
IAP/NWK/CC/CA/	Limited testing of the observable capabilities of the IUT concerning the test group NWK/CC.

##### 6.1.1.2 Test case index

Table 6 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 758-1 [30] and ETS 300 758-2 [31].

**Table 6: PP - IWU test cases and test case descriptions**

Test Group Ref.	Test Case Id	Description
IAP/IWU/FPIS/CA/	TC_FPIS_CA_000	To check that the IUT sends an {FACILITY-ciss}, with the TI value set to connectionless, to the tester for invoking a supplementary service component.
	TC_FPIS_CA_001	To check that the IUT, on receipt of the {FACILITY-ciss} response for the {FACILITY-ciss} sent, release the MAC connection used for the exchange.
	TC_FPIS_CA_002	To check that the IUT, on expiration of the waiting response timer for the {FACILITY-ciss} sent, release the MAC connection used for the exchange.
	TC_FPIS_CA_003	To check that the IUT, after sending the {FACILITY-ciss} invoking the supplementary service component, release the MAC connection used for the transmission.
IAP/NWK/CC/CA/	TC_CC_CA_000	To check that the IUT, on receipt of a {CC-SETUP} message with inconsistency between type of frame and class of service in the <<CALL-ATTRIBUTES>> element, rejects the call by sending a {CC-RELEASE-COM} message.
	TC_CC_CA_001	To check that the IUT, on receipt of {CC-SETUP} message with a not supported information transfer type in the <<IWU-ATTRIBUTES>> element, rejects the call by sending a {CC-RELEASE-COM} message.

## 6.1.2 NWK layer

## 6.1.2.1 Test suite structure

The test suite structure described in ETS 300 497-6 [24] clause 4 and the abstract test method described in ETS 300 497-7 [25] subclause 4.1 shall fully apply for testing the NWK layer of the PP.

Table 7 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 7: PP - NWK test groups and test group objectives**

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/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/ME/	To check the behaviour of the Lower Layer Management Entity (LLME) of the IUT.
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/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.

6.1.2.2 Test case index

Table 8 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 497-7 [25], and augmented with additional test cases derived from ETS 300 758-2 [31].

Table 8: PP - NWK test cases and test case descriptions

Test Group Ref.	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 - piecewise 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}.
	TC_PT_CC_BV_IC_03	Incoming call - U-plane connection upon <<Progress ind.>> in {CC-SETUP}.
	TC_PT_CC_BV_IC_04	Incoming call - U-plane connection upon <<Progress ind.>> in {CC-INFO} in T-07.
PT/CC/BV/CI/	TC_PT_CC_BV_CI_01	Alerting the user - Incoming call - <<SIGNAL>> in {CC-SETUP}.
	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_12	T-10 - {CC-INFO}, <<Multi display>> standard characters handling.
	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} mandatory I.E. missing - answer upon with {CC-RELEASE-COM}.
		(continued)

**Table 8 (concluded): PP - NWK test cases and test case descriptions**

Test Group Ref.	Test Case Id	Description
	TC_PT_CC_BI_03	T-00 - {CC-SETUP}-like message, non {CC-SETUP} unrecognised message type - ignore.
	TC_PT_CC_BI_04	T-00 - too short message to contain the complete <<Message type>> - ignore.
PT/CC/TI/	TC_PT_CC_TI_01	T-19; timer P-<CC.02> expiry ( $\pm$ 5% margin); IUT sends {CC-RELEASE-COM}.
	TC_PT_CC_TI_02	Outgoing call; T-01; timer P-<CC.03> expiry ( $\pm$ 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 ( $\pm$ 5% margin); IUT sends {CC-RELEASE}.
PT/ME/BV/	TC_PT_ME_BV_12	T-10 - link fails - IUT clears the call.
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_02	Link exists - CC entity ceases to use the link - no other entity uses the link - normal release.
	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_02	t-07 - {CC-INFO} with wrong transaction id. - IUT sends {CC-RELEASE-COM} with the same transaction id.

### 6.1.3 DLC layer

#### 6.1.3.1 Test suite structure

The test suite structure described in ETS 300 497-4 [22] clause 4 and the abstract test method described in ETS 300 497-5 [23] clause 4 shall fully apply for testing the DLC layer of the PP.

Table 9 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 9: PP - DLC test groups and test group objectives**

Test Group Reference	Test Group Objective
DLC/C_Plane/	Conformance of C-plane generic behaviours.
DLC/C_Plane/ClassA/	Conformance of C-plane Class A behaviours.
DLC/C_Plane/ClassA/CA/	Conformance of C-plane Class A capability behaviours.
DLC/C_Plane/ClassA/BV/	Conformance of C-plane Class A valid behaviours.
DLC/C_Plane/ClassA/BI/	Conformance of C-plane Class A invalid behaviours.
DLC/C_Plane/ClassA/BO/	Conformance of C-plane Class A inopportune behaviours.
DLC/C_Plane/Lb/	Conformance of C-plane Broadcast behaviours.
DLC/C_Plane/Lb/CA/	Conformance of C-plane Broadcast capability behaviours.
DLC/U_Plane/	Conformance of U-plane generic behaviours.
DLC/U_Plane/Class0/	Conformance of U-plane Class 0 behaviours.
DLC/U_Plane/Class0/CA/	Conformance of U-plane Class 0 capability behaviours.
DLC/U_Plane/Class0/BV/	Conformance of U-plane Class 0 (LU7) valid behaviours.
DLC/U_Plane/Class1/	Conformance of U-plane Class 1 behaviours.
DLC/U_Plane/Class1/CA/	Conformance of U-plane Class 1 capability behaviours.
DLC/U_Plane/Class1/BV/	Conformance of U-plane Class 1 valid behaviours.
DLC/U_Plane/Class1/BI/	Conformance of U-plane Class 1 invalid behaviours.

**6.1.3.2 Test case index**

Table 10 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 497-5 [23], and augmented with additional test cases derived from ETS 300 758-2 [31].

**Table 10: PP - DLC test cases and test case descriptions**

Test Group Reference	Test Case Id	Description
DLC/C_Plane/ClassA/CA/	TC_A_CA_000	To check the IUT re-transmission of the link establishment I-Frame request N250 times.
	TC_A_CA_001	Verify that the IUT, on receipt of a valid RR frame response to the link establishment request it has sent, enters established state.
	TC_A_CA_002	To check the IUT re-transmission of the link re-establishment request N250 times.
	TC_A_CA_003	Verify that the IUT, on receipt of a valid RR frame response to the link re-establishment request it has sent, enters established state.
	TC_A_CA_004	Verify that the IUT discards outstanding I-Frames and resets link variables in case of link re-establishment.
	TC_A_CA_005	Verify that the IUT acknowledges rightly a valid received I-Frame within timer <DL-04>.
	TC_A_CA_006	To check the IUT re-transmission of an I-Frame N250 times.
	TC_A_CA_007	Verify that the IUT, refuses a Class B link establishment request by sending RR response frame with the reserved Logical Link Number (LLN) value "Class A operation" and New Link Flag (NLF) bit set to "1", and enters into the Class A established state.
	TC_A_CA_008	Verify that the IUT responds and enters into Class A established state , on receipt of a establishment request.
DLC/C_Plane/ClassA/BV/	TC_A_BV_000	Verify that the IUT reacts correctly in case of collision of establishment requests.
	TC_A_BV_001	Verify that the IUT reacts correctly in case of collision of re-establishment requests.
	TC_A_BV_002	Verify that the IUT accepts a RR response frame with correct N(R) value as an acknowledgement.
	TC_A_BV_003	Verify that the IUT accepts an I-Frame command with correct N(S) and N(R) values as an acknowledgement.
	TC_A_BV_004	Verify that, in Class A established state, the IUT accepts a re-establishment request.
	TC_A_BV_005	Verify that, in timer recovery phase, the IUT accepts a RR response frame with correct N(R) value as an acknowledgement.
	TC_A_BV_006	Verify that, in timer recovery phase, the IUT accepts an I-Frame command with correct N(S) and N(R) values as an acknowledgement.
DLC/C_Plane/ClassA/BI/	TC_A_BI_000	Verify that the IUT, in establishment pending state, discards a received RR class B response frame with NLF bit set to '1', and re-transmits the establishment request.
	TC_A_BI_001	Verify that the IUT, in establishment pending state, discards a received RR response frame with NLF bit set to '1' and invalid N(R), and re-transmits the establishment request.
		(continued)

Table 10 (continued): PP - DLC test cases and test case descriptions

Test Group Reference	Test Case Id	Description
	TC_A_BI_002	Verify that the IUT, in re-establishment pending state, discards a received RR class B response frame with NLF bit set to '1', and re-transmits the re-establishment request.
	TC_A_BI_003	Verify that the IUT, in re-establishment pending state, discards a received RR response frame with NLF bit set to '1' and invalid N(R), and re-transmits the re-establishment request.
	TC_A_BI_004	Verify that the IUT, in information transfer phase, discards a received RR class B response frame with NLF bit set to '0' and re-transmits the unacknowledged I-Frame.
	TC_A_BI_005	Verify that the IUT, in information transfer phase, discards a received RR response frame with NLF bit set to '0' and invalid N(R) and re-transmits the unacknowledged I-Frame.
	TC_A_BI_006	Verify that the IUT, accepts a received I-Frame with invalid N(R) and, on expiration of <DL-04>, re-transmits the unacknowledged I-Frame with updated N(R).
	TC_A_BI_007	On receipt of an I-Frame with invalid N(S), the IUT indicates the expected N(S) by sending RR response frame and stops, if necessary, DL_04 according to the received N(R).
	TC_A_BI_008	On receipt of an I-Frame with invalid N(S) and invalid N(R), the IUT indicates the expected N(S) by sending a RR response frame and re-transmits the unacknowledged I-Frame.
	TC_A_BI_009	Verify that the IUT, in timer recovery phase, discards a received RR class B response frame with NLF bit set to '0', and re-transmits the unacknowledged I-Frame.
	TC_A_BI_010	Verify that the IUT, in timer recovery phase, discards a received RR response frame with NLF bit set to '0' and invalid N(R), and re-transmits the unacknowledged I-Frame.
	TC_A_BI_011	Verify that the IUT, in timer recovery phase, accepts a received I-Frame with invalid N(R) and, on expiration of <DL-04>, re-transmits the unacknowledged I-Frame with updated N(R).
	TC_A_BI_012	The IUT, in timer recovery phase and on receipt of an I-Frame with invalid N(S), indicates the expected N(S) by sending a RR response frame, and leaves timer recovery phase.
	TC_A_BI_013	In timer recovery phase and on receipt of an I-Frame with invalid N(S) and invalid N(R), the IUT indicates the expected N(S) by sending a RR response frame and re-transmits the unacknowledged I-Frame.
DLC/C_Plane/ClassA/BO/	TC_A_BO_000	Verify that the IUT, in establishment pending state, discards a received I-Frame with NLF bit set to '0', and re-transmits the establishment request.
	TC_A_BO_001	Verify that the IUT, in establishment pending state, discards a received RR response frame with NLF bit set to '0', and re-transmits the establishment request.
		(continued)

Table 10 (concluded): PP - DLC test cases and test case descriptions

Test Group Reference	Test Case Id	Description
	TC_A_BO_002	Verify that the IUT, in re-establishment pending state, discards a received I-Frame with NLF bit set to '0', and re-transmits the establishment request.
	TC_A_BO_003	Verify that the IUT, in re-establishment pending state, discards a received RR response frame with NLF bit set to '0', and re-transmits the establishment request.
DLC/C_Plane/Lb/CA/	TC_L_CA_000	Verify that the IUT is able to generate/to receive a short broadcast frame (3 octets).
	TC_L_CA_001	Verify that the IUT is able to generate/to receive a long broadcast frame (5 octets).
DLC/U_Plane/Class0/CA/	TC_0_CA_000	Verify that the IUT is able to transmit a correct U-plane Class 0 frame.
	TC_0_CA_001	Verify that the IUT is able to receive a correct U-plane Class 0 frame.
DLC/U_Plane/Class0/BV/	TC_0_BV_000	On receipt of a frame with incorrect checksum with its VO variable = 0, the IUT uses the first frame transmission procedure to transmit the next frame.
	TC_0_BV_001	On receipt of a frame with incorrect checksum with its VO variable > 0, the IUT uses the first frame transmission procedure to transmit the next frame.
	TC_0_BV_002	On receipt of a request for re-transmission with its VO variable = 0, the IUT uses the same format as used for the normal transmission for re-transmitting the frame.
	TC_0_BV_003	On receipt of a 64 kbit/s frame and with its VO variable = 0, the IUT acknowledges the frame by sending a frame with NR set to the correct value.
	TC_0_BV_004	Check that the IUT treats the received N(R) value as an acknowledgement for all frames transmitted up to this value.
DLC/U_Plane/Class1/CA/	TC_1_CA_000	Verify that the IUT is able to transmit a correct U-plane Class 1 frame.
	TC_1_CA_001	Verify that the IUT treats a received frame including an RN with the A/N bit set to '1', as an acknowledgement for all frames up to and including frame number RN.
	TC_1_CA_002	Verify that the IUT correctly acknowledges received frame(s) with appropriate send sequence number(s). (In-sequence frames).
DLC/U_Plane/Class1/BV/	TC_1_BV_000	Verify that the IUT disconnects the U-plane link, at the event of expiration of timer <DLU-01> without receiving the requested acknowledgement.
	TC_1_BV_001	Verify that the IUT resets timer <DLU-01> on receipt of a valid acknowledgement.
	TC_1_BV_002	Verify that the IUT maintains the <DLU-01> timer whenever the window size is reached (thereby halting further transmissions).
DLC/U_Plane/Class1/BI/	TC_1_BI_000	Verify that the IUT discards a received frame with an I/R bit set to '0'.
	TC_1_BI_001	Verify that the IUT discards a received frame with an A/N bit set to '0'.
	TC_1_BI_002	Verify that the IUT correctly acknowledges received frame(s) with erroneous send sequence number(s) after waiting for L(R) TDMA frames. (Out-of-sequence frames).

## 6.1.4 MAC layer

## 6.1.4.1 Test suite structure

The test suite structure described in ETS 300 497-1 [19] clause 4 and the abstract test method described in ETS 300 497-2 [20] clause 4 shall fully apply for testing the MAC layer of the PP.

Table 11 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 11: PP - MAC test groups and test group objectives**

Test Group Reference	Test Group Objective
PT/	Verify the correct implementation of the PT (IUT) MAC layer.
PT/BH/	Verify the correct implementation of connection oriented bearer handover procedures.
PT/BH/BV/	To test the behaviour of the IUT concerning connection oriented bearer handover procedures in relation to syntactically and contextual correct behaviour of the test system.
PT/BH/CA/	Limited testing that the observable capabilities of the IUT concerning connection oriented bearer handover procedures are in accordance with the static requirements.
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 connection oriented bearer release procedures are in accordance with the static requirements.
PT/BS/	Verify the correct implementation of connection oriented bearer setup procedures.
PT/BS/BV/	To test the behaviour of the IUT concerning connection oriented bearer setup procedures in relation to syntactically and contextual correct behaviour of the test system.
PT/BS/CA/	Limited testing that the observable capabilities of the IUT concerning connection oriented bearer setup procedures are in accordance with the static requirements.
PT/DB/	Verify the correct implementation of the downlink broadcast services.
PT/DB/BV/	To test the behaviour of the IUT concerning the downlink broadcast services in relation to syntactically and contextual correct behaviour of the test system.
PT/DT/	Verify the correct implementation of connection oriented data transfer procedures.
PT/DT/BI/	To check the behaviour of the IUT concerning connection oriented data transfer procedures in response to invalid messages.
PT/DT/BV/	To test the behaviour of the IUT concerning connection oriented data transfer procedures in relation to syntactically and contextual correct behaviour of the test system.
PT/DT/CA/	Limited testing that the observable capabilities of the IUT concerning connection oriented data transfer procedures are in accordance with the static requirements.
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 MAC layer management are in accordance with the static requirements.
PT/PG/	Verify the correct implementation of the paging services.
PT/PG/BV/	To test the behaviour of the IUT concerning the paging services in relation to syntactically and contextual correct behaviour of the test system.
PT/PG/CA/	Limited testing that the observable capabilities of the IUT concerning the paging services are in accordance with the static requirements.



6.1.4.2 Test case index

Table 12 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 497-2 [20], and augmented with additional test cases derived from ETS 300 758-2 [31].

Table 12: PP - MAC test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
PT/BH/BV/	TC_PT_BH_BV_00	Check that the IUT, for a duplex bearer, correctly initiates and completes an intracell bearer handover procedure using basic set-up when encryption is enabled.
	TC_PT_BH_BV_01	Check that the IUT, for a duplex bearer, correctly initiates and completes an intercell bearer handover procedure using basic set-up when encryption is enabled.
PT/BH/CA/	TC_PT_BH_CA_00	Check that the IUT, for a duplex bearer, correctly initiates and completes an intracell bearer handover procedure using basic set-up.
	TC_PT_BH_CA_01	Check that the IUT, for a duplex bearer, correctly initiates and completes an intercell bearer handover procedure using basic set-up.
PT/BR/CA/	TC_PT_BR_CA_00	Check that the IUT manages rightly a release of a basic duplex bearer with an unacknowledged release procedure when receiving a release message.
	TC_PT_BR_CA_01	Check that the IUT manages rightly a release of a B field advanced connection with an unacknowledged release procedure when receiving a release message.
PT/BS/BV/	TC_PT_BS_BV_00	Check that the IUT releases a duplex bearer in case the timer T201 expires during the time a basic bearer exists.
	TC_PT_BS_BV_01	Check that the IUT releases a connection in case the timer T201 expires during the time a multi bearer connection exists.
PT/BS/CA/	TC_PT_BS_CA_00	Check that the IUT manages rightly the PT initiated (single) basic bearer setup procedure without wait messages.
	TC_PT_BS_CA_01	Check that the IUT manages rightly the PT initiated (single) basic bearer setup procedure with wait messages.
	TC_PT_BS_CA_02	Check that the IUT manages rightly the PT initiated B field advanced bearer setup procedure without wait messages.
	TC_PT_BS_CA_03	Check that the IUT manages rightly the PT initiated B filed advanced bearer setup procedure with wait messages.
PT/DB/BV/	TC_PT_DB_BV_01	Check that the IUT is able to establish a bearer after reception of the extended RF carrier information QT message.
PT/DT/BI/	TC_PT_DT_BI_00	Check that the IUT, when receiving IN minimum delay data, is capable to detect A-field R-CRC error and to respond with the correct Q2 bit setting (Q2 = 0).
PT/DT/BV/	TC_PT_DT_BV_00	Check that the IUT releases the basic connection when it cannot conclude the procedure to switch from clear mode to encrypt mode.
	TC_PT_DT_BV_01	Check that the IUT releases the basic connection when it cannot conclude the procedure to switch from encrypt mode to clear mode.
PT/DT/CA/	TC_PT_DT_CA_00	Check that the IUT re-transmits Cs segment until it receives an acknowledgement in the same ARQ window.
	TC_PT_DT_CA_01	Check that the IUT does not transmit another Cs segment until the successful transmission of the current segment.
	TC_PT_DT_CA_02	Check that the IUT manages correctly the one bit numbering of the Cs segments.
	TC_PT_DT_CA_03	Check that the IUT manages correctly the procedure to switch the basic connection from clear mode to encrypt mode.
		(continued)

**Table 12 (concluded): PP - MAC test cases and test case descriptions**

Test Group Ref.	Test Case Id	Description
	TC_PT_DT_CA_04	Check that the IUT manages correctly the procedure to switch the basic connection from encrypt mode to clear mode.
PT/LM/CA/	TC_PT_LM_CA_00	Check that the IUT manages rightly the protocol constant N200.
	TC_PT_LM_CA_01	Check that the IUT manages rightly the protocol timer T200.
	TC_PT_LM_CA_02	Check that the IUT manages rightly the protocol timer T207.
	TC_PT_LM_CA_03	Check that the IUT manages rightly the protocol timer T208.
	TC_PT_LM_CA_04	Check that the IUT, within a time window of T202 seconds. makes at most N201 bearer setup attempts for bearer handover.
PT/PG/BV/	TC_PT_PG_BV_02	Check that the PT does not setup a bearer on a slot announced to be blind, after reception of a PT blind full slot information message.
	TC_PT_PG_BV_03	Check that the PT stays locked to a FT, based on reception of other bearer and dummy or CL-bearer position zero length PT messages.
PT/PG/CA/	TC_PT_PG_CA_00	Check that the IUT can receive a short page message.
	TC_PT_PG_CA_01	Check that the PT can receive a correct zero length page message.
	TC_PT_PG_CA_02	Check that the IUT can receive a full page message.

### 6.1.5 PH layer

For all environments, PH layer capabilities testing document TBR 6 [36] shall apply.

## 6.2 FP

This subclause shall apply only if the DECT FP is a terminal equipment connected to a public network interface. If the DECT FP is a part of the network (i.e. functionally attached to the ISDN network) and is therefore not considered to be a terminal equipment the present document shall not apply (see clause 1).

### 6.2.1 IWU layer

#### 6.2.1.1 Test suite structure

The test suite structure and the abstract test method described in ETS 300 758-3 [32] respectively in subclauses 10.1 and 10.3 shall fully apply for testing the IWU layer of the FP.

Table 13 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 13: FP - IWU test groups and test group objectives**

<b>Test Group Reference</b>	<b>Test Group Objective</b>
IAP/	To check the behaviour of the IAP IWU of the FT (IUT).
IAP/IWUprocedure/	To check the behaviour of the IAP IWU procedures of the FT (IUT).
IAP/IWUprocedure/CCCE/	To check the behaviour of the IAP IWU CC (Call Establishment) procedures of the FT (IUT).
IAP/IWUprocedure/CCCE/CA/	To check the behaviour of the IAP IWU CC (Call Establishment) procedures of the FT (IUT) - Capability testing.
IAP/IWUprocedure/CCCI/	To check the behaviour of the IAP IWU CC (Call Information) procedures of the FT (IUT).
IAP/IWUprocedure/CCCI/CA/	To check the behaviour of the IAP IWU CC (Call Information) procedures of the FT (IUT) - Capability testing.
IAP/IWUprocedure/CCCR/	To check the behaviour of the IAP IWU CC (Call Release) procedures of the FT (IUT).
IAP/IWUprocedure/CCCR/CA/	To check the behaviour of the IAP IWU CC (Call Release) procedures of the FT (IUT) - Capability testing.
IAP/IWUprocedure/FPIS/	To check the behaviour of the IAP IWU Functional Protocol Call Independent Supplementary Services (CISS) procedures of the FT (IUT).
IAP/IWUprocedure/FPIS/CA/	To check the behaviour of the IAP IWU Functional Protocol CISS procedures of the FT (IUT) - Capability testing.
IAP/IWUprocedure/FPRS/	To check the behaviour of the IAP IWU Functional Protocol Call Related Supplementary Services (CRSS) procedures of the FT (IUT).
IAP/IWUprocedure/FPRS/CA/	To check the behaviour of the IAP IWU Functional Protocol CRSS procedures of the FT (IUT) - Capability testing.
IAP/IWUprocedure/KPSS/	To check the behaviour of the IAP IWU Keypad Protocol Supplementary Services (KPSS) procedures of the FT (IUT).
IAP/IWUprocedure/KPSS/CA/	To check the behaviour of the IAP IWU Keypad Protocol Supplementary Services (KPSS) procedures of the FT (IUT) - Capability Testing.
IAP/IWUmapping/	To check the behaviour of the IAP IWU message mapping procedures of the FT (IUT).
IAP/IWUmapping/MES/	To check the behaviour of the IAP IWU message mapping procedures of the FT (IUT).
IAP/IWUmapping/MES/CA/	To check the behaviour of the IAP IWU message mapping procedures of the FT (IUT) - Capability testing.
IAP/NWK/	To check the behaviour of the IAP IWU of the FT (IUT) - additional NWK layer procedures.
IAP/NWK/CC/	To check the behaviour of the IAP IWU of the FT (IUT) - additional CC procedures.
IAP/NWK/CC/CA/	To check the behaviour of the IAP IWU of the FT (IUT) - additional CC procedures - Capability testing.

## 6.2.1.2 Test case index

Table 14 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 758-1 [30] and ETS 300 758-3 [32].

**Table 14: FP - IWU test cases and test case descriptions**

Test Group Ref.	Test Case Id	Description
IAP/IWUprocedure/CCCE/CA/	TC-CCCE-CA-000	F00-U00; outgoing call initiated by the PT with a {CC_SETUP} including a <<Called party number>>.
	TC-CCCE-CA-001	F00-U00; outgoing call initiated by the PT with a {CC_SETUP} and the <<Called party number>> in a following {CC-INFO}, the IUT sends a {SETUP} to the NT.
	TC-CCCE-CA-002	F00-U00; outgoing call initiated by the PT with a {CC_SETUP} and the dialling information in consecutive {CC-INFO} in <<Keypad>>, the IUT sends a {SETUP} to the NT.
	TC-CCCE-CA-003	F00-U00; outgoing call initiated by the PT with a {CC_SETUP} and the <<Called party number>> in a following {CC-INFO}, the IUT sends a {CC-SETUP-ACK} to the PT.
	TC-CCCE-CA-004	F00-U00; outgoing call initiated by the PT with a {CC_SETUP} and the dialling information in consecutive {CC-INFO} in <<Keypad>>, the IUT sends a {CC-SETUP-ACK} to the PT.
	TC-CCCE-CA-005	F00-U00; incoming call initiated by the NT with a {SETUP} containing enough dialling information to identify the destination.
	TC-CCCE-CA-006	F00-U00; incoming call initiated by the NT with a {SETUP} followed by {INFORMATION } containing the dialling information.
	TC-CCCE-CA-007	F00-U00; incoming call with 2 <<Bearer-capability>> and possibly 2 <<High-layer-capability>>, the IUT selects one set of attributes and forwards this chosen set to the PT.
IAP/IWUprocedure/CCCI/CA/	TC-CCCI-CA-000	F10-U10; check that on receipt of an {INFORMATION} or {CC-INFO}, the IUT sends respectively a {CC-INFO} or a {INFORMATION} and remains in F10-U10.
IAP/IWUprocedure/CCCR/CA/	TC-CCCR-CA-000	F10-U10; check that on receipt of a {CC-RELEASE}, the IUT sends a {DISCONNECT} to the NT, waits for a {RELEASE} and on receipt of it replies with a {CC-RELEASE-COM} and a {RELEASE-COM} and enters state F00-U00.
	TC-CCCR-CA-001	F10-U10; check that on receipt of a {CC-RELEASE-COM}, the IUT sends a {DISCONNECT} to the NT, waits for a {RELEASE} and on receipt of it replies with a {RELEASE-COM} and enters state F00-U00.
	TC-CCCR-CA-002	F10-U10; check that on receipt of a {DISCONNECT}, the IUT sends a {CC-RELEASE} to the PT, waits for a {CC-RELEASE-COM} and on receipt of it replies with a {RELEASE} to the NT, waits for a {RELEASE-COM} and on receipt of it enters state F00-U00.
		(continued)

Table 14 (continued): FP - IWU test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
	TC-CCCR-CA-003	F10-U10; check that on receipt of a {RELEASE}, the IUT sends a {CC-RELEASE-COM} to the PT and a {RELEASE-COM} to the NT and enters state F00-U00.
	TC-CCCR-CA-004	F10-U10; check that on receipt of a {RELEASE-COM}, the IUT sends a {CC-RELEASE-COM} to the PT and enters state F00-U00.
IAP/IWUprocedure/FPIS/CA/	TC-FPIS-CA-000	F10-U10; check that the IUT, on receipt of a DECT {CISS-REGISTER}, sends an ISDN {REGISTER} to the NT.
	TC-FPIS-CA-001	F10-U10; check that the IUT, on receipt of a ISDN {REGISTER}, sends a {CISS-REGISTER} to the PT.
	TC-FPIS-CA-002	F10-U10 and a CISS connection is established; check that the IUT, on receipt of a DECT {CISS-RELEASE-COM}, sends an ISDN {CISS-RELEASE} to the NT.
	TC-FPIS-CA-003	F10-U10 and a CISS connection is established; check that the IUT, on receipt of a DECT {CISS-RELEASE}, sends an ISDN { CISS-RELEASE-COM } to the NT.
	TC-FPIS-CA-004	F10-U10 and a CISS connection is established; check that the IUT, on receipt of a DECT {FACILITY ciss}, sends an ISDN {FACILITY ciss} to the NT.
	TC-FPIS-CA-005	F10-U10 and a CISS connection is established; check that the IUT, on receipt of a ISDN {FACILITY ciss}, sends a DECT {FACILITY ciss} to the PT.
	TC-FPIS-CA-006	F00-U00; check that the IUT, on receipt of a ISDN {FACILITY ciss}, sends a {LCE-PAGE-REQUEST}, waits for a {LCE-PAGE-RESPONSE}, then forwards the {FACILITY ciss} to the PT with a correct TI and mapping.
IAP/IWUprocedure/FPRS/CA/	TC-FPRS-CA-000	F00-U00; outgoing call; check that on receipt of a DECT {CC-SETUP} including a <<Called-party-number>> and a <<Facility>>, sends an ISDN {SETUP} with a correctly mapped <<Facility>>.
	TC-FPRS-CA-001	F00-U00; outgoing call; check that the IUT, on receipt of a {CONNECT} with a <<facility>> IE sends a {CC-CONNECT} with a correctly mapped <<facility>> IE.
	TC-FPRS-CA-002	F00-U00; outgoing call; check that the IUT, on receipt of a {ALERTING} with a <<facility>> IE sends a {CC-ALERTING} with a correctly mapped <<facility>> IE.
	TC-FPRS-CA-003	F00-U00; outgoing call; check that the IUT, on receipt of a {CALL-PROCEEDING} with a <<facility>> IE sends a {CC-CALL-PROCEEDING} with a correctly mapped <<facility>> IE.

(continued)

Table 14 (continued): FP - IWU test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
	TC-FPRS-CA-004	F00-U00; outgoing call; check that the IUT, on receipt of a {PROGRESS} with a <<facility>> IE sends a {CC-INFO} with a correctly mapped <<facility>> IE.
	TC-FPRS-CA-005	F00-U00; incoming call; check that the IUT, on receipt of a DECT {CC-CONNECT} with a <<facility>> IE from the PT, sends an ISDN {CONNECT} with a correctly mapped <<facility>> IE.
	TC-FPRS-CA-006	F00-U00; incoming call; check that the IUT, on receipt of a DECT {CC- ALERTING} with a <<facility>> IE from the PT, sends an ISDN {ALERTING} with a correctly mapped <<facility>> IE.
	TC-FPRS-CA-007	F00-U00; incoming call; check that the IUT, on receipt of a {SETUP} with a <<facility>> IE and enough dialling information to identify the destination, from the PT, sends an DECT {CC-SETUP} with a correctly mapped <<facility>> IE.
	TC-FPRS-CA-008	F10-U10; check that on receipt of a {CC-RELEASE}, the IUT sends a {DISCONNECT}, waits for a {RELEASE} and sends a {CC-RELEASE-COM}, a {RELEASE-COM} and enter state F00-U00. the <<facility>> IE are mapped correctly from {CC-RELEASE} to {DISCONNECT} and from {RELEASE} to {CC-RELEASE-COM}.
	TC-FPRS-CA-009	F10-U10; check that on receipt of a {CC-RELEASE-COM}, the IUT sends a {DISCONNECT}, waits for a {RELEASE} and sends a {RELEASE-COM} and enter state F00-U00. The <<facility>> IE is mapped correctly from {CC-RELEASE-COM} to {DISCONNECT}.
	TC-FPRS-CA-010	F10-U10; check that on receipt of a {DISCONNECT}, the IUT sends a {CC-RELEASE}, waits for a {CC-RELEASE-COM}, then sends a {RELEASE}, waits for a {RELEASE-COM} and then enters state F0-U0. The <<facility>> IE are mapped correctly from {DISCONNECT} to {CC-RELEASE} and from {CC-RELEASE-COM} to {RELEASE} and the message type {DISCONNECT} is mapped in an <<IWU-to-IWU>> of the {CC-RELEASE}.
	TC-FPRS-CA-011	F10-U10; check that on receipt of a {RELEASE}, the IUT sends a {CC-RELEASE-COM} and enters state F00-U00. The <<facility>> IE is mapped correctly from {RELEASE} to {CC-RELEASE-COM}.
	TC-FPRS-CA-012	F10-U10; check that on receipt of a {RELEASE-COM}, the IUT sends a {CC-RELEASE-COM} and enters state F00-U00. The <<facility>> IE is mapped correctly from {RELEASE-COM} to {CC-RELEASE-COM}.
	TC-FPRS-CA-013	F10-U10; check that on receipt of a {FACILITY crss} from PT or NT, a {FACILITY crss} is sent respectively to the NT or PT with the <<facility>> IE is mapped correctly.
	TC-FPRS-CA-014	F10-U10; check that on receipt of a DECT {HOLD} for the existing call, the IUT sends a ISDN {HOLD} and waits for an ISDN {HOLD-ACK} then forwards it to the PT.
		(continued)

Table 14 (continued): FP - IWU test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
	TC-FPRS-CA-015	F10-U10; check that on receipt of a DECT {HOLD} for an existing held call, the IUT sends a ISDN {HOLD} and waits for an ISDN {HOLD-REJ} then forwards it to the PT.
	TC-FPRS-CA-016	F10-U10; check that on receipt of a DECT {RETRIEVE} for an held call, the IUT sends an ISDN {RETRIEVE}, waits for an ISDN {RETRIEVE-ACK} and upon receipt of this message, it is forwarded to the PT.
	TC-FPRS-CA-017	F10-U10; check that on receipt of a DECT {RETRIEVE} for an normal call, the IUT sends an ISDN {RETRIEVE}, waits for an ISDN {RETRIEVE-REJ} and upon receipt of this message, it is forwarded to the PT.
	TC-FPRS-CA-018	F00-U00; outgoing call establishment, on receipt of a {CONNECT} the IUT sends a {CC-CONNECT} with the <<NOTIFICATION-INDICATOR>> IE of the ISDN message mapped to an <<IWU-to-IWU>>.
	TC-FPRS-CA-019	F00-U00; outgoing call establishment, on receipt of a {ALERTING} the IUT sends a {CC-ALERTING} with the <<NOTIFICATION-INDICATOR>> IE of the ISDN message mapped to an <<IWU-to-IWU>>.
	TC-FPRS-CA-020	F00-U00; outgoing call establishment, on receipt of a {CALL-PROCEEDING} the IUT sends a {CC-CALL-PROCEEDING} with the <<NOTIFICATION-INDICATOR>> IE of the ISDN message mapped to an <<IWU-to-IWU>>.
	TC-FPRS-CA-021	F00-U00; outgoing call establishment, on receipt of a {PROGRESS} the IUT sends a {CC-INFO} with the <<NOTIFICATION-INDICATOR>> IE of the ISDN message mapped to an <<IWU-to-IWU>>.
	TC-FPRS-CA-022	F00-U00; incoming call establishment, on receipt of a {CONNECT-ACK} the IUT sends a {CC-CONNECT-ACK} with the <<NOTIFICATION-INDICATOR>> IE of the ISDN message mapped to an <<IWU-to-IWU>>.
	TC-FPRS-CA-023	F00-U00; incoming call establishment, on receipt of a {SETUP} containing enough dialling information , sends a {CC-SETUP} with the <<NOTIFICATION-INDICATOR>> IE of the ISDN message mapped to an <<IWU-to-IWU>>.
	TC-FPRS-CA-024	F10-U10; check that on receipt of a {DISCONNECT}, the IUT sends a {CC-RELEASE} to the PT, waits for a {CC-RELEASE-COM} then sends {RELEASE} and waits for a {RELEASE-COM} then enters state F00-U00 with the <<NOTIFICATION-INDICATOR>> IE of the {DISCONNECT} message mapped to an <<IWU-to-IWU>> and the message type of the {DISCONNECT} to another <<IWU-to-IWU>> both sent in {CC-RELEASE}.
		(continued)

Table 14 (continued): FP - IWU test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
	TC-FPRS-CA-025	F10-U10; check that on receipt of a {RELEASE-COM}, the IUT sends a {CC-RELEASE-COM} and enters state F00-U00. The <<NOTIFICATION-INDICATOR>> IE is mapped correctly from {RELEASE-COM} to a <<IWU-to-IWU>> in the {CC-RELEASE-COM}.
	TC-FPRS-CA-026	F00-U00; during establishment of an incoming call; check that on receipt of a {NOTIFY}, the IUT sends a {CC-INFO} The <<NOTIFICATION-INDICATOR>> IE is mapped correctly from {NOTIFY} to a <<IWU-to-IWU>> in the {CC-INFO}.
	TC-FPRS-CA-027	F00-U00; during establishment of an incoming call; check that on receipt of a ISND {FACILITY-crss}, the IUT sends a DECT { FACILITY-crss}. The <<NOTIFICATION-INDICATOR>> IE is mapped correctly from ISDN to a <<IWU-to-IWU>> in the DECT { FACILITY-crss}.
IAP/IWUprocedure/KPSS/CA/	TC-KPSS-CA-000	F00-U00; outgoing call initiated by a {CC-SETUP} without <<Called party number>> IE, dialling data are sent in <<KEYPAD>> IE in {CC-INFO}. (case a) The IUT sends a {SETUP}. The supplementary service key data of the DECT <<KEYPAD>> in the {CC-SETUP} and {CC_INFO} are mapped to an ISDN <<KEYPAD-FACILITY>> in the {SETUP} and {INFORMATION}. The called party number key data of the DECT <<KEYPAD>> in the {CC-SETUP} and {CC-INFO} are mapped to an ISDN <<Called-party-number>> in the ISDN {SETUP} and {INFORMATION}.
	TC-KPSS-CA-001	F00-U00; outgoing call initiated by a {CC-SETUP} without <<Called party number>> IE, dialling data are sent in <<KEYPAD>> IE in {CC-INFO}. (case b) The IUT sends a {CC-SETUP-ACK}. The supplementary service key data of the DECT <<KEYPAD>> in the {CC-SETUP} and {CC_INFO} are collected mapped to an ISDN <<KEYPAD-FACILITY>> in the {SETUP}. The called party number key data of the DECT <<KEYPAD>> in the {CC-SETUP} and {CC-INFO} are collected and mapped to an ISDN <<Called-party-number>> in the ISDN {SETUP}.
	TC-KPSS-CA-002	F00-U00; incoming call initiated by a {SETUP} not containing enough dialling data, collect these data in the following {INFORMATION}. The supplementary service key data received in the <<keypad-facility>> in the ISDN {SETUP} and in subsequent {INFORMATION} are collected until identification of the destination and sent in an <<IWU-to-IWU>> in the {CC-SETUP}. The supplementary service key data received in the ISDN <<Keypad facility>> in subsequent {INFORMATION} after sending the DECT {CC-SETUP} are mapped in <<IWU-to-IWU>> in a {CC-INFO}.<<Display>> received in ISDN CC messages are mapped to }.<<Display>> of the corresponding DECT message.

(continued)



Table 14 (concluded): FP - IWU test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
IAP/IWUmapping/MES/CA/	TC-MES-CA-000	F02-U02; check that on receipt of {ALERTING}, the IUT sends a {CC-ALERTING} and enters in F04-U04.
	TC-MES-CA-001	F02-U02; check that on receipt of {CALL_PROCEEDING}, the IUT sends a {CC-CALL_PROCEEDING} and enters in F03-U03.
	TC-MES-CA-002	F02-U02; check that on receipt of {CONNECT}, the IUT sends a {CC-CONNECT} and enters in F10-U10.
	TC-MES-CA-003	F07-U08; check that on receipt of {CONNECT-ACK}, the IUT sends a {CC-CONNECT-ACK} and enters in F10-U10.
	TC-MES-CA-004	F10-U10; check that on receipt of {DISCONNECT}, the IUT sends a {CC-RELEASE} and enters state F10-U12, the ISDN message type {DISCONNECT} being mapped in a <<IWU-to-IWU>> of the {CC-RELEASE}.
	TC-MES-CA-005	F02-U02; check that on receipt of {INFORMATION}, the IUT sends a {CC-INFO} and remains in F02-U02.
	TC-MES-CA-006	F00-U25; check that on receipt of {INFORMATION}, the IUT sends a {CC-SETUP}, a {CALL-PROCEEDING} and enters state F06-U09. mandatory IE received from previous messages are mapped into the {CC-SETUP}.
	TC-MES-CA-007	F01-U01; check that on receipt of {PROGRESS}, the IUT sends a {CC-INFO} the <<Progress indicator>> being correctly mapped into the {CC-INFO}.
	TC-MES-CA-008	F00-U00; check that on receipt of {SETUP} with <<sending complete>>, the IUT sends a {CC-SETUP}, a {CALL-PROCEEDING} and enters state F01-U01.
	TC-MES-CA-009	F02-U01; check that on receipt of {SETUP-ACK} with <<Progress indicator>>, the IUT sends a {CC-INFO} and enters state F02-U02.
	TC-MES-CA-010	F01-U01; check that on receipt of {SETUP-ACK} the IUT sends a {CC- SETUP-ACK} and enters state F02-U02.
	TC-MES-CA-011	F06-U09; check that on receipt of a {CC-ALERTING}, the IUT sends a ISDN {ALERTING} and enters state F07-U07.
	TC-MES-CA-012	F10-U10; check that on receipt of a {CC-RELEASE}, the IUT sends a {DISCONNECT} and enters state F10-U11.
	TC-MES-CA-013	F19-U12; check that on receipt of a {CC-RELEASE-COM}, the IUT sends a {RELEASE} and enters state F00-U19.
	TC-MES-CA-014	F10-U10; check that on receipt of a {CC-RELEASE-COM}, the IUT sends a {DISCONNECT} and enters state F00-U11.
IAP/NWK/CC/CA/	TC-CC-CA-000	Incoming call; F01; timer F-<CC.03> expiry; IUT sends {CC-RELEASE-COM} to the PT and {RELEASE-COM} to the network. and enters F00-U00.

## 6.2.2 NWK layer

## 6.2.2.1 Test suite structure

The test suite structure described in ETS 300 497-8 [26] clause 4 and the abstract test method described in ETS 300 497-9 [27] subclause 4.1 shall fully apply for testing the NWK layer of the FP.

Table 15 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 15: FP - NWK test groups and test group objectives**

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/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.
FT/CC/BV/CI/	To check the IUT's behaviour in information transfer procedures.
FT/CC/BV/CR/	To check the IUT's behaviours to release an outgoing/incoming call.
FT/CC/RS/	To check the IUT's behaviour during call related supplementary service procedures.
FT/CC/BO/	To check the behaviour of the CC entity of the IUT in response to the messages that are syntactically correct but not allowed to occur in some states of the CC procedures.
FT/CC/BI/	To check the behaviour of the CC entity of the IUT in response to invalid messages.
FT/CC/TI/	To verify that the IUT CC timers are with correct values and the IUT is reacting properly to the expiry of a timer.
FT/MM/	To check the behaviour of the Mobility Management entity of the IUT.
FT/MM/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.
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/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/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.

6.2.2.2 Test case index

Table 16 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 497-9 [27], and augmented with additional test cases derived from ETS 300 758-3 [32].

Table 16: FP - NWK test cases and test case descriptions

Test Group Ref.	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.
	TC_FT_CC_BV_OC_02	Outgoing call; F-00->F-10; en-block dialling in {CC-SETUP}.
	TC_FT_CC_BV_OC_05	Outgoing call; F-00, F-01, F-02, F-10; piecewise dialling in F-02.
FT/CC/BV/IC/	TC_FT_CC_BV_IC_01	Incoming call; F-00, F-06, F-07 to F-10.
	TC_FT_CC_BV_IC_02	Incoming call; F-06 directly to the state 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_10	Outgoing normal call; F-10; {CC-INFO}, <<Multi keypad>>, "0-9, star, hash mark" handling.
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 normal call; F-06; PT initiated abnormal release.
	TC_FT_CC_BV_CR_10	F-10; PT initiated partial release.
	TC_FT_CC_BV_CR_12	Outgoing normal call; F-10; FT initiated release. Handle {CC-INFO} message.
	FT/CC/RS/	TC_FT_CC_BV_RS_07
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.
	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 ( $\pm 5\%$ 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 ( $\pm 5\%$ margin); IUT sends {CC-RELEASE-COM} of IUT-Timer T_F_CC_02 in state F-19.
	TC_FT_CC_TI_04	Outgoing call; F-06; timer F-<CC.03> expiry ( $\pm 5\%$ margin); IUT sends {CC-RELEASE-COM}.
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 IPU; IUT rejects and release the link.
		(continued)

**Table 16 (concluded): FP - NWK test cases and test case descriptions**

Test Group Ref.	Test Case Id	Description
	TC_FT_LC_BV_LE_03	Direct PT initiated link establishment procedure.
FT/LC/BV/LR/	TC_FT_LC_BV_LR_01	Link exists; PT initiated "normal" link release.
	TC_FT_LC_BV_LR_03	Link exists; CC call is terminated; FT initiated link release.
	TC_PT_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_03	F-02; {CC-INFO} with wrong transaction id.; IUT sends {CC-RELEASE-COM} with the same transaction id.
	TC_FT_LC_BI_06	IUT(FT) indirect link establishment; unrecognised {LCE-PAGE-RESPONSE} like message received; reject and release the link.
	TC_FT_LC_BI_07	F-10; link fails; IUT clears the call.
FT/LC/TI/	TC_FT_LC_TI_03	Indirect IUT (FT) initiated link establishment; no answer; timer <LCE.03> expiry ( $\pm$ 5% margin).

### 6.2.3 DLC layer

#### 6.2.3.1 Test suite structure

The test suite structure described in ETS 300 497-4 [22] clause 4 and the abstract test method described in ETS 300 497-5 [23] clause 4 shall fully apply for testing the DLC layer of the FP.

Table 17 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 17: FP - DLC test groups and test group objectives**

Test Group Reference	Test Group Objective
DLC/C_Plane/	Conformance of C-plane generic behaviours.
DLC/C_Plane/ClassA/	Conformance of C-plane Class A behaviours.
DLC/C_Plane/ClassA/CA/	Conformance of C-plane Class A capability behaviours.
DLC/C_Plane/ClassA/BV/	Conformance of C-plane Class A valid behaviours.
DLC/C_Plane/ClassA/BI/	Conformance of C-plane Class A invalid behaviours.
DLC/C_Plane/ClassA/BO/	Conformance of C-plane Class A inopportune behaviours.
DLC/C_Plane/Lb/	Conformance of C-plane Broadcast behaviours.
DLC/C_Plane/Lb/CA/	Conformance of C-plane Broadcast capability behaviours.
DLC/U_Plane/	Conformance of U-plane generic behaviours.
DLC/U_Plane/Class0/	Conformance of U-plane Class 0 behaviours.
DLC/U_Plane/Class0/CA/	Conformance of U-plane Class 0 capability behaviours.
DLC/U_Plane/Class0/BV/	Conformance of U-plane Class 0 (LU7) valid behaviours.
DLC/U_Plane/Class1/	Conformance of U-plane Class 1 behaviours.
DLC/U_Plane/Class1/CA/	Conformance of U-plane Class 1 capability behaviours.
DLC/U_Plane/Class1/BV/	Conformance of U-plane Class 1 valid behaviours.
DLC/U_Plane/Class1/BI/	Conformance of U-plane Class 1 invalid behaviours.

### 6.2.3.2 Test case index

Table 18 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 497-5 [23], and augmented with additional test cases derived from ETS 300 758-3 [32].

**Table 18: FP - DLC test cases and test case descriptions**

Test Group Reference	Test Case Id	Description
DLC/C_Plane/ClassA/CA/	TC_A_CA_000	To check the IUT re-transmission of the link establishment I-Frame request N250 times.
	TC_A_CA_001	Verify that the IUT, on receipt of a valid RR frame response to the link establishment request it has sent, enters established state.
	TC_A_CA_002	To check the IUT re-transmission of the link re-establishment request N250 times.
	TC_A_CA_003	Verify that the IUT, on receipt of a valid RR frame response to the link re-establishment request it has sent, enters established state.
	TC_A_CA_004	Verify that the IUT discards outstanding I-Frames and resets link variables in case of link re-establishment.
	TC_A_CA_005	Verify that the IUT acknowledges rightly a valid received I-Frame within timer <DL-04>.
	TC_A_CA_006	To check the IUT re-transmission of an I-Frame N250 times.
	TC_A_CA_007	Verify that the IUT, refuses a Class B link establishment request by sending RR response frame with the reserved LLN value "Class A operation" and NLF bit set to "1", and enters into the Class A established state.
	TC_A_CA_008	Verify that the IUT responds and enters into Class A established state , on receipt of a establishment request.
DLC/C_Plane/ClassA/BV/	TC_A_BV_000	Verify that the IUT reacts correctly in case of collision of establishment requests.
	TC_A_BV_001	Verify that the IUT reacts correctly in case of collision of re-establishment requests.
	TC_A_BV_002	Verify that the IUT accepts a RR response frame with correct N(R) value as an acknowledgement.
	TC_A_BV_003	Verify that the IUT accepts an I-Frame command with correct N(S) and N(R) values as an acknowledgement.
	TC_A_BV_004	Verify that, in Class A established state, the IUT accepts a re-establishment request.
	TC_A_BV_005	Verify that, in timer recovery phase, the IUT accepts a RR response frame with correct N(R) value as an acknowledgement.
	TC_A_BV_006	Verify that, in timer recovery phase, the IUT accepts an I-Frame command with correct N(S) and N(R) values as an acknowledgement.
DLC/C_Plane/ClassA/BI/	TC_A_BI_000	Verify that the IUT, in establishment pending state, discards a received RR class B response frame with NLF bit set to '1', and re-transmits the establishment request.
	TC_A_BI_001	Verify that the IUT, in establishment pending state, discards a received RR response frame with NLF bit set to '1' and invalid N(R), and re-transmits the establishment request.
	TC_A_BI_002	Verify that the IUT, in re-establishment pending state, discards a received RR class B response frame with NLF bit set to '1', and re-transmits the re-establishment request.
	TC_A_BI_003	Verify that the IUT, in re-establishment pending state, discards a received RR response frame with NLF bit set to '1' and invalid N(R), and re-transmits the re-establishment request.
		(continued)

Table 18 (continued): FP - DLC test cases and test case descriptions

Test Group Reference	Test Case Id	Description
	TC_A_BI_004	Verify that the IUT, in information transfer phase, discards a received RR class B response frame with NLF bit set to '0' and re-transmits the unacknowledged I-Frame.
	TC_A_BI_005	Verify that the IUT, in information transfer phase, discards a received RR response frame with NLF bit set to '0' and invalid N(R) and re-transmits the unacknowledged I-Frame.
	TC_A_BI_006	Verify that the IUT, accepts a received I-Frame with invalid N(R) and, on expiration of <DL-04>, re-transmits the unacknowledged I-Frame with updated N(R).
	TC_A_BI_007	On receipt of an I-Frame with invalid N(S), the IUT indicates the expected N(S) by sending RR response frame and stops, if necessary, DL_04 according to the received N(R).
	TC_A_BI_008	On receipt of an I-Frame with invalid N(S) and invalid N(R), the IUT indicates the expected N(S) by sending a RR response frame and re-transmits the unacknowledged I-Frame.
	TC_A_BI_009	Verify that the IUT, in timer recovery phase, discards a received RR class B response frame with NLF bit set to '0', and re-transmits the unacknowledged I-Frame.
	TC_A_BI_010	Verify that the IUT, in timer recovery phase, discards a received RR response frame with NLF bit set to '0' and invalid N(R), and re-transmits the unacknowledged I-Frame.
	TC_A_BI_011	Verify that the IUT, in timer recovery phase, accepts a received I-Frame with invalid N(R) and, on expiration of <DL-04>, re-transmits the unacknowledged I-Frame with updated N(R).
	TC_A_BI_012	The IUT, in timer recovery phase and on receipt of an I-Frame with invalid N(S), indicates the expected N(S) by sending a RR response frame, and leaves timer recovery phase.
	TC_A_BI_013	In timer recovery phase and on receipt of an I-Frame with invalid N(S) and invalid N(R), the IUT indicates the expected N(S) by sending a RR response frame and re-transmits the unacknowledged I-Frame.
DLC/C_Plane/ClassA/BO/	TC_A_BO_000	Verify that the IUT, in establishment pending state, discards a received I-Frame with NLF bit set to '0', and re-transmits the establishment request.
	TC_A_BO_001	Verify that the IUT, in establishment pending state, discards a received RR response frame with NLF bit set to '0', and re-transmits the establishment request.
	TC_A_BO_002	Verify that the IUT, in re-establishment pending state, discards a received I-Frame with NLF bit set to '0', and re-transmits the establishment request.
	TC_A_BO_003	Verify that the IUT, in re-establishment pending state, discards a received RR response frame with NLF bit set to '0', and re-transmits the establishment request.
DLC/C_Plane/Lb/CA/	TC_L_CA_000	Verify that the IUT is able to generate/to receive a short broadcast frame (3 octets).
	TC_L_CA_001	Verify that the IUT is able to generate/to receive a long broadcast frame (5 octets).
DLC/U_Plane/Class0/CA/	TC_0_CA_000	Verify that the IUT is able to transmit a correct U-plane Class 0 frame.
		(continued)

Table 18 (concluded): FP - DLC test cases and test case descriptions

Test Group Reference	Test Case Id	Description
	TC_0_CA_001	Verify that the IUT is able to receive a correct U-plane Class 0 frame.
DLC/U_Plane/Class0/BV/	TC_0_BV_000	On receipt of a frame with incorrect checksum with its VO variable = 0, the IUT uses the first frame transmission procedure to transmit the next frame.
	TC_0_BV_001	On receipt of a frame with incorrect checksum with its VO variable > 0, the IUT uses the first frame transmission procedure to transmit the next frame.
	TC_0_BV_002	On receipt of a request for re-transmission with its VO variable = 0, the IUT uses the same format as used for the normal transmission for re-transmitting the frame.
	TC_0_BV_003	On receipt of a 64 kbit/s frame and with its VO variable = 0, the IUT acknowledges the frame by sending a frame with NR set to the correct value.
	TC_0_BV_004	Check that the IUT treats the received N(R) value as an acknowledgement for all frames transmitted up to this value.
DLC/U_Plane/Class1/CA/	TC_1_CA_000	Verify that the IUT is able to transmit a correct U-plane Class 1 frame.
	TC_1_CA_001	Verify that the IUT treats a received frame including an RN with the A/N bit set to '1', as an acknowledgement for all frames up to and including frame number RN.
	TC_1_CA_002	Verify that the IUT correctly acknowledges received frame(s) with appropriate send sequence number(s). (In-sequence frames)
DLC/U_Plane/Class1/BV/	TC_1_BV_000	Verify that the IUT disconnects the U-plane link, at the event of expiration of timer <DLU-01> without receiving the requested acknowledgement.
	TC_1_BV_001	Verify that the IUT resets timer <DLU-01> on receipt of a valid acknowledgement.
	TC_1_BV_002	Verify that the IUT maintains the <DLU-01> timer whenever the window size is reached (thereby halting further transmissions).
DLC/U_Plane/Class1/BI/	TC_1_BI_000	Verify that the IUT discards a received frame with an I/R bit set to '0'.
	TC_1_BI_001	Verify that the IUT discards a received frame with an A/N bit set to '0'.
	TC_1_BI_002	Verify that the IUT correctly acknowledges received frame(s) with erroneous send sequence number(s) after waiting for L(R) TDMA frames. (Out-of-sequence frames).

## 6.2.4 MAC layer

### 6.2.4.1 Test suite structure

The test suite structure described in ETS 300 497-1 [19] clause 4 and the abstract test method described in ETS 300 497-3 [21] clause 4 shall fully apply for testing the MAC layer of the FP.

Table 19 lists the test groups and test group objectives relevant for DECT/ISDN IAP.

**Table 19: FP - MAC test groups and test group objectives**

Test Group Ref.	Test Group Objective
FT/	Verify the correct implementation of the FT (IUT) MAC layer.
FT/BH/	Verify the correct implementation of connection oriented bearer handover procedures.
FT/BH/BV/	To test the behaviour of the IUT concerning connection oriented bearer handover procedures in relation to syntactically and contextual correct behaviour of the test system.
FT/BH/CA/	Limited testing that the observable capabilities of the IUT concerning connection oriented bearer handover procedures are in accordance with the static requirements.
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 connection oriented bearer release procedures are in accordance with the static requirements.
FT/BS/	Verify the correct implementation of connection oriented bearer setup procedures.
FT/BS/BV/	To test the behaviour of the IUT concerning connection oriented bearer setup procedures in relation to syntactically and contextual correct behaviour of the test system.
FT/BS/CA/	Limited testing that the observable capabilities of the IUT concerning connection oriented bearer setup procedures are in accordance with the static requirements.
FT/DB/	Verify the correct implementation of the downlink broadcast services.
FT/DB/BV/	To test the behaviour of the IUT concerning the downlink broadcast services in relation to syntactically and contextual correct behaviour of the test system.
FT/DB/CA/	Limited testing that the observable capabilities of the IUT concerning the downlink broadcast services are in accordance with the static requirements.
FT/DT/	Verify the correct implementation of connection oriented data transfer procedures.
FT/DT/BI/	To check the behaviour of the IUT concerning connection oriented data transfer procedures in response to invalid messages.
FT/DT/BV/	To test the behaviour of the IUT concerning connection oriented data transfer procedures in relation to syntactically and contextual correct behaviour of the test system.
FT/DT/CA/	Limited testing that the observable capabilities of the IUT concerning connection oriented data transfer procedures are in accordance with the static requirements.
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 MAC layer management are in accordance with the static requirements.
FT/PG/	Verify the correct implementation of the paging services.
FT/PG/BV/	To test the behaviour of the IUT concerning the paging services in relation to syntactically and contextual correct behaviour of the test system.
FT/PG/CA/	Limited testing that the observable capabilities of the IUT concerning the paging services are in accordance with the static requirements.



6.2.4.2 Test case index

Table 20 lists the abstract test cases and the test case descriptions relevant for DECT/ISDN IAP, derived from ETS 300 497-3 [21], and augmented with additional test cases derived from ETS 300 758-3 [32].

Table 20: FP - MAC test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
FT/BH/BV/	TC_FT_BH_BV_00	Check that the IUT responds rightly to a PT initiated intracell bearer handover procedure when encryption is enabled.
	TC_FT_BH_BV_01	Check that the IUT responds rightly to a PT initiated intercell bearer handover procedure when encryption is enabled.
FT/BH/CA/	TC_FT_BH_CA_00	Check that the IUT responds rightly to a PT initiated intracell bearer handover procedure.
	TC_FT_BH_CA_01	Check that the IUT responds rightly to a PT initiated intercell bearer handover procedure.
FT/BR/CA/	TC_FT_BR_CA_00	Check that the IUT manages rightly a release of a basic duplex bearer with an unacknowledged release procedure when receiving a release message.
	TC_FT_BR_CA_01	Check that the IUT manages rightly a release of a b field advanced connection with an unacknowledged release procedure when receiving a release message.
FT/BS/BV/	TC_FT_BS_BV_00	Check that the IUT releases a duplex bearer in case the timer T201 expires during the time a basic bearer exists.
	TC_FT_BS_BV_01	Check that the IUT releases a connection in case the timer T201 expires during the time a multi bearer connection exists.
FT/BS/CA/	TC_FT_BS_CA_00	Check that the IUT manages rightly the PT initiated (single) basic bearer setup procedure.
	TC_FT_BS_CA_02	Check that the IUT manages rightly the PT initiated B field advanced basic bearer setup procedure.
FT/DB/BV/	TC_FT_DB_BV_03	Check that once a SARI is introduced into the FT, the E-bit within the NT message is indicating SARI list available.
FT/DB/CA/	TC_FT_DB_CA_00	Check that the IUT transmits constantly at least in frame 14 of each multiframe, the correct NT message.
	TC_FT_DB_CA_01	Check that the IUT transmits constantly at least once every T205 seconds in frame 0, the correct NT message.
	TC_FT_DB_CA_02	Check that the IUT transmits constantly one correct QT message in frame 8 of each multiframe.
	TC_FT_DB_CA_03	Check that the IUT transmits constantly at least one static system information QT message in each interval of 8 multiframe and that all such messages are correct.
	TC_FT_DB_CA_04	Check that the IUT transmits constantly at least one FP capabilities QT message in each interval of 8 multiframe and that all such messages are correct.
	TC_FT_DB_CA_05	Check that the IUT transmits constantly at least one multiframe number QT message in each interval of 8 multiframe and that all such messages are correct.
	TC_FT_DB_CA_06	Check that the IUT transmits constantly at least one SARI list content QT message in each interval of 4 multiframe and that all such messages are correct.
	TC_FT_DB_CA_07	Check that the IUT transmits the correct "Extended RF carrier information" QT message in the multi-frame following the "Static system information" QT message with the Extended RF carrier bit set.
FT/DT/BI/	TC_FT_DT_BI_00	Check that the IUT, when receiving IN minimum delay data, is capable to detect A-field R-CRC error and to respond with the correct Q2 bit setting (Q2 = 0).
		(continued)

Table 20 (concluded): FP - MAC test cases and test case descriptions

Test Group Ref.	Test Case Id	Description
	TC_FT_DT_BI_01	Check that the IUT sets the Q1 & Q2 bits correctly when it receives data with Z-field error during IN minimum delay transfer.
FT/DT/BV/	TC_FT_DT_BV_00	Check that the IUT releases the basic connection when it cannot conclude the procedure to switch from clear mode to encrypt mode.
	TC_FT_DT_BV_01	Check that the IUT releases the basic connection when it cannot conclude the procedure to switch from encrypt mode to clear mode.
FT/DT/CA/	TC_FT_DT_CA_00	Check that the IUT re-transmits Cs segment until it receives an acknowledgement in the same ARQ window.
	TC_FT_DT_CA_01	Check that the IUT does not transmit another Cs segment until the successful transmission of the current segment.
	TC_FT_DT_CA_02	Check that the IUT manages correctly the one bit numbering of the Cs segments.
	TC_FT_DT_CA_03	Check that the IUT manages correctly the procedure to switch the basic connection from clear mode to encrypt mode.
	TC_FT_DT_CA_04	Check that the IUT manages correctly the procedure to switch the basic connection from encrypt mode to clear mode.
FT/LM/CA/	TC_FT_LM_CA_05	Check that the IUT, after the establishment of a new bearer during bearer handover, releases one of the two bearers within a time interval of T203 seconds.
FT/PG/BV/	TC_FT_PG_BV_01	Check that the IUT periodically announces (at least every 10s) its blind slots.
FT/PG/CA/	TC_FT_PG_CA_00	Check that the IUT can transmit (FT part normal paging mode) a short page message.
	TC_FT_PG_CA_01	Check that the FT can transmit a correct zero length page message.
	TC_FT_PG_CA_02	Check that the FT can transmit a correct full page message.

### 6.2.5 PH layer

For all environments, PH layer capabilities testing document TBR 6 [36] shall fully apply with the modifications and the additions given for PH layer in TBR 22 [38].

## Annex A (normative): Requirements Tables (RT) for DECT/ISDN interworking for end system configuration

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the 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 indicate which features and procedures are mandatory, optional or conditional. The features and procedures are referenced via an existing profile Implementation Conformance Statement (ICS) document.

The following table headers are applicable to TBR-RT.

<b>Item</b>	is a number unique in the table to be used for references. Each table carries the table number of the corresponding ICS table in ETS 300 476 or ETS 300 705, therefore in order to have matching item numbers, item numbering in these tables may not be continuous.
<b>Cat</b>	the category in which the relative item falls under the Article 4 in the Council Directive 91/263/EEC [39].
<b>Reference</b>	references to EN 300 434-1 [9] and EN 300 434-2 [10], the DECT/ISDN IAP specification, unless otherwise specified.
<b>Prerequisite line</b>	A prerequisite line takes the form: Prerequisite: <predicate>. A prerequisite line before a clause or table title indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.
<b>Status</b>	contains the status required for implementation conforming to this DECT/ISDN IAP TBR.
<b>Support</b>	is the column for the manufacturer's statement of whether the particular item is supported by the implementation.

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

- M Mandatory - the capability is required to be supported.
- O Optional - the capability may be supported or not.
- N/A Not Applicable - in the given context, it is impossible to use the capability.
- X Prohibited (Excluded) - there is a requirement not to use this capability in the given context.
- 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 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.
- 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 (out of scope).

The interpretation of the Category (Cat) column in all tables is as follows:

- d** falls under item (d) from Article 4 of Council Directive 91/263/EEC [39];
- e** falls under item (e) from Article 4 of Council Directive 91/263/EEC [39];
- f** falls under item (f) from Article 4 of Council Directive 91/263/EEC [39];
- g** falls under item (g) from Article 4 of Council Directive 91/263/EEC [39].

## A.2 PP

### A.2.1 Tables for PP IWU layer

#### A.2.1.1 IWU features

**Table A.1: ETS 300 705-1 [28] table C.9 features support**

Item	Cat	Features support	Reference EN 300 434-2 [10]	Status	Support
1	e, f, g	Duplex speech - 32 kbit/s ADPCM	subclause 5.1	M	
3	f	64kbit/s data bearer service	subclause 5.1	O	

#### A.2.1.2 IWU procedures

**Table A.2: ETS 300 705-1 [28] table C.10 IWU procedures support**

Item	Cat	IWU procedures support	Reference EN 300 434-1 [9]	Status	Support
1	f	Functional protocol IWU procedures for CISS	subclause 5.2.2.4	O	
2	f	Specific procedures for supplementary services	subclause 5.2.2.5	O	
3	f	Error handling for supplementary services	subclause 5.2.2.6	O	

**Table A.3: ETS 300 705-1 [28] table C.11 functional protocol procedures for CISS**

Prerequisite: A.2/1					
Item	Functional protocol procedures for CISS		Reference EN 300 434-1 [9]	Status	Support
1	Connectionless		subclause 5.2.2.4.2	O	

**Table A.4: ETS 300 705-1 [28] table C.13 error handling for supplementary services**

Prerequisite: A.2/3					
Item	Error handling for supplementary services		Reference EN 300 434-1 [9]	Status	Support
1	Error handling procedures at the DECT CI		subclause 5.2.2.6.1	O	

## A.2.2 Tables for PP NWK layer

### A.2.2.1 Entities

**Table A.5: ETS 300 476-1 [12] table A.12 entities supported**

Item	Cat	Entity name	Reference	Status	Support
1	f, g	Call control (CC)	EN 300 434-1 [9], subclause 5.2.4.1	M	
2	f	Call Independent Supplementary Services (CISS)	EN 300 434-1 [9], subclause 5.2.4.1	O	
6	f	LCE	EN 300 434-2 [10], subclause 5.2	M	

### A.2.2.2 Features

#### A.2.2.2.1 CC features

**Table A.6: ETS 300 476-1 [12] table A.13 CC features supported**

Item	Cat	CC features	Reference EN 300 434-2 [10]	Status	Support
3	f	Control of supervisory tones	subclause 4.1.9	O	
5	f	Dialled digits (basic)	subclause 4.1.5	M	
6	f	Dialled digits additional	subclause 4.1.6	O	
7	f	Dialling delimiter	subclause 4.1.7	O	
17	f	Incoming call	subclause 4.1.8	M	
19	f	Off hook	subclause 4.1.3	M	
20	f	On hook (full release)	subclause 4.1.4	M	
21	f	Outgoing call	subclause 4.1.1	M	
26	f	Signalling of display characters	subclause 4.1.10	O	
27	f	Selection of bearer service	subclause 4.1.12	M	

#### A.2.2.2.2 LCE features

**Table A.7: ETS 300 476-1 [12] table A.16 LCE features supported**

Item	Cat	LCE features	Reference EN 300 434-2 [10]	Status	Support
1	f	Connection oriented Link control (Link control)	subclause 5.2	M	

## A.2.2.3 Procedures

## A.2.2.3.1 CC procedures

Table A.8: ETS 300 476-1 [12] table A.18 CC procedures supported

Prerequisite: A.5/1				
Item	CC procedures	Reference EN 300 434-2 [10]	Status	Support
1	cc_outgoing_normal_call_request	subclause 5.2	M	
5	cc_outgoing_connection_of_U_plane	subclause 5.2	M	
6	cc_outgoing_overlap_sending	subclause 5.2	M	
7	cc_outgoing_call_proceeding	subclause 5.2	M	
8	cc_outgoing_call_confirmation	subclause 5.2	M	
9	cc_outgoing_call_connection	subclause 5.2	M	
12	cc_incoming_connection_of_U_plane	subclause 5.2	M	
15	cc_incoming_call_confirmation	subclause 5.2	M	
16	cc_incoming_call_connection	subclause 5.2	M	
17	cc_sending_terminal_capability	subclause 5.2	O	
19	cc_call_information	subclause 5.2	O	
20	cc_normal_call_release	subclause 5.2	M	
22	cc_abnormal_call_release	subclause 5.2	M	
23	cc_release_collisions	subclause 5.2	M	
32	cc_timer_p_cc_03_mgt	subclause 5.2	M	

## A.2.2.3.2 Additional IWU CC procedures

Table A.9: ETS 300 705-1 [28] table C.14 additional IWU CC procedures

Prerequisite: A.5/1				
Item	Procedure name	Reference EN 300 434-2 [10]	Status	Support
1	cc_incoming_call_accept	subclause 5.2	M	
2	cc_incoming_call_reject	subclause 5.2	M	

## A.2.2.3.3 SS protocols

Table A.10: ETS 300 476-1 [12] table A.20 SS protocols

Prerequisite: A.5/2				
Item	SS protocol name	Reference EN 300 434-1 [9]	Status	Support
8	ciss_functional_protocol_ciec	subclause 5.2.2.4.1	O	

**A.2.2.3.4 LCE procedures**

**Table A.11: ETS 300 476-1 [12] table A.23 LCE procedures**

Prerequisite: A.5/6				
Item	Procedure name	Reference EN 300 434-2 [10]	Status	Support
1	lce_direct_pt_init_link_establishment	subclause 5.2	M	
2	lce_indirect_ft_init_link_establishment	subclause 5.2	M	
3	lce_direct_ft_init_link_establishment	subclause 5.2	O	
4	lce_link_maintenance	subclause 5.2	M	
7	lce_link_release	subclause 5.2	M	
11	lce_timer_lce_01_mgt	subclause 5.2	M	
12	lce_timer_lce_02_mgt	subclause 5.2	M	

**A.2.2.4 Messages**

**A.2.2.4.1 Call control messages**

**Table A.12: ETS 300 476-1 [12] table A.25 CC sending (P to F) messages supported**

Prerequisite: A.5/1				
Item	CC sending (P to F) Message name	Reference EN 300 434-1 [9]	Status	Support
1	CC-SETUP	subclause 5.2.4.2	M	
2	CC-INFORMaTION	subclause 5.2.4.2	M	
5	CC-ALERTING	subclause 5.2.4.2	M	
6	CC-CONNECT	subclause 5.2.4.2	M	
8	CC-RELEASE	subclause 5.2.4.2	M	
9	CC-RELEASE-COMplete	subclause 5.2.4.2	M	

**Table A.13: ETS 300 476-1 [12] table A.26 CC receiving (F to P) messages supported**

Prerequisite: A.5/1				
Item	CC receiving (F to P) Message name	Reference EN 300 434-1 [9]	Status	Support
1	CC-SETUP	subclause 5.2.4.1	M	
2	CC-INFORMaTION	subclause 5.2.4.1	M	
3	CC-SETUP-ACKnowledge	subclause 5.2.4.1	M	
4	CC-CALL-PROCeeding	subclause 5.2.4.1	M	
5	CC-ALERTING	subclause 5.2.4.1	M	
6	CC-CONNECT	subclause 5.2.4.1	M	
7	CC-CONNECT-ACKnowledge	subclause 5.2.4.1	M	
8	CC-RELEASE	subclause 5.2.4.1	M	
9	CC-RELEASE-COMplete	subclause 5.2.4.1	M	

## A.2.2.4.2 CRSS and CISS messages

Table A.14: ETS 300 476-1 [12] table A.86 CRSS and CISS messages sending (P to F)

Prerequisite: A.5/2				
Item	CRSS/CISS messages sending (P to F) Message name	Reference EN 300 434-2 [10]	Status	Support
1	FACILITY	subclause 5.2.4.2	O	
2	HOLD	subclause 5.2.4.2	O	
3	HOLD-ACKnowledge	subclause 5.2.4.1	X	
4	HOLD-REJECT	subclause 5.2.4.1	X	
5	RETRIEVE	subclause 5.2.4.2	O	
6	RETRIEVE-ACKnowledge	subclause 5.2.4.1	X	
7	RETRIEVE-REJECT	subclause 5.2.4.1	X	
8	CISS-REGISTER	subclause 5.2.4.2	O	
9	CISS-RELEASE-COMplete	subclause 5.2.4.2	O	

Table A.15: ETS 300 476-1 [12] table A.87 CRSS and CISS messages receiving (F to P)

Prerequisite: A.5/2				
Item	CRSS/CISS messages receiving (F to P) Message name	Reference EN 300 434-2 [10]	Status	Support
1	FACILITY	subclause 5.2.4.1	O	
2	HOLD	subclause 5.2.4.2	X	
3	HOLD-ACKnowledge	subclause 5.2.4.1	O	
4	HOLD-REJECT	subclause 5.2.4.1	O	
5	RETRIEVE	subclause 5.2.4.2	X	
6	RETRIEVE-ACKnowledge	subclause 5.2.4.1	O	
7	RETRIEVE-REJECT	subclause 5.2.4.1	O	
8	CISS-REGISTER	subclause 5.2.4.1	O	
9	CISS-RELEASE-COMplete	subclause 5.2.4.1	O	

## A.2.2.4.3 LCE messages

Table A.16: ETS 300 476-1 [12] table A.126 LCE message sending (P to F) supported

Prerequisite: A.5/6				
Item	LCE message sending (P to F) Message name	Reference EN 300 434-1 [9]	Status	Support
1	LCE-PAGE-RESPONSE	figure 22	M	

Table A.17: ETS 300 476-1 [12] table A.127 LCE message receiving (F to P) supported

Prerequisite: A.5/6				
Item	LCE message receiving (F to P) Message name	Reference EN 300 434-1 [9]	Status	Support
2	LCE-PAGE-REJECT	figure 22	M	
3	LCE-REQUEST-PAGE short	figure 22	M	
4	LCE-REQUEST-PAGE long	figure 22	M	



### A.2.3 Tables for PP DLC layer

#### A.2.3.1 Services

**Table A.18: ETS 300 476-2 [13] table A.9 data link services**

Item	Cat	Data link services	Reference EN 300 434-1 [9]	Status	Support
1	f	C-plane services	subclause 5.2	M	
2	g	U-plane services	subclause 5.4	M	

#### A.2.3.1.1 C-plane Services

**Table A.19: ETS 300 476-2 [13] table A.10 C-plane services**

Prerequisite: A.18/1					
Item		C-plane services	Reference EN 300 434-2 [10]	Status	Support
2		Class A service	subclause 6.1.1	M	
4		Broadcast service	subclause 6.1.2	M	

#### A.2.3.1.2 U-plane Services

**Table A.20: ETS 300 476-2 [13] table A.11 U-plane services**

Prerequisite: A.18/2					
Item		U-plane services	Reference EN 300 434-2 [10]	Status	Support
1		LU1 - Transparent Unprotected service	subclause 6.2	M	
8		LU7 - 64kbit/s data bearer service	subclause 6.2	C2001	

C2001: IF A.1/3 THEN M ELSE O

**Table A.21: ETS 300 476-2 [13] table A.12 management services**

Item	Cat	Management services	Reference EN 300 175-2 [2]	Status	Support
1	e, f	MAC connection management	subclause 10.2	M	
2	f	DLC C-plane management	subclause 10.3	M	
3	g	DLC U-plane management	subclause 10.4	M	

#### A.2.3.2 Procedures

##### A.2.3.2.1 Generic signalling procedures

**Table A.22: ETS 300 476-2 [13] table A.13 generic signalling procedures**

Prerequisite: A.18/1					
Item		Generic signalling procedures	Reference ETS 300 476-2 [13]	Status	Support
2		C <sub>S</sub> channel fragmentation and recombination	subclause 6.1.1	M	

**A.2.3.2.2 Additional DLC procedures**

**Table A.23: ETS 300 705-1 [28] table C.15 additional DLC procedures**

Prerequisite: A.18/1				
Item	Procedure name	Reference EN 300 434-1 [9]	Status	Support
1	DLC more bit procedure	subclause 5.2.3.1	M	

**A.2.3.2.3 Class A procedures**

**Table A.24: ETS 300 476-2 [13] table A.14 class A procedures**

Prerequisite: A.19/2				
Item	Class A procedures	Reference EN 300 434-2 [10]	Status	Support
1	Class A link establishment	subclause 6.1.1	M	
2	Class A acknowledged information transfer	subclause 6.1.1	M	
3	Class A link release	subclause 6.1.1	M	
4	Class A link re-establishment	subclause 6.1.1	M	

**A.2.3.2.4 Broadcast procedures**

**Table A.25: ETS 300 476-2 [13] table A.16 broadcast procedures**

Prerequisite: A.19/4				
Item	Broadcast procedures	Reference EN 300 434-2 [10]	Status	Support
1	Normal operation	subclause 7.1.2	M	

**A.2.3.2.5 LU1 procedures**

**Table A.26: ETS 300 476-2 [13] table A.18 LU1 procedures**

Prerequisite: A.20/1				
Item	LU1 procedures	Reference EN 300 434-2 [10]	Status	Support
1	U plane Class 0/min_delay	subclause 6.2	M	
3	FU1 frame operation	subclause 6.2	M	

**Table A.27: ETS 300 476-2 [13] table A.19 FU1 options**

Prerequisite: A.26/3				
Item	FU1 options	Reference EN 300 175-4 [4]	Status	Support
1	FU1 buffering procedures (FU1 frame operation)	subclause 12.2.2	M	
2	FU1 minimum delay (speech) operation	subclause 12.2.3	M	
4	FU1 transmission order	subclause 12.2.5	M	

A.2.3.2.6 LU7 procedures

Table A.28: ETS 300 476-2 [13] table A.26 LU7 procedures

Prerequisite: A.20/8				
Item	LU7 procedures	Reference EN 300 175-4 [4]	Status	Support
1	Establishment and synchronization procedures	subclause E.4.3.1	M	
2	Active phase procedures	subclause E.4.3.2	M	
3	Release procedures	subclause E.4.3.3	M	
4	Exceptional procedures	subclause E.4.4	M	

Table A.29: ETS 300 476-2 [13] table A.27 LU7 establishment and synchronization procedures

Prerequisite: A.28/1				
Item	LU7 establishment and synchronization procedures	Reference EN 300 175-4 [4]	Status	Support
1	Incoming call establishment	subclause E.4.3.1.1	M	
2	Outgoing call establishment	subclause E.4.3.1.2	M	

Table A.30: ETS 300 476-2 [13] table A.28 LU7 active phase procedures

Prerequisite: A.28/2				
Item	LU7 active phase procedures	Reference EN 300 175-4 [4]	Status	Support
1	Transmitting frames	subclause E.4.3.2.1	M	
2	Re-transmitting frames	subclause E.4.3.2.2	M	
3	Receiving frames	subclause E.4.3.2.3	M	
4	Sending acknowledgements	subclause E.4.3.2.4	M	
5	Receiving acknowledgements	subclause E.4.3.2.5	M	

Table A.31: ETS 300 476-2 [13] table A.29 LU7 exceptional procedures

Prerequisite: A.28/4				
Item	LU7 exceptional procedures	Reference EN 300 175-4 [4]	Status	Support
1	Invalid frame condition	subclause E.4.4.1	M	
2	Establishment	subclause E.4.4.2	M	
3	Transmitting frames	subclause E.4.4.3	M	
4	Receiving frames	subclause E.4.4.4	M	
5	Sending acknowledgements	subclause E.4.4.5	M	
6	N(R) sequence error	subclause E.4.4.7	M	
7	N(O) sequence error	subclause E.4.4.8	M	
8	N(S) sequence error	subclause E.4.4.9	M	
9	Format error	subclause E.4.4.10	M	
10	Abnormal release	subclause E.4.4.11	M	

A.2.3.2.7 Management procedures

Table A.32: ETS 300 476-2 [13] table A.30 management procedures

Prerequisite: A.21				
Item	Management procedures	Reference EN 300 175-4 [4]	Status	Support
1	MAC connection management	subclause 10.2	M	
2	DLC C-plane management	subclause 10.3	M	
3	DLC U-plane management	subclause 10.4	M	

Table A.33: ETS 300 476-2 [13] table A.31 MAC connection management procedures

Prerequisite: A.32/1				
Item	MAC connection management procedures	Reference EN 300 175-4 [4]	Status	Support
1	MAC connection set-up	subclause 10.2.1	M	
2	MAC connection release	subclause 10.2.2	M	
4	MAC connection identification	subclause 10.2.4	M	

Table A.34: ETS 300 476-2 [13] table A.32 DLC C-plane management procedures

Prerequisite: A.32/2				
Item	DLC C-plane management procedures	Reference EN 300 175-4 [4]	Status	Support
1	Provision of link signature	subclause 10.3.1	M	
2	Routing of connection oriented links	subclause 10.3.2	C3401	
3	Routing of connectionless links	subclause 10.3.3	M	

C3401: IF A.18/1 THEN M ELSE N/A

Table A.35: ETS 300 476-2 [13] table A.33 DLC U-plane management procedures

Prerequisite: A.32/3				
Item	DLC U-plane management procedures	Reference EN 300 175-4 [4]	Status	Support
1	U-plane establishment	subclause 10.4.1	M	
2	U-plane release	subclause 10.4.2	M	

A.2.3.3 Parameters

A.2.3.3.1 LU1 parameters

Table A.36: ETS 300 476-2 [13] table A.40 LU1 connection types

Prerequisite: A.20/1				
Item	Connection types	Reference EN 300 434-2 [10]	Status	Support
3	In / min delay - Full slot (40 octets)	subclause 6.2	M	

**A.2.3.3.2 LU7 parameters**

**Table A.37: ETS 300 476-2 [13] table A.48 LU7 connection types**

Prerequisite: A.20/8				
Item	Connection types	Reference EN 300 434-2 [10]	Status	Support
1	LN / normal delay - Double slot (100 octets)	subclause 6.2	M	

**A.2.3.4 Messages**

**A.2.3.4.1 C-plane PDUs**

**Table A.38: ETS 300 476-2 [13] table A.54 broadcast service frame structure (receipt F to P)**

Prerequisite: A.19/4				
Item	Frame structure	Reference EN 300 434-2 [10]	Status	Support
1	Short frame format (3 octets)	subclause 6.1.2	M	
2	Long frame format (5 octets)	subclause 6.1.2	M	

**A.2.4 Tables for PP MAC layer**

**A.2.4.1 Services**

**Table A.39: ETS 300 476-3 [14] table A.9 service groups supported**

Item	Cat	Name of service group	Reference	Status	Support
1	e, f	Connection oriented control	EN 300 434-2 [10], subclause 7.1.1	M	
2	e, f	Broadcast control	EN 300 434-2 [10], subclause 7.1.2	M	
4	e, f	Multiplexing	EN 300 175-3 [3], clause 6	M	
5	e, f	Management	EN 300 175-3 [3], clause 11	M	

**A.2.4.1.1 Connection oriented control services**

**Table A.40: ETS 300 476-3 [14] table A.10 connection oriented control services**

Prerequisite: A.39/1				
Item	Connection oriented control services	Reference EN 300 434-2 [10]	Status	Support
1	Basic connections	subclause 7.1.1	M	
2	Advanced symmetric connections	subclause 7.1.1	C4001	

C4001: IF A.1/3 THEN M ELSE O

Table A.41: ETS 300 476-3 [14] table A.11 connection services

Prerequisite: A.40/1 OR A.40/2				
Item	Connection services	Reference EN 300 434-2 [10]	Status	Support
1	Connection setup	subclause 7.2.1.1	M	
3	Connection data transfer	subclause 7.2.1.1	M	
5	Connection release	subclause 7.2.1.1	M	

Table A.42: ETS 300 476-3 [14] table A.12 symmetric connection oriented services

Prerequisite: A.40/2				
Item	Symmetric connection oriented services	Reference EN 300 434-2 [10]	Status	Support
1	Type 1 IN_minimum_delay	subclause 7.2.1.1	M	
2	Type 2 IN_normal_delay	subclause 7.1.1	C4201	

C4201: IF A.1/3 THEN M ELSE O

Table A.43: ETS 300 476-3 [14] table A.14 C-plane connection services

Prerequisite: A.40				
Item	C-plane connection services	Reference EN 300 434-2 [10]	Status	Support
1	Only C <sub>S</sub> channel supported	subclause 7.3.1	M	

## A.2.4.1.2 Broadcast control services

Table A.44: ETS 300 476-3 [14] table A.15 broadcast services

Prerequisite: A.39/2				
Item	Broadcast services	Reference EN 300 434-2 [10]	Status	Support
1	Continuous broadcast	subclause 7.1.2	M	
3	Paging broadcast	subclause 6.1.2	M	

**A.2.4.1.3 Multiplexing services**

**Table A.45: ETS 300 476-3 [14] table A.19 CSF multiplexing services**

<b>Prerequisite: A.39/4</b>				
<b>Item</b>	<b>CSF multiplexing services</b>	<b>Reference</b>	<b>Status</b>	<b>Support</b>
1	D-MAP	EN 300 434-2 [10], subclause 7.1.1	M	
2	A-MAP	EN 300 434-2 [10], subclause 7.1.1	M	
3	B-MAP	EN 300 434-2 [10], subclause 7.1.1	M	
4	T-MUX	EN 300 434-2 [10], subclause 7.1.1	M	
5	E/U-MUX	EN 300 434-2 [10], subclause 7.1.1	M	
6	C-MUX	EN 300 434-2 [10], subclause 7.1.1	C4502	
9	Scrambling	EN 300 175-3 [3], subclause 6.2.4	M	
12	Broadcast control	EN 300 175-3 [3], subclause 6.2.6	M	

C4502: IF A.1/3 THEN M ELSE I

**Table A.46: ETS 300 476-3 [14] table A.20 D-MAP services**

<b>Prerequisite: A.45/1</b>				
<b>Item</b>	<b>D-MAP</b>	<b>Reference</b> <b>EN 300 434-2 [10]</b>	<b>Status</b>	<b>Support</b>
1	D-field MAP D80	subclause 7.1.1	C4601	
2	D-field MAP D32	subclause 7.1.1	M	

C4601: IF A.1/3 THEN M ELSE O

**Table A.47: ETS 300 476-3 [14] table A.21 B-MAP services**

<b>Prerequisite: A.45/3</b>				
<b>Item</b>	<b>B-MAP</b>	<b>Reference</b> <b>EN 300 434-2 [10]</b>	<b>Status</b>	<b>Support</b>
1	B-field MAP unprotected format	subclause 7.1.1	M	
2	B-field MAP protected format	subclause 7.1.1	C4701	

C4701: IF A.1/3 THEN M ELSE O

**Table A.48: ETS 300 476-3 [14] table A.22 E/U mux services**

<b>Prerequisite: A.45/5</b>				
<b>Item</b>	<b>E/U MUX</b>	<b>Reference</b> <b>EN 300 434-2 [10]</b>	<b>Status</b>	<b>Support</b>
1	E/U-mux E type	subclause 7.3.1	C4801	
2	E/U-mux U type	subclause 7.1.1	M	

C4801: IF A.1/3 THEN M ELSE O

Table A.49: ETS 300 476-3 [14] table A.23 C mux mapping services

Prerequisite: A.45/6				
Item	Time multiplexers - C mux	Reference EN 300 434-2 [10]	Status	Support
1	C-mux double slot	subclause 8.1	M	

A.2.4.1.4 Management services

Table A.50: ETS 300 476-3 [14] table A.24 management services

Prerequisite: A.39/5				
Item	Management services	Reference EN 300 175-3 [3]	Status	Support
1	Broadcasting	subclause 11.1	M	
3	PP states and state transition	subclause 11.3	M	
4	Physical channel selection	subclause 11.4	M	
5	In-connection quality control	subclause 11.5	M	
6	Radio Fixed Part (RFP) system load	subclause 11.6	M	
7	Receiver scan sequence	subclause 11.9	M	

A.2.4.2 Procedures

A.2.4.2.1 Connection setup procedures

Table A.51: ETS 300 476-3 [14] table A.26 C/O single bearer setup procedures

Prerequisite: A.40/1 AND A.41/1				
Item	Name of procedure	Reference	Status	Support
1	Basic setup, single bearer basic connection of known service	EN 300 434-2 [10], subclause 7.2.1.1	M	
2	Normal setup, single bearer duplex connection of known service	EN 300 434-1 [9], clause 6	C5101	

C5101: IF A.1/3 THEN M ELSE O

Table A.52: ETS 300 476-3 [14] table A.29 C/O bearer setup procedures

Prerequisite: A.41/1				
Item	Name of procedure	Reference EN 300 434-2 [10]	Status	Support
1	Basic bearer setup	subclause 7.2.1.1	M	
3	PT initiated - B-field single bearer setup	subclause 7.2.1.1	C5201	

C5201: IF A.1/3 THEN M ELSE O



**A.2.4.2.2 Connection data transfer procedures**

**Table A.53: ETS 300 476-3 [14] table A.31 C/O data transfer procedures**

Prerequisite: A.41/3				
Item	Name of procedure	Reference	Status	Support
1	ARQ procedure, Q1 and Q2 bit setting, for C-channel	EN 300 175-3 [3], subclause 10.8.1	M	
2	Cs - channel data	EN 300 434-2 [10], subclause 7.3.3	M	
3	Q1/Q2 setting for sliding collision/A,B-field check (FT to PT)	EN 300 175-3 [3], subclause 10.8.1.3	M	
5	Q2 bit settings	EN 300 434-2 [10], subclause 6.1.1	M	

**A.2.4.2.3 Connection release procedures**

**Table A.54: ETS 300 476-3 [14] table A.33 C/O connection release procedures**

Prerequisite: A.41/5				
Item	Name of procedure	Reference EN 300 434-2 [10]	Status	Support
1	Unacknowledged bearer release	subclause 7.2.1.1	M	

**A.2.4.2.4 Broadcast procedures**

**Table A.55: ETS 300 476-3 [14] table A.34 broadcast procedures**

Prerequisite: A.39/2				
Item	Name of procedure	Reference	Status	Support
1	Normal paging (Paging broadcast)	EN 300 434-2 [10], subclause 7.3.2.3	M	
3	Downlink broadcast	EN 300 175-3 [3], subclause 9.1.1.3	M	

**A.2.4.2.5 CSF multiplexing procedures**

**Table A.56: ETS 300 476-3 [14] table A.37 CSF multiplexing procedures**

Prerequisite: A.39/4				
Item	CSF multiplexing procedures	Reference	Status	Support
2	Scrambling	EN 300 175-3 [3], subclause 6.2.4	M	
3	R-CRC generation	EN 300 434-2 [10], subclause 6.1.1	M	
4	R-CRC checking	EN 300 434-2 [10], subclause 6.1.1	M	
5	X-CRC generation	EN 300 434-2 [10], subclause 7.3.3	M	
6	X-CRC checking	EN 300 434-2 [10], subclause 7.3.3	M	
7	Broadcast control function	EN 300 175-3 [3], subclause 6.2.6	M	

**A.2.4.2.6 Layer management procedures**

**Table A.57: ETS 300 476-3 [14] table A.38 layer management procedures**

Prerequisite: A.39/5				
Item	Name of procedure	Reference	Status	Support
1	Extended system information PP request	EN 300 434-2 [10], subclause 7.3.2.2	M	
2	Duplex bearer physical channel selection	EN 300 175-3 [3], subclause 11.4.1	M	
4	Simplex bearer physical channel selection	EN 300 175-3 [3], subclause 11.4.1	M	
5	Radio Fixed Part Identity (RFPI) handshake	EN 300 175-3 [3], subclause 11.5.1	M	

**A.2.4.3 Other capabilities**

**Table A.58: ETS 300 476-3 [14] table A.40 operation modes in Idle\_locked state supported**

Item	Operation mode	Reference	Status	Support
1	Scanning mode	EN 300 175-3 [3], subclauses 4.3.1, 11.3	M	
4	Low duty cycle Idle_locked mode	EN 300 434-2 [10], subclause 7.3.2.3	M	

**A.2.4.4 Protocol parameters**

**A.2.4.4.1 Timer support**

**Table A.59: ETS 300 476-3 [14] table A.41 timer supported**

Item	Name of timer	Reference EN 300 175-3 [3]	Status	Support	Value Allowed	Value Supported
13	T212	clause A.1	M		20 frames	

**A.2.4.4.2 Channel selection parameters**

**Table A.60: ETS 300 476-3 [14] table A.43 channel selection parameters**

Item	Parameter	Reference EN 300 175-3 [3]	Status	Support	Value Allowed	Value Supported
1	Lowest boundary of channel list	subclause 11.4.1	M		<= -93 dBm	
2	Band resolution	subclause 11.4.1	M		<= 6 dB	
3	RSSI variation between checking	subclause 11.4.2	M		<= 12 dB	

**A.2.4.4.3 Slot types supported**

**Table A.61: ETS 300 476-3 [14] table A.46 slot types supported**

Item	Slot types supported	Reference EN 300 175-3 [3]	Status	Support
3	Full slot	subclause 6.2.1	M	
4	Double slot	subclause 6.2.1	M	

**A.2.4.5 Messages**

**A.2.4.5.1 A - field header - tail identification**

**Table A.62: ETS 300 476-3 [14] table A.47 tail identification (sending P to F)**

Item	Tail Identification	Reference EN 300 175-3 [3]	Status	Support
1	CT data packet number 0	subclause 7.1.2	M	
2	CT data packet number 1	subclause 7.1.2	M	
4	Identities information	subclause 7.1.2	M	
7	MAC layer control	subclause 7.1.2	M	
9	First PP transmission	subclause 7.1.2	M	

**Table A.63: ETS 300 476-3 [14] table A.48 tail identification (receipt F to P)**

Item	Tail Identification	Reference EN 300 175-3 [3]	Status	Support
1	CT data packet number 0	subclause 7.1.2	M	
2	CT data packet number 1	subclause 7.1.2	M	
4	Identities information	subclause 7.1.2	M	
5	Multiframe synchronization - system info.	subclause 7.1.2	M	
7	MAC layer control	subclause 7.1.2	M	

**A.2.4.5.2 A - field header - B-field identification**

**Table A.64: ETS 300 476-3 [14] table A.51 B-field identification (sending P to F)**

Item	B-field identification	Reference EN 300 434-2 [10]	Status	Support
1	U-type, IN, SIN or IP packet number 0	subclause 7.3.1	M	
5	E-type, not all CF or CLF; packet number 0	subclause 7.3.1	C6401	
6	E-type, not all CF; CF packet number 1	subclause 7.3.1	C6401	
7	E-type, all MAC control (unnumbered)	subclause 7.3.1	C6401	
8	No B-field	subclause 7.3.1	M	

C6401: IF A.1/3 THEN M ELSE O

**Table A.65: ETS 300 476-3 [14] table A.52 B-field identification (receipt F to P)**

Item	B-field identification	Reference EN 300 434-2 [10]	Status	Support
1	U-type, IN, SIN or IP packet number 0	subclause 7.3.1	M	
5	E-type, not all CF or CLF; packet number 0	subclause 7.3.1	C6501	
6	E-type, not all CF; CF packet number 1	subclause 7.3.1	C6501	
7	E-type, all MAC control (unnumbered)	subclause 7.3.1	C6501	
8	No B-field	subclause 7.3.1	M	

C6501: IF A.1/3 THEN M ELSE O

**A.2.4.5.3 A - field header - "Q2" bit**

**Table A.66: ETS 300 476-3 [14] table A.53 "Q2" bit (sending P to F)**

Item	"Q2" bit	Reference EN 300 175-3 [3]	Status	Support
1	Q2 bearer quality & flow control	subclause 7.1.5	M	

Table A.67: ETS 300 476-3 [14] table A.54 "Q2" bit (receipt F to P)

Item	"Q2" bit	Reference EN 300 175-3 [3]	Status	Support
1	Q2 bearer quality & flow control	subclause 7.1.5	M	

A.2.4.5.4 A - field identities information (N<sub>T</sub>) message

Table A.68: ETS 300 476-3 [14] table A.55 Identities information (N<sub>T</sub>) message (sending P to F)

Item	System information message	Reference EN 300 175-3 [3]	Status	Support
1	NT - Identities Information	subclause 7.2.2	M	

Table A.69: ETS 300 476-3 [14] table A.56 identities information (N<sub>T</sub>) message (receipt F to P)

Item	System information message	Reference EN 300 175-3 [3]	Status	Support
1	NT - Identities Information	subclause 7.2.2	M	

A.2.4.5.5 A - field system information (Q<sub>T</sub>) messages

Table A.70: ETS 300 476-3 [14] table A.57 system information (Q<sub>T</sub>) message (receipt F to P)

Item	System information message	Reference EN 300 175-3 [3]	Status	Support
1	QT - Static system information	subclause 7.2.3.2	M	
3	QT - Fixed part capabilities	subclause 7.2.3.4	M	

A.2.4.5.6 A - field paging tail (P<sub>T</sub>) messages

Table A.71: ETS 300 476-3 [14] table A.58 paging tail (P<sub>T</sub>) messages (receipt F to P)

Item	Paging tail (P <sub>T</sub> ) messages	Reference EN 300 434-2 [10]	Status	Support
1	Full page format	subclause 7.3.2.3	M	
3	Short page format	subclause 7.3.2.3	M	

A.2.4.5.7 A - field MAC control (M<sub>T</sub>) messages

Table A.72: ETS 300 476-3 [14] table A.60 MAC control (M<sub>T</sub>) messages (sending P to F)

Item	MAC control (M <sub>T</sub> ) messages	Reference EN 300 434-2 [10]	Status	Support
1	Basic connection control	subclause 7.3.2.4	M	
3	Advanced connection control	subclause 7.3.2.4	C7201	
7	B-field setup, first PT transmission	subclause 7.3.2.4	C7201	

C7201: IF A.1/3 THEN M ELSE O

**Table A.73: ETS 300 476-3 [14] table A.61 MAC control (M<sub>T</sub>) messages (receipt F to P)**

Item	MAC control (M <sub>T</sub> ) messages	Reference EN 300 434-2 [10]	Status	Support
1	Basic connection control	subclause 7.3.2.4	M	
3	Advanced connection control	subclause 7.3.2.4	C7301	

C7301: IF A.1/3 THEN M ELSE O

**Table A.74: ETS 300 476-3 [14] table A.62 basic connection control (sending P to F)**

Item	MAC control (M <sub>T</sub> ) messages -Basic connection control	Reference EN 300 175-3 [3]	Status	Support
1	Basic CC - access request	subclause 7.2.5.2.2	M	
6	Basic CC - release	subclause 7.2.5.2.2	M	
7	Basic CC - wait	subclause 7.2.5.2.3	M	

**Table A.75: ETS 300 476-3 [14] table A.63 basic connection control (receipt F to P)**

Item	MAC control (M <sub>T</sub> ) messages -Basic connection control	Reference EN 300 175-3 [3]	Status	Support
5	Basic CC - bearer confirm	subclause 7.2.5.2.2	M	
6	Basic CC - release	subclause 7.2.5.2.2	M	
7	Basic CC - wait	subclause 7.2.5.2.3	M	

#### A.2.4.5.8 B-field messages supported

**Table A.76: ETS 300 476-3 [14] table A.74 B - field messages supported (sending P to F)**

Prerequisite: A.1/3				
Item	B - Field messages	Reference EN 300 434-2 [10]	Status	Support
1	X001 - Advanced connection control	subclause 7.3.3	M	
2	X010 - Null message	subclause 7.3.3	M	

**Table A.77: ETS 300 476-3 [14] table A.75 B - field messages supported (receipt F to P)**

Prerequisite: A.1/3				
Item	B - Field messages	Reference EN 300 434-2 [10]	Status	Support
1	X001 - Advanced connection control	subclause 7.3.3	M	
2	X010 - Null message	subclause 7.3.3	M	

Table A.78: ETS 300 476-3 [14] table A.76 B - field adv. connection control msg (sending P to F)

Prerequisite: A.1/3				
Item	B - Field Advanced CC messages	Reference	Status	Support
1	Access request	EN 300 434-2 [10], subclause 7.3.3	M	
6	Wait	EN 300 434-2 [10], subclause 7.3.3	M	
7	Attributes_B.request	EN 300 175-3 [3], subclause 7.3.3.5	M	
8	Attributes_B.confirm	EN 300 175-3 [3], subclause 7.3.3.5	M	
9	Bandwidth_B.request	EN 300 175-3 [3], subclause 7.3.3.6	M	
10	Bandwidth_B.confirm	EN 300 175-3 [3], subclause 7.3.3.6	M	
11	Channel list	EN 300 175-3 [3], subclause 7.3.3.7	M	
14	Release	EN 300 434-2 [10], subclause 7.3.3	M	

Table A.79: ETS 300 476-3 [14] table A.77 B - field adv. connection control msg (receipt F to P)

Prerequisite: A.1/3				
Item	B - Field Advanced CC messages	Reference	Status	Support
5	Bearer confirm	EN 300 434-2 [10], subclause 7.3.3	M	
6	Wait	EN 300 434-2 [10], subclause 7.3.3	M	
7	Attributes_B.request	EN 300 175-3 [3], subclause 7.3.3.5	M	
8	Attributes_B.confirm	EN 300 175-3 [3], subclause 7.3.3.5	M	
9	Bandwidth_B.request	EN 300 175-3 [3], subclause 7.3.3.6	M	
10	Bandwidth_B.confirm	EN 300 175-3 [3], subclause 7.3.3.6	M	
11	Channel list	EN 300 175-3 [3], subclause 7.3.3.7	M	
14	Release	EN 300 434-2 [10], subclause 7.3.3	M	

Table A.80: ETS 300 476-3 [14] table A.78 B - field null messages (sending P to F)

Prerequisite: A.1/3				
Item	B - Field - Null messages	Reference	Status	Support
1	No C <sub>F</sub> or CL <sub>F</sub> data in the B-field	EN 300 434-2 [10] subclause 7.3.3	M	

Table A.81: ETS 300 476-3 [14] table A.79 B - field null messages (receipt F to P)

Prerequisite: A.1/3				
Item	B - Field - Null messages	Reference	Status	Support
1	No C <sub>F</sub> or CL <sub>F</sub> data in the B-field	EN 300 434-2 [10] subclause 7.3.3	M	

**A.2.4.6 MAC messages format and field value**

**A.2.4.6.1 QT - fixed part capability**

**Table A.82: ETS 300 476-3 [14] table A.88 QT - fixed part capability (receipt F to P)**

Item	QT - Fixed part capability	Reference	Status	Support	Allowed Value	Supported Value
1	Q <sub>T</sub> header	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0011"B	
2	Extended FP info.	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
3	Reserved	EN 300 175-3 [3], subclause 7.2.3.4.2	M		1 bit	
4	Reserved	EN 300 175-3 [3], subclause 7.2.3.4.2	M		1 bit	
5	Double slot	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
6	Half slot	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
7	Full slot	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
8	Frequency control	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
9	Page repetition	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
10	Dummy bearer setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
11	C/L uplink	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
12	C/L downlink	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
13	Basic A-field setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
14	Adv. A-field setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
15	B-field setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
16	CF messages	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
17	IN minimum delay	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
18	IN normal delay	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
19	IP error detection	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
20	IP error correction	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
21	Multibearer connection	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
22	Higher layer info.	EN 300 434-1 [9], clause A.1	M		C8201	

C8201: IF A.1/3 THEN 15 bits value followed by 1 bit set to 1 ELSE 16 bits value

## A.2.5 Tables for PP PH layer

## A.2.5.1 Services

Table A.83: ETS 300 476-7 [18] table A.12 PP services supported

Item	Service name	Reference EN 300 175-2 [2]	Status	Support
1	10 RF Carriers implemented	subclause 4.1.1	M	
2	Centre Frequency of each is as defined in 4.1.1	subclause 4.1.1	M	
3	RF carrier accuracy is $F_c \pm 100$ kHz during 1s after transition from idle-locked state to active-locked state	subclause 4.1.2	M	
4	RF carrier accuracy is $F_c \pm 50$ kHz at other times	subclause 4.1.2	M	
5	RF carrier rate of change < 15 kHz per slot	subclause 4.1.2	M	
6	Reference timer accuracy and stability better than 25 ppm at extreme conditions	subclause 4.2.2	M	
7	PP jitter of a packet transmission < $\pm 2$ $\mu$ s at extreme conditions	subclause 4.2.4	M	
8	Jitter between p0 and every other bit in a packet within $\pm 0,1$ $\mu$ s	subclause 4.2.4	M	

## A.2.5.2 Physical layer procedures

Table A.84: ETS 300 476-7 [18] table A.14 physical channels supported

Item	Procedure name	Reference EN 300 175-2 [2]	Status	Support
1	Short physical channel R00	subclause 4.5.2	M	
2	Basic physical channel R32	subclause 4.5.3	M	
4	The high capacity physical channel R80	subclause 4.5.5	C8401	

C8401: IF A.1/3 THEN M ELSE O

Table A.85: ETS 300 476-7 [18] table A.15 PH layer procedures supported

Item	Procedure name	Reference EN 300 175-2 [2]	Status	Support
1	Addition of synchronization (S) field and transmission	subclause 8.1	M	
3	Packet reception and removal of synchronization (S) field	subclause 8.2	M	
5	Measurement of signalling strength	subclause 8.3	M	
6	Synchronization pulse detection	subclause 8.4	M	
9	Basic physical channel R32 management	subclause 7.1.1	M	
11	The high capacity physical channel R80 management	subclause 7.1.1	C8501	

C8501: IF A.1/3 THEN M ELSE O

Table A.86: ETS 300 476-7 [18] table A.16 management procedures supported

Item	Procedure name	Reference EN 300 175-2 [2]	Status	Support
1	List of quietest physical channels	subclause 9.1	M	
2	Physical channels with greatest field strength (PP only)	subclause 9.2	M	
3	Extract timing	subclause 9.3	M	



**A.2.5.3 Protocol data units**

**Table A.87: ETS 300 476-7 [18] table A.17 frame structure supported**

Item	Structure	Reference EN 300 175-2 [2]	Status	Support
1	TDMA frame structure	subclause 4.2.1	M	

**Table A.88: ETS 300 476-7 [18] table A.18 packet types supported**

Item	Packet type	Reference EN 300 175-2 [2]	Status	Support
2	Short physical packet P00 reception	subclauses 4.4, 4.4.1	M	
3	Basic physical packet P32 transmission and reception	subclauses 4.4, 4.4.2	M	
5	High capacity physical packet P80 transmission and reception	subclauses 4.4, 4.4.4	C8801	

C8801: IF A.1/3 THEN M ELSE O

**A.2.5.4 Transmitter characteristics**

**Table A.89: ETS 300 476-7 [18] table A.27 transmitter requirements supported**

Item	Transmitter characteristic	Reference EN 300 175-2 [2]	Status	Support
1	Transmitter Attack Time < 10 $\mu$ s	subclause 5.2.1	M	
2	Transmitter Release Time < 10 $\mu$ s	subclause 5.2.2	M	
3	Transmitter Minimum Power > NTP - 1 dB	subclause 5.2.3	M	
4	Transmitter Maximum Power < NTP + 1dB	subclause 5.2.4	M	
6	Maintenance of transmission power for 0,5 $\mu$ s after packet end > NTP - 6 dB	subclause 5.2.5	M	
7	Transmitter Idle Power < 20 nW	subclause 5.2.6	M	
8	Peak Power Per Transceiver < 250 mW	subclause 5.3.1	M	
9	RF Carrier Modulation Gaussian Frequency Shift Keying	subclause 5.4	M	
10	Emissions Due to Modulation according to table 1	subclause 5.5.1	M	
11	Emissions due to Transmitter Transients according to table 2	subclause 5.5.1	M	
12	Emissions due to Intermodulation < 1 $\mu$ W	subclause 5.5.3	M	
13	Out of Band Emissions when Transmitting	subclause 5.5.4	M	

**A.2.5.5 Receiver characteristics**

**Table A.90: ETS 300 476-7 [18] table A.28 receiver requirements supported**

Item	Receiver characteristic	Reference EN 300 175-2 [2]	Status	Support
1	Radio Receiver Sensitivity > -83 dBm	subclause 6.2	M	
2	Receiver Reference Bit Error Rate is 0,00001 in the D-field	subclause 6.3	M	
3	Receiver Interference Performance	subclause 6.4	M	
4	Rx Blocking (out-of-band, in slot signals)	subclause 6.5.1	M	
5	Rx Blocking (in band, out-of-slot signals)	subclause 6.5.2	M	
6	Rx Intermodulation Performance	subclause 6.6	M	
7	Out of band emissions when receiving or idling	subclause 6.7.1	M	
8	In band emissions when receiving or idling	subclause 6.7.2	M	

### A.3 FP

This subclause shall apply only if the DECT FP is a terminal equipment connected to a public network interface. If the DECT FP is a part of the network (i.e. functionally attached to the ISDN network) and is therefore not considered to be a terminal equipment this subclause shall not apply (see clause 1).

#### A.3.1 Tables for FP IWU layer

##### A.3.1.1 IWU features

**Table A.91: ETS 300 705-2 [29] table C.9 features support**

Item	Cat	Features support	Reference EN 300 434-2 [10]	Status	Support
1	e, f, g	Duplex speech - 32 kbit/s ADPCM	subclause 5.1	M	
3	f	64kbit/s data bearer service	subclause 5.1	O	

##### A.3.1.2 IWU procedures

**Table A.92: ETS 300 705-2 [29] table C.10 IWU procedures support**

Item	Cat	IWU procedures support	Reference EN 300 434-1 [9]	Status	Support
1	f, g	CC - Call establishment procedures	subclause 5.2.1.1	M	
2	f, g	CC - Call Information Procedures	subclause 5.2.1.2.	M	
3	f, g	CC - Call Release Procedures	subclause 5.2.1.3	M	
4	f	Keypad Protocol Procedures for CRSS	subclause 5.2.2.1	O	
6	f	Functional protocol IWU procedures for CRSS	subclause 5.2.2.3	O	
7	f	Functional protocol IWU procedures for CISS	subclause 5.2.2.4	O	
9	f	Error handling for supplementary services	subclause 5.2.2.6	O	
10	f	Identity mapping procedures	subclause 5.2.3.2	M	

**Table A.93: ETS 300 705-2 [29] table C.11: call establishment (CC) IWU procedures**

Prerequisite: C.92/1					
Item	Call establishment (CC) IWU procedures		Reference EN 300 434-1 [9]	Status	Support
1	Outgoing Call		subclause 5.2.1.1.1	M	
2	Incoming Call		subclause 5.2.1.1.2	M	
3	Fall-back procedures		subclause 5.2.1.1.3	M	

**Table A.94: ETS 300 705-2 [29] table C.12: call release (CC) IWU procedures**

Prerequisite: C.92/3					
Item	Call Release (CC) IWU procedures		Reference EN 300 434-1 [9]	Status	Support
1	Call release initiated by the DPS		subclause 5.2.1.3.1	M	
2	Call release initiated by the NT		subclause 5.2.1.3.2	M	

**Table A.95: ETS 300 705-2 [29] table C.13: functional protocol procedures for CRSS**

<b>Prerequisite: C.92/6</b>				
<b>Item</b>	<b>Functional protocol procedures for CRSS</b>	<b>Reference EN 300 434-1 [9]</b>	<b>Status</b>	<b>Support</b>
1	Common information element approach: Messages for outgoing call control, Messages for incoming call control, Active call messages, Call release messages, Additional CRSS messages	subclauses 5.2.2.3.1, 5.2.2.3.2, 5.2.2.3.3, 5.2.2.3.4, 5.2.2.3.5	O	
2	Separate message approach	subclause 5.2.2.3.7	O	
3	Generic notification mapping procedures: Outgoing call messages, Incoming call messages, Active call messages, Call release messages, Additional CRSS messages	subclauses 5.2.2.3.8, 5.2.2.3.9, 5.2.2.3.10, 5.2.2.3.11, 5.2.2.3.12	O	

**Table A.96: ETS 300 705-2 [29] table C.14: functional protocol procedures for CISS**

<b>Prerequisite: C.92/7</b>				
<b>Item</b>	<b>Functional protocol procedures for CISS</b>	<b>Reference EN 300 434-1 [9]</b>	<b>Status</b>	<b>Support</b>
1	Connection-oriented	subclause 5.2.2.4.1	M	
2	Connectionless	subclause 5.2.2.4.2	M	

**Table A.97: ETS 300 705-2 [29] table C.16: error handling for supplementary services**

<b>Prerequisite: C.92/9</b>				
<b>Item</b>	<b>Error handling for supplementary services</b>	<b>Reference EN 300 434-1 [9]</b>	<b>Status</b>	<b>Support</b>
1	Error handling procedures at the DECT CI	subclause 5.2.2.6.1	M	
2	IWU Error handling procedures - information from the NT	subclause 5.2.2.6.2	M	
3	IWU Error handling procedure - information from the DPS	subclause 5.2.2.6.3	C9701	

C9701: IF C.95/1 OR 95/2 THEN M ELSE N/A

## A.3.1.3 IWU messages mapping

Table A.98: ETS 300 705-2 [29] table C.17: messages mapping - ISDN to DECT

Item	Messages mapping - ISDN to DECT	Reference EN 300 434-1 [9]	Status	Support
1	ALERTING - CC-ALERTING	subclause 5.2.4.1.1	M	
2	CALL-PROC - CC-CALL-PROC	subclause 5.2.4.1.2	M	
3	CISS-RELEASE - CISS-RELEASE-COM	subclause 5.2.4.1.3	O	
4	CISS-RELEASE-COM - CISS-RELEASE-COM	subclause 5.2.4.1.4	O	
5	CONGESTION-CONTROL - CC-INFO	subclause 5.2.4.1.5	O	
6	CONNECT - CC-CONNECT	subclause 5.2.4.1.6	M	
7	CONNECT-ACK - CC-CONNECT-ACK	subclause 5.2.4.1.7	M	
8	DISCONNECT - CC-RELEASE	subclause 5.2.4.1.8	C9801	
9	FACILITY <sub>ciss</sub> - FACILITY <sub>ciss</sub>	subclause 5.2.4.1.9	O	
10	FACILITY <sub>crss</sub> - FACILITY <sub>crss</sub>	subclause 5.2.4.1.10	O	
11	HOLD-ACK - HOLD-ACK	subclause 5.2.4.1.11	O	
12	HOLD-REJ - HOLD-REJ	subclause 5.2.4.1.12	O	
13	INFORMATION - CC-INFO(F-02, F-03, F-04, F-07, F-10)	subclause 5.2.4.1.13	O	
14	INFORMATION - CC-SETUP	subclause 5.2.4.1.14	O	
15	NOTIFY - CC-INFO	subclause 5.2.4.1.15	O	
16	PROGRESS - CC-INFO	subclause 5.2.4.1.16	M	
17	REGISTER - CISS-REGISTER	subclause 5.2.4.1.17	O	
18	RELEASE - CC-RELEASE-COM	subclause 5.2.4.1.18	M	
19	RELEASE-COM - CC-RELEASE-COM	subclause 5.2.4.1.19	M	
20	RETRIEVE-ACK - RETRIEVE-ACK	subclause 5.2.4.1.20	O	
21	RETRIEVE-REJ - RETRIEVE-REJ	subclause 5.2.4.1.21	O	
22	SETUP - CC-SETUP	subclause 5.2.4.1.22	M	
23	SETUP-ACK without <<progress indicator>> IE - CC-SETUP-ACK	subclause 5.2.4.1.24	M	
24	SETUP-ACK with <<progress indicator>> IE - CC-SETUP-ACK + CC-INFO	subclause 5.2.4.1.23	M	
25	USER-INFORMATION - CC-INFO	subclause 5.2.4.1.25	O	

C9801: IF 64 kbit/s unrestricted THEN M ELSE O

Table A.99: ETS 300 705-2 [29] table C.18: messages mapping - DECT to ISDN

Item	Messages mapping - DECT to ISDN	Reference EN 300 434-1 [9]	Status	Support
1	CC-ALERTING - ALERTING	subclause 5.2.4.2.1	M	
2	CC-CONNECT - CONNECT	subclause 5.2.4.2.2	M	
3	CC-INFO(F-02) - INFORMATION (U2)	subclause 5.2.4.2.3	M	
4	CC-INFO(F-02) - SETUP	subclause 5.2.4.2.4	M	
5	CC-INFO(F-03, F-04, F-07, F-10, F-19) - INFORMATION	subclause 5.2.4.2.5	O	
6	CC-INFO - FACILITY <sub>crss</sub>	subclause 5.2.4.2.6	C9901	
7	CC-INFO - USER-INFORMATION	subclause 5.2.4.2.7	C9901	
8	CC-RELEASE - DISCONNECT	subclause 5.2.4.2.8	M	
9	CC-RELEASE-COM - RELEASE	subclause 5.2.4.2.9	M	
10	CC-RELEASE-COM - DISCONNECT	subclause 5.2.4.2.10	M	
11	CC-SETUP - SETUP	subclause 5.2.4.2.11	M	
12	CISS-REGISTER - REGISTER	subclause 5.2.4.2.12	O	
13	CISS-RELEASE-COM - CISS-RELEASE	subclause 5.2.4.2.13	O	
14	FACILITY <sub>ciss</sub> - FACILITY <sub>ciss</sub>	subclause 5.2.4.2.14	O	
15	FACILITY <sub>crss</sub> - FACILITY <sub>crss</sub>	subclause 5.2.4.2.15	O	
16	HOLD - HOLD	subclause 5.2.4.2.16	O	
17	RETRIEVE - RETRIEVE	subclause 5.2.4.2.17	O	

C9901: IF mapping of {CC-INFO} is called up by item 3, 4, 5 THEN M ELSE X

**Table A.100: ETS 300 705-2 [29] table C.19: ISDN information element to DECT information element**

Item	ISDN information element to DECT information element	Reference EN 300 434-1 [9]	Status	Support
1	ISDN Bearer-capability to DECT Basic-service	subclause 5.2.5.1.1	M	
2	ISDN to DECT: Calling-party-number	subclause 5.2.5.1.2	O	
3	ISDN to DECT: Called-party-number	subclause 5.2.5.1.3	O	
4	ISDN to DECT: Called-party-subaddress	subclause 5.2.5.1.4	O	
5	ISDN to DECT: Display	subclause 5.2.5.1.5	O	
6	ISDN Bearer-capability to DECT End-to-end-compatibility	subclause 5.2.5.1.6	C10001	
7	ISDN to DECT: Facility	subclause 5.2.5.1.8	M	
8	ISDN Bearer-capability to DECT Iwu-attributes	subclause 5.2.5.1.9	C10001	
9	ISDN to DECT: Progress-indicator	subclause 5.2.5.1.15	M	
10	ISDN Cause to DECT Reject-reason	subclause 5.2.5.1.16	O	
11	ISDN to DECT: Sending-complete	subclause 5.2.5.1.18	O	

C10001: IF Bearer Capability is not equal to "default set-up attributes" THEN M ELSE X

**Table A.101: ETS 300 705-2 [29] table C.20: ISDN information element to DECT iwu to iwu**

Item	ISDN information element to DECT iwu to iwu	Reference EN 300 434-1 [9]	Status	Support
1	redirecting number	subclause 5.2.5.1.11	O	
2	congestion level	subclause 5.2.5.1.12	M	
3	date/time	subclause 5.2.5.1.11	O	
4	connected party number	subclause 5.2.5.1.11	O	
5	connected party subaddress	subclause 5.2.5.1.11	O	
6	cause	subclause 5.2.5.1.11	O	
7	user to user	subclause 5.2.5.1.11	O	
8	channel identification	subclause 5.2.5.1.11	O	
9	network specific facil.	subclause 5.2.5.1.11	O	
10	notification indicator	subclause 5.2.5.1.11	M	
11	keypad facility	subclause 5.2.5.1.11	O	
12	calling party subaddr.	subclause 5.2.5.1.11	O	
13	low layer compatibility	subclause 5.2.5.1.11	C10101	
14	high layer compatibility	subclause 5.2.5.1.11	C10101	
15	user to user	subclause 5.2.5.1.11	O	
16	more data	subclause 5.2.5.1.12	M	

C10101: IF not basic-service THEN M ELSE I

Table A.102: ETS 300 705-2 [29] table C.21: DECT information element to ISDN information element

Item	DECT information element to ISDN information element	Reference EN 300 434-1 [9]	Status	Support
1	DECT Basic-service to ISDN Bearer-capability	subclause 5.2.5.1.1	M	
2	DECT to ISDN: Calling-party-number	subclause 5.2.5.1.2	O	
3	DECT to ISDN: Called-party-number	subclause 5.2.5.1.3	M	
4	DECT to ISDN: Called-party-subaddress	subclause 5.2.5.1.4	O	
5	DECT End-to-end-compatibility to ISDN Bearer-capability	subclause 5.2.5.1.6	C10205	
6	DECT End-to-end-comp. to ISDN Lower-Layer-comp.	subclause 5.2.5.1.7	C10206	
7	DECT to ISDN: Facility	subclause 5.2.5.1.8	M	
8	DECT Iwu-attributes to ISDN Bearer-capability	subclause 5.2.5.1.9	C10203	
9	DECT Iwu-attributes to ISDN Lower-layer-compatibility	subclause 5.2.5.1.10	C10204	
10	DECT Iwu-to-iwu to ISDN-information-element	subclause 5.2.5.1.11	M	
11	DECT Iwu-to-iwu to ISDN-message	subclause 5.2.5.1.12	M	
12	DECT Keypad to ISDN Called-party-number	subclause 5.2.5.1.13	C10202	
13	DECT to ISDN: Keypad	subclause 5.2.5.1.14	C10201	
15	DECT Release-reason to ISDN Cause	subclause 5.2.5.1.17	O	
16	DECT to ISDN: Sending-complete	subclause 5.2.5.1.18	M	

C10201: IF NOT called party number info AND NOT mapped to <<FACILITY>> THEN M ELSE X

C10202: IF called party number info THEN M ELSE X

C10203: IF NOT speech(default) THEN M ELSE O

C10204: IF present THEN M ELSE X

C10205: IF parameters are significant for the network THEN M ELSE X

C10206: IF parameters are significant for end to end THEN O ELSE X

Table A.103: ETS 300 705-2 [29] table C.22: DECT iwu to iwu to ISDN information element

Item	DECT iwu to iwu to ISDN information element	Reference EN 300 434-1 [9]	Status	Support
1	connected party number	subclause 5.2.5.1.11	O	
2	connected party subaddress	subclause 5.2.5.1.11	O	
3	user to user	subclause 5.2.5.1.11	M	
4	high layer comp.	subclause 5.2.5.1.11	M	
5	calling party subaddress	subclause 5.2.5.1.11	O	
6	calling party number	subclause 5.2.5.1.11	O	

Table A.104: ETS 300 705-2 [29] table C.23: DECT iwu to iwu to ISDN message

Item	DECT iwu to iwu to ISDN message	Reference EN 300 434-1 [9]	Status	Support
1	USER-INFOrmation	subclause 5.2.4.2.7	M	

**Table A.105: ETS 300 705-2 [29] table C.24: information element coding mappings**

Item	Information element coding mappings	Reference EN 300 434-1 [9]	Status	Support
1	coding-standard - coding-standard	subclause 5.2.6.1	M	
2	data bits coding - number of data bits	subclause 5.2.6.2	M	
3	duplex mode - duplex mode	subclause 5.2.6.3	M	
4	Flow control on reception - Flow control on reception	subclause 5.2.6.4	M	
5	Flow control on transmission - Flow control on transmission	subclause 5.2.6.5	M	
6	id-for-info-element - info-element-id	subclause 5.2.6.6	M	
7	info.-transfer-capability - info.-transfer-capability	subclause 5.2.6.7	M	
8	information-transfer-rate - information-transfer-rate	subclause 5.2.6.8	M	
9	intermediate rate - intermediate rate	subclause 5.2.6.9	M	
10	location - location	subclause 5.2.6.10	M	
11	length-of-contents - length-of-contents	subclause 5.2.6.11	M	
12	L2-protocol-identifier - user-information-layer-2-protocol	subclause 5.2.6.12	M	
13	L3-protocol-identifier - user-information-layer-3-protocol	subclause 5.2.6.13	M	
14	message-type - message-type	subclause 5.2.6.14	M	
15	modem type - modem type	subclause 5.2.6.15	M	
16	negotiation - negotiation	subclause 5.2.6.16	M	
17	NIC on reception - NIC on reception	subclause 5.2.6.17	M	
18	NIC on transmission - NIC on transmission	subclause 5.2.6.18	M	
19	number-type - type-of-number	subclause 5.2.6.19	M	
20	numbering-plan - numbering-plan	subclause 5.2.6.20	M	
21	odd/even - odd/even-indicator	subclause 5.2.6.21	M	
22	parity - parity	subclause 5.2.6.22	M	
23	presentation-indicator - presentation-indicator	subclause 5.2.6.23	M	
24	progress-description - progress-description	subclause 5.2.6.24	M	
25	protocol-discriminator - protocol-discriminator	subclause 5.2.6.25	M	
26	protocol-identifier-coding - protocol-identifier-coding	subclause 5.2.6.26	M	
27	reject-reason-code - cause-value	subclause 5.2.6.27	M	
28	release-reason-code - cause-value	subclause 5.2.6.28	M	
29	screening-indicator - screening-indicator	subclause 5.2.6.29	M	
30	service-discriminator - service-discriminator	subclause 5.2.6.30	M	
31	stop bits coding - number of stop bits	subclause 5.2.6.31	M	
32	subaddress-type - type-of-subaddress	subclause 5.2.6.32	M	
33	synchronous/asynchronous - synchronous/asynchronous	subclause 5.2.6.33	M	
34	transaction-identifier - call-reference	subclause 5.2.6.34	M	
35	transfer-mode - transfer-mode	subclause 5.2.6.35	M	
36	user-protocol-identifier - user-information-layer-1-protocol	subclause 5.2.6.36	M	
37	user rate - user rate	subclause 5.2.6.37	M	

## A.3.2 Tables for FP NWK layer

## A.3.2.1 Entities

Table A.106: ETS 300 476-4 [15] table A.12 entities supported

Item	Cat	Entity name	Reference	Status	Support
1	f, g	Call control (CC)	EN 300 434-1 [9], subclause 5.2.4.1	M	
2	f	Call Independent Supplementary Services (CISS)	EN 300 434-1 [9], subclause 5.2.4.1	O	
6	f	Link Control Entity (LCE)	EN 300 434-2 [10], subclause 5.2	M	

## A.3.2.2 Features

## A.3.2.2.1 CC features

Table A.107: ETS 300 476-4 [15] table A.13 CC features supported

Item	Cat	CC features	Reference EN 300 434-2 [10]	Status	Support
3	f	Control of supervisory tones	subclause 4.1.9	O	
5	f	Dialled digits (basic)	subclause 4.1.5	M	
6	f	Dialled digits additional	subclause 4.1.6	O	
7	f	Dialling delimiter	subclause 4.1.7	O	
17	f	Incoming call	subclause 4.1.8	M	
19	f	Off hook	subclause 4.1.3	M	
20	f	On hook (full release)	subclause 4.1.4	M	
21	f	Outgoing call	subclause 4.1.1	M	
26	f	Signalling of display characters	subclause 4.1.10	O	
27	f	Selection of bearer service	subclause 4.1.12	M	

## A.3.2.2.2 LCE features

Table A.108: ETS 300 476-4 [15] table A.16 LCE features supported

Item	Cat	LCE features	Reference EN 300 434-2 [10]	Status	Support
1	f	Connection oriented Link control (Link control)	subclause 5.2	M	



**A.3.2.3 Procedures**

**A.3.2.3.1 CC procedures**

**Table A.109: ETS 300 476-4 [15] table A.18 CC procedures supported**

Prerequisite: A.106/1				
Item	CC procedures	Reference EN 300 434-2 [10]	Status	Support
1	cc_outgoing_normal_call_request	subclause 5.2	M	
5	cc_outgoing_connection_of_U_plane	subclause 5.2	M	
6	cc_outgoing_overlap_sending	subclause 5.2	M	
7	cc_outgoing_call_proceeding	subclause 5.2	M	
8	cc_outgoing_call_confirmation	subclause 5.2	M	
9	cc_outgoing_call_connection	subclause 5.2	M	
12	cc_incoming_connection_of_U_plane	subclause 5.2	M	
15	cc_incoming_call_confirmation	subclause 5.2	M	
16	cc_incoming_call_connection	subclause 5.2	M	
20	cc_normal_call_release	subclause 5.2	M	
22	cc_abnormal_call_release	subclause 5.2	M	
23	cc_release_collisions	subclause 5.2	M	
32	cc_timer_p_cc_03_mgt	subclause 5.2	M	

**A.3.2.3.2 Additional IWU CC procedures**

**Table A.110: ETS 300 705-2 [29] table C.25 additional IWU CC procedures**

Prerequisite: A.106/1				
Item	Procedure name	Reference EN 300 434-2 [10]	Status	Support
1	cc_incoming_call_accept	subclause 5.2	M	
2	cc_incoming_call_reject	subclause 5.2	M	

**A.3.2.3.3 SS protocols**

**Table A.111: ETS 300 476-4 [15] table A.20 SS protocols**

Prerequisite: A.106/2				
Item	SS protocol name	Reference EN 300 434-1 [9]	Status	Support
8	ciss_functional_protocol_ciec	subclause 5.2.2.4.1	O	

## A.3.2.3.4 LCE procedures

Table A.112: ETS 300 476-4 [15] table A.23 LCE procedures

Prerequisite: A.106/6				
Item	Procedure name	Reference EN 300 434-2 [10]	Status	Support
1	Ice_direct_pt_init_link_establishment	subclause 5.2	M	
2	Ice_indirect_ft_init_link_establishment	subclause 5.2	M	
3	Ice_direct_ft_init_link_establishment	subclause 5.2	O	
4	Ice_link_maintenance	subclause 5.2	M	
7	Ice_link_release	subclause 5.2	M	
11	Ice_timer_Ice_01_mgt	subclause 5.2	M	
12	Ice_timer_Ice_02_mgt	subclause 5.2	M	
13	Ice_timer_Ice_03_mgt	subclause 5.2	M	

## A.3.2.4 Messages

## A.3.2.4.1 Call control messages

Table A.113: ETS 300 476-4 [15] table A.25 CC receiving (P to F) messages supported

Prerequisite: A.106/1				
Item	CC receiving (P to F) Message name	Reference EN 300 434-1 [9]	Status	Support
1	CC-SETUP	subclause 5.2.4.2	M	
2	CC-INFORMAtion	subclause 5.2.4.2	M	
5	CC-ALERTING	subclause 5.2.4.2	M	
6	CC-CONNECT	subclause 5.2.4.2	M	
8	CC-RELEASE	subclause 5.2.4.2	M	
9	CC-RELEASE-COMplete	subclause 5.2.4.2	M	

Table A.114: ETS 300 476-4 [15] table A.26 CC sending (F to P) messages supported

Prerequisite: A.106/1				
Item	CC sending (F to P) Message name	Reference EN 300 434-1 [9]	Status	Support
1	CC-SETUP	subclause 5.2.4.1	M	
2	CC-INFORMAtion	subclause 5.2.4.1	M	
3	CC-SETUP-ACKnowledge	subclause 5.2.4.1	M	
4	CC-CALL-PROCeeding	subclause 5.2.4.1	M	
5	CC-ALERTING	subclause 5.2.4.1	M	
6	CC-CONNECT	subclause 5.2.4.1	M	
7	CC-CONNECT-ACKnowledge	subclause 5.2.4.1	M	
8	CC-RELEASE	subclause 5.2.4.1	M	
9	CC-RELEASE-COMplete	subclause 5.2.4.1	M	

**A.3.2.4.2 CRSS and CISS messages**

**Table A.115: ETS 300 476-4 [15] table A.86 CRSS and CISS messages receiving (P to F)**

Prerequisite: A.106/2				
Item	CRSS/CISS messages receiving (P to F) Message name	Reference EN 300 434-2 [10]	Status	Support
1	FACILITY	subclause 5.2.4.2	O	
2	HOLD	subclause 5.2.4.2	O	
5	RETRIEVE	subclause 5.2.4.2	O	
8	CISS-REGISTER	subclause 5.2.4.2	O	
9	CISS-RELEASE-COMplete	subclause 5.2.4.2	O	

**Table A.116: ETS 300 476-4 [15] table A.87 CRSS and CISS messages sending (F to P)**

Prerequisite: A.106/2				
Item	CRSS/CISS messages sending (F to P) Message name	Reference EN 300 434-2 [10]	Status	Support
1	FACILITY	subclause 5.2.4.1	O	
3	HOLD-ACKnowledge	subclause 5.2.4.1	O	
4	HOLD-REJECT	subclause 5.2.4.1	O	
6	RETRIEVE-ACKnowledge	subclause 5.2.4.1	O	
7	RETRIEVE-REJECT	subclause 5.2.4.1	O	
8	CISS-REGISTER	subclause 5.2.4.1	O	
9	CISS-RELEASE-COMplete	subclause 5.2.4.1	O	

**A.3.2.4.3 Link control entity messages**

**Table A.117: ETS 300 476-4 [15] table A.126 LCE message receiving (P to F) supported**

Prerequisite: A.106/6				
Item	LCE message receiving (P to F) Message name	Reference EN 300 434-1 [9]	Status	Support
1	LCE-PAGE-RESPONSE	figure 22	M	

**Table A.118: ETS 300 476-4 [15] table A.127 LCE message sending (F to P) supported**

Prerequisite: A.106/6				
Item	LCE message sending (F to P) Message name	Reference EN 300 434-1 [9]	Status	Support
2	LCE-PAGE-REJECT	figure 22	M	
3	LCE-REQUEST-PAGE short	figure 22	M	
4	LCE-REQUEST-PAGE long	figure 22	M	

**A.3.3 Tables for FP DLC layer**

**A.3.3.1 Services**

**Table A.119: ETS 300 476-5 [16] table A.9 data link services**

Item	Cat	Data link services	Reference EN 300 434-1 [9]	Status	Support
1	f	C-plane services	subclause 5.2	M	
2	g	U-plane services	subclause 5.4	M	

**A.3.3.1.1 C-plane Services**

**Table A.120: ETS 300 476-5 [16] table A.10 C-plane services**

Prerequisite: A.119/1				
Item	C-plane services	Reference EN 300 434-2 [10]	Status	Support
2	Class A service	subclause 6.1.1	M	
4	Broadcast service	subclause 6.1.2	M	

**A.3.3.1.2 U-plane Services**

**Table A.121: ETS 300 476-5 [16] table A.11 U-plane services**

Prerequisite: A.119/2				
Item	U-plane services	Reference EN 300 434-2 [10]	Status	Support
1	LU1 - Transparent Unprotected service	subclause 6.2	M	
8	LU7 - 64kbit/s data bearer service	subclause 6.2	C12101	

C12101: IF A.91/3 THEN M ELSE O

**Table A.122: ETS 300 476-5 [16] table A.12 management services**

Item	Cat	Management services	Reference EN 300 175-2 [2]	Status	Support
1	e, f	MAC connection management	subclause 10.2	M	
2	f	DLC C-plane management	subclause 10.3	M	
3	g	DLC U-plane management	subclause 10.4	M	

**A.3.3.2 Procedures**

**A.3.3.2.1 Generic signalling procedures**

**Table A.123: ETS 300 476-5 [16] table A.13 generic signalling procedures**

Prerequisite: A.119/1					
Item	Generic signalling procedures		Reference EN 300 434-2 [10]	Status	Support
2	C <sub>S</sub>	channel fragmentation and recombination	subclause 6.1.1	M	

**A.3.3.2.2 Additional DLC procedures**

**Table A.124: ETS 300 705-2 [29] table C.15 additional DLC procedures**

Prerequisite: A.119/1					
Item	Procedure name		Reference EN 300 434-1 [9]	Status	Support
1	DLC more bit procedure		subclause 5.2.3.1	M	

**A.3.3.2.3 Class A procedures**

**Table A.125: ETS 300 476-5 [16] table A.14 class A procedures**

Prerequisite: A.120/2				
Item	Class A procedures	Reference EN 300 434-2 [10]	Status	Support
1	Class A link establishment	subclause 6.1.1	M	
2	Class A acknowledged information transfer	subclause 6.1.1	M	
3	Class A link release	subclause 6.1.1	M	
4	Class A link re-establishment	subclause 6.1.1	M	

**A.3.3.2.4 Broadcast procedures**

**Table A.126: ETS 300 476-5 [16] table A.16 broadcast procedures**

Prerequisite: A.120/4				
Item	Broadcast procedures	Reference EN 300 434-2 [10]	Status	Support
1	Normal operation	subclause 7.1.2	M	

**A.3.3.2.5 LU1 procedures**

**Table A.127: ETS 300 476-5 [16] table A.18 LU1 procedures**

Prerequisite: A.121/1				
Item	LU1 procedures	Reference EN 300 434-2 [10]	Status	Support
1	U plane Class 0/min_delay	subclause 6.2	M	
3	FU1 frame operation	subclause 6.2	M	

**Table A.128: ETS 300 476-5 [16] table A.19 FU1 options**

Prerequisite: A.127/3				
Item	FU1 options	Reference EN 300 175-4 [4]	Status	Support
1	FU1 buffering procedures (FU1 frame operation)	subclause 12.2.2	M	
2	FU1 minimum delay (speech) operation	subclause 12.2.3	M	
4	FU1 transmission order	subclause 12.2.5	M	

**A.3.3.2.6 LU7 procedures**

**Table A.129: ETS 300 476-5 [16] table A.26 LU7 procedures**

Prerequisite: A.121/8				
Item	LU7 procedures	Reference EN 300 175-4 [4]	Status	Support
1	Establishment and synchronization procedures	subclause E.4.3.1	M	
2	Active phase procedures	subclause E.4.3.2	M	
3	Release procedures	subclause E.4.3.3	M	
4	Exceptional procedures	subclause E.4.4	M	

**Table A.130: ETS 300 476-5 [16] table A.27 LU7 establishment and synchronization procedures**

<b>Prerequisite: A.129/1</b>				
<b>Item</b>	<b>LU7 establishment and synchronization procedures</b>	<b>Reference EN 300 175-4 [4]</b>	<b>Status</b>	<b>Support</b>
1	Incoming call establishment	subclause E.4.3.1.1	M	
2	Outgoing call establishment	subclause E.4.3.1.2	M	

**Table A.131: ETS 300 476-5 [16] table A.28 LU7 active phase procedures**

<b>Prerequisite: A.129/2</b>				
<b>Item</b>	<b>LU7 active phase procedures</b>	<b>Reference EN 300 175-4 [4]</b>	<b>Status</b>	<b>Support</b>
1	Transmitting frames	subclause E.4.3.2.1	M	
2	Re-transmitting frames	subclause E.4.3.2.2	M	
3	Receiving frames	subclause E.4.3.2.3	M	
4	Sending acknowledgements	subclause E.4.3.2.4	M	
5	Receiving acknowledgements	subclause E.4.3.2.5	M	

**Table A.132: ETS 300 476-5 [16] table A.29 LU7 exceptional procedures**

<b>Prerequisite: A.129/4</b>				
<b>Item</b>	<b>LU7 exceptional procedures</b>	<b>Reference EN 300 175-4 [4]</b>	<b>Status</b>	<b>Support</b>
1	Invalid frame condition	subclause E.4.4.1	M	
2	Establishment	subclause E.4.4.2	M	
3	Transmitting frames	subclause E.4.4.3	M	
4	Receiving frames	subclause E.4.4.4	M	
5	Sending acknowledgements	subclause E.4.4.5	M	
6	N(R) sequence error	subclause E.4.4.7	M	
7	N(O) sequence error	subclause E.4.4.8	M	
8	N(S) sequence error	subclause E.4.4.9	M	
9	Format error	subclause E.4.4.10	M	
10	Abnormal release	subclause E.4.4.11	M	

**A.3.3.2.7 Management procedures**

**Table A.133: ETS 300 476-5 [16] table A.30 management procedures**

<b>Prerequisite: A.122</b>				
<b>Item</b>	<b>Management procedures</b>	<b>Reference EN 300 175-4 [4]</b>	<b>Status</b>	<b>Support</b>
1	MAC connection management	subclause 10.2	M	
2	DLC C-plane management	subclause 10.3	M	
3	DLC U-plane management	subclause 10.4	M	

**Table A.134: ETS 300 476-5 [16] table A.31 MAC connection management procedures**

<b>Prerequisite: A.133/1</b>				
<b>Item</b>	<b>MAC connection management procedures</b>	<b>Reference EN 300 175-4 [4]</b>	<b>Status</b>	<b>Support</b>
1	MAC connection set-up	subclause 10.2.1	M	
2	MAC connection release	subclause 10.2.2	M	
4	MAC connection identification	subclause 10.2.4	M	

Table A.135: ETS 300 476-5 [16] table A.32 DLC C-plane management procedures

Prerequisite: A.133/2				
Item	DLC C-plane management procedures	Reference EN 300 175-4 [4]	Status	Support
1	Provision of link signature	10.3.1	M	
2	Routing of connection oriented links	10.3.2	C13501	
3	Routing of connectionless links	10.3.3	M	

C13501: IF A.119/1 THEN M ELSE N/A

Table A.136: ETS 300 476-5 [16] table A.33 DLC U-plane management procedures

Prerequisite: A.133/3				
Item	DLC U-plane management procedures	Reference EN 300 175-4 [4]	Status	Support
1	U-plane establishment	subclause 10.4.1	M	
2	U-plane release	subclause 10.4.2	M	

### A.3.3.3 Parameters

#### A.3.3.3.1 LU1 parameters

Table A.137: ETS 300 476-5 [16] table A.40 LU1 connection types

Prerequisite: A.121/1				
Item	Connection types	Reference	Status	Support
3	ln / min delay - Full slot (40 octets)	subclause 6.2	M	

#### A.3.3.3.2 LU7 parameters

Table A.138: ETS 300 476-5 [16] table A.48 LU7 connection types

Prerequisite: A.121/8				
Item	Connection types	Reference EN 300 434-2 [10]	Status	Support
1	ln / normal delay - Double slot (100 octets)	subclause 6.2	M	

### A.3.3.4 Messages

#### A.3.3.4.1 C-plane PDUs

Table A.139: ETS 300 476-5 [16] table A.54 broadcast service frame structure (receipt F to P)

Prerequisite: A.120/4				
Item	Frame structure	Reference EN 300 434-2 [10]	Status	Support
1	Short frame format (3 octets)	subclause 6.1.2	M	
2	Long frame format (5 octets)	subclause 6.1.2	M	

## A.3.4 Tables for FP MAC layer

## A.3.4.1 Services

Table A.140: ETS 300 476-6 [17] table A.9 service groups supported

Item	Cat	Name of service group	Reference	Status	Support
1	e, f	Connection oriented control	EN 300 434-2 [10], subclause 7.1.1	M	
2	e, f	Broadcast control	EN 300 434-2 [10], subclause 7.1.2	M	
4	e, f	Multiplexing	EN 300 175-3 [3], clause 6	M	
5	e, f	Management	EN 300 175-3 [3], clause 11	M	

## A.3.4.1.1 Connection oriented control services

Table A.141: ETS 300 476-6 [17] table A.10 connection oriented control services

Prerequisite: A.140/1					
Item	Connection oriented control services		Reference	Status	Support
			<b>EN 300 434-2 [10]</b>		
1	Basic connections		subclause 7.1.1	M	
2	Advanced symmetric connections		subclause 7.1.1	C14101	

C14101: IF A.91/3 THEN M ELSE O

Table A.142: ETS 300 476-6 [17] table A.11 connection services

Prerequisite: A.141/1 OR A.141/2					
Item	Connection services		Reference	Status	Support
			<b>EN 300 434-2 [10]</b>		
1	Connection setup		subclause 7.2.1.1	M	
3	Connection data transfer		subclause 7.2.1.1	M	
5	Connection release		subclause 7.2.1.1	M	

Table A.143: ETS 300 476-6 [17] table A.12 symmetric connection oriented services

Prerequisite: A.141/2					
Item	Symmetric connection oriented services		Reference	Status	Support
			<b>EN 300 434-2 [10]</b>		
1	Type 1 IN_minimum_delay		subclause 7.2.1.1	M	
2	Type 2 IN_normal_delay		subclause 7.1.1	C14301	

C14301: IF A.91/3 THEN M ELSE O

Table A.144: ETS 300 476-6 [17] table A.14 C-plane connection services

Prerequisite: A.141					
Item	C-plane connection services		Reference	Status	Support
			<b>EN 300 434-2 [10]</b>		
1	Only C <sub>S</sub> channel supported		subclause 7.3.1	M	



**A.3.4.1.2 Broadcast control services**

**Table A.145: ETS 300 476-6 [17] table A.15 broadcast services**

Prerequisite: A.140/2				
Item	Broadcast services	Reference EN 300 434-2 [10]	Status	Support
1	Continuous broadcast	subclause 7.1.2	M	
3	Paging broadcast	subclause 6.1.2	M	

**A.3.4.1.3 Multiplexing services**

**Table A.146: ETS 300 476-6 [17] table A.19 CSF multiplexing services**

Prerequisite: A.140/4				
Item	CSF multiplexing services	Reference	Status	Support
1	D-MAP	EN 300 434-2 [10], subclause 7.1.1	M	
2	A-MAP	EN 300 434-2 [10], subclause 7.1.1	M	
3	B-MAP	EN 300 434-2 [10], subclause 7.1.1	M	
4	T-MUX	EN 300 434-2 [10], subclause 7.1.1	M	
5	E/U-MUX	EN 300 434-2 [10], subclause 7.1.1	M	
6	C-MUX	EN 300 434-2 [10], subclause 7.1.1	C14602	
9	Scrambling	EN 300 175-3 [3], subclause 6.2.4	M	
12	Broadcast control	EN 300 175-3 [3], subclause 6.2.6	M	

C14602: IF A.91/3 THEN M ELSE I

**Table A.147: ETS 300 476-6 [17] table A.20 D-MAP services**

Prerequisite: A.146/1				
Item	D-MAP	Reference EN 300 434-2 [10]	Status	Support
1	D-field MAP D80	subclause 7.1.1	C14701	
2	D-field MAP D32	subclause 7.1.1	M	

C14701: IF A.91/3 THEN M ELSE O

**Table A.148: ETS 300 476-6 [17] table A.21 B-MAP services**

Prerequisite: A.146/3				
Item	B-MAP	Reference EN 300 434-2 [10]	Status	Support
1	B-field MAP unprotected format	subclause 7.1.1	M	
2	B-field MAP protected format	subclause 7.1.1	C14801	

C14801: IF A.91/3 THEN M ELSE O

Table A.149: ETS 300 476-6 [17] table A.22 E/U mux services

Prerequisite: A.146/5				
Item	E/U MUX	Reference EN 300 434-2 [10]	Status	Support
1	E/U-mux E type	subclause 7.3.1	C14901	
2	E/U-mux U type	subclause 7.1.1	M	

C14901: IF A.91/3 THEN M ELSE O

Table A.150: ETS 300 476-6 [17] table A.23 C mux mapping services

Prerequisite: A.146/6				
Item	Time multiplexers - C mux	Reference EN 300 434-2 [10]	Status	Support
1	C-mux double slot	subclause 8.1	M	

#### A.3.4.1.4 Management services

Table A.151: ETS 300 476-6 [17] table A.24 management services

Prerequisite: A.140/5				
Item	Management services	Reference EN 300 175-3 [3]	Status	Support
1	Broadcasting	subclause 11.1	M	
3	PP states and state transition	subclause 11.3	M	
4	Physical channel selection	subclause 11.4	M	
5	In-connection quality control	subclause 11.5	M	
6	RFP system load	subclause 11.6	M	
7	Receiver scan sequence	subclause 11.9	M	

#### A.3.4.2 Procedures

##### A.3.4.2.1 Connection setup procedures

Table A.152: ETS 300 476-6 [17] table A.26 C/O single bearer setup procedures

Prerequisite: A.141/1 AND A.142/1				
Item	Name of procedure	Reference	Status	Support
1	Basic setup, single bearer basic connection of known service	EN 300 434-2 [10], subclause 7.2.1.1	M	
2	Normal setup, single bearer duplex connection of known service	EN 300 434-1 [9], clause 6	C15201	

C15201: IF A.91/3 THEN M ELSE O

Table A.153: ETS 300 476-6 [17] table A.29 C/O bearer setup procedures

Prerequisite: A.142/1				
Item	Name of procedure	Reference EN 300 434-2 [10]	Status	Support
1	Basic bearer setup	subclause 7.2.1.1	M	
3	PT initiated - B-field single bearer setup	subclause 7.2.1.1	C15301	

C15301: IF A.91/3 THEN M ELSE O

**A.3.4.2.2 Connection data transfer procedures**

**Table A.154: ETS 300 476-6 [17] table A.31 C/O data transfer procedures**

Prerequisite: A.142/3				
Item	Name of procedure	Reference	Status	Support
1	ARQ procedure, Q1 and Q2 bit setting, for C-channel	EN 300 175-3 [3], subclause 10.8.1	M	
2	Cs - channel data	EN 300 434-2 [10], subclause 7.3.3	M	
3	Q1/Q2 setting for sliding collision/A,B-field check (FT to PT)	EN 300 175-3 [3], subclause 10.8.1.3	M	
5	Q2 bit settings	EN 300 434-2 [10], subclause 6.1.1	M	

**A.3.4.2.3 Connection release procedures**

**Table A.155: ETS 300 476-6 [17] table A.33 C/O connection release procedures**

Prerequisite: A.142/5				
Item	Name of procedure	Reference EN 300 434-2 [10]	Status	Support
1	Unacknowledged bearer release	subclause 7.2.1.1	M	

**A.3.4.2.4 Broadcast procedures**

**Table A.156: ETS 300 476-6 [17] table A.34 broadcast procedures**

Prerequisite: A.140/2				
Item	Name of procedure	Reference EN 300 434-2 [10]	Status	Support
1	Normal paging (Paging broadcast)	subclause 7.3.2.3	M	

**A.3.4.2.5 CSF multiplexing procedures**

**Table A.157: ETS 300 476-6 [17] table A.37 CSF multiplexing procedures**

Prerequisite: A.140/4				
Item	CSF multiplexing procedures	Reference	Status	Support
2	Scrambling	EN 300 175-3 [3], subclause 6.2.4	M	
3	R-CRC generation	EN 300 434-2 [10], subclause 6.1.1	M	
4	R-CRC checking	EN 300 434-2 [10], subclause 6.1.1	M	
5	X-CRC generation	EN 300 434-2 [10], subclause 7.3.3	M	
6	X-CRC checking	EN 300 434-2 [10], subclause 7.3.3	M	
7	Broadcast control function	EN 300 175-3 [3], subclause 6.2.6	M	

## A.3.4.2.6 Layer management procedures

Table A.158: ETS 300 476-6 [17] table A.38 layer management procedures

Prerequisite: A.140/5				
Item	Name of procedure	Reference	Status	Support
1	Extended system information PP request	EN 300 434-2 [10], subclause 7.3.2.2	M	
2	Duplex bearer physical channel selection	EN 300 175-3 [3], subclause 11.4.1	M	
4	Simplex bearer physical channel selection	EN 300 175-3 [3], subclause 11.4.1	M	
5	RFPI handshake	EN 300 175-3 [3], subclause 11.5.1	M	

## A.3.4.3 Protocol parameters

## A.3.4.3.1 Timer support

Table A.159: ETS 300 476-6 [17] table A.41 timer supported

Item	Name of timer	Reference EN 300 175-3 [3]	Status	Support	Value Allowed	Value Supported
1	T200	clause A.1	M		3 seconds	
2	T201	clause A.1	M		5 seconds	
4	T203	clause A.1	M		16 frames	
5	T204	clause A.1	M		6 multi-frames	
6	T205	clause A.1	M		10 seconds	
12	T211	clause A.1	M		3 seconds	
13	T212	clause A.1	M		20 frames	

## A.3.4.3.2 Channel selection parameters

Table A.160: ETS 300 476-6 [17] table A.43 channel selection parameters

Item	Parameter	Reference EN 300 175-3 [3]	Status	Support	Value Allowed	Value Supported
1	Lowest boundary of channel list	clause 11.4.1	M		$\leq -93$ dBm	
2	Band resolution	clause 11.4.1	M		$\leq 6$ dB	
3	RSSI variation between checking	clause 11.4.2	M		$\leq 12$ dB	

## A.3.4.3.3 Slot types supported

Table A.161: ETS 300 476-6 [17] table A.46 slot types supported

Item	Slot types supported	Reference EN 300 175-3 [3]	Status	Support
3	Full slot	subclause 6.2.1	M	
4	Double slot	subclause 6.2.1	M	

**A.3.4.4 Messages**

**A.3.4.4.1 A - field header - tail identification**

**Table A.162: ETS 300 476-6 [17] table A.47 tail identification (receipt P to F)**

Item	Tail Identification	Reference EN 300 175-3 [3]	Status	Support
1	CT data packet number 0	subclause 7.1.2	M	
2	CT data packet number 1	subclause 7.1.2	M	
4	Identities information	subclause 7.1.2	M	
7	MAC layer control	subclause 7.1.2	M	
9	First PP transmission	subclause 7.1.2	M	

**Table A.163: ETS 300 476-6 [17] table A.48 tail identification (sending F to P)**

Item	Tail Identification	Reference EN 300 175-3 [3]	Status	Support
1	CT data packet number 0	subclause 7.1.2	M	
2	CT data packet number 1	subclause 7.1.2	M	
4	Identities information	subclause 7.1.2	M	
5	Multiframe synchronization - system info.	subclause 7.1.2	M	
7	MAC layer control	subclause 7.1.2	M	

**A.3.4.4.2 A - field header - B-field identification**

**Table A.164: ETS 300 476-6 [17] table A.51 B-field identification (receipt P to F)**

Item	B-field identification	Reference EN 300 434-2 [10]	Status	Support
1	U-type, IN, SIN or IP packet number 0	subclause 7.3.1	M	
5	E-type, not all CF or CLF; packet number 0	subclause 7.3.1	C16401	
6	E-type, not all CF; CF packet number 1	subclause 7.3.1	C16401	
7	E-type, all MAC control (unnumbered)	subclause 7.3.1	C16401	
8	No B-field	subclause 7.3.1	M	

C16401: IF A.91/3 THEN M ELSE O

**Table A.165: ETS 300 476-6 [17] table A.52 B-field identification (sending F to P)**

Item	B-field identification	Reference EN 300 434-2 [10]	Status	Support
1	U-type, IN, SIN or IP packet number 0	subclause 7.3.1	M	
5	E-type, not all CF or CLF; packet number 0	subclause 7.3.1	C16501	
6	E-type, not all CF; CF packet number 1	subclause 7.3.1	C16501	
7	E-type, all MAC control (unnumbered)	subclause 7.3.1	C16501	
8	No B-field	subclause 7.3.1	M	

C16501: IF A.91/3 THEN M ELSE O

**A.3.4.4.3 A - field header - "Q2" bit**

**Table A.166: ETS 300 476-6 [17] table A.53 "Q2" bit (receipt P to F)**

Item	"Q2" bit	Reference EN 300 175-3 [3]	Status	Support
1	Q2 bearer quality & flow control	subclause 7.1.5	M	

Table A.167: ETS 300 476-6 [17] table A.54 "Q2" bit (sending F to P)

Item	"Q2" bit	Reference EN 300 175-3 [3]	Status	Support
1	Q2 bearer quality & flow control	subclause 7.1.5	M	

A.3.4.4.4 A - field identities information (N<sub>T</sub>) message

Table A.168: ETS 300 476-6 [17] table A.55 identities information (N<sub>T</sub>) message (receipt P to F)

Item	System information message	Reference EN 300 175-3 [3]	Status	Support
1	NT - Identities Information	subclause 7.2.2	M	

Table A.169: ETS 300 476-6 [17] table A.56 identities information (N<sub>T</sub>) message (sending F to P)

Item	System information message	Reference EN 300 175-3 [3]	Status	Support
1	NT - Identities Information	subclause 7.2.2	M	

A.3.4.4.5 A - field system information (Q<sub>T</sub>) messages

Table A.170: ETS 300 476-6 [17] table A.57 system information (Q<sub>T</sub>) message (sending F to P)

Item	System information message	Reference EN 300 175-3 [3]	Status	Support
1	QT - Static system information	subclause 7.2.3.2	M	
3	QT - Fixed part capabilities	subclause 7.2.3.4	M	

A.3.4.4.6 A - field paging tail (P<sub>T</sub>) messages

Table A.171: ETS 300 476-6 [17] table A.58 paging tail (P<sub>T</sub>) messages (sending F to P)

Item	Paging tail (P <sub>T</sub> ) messages	Reference EN 300 434-2 [10]	Status	Support
1	Full page format	subclause 7.3.2.3	M	
3	Short page format	subclause 7.3.2.3	M	

A.3.4.4.7 A - field MAC control (M<sub>T</sub>) messages

Table A.172: ETS 300 476-6 [17] table A.60 MAC control (M<sub>T</sub>) messages (receipt P to F)

Item	MAC control (M <sub>T</sub> ) messages	Reference EN 300 434-2 [10]	Status	Support
1	Basic connection control	subclause 7.3.2.4	M	
3	Advanced connection control	subclause 7.3.2.4	C17201	
7	B-field setup, first PT transmission	subclause 7.3.2.4	C17201	

C17201: IF A.91/3 THEN M ELSE O

Table A.173: ETS 300 476-6 [17] table A.61 MAC control ( $M_T$ ) messages (sending F to P)

Item	MAC control ( $M_T$ ) messages	Reference EN 300 434-2 [10]	Status	Support
1	Basic connection control	subclause 7.3.2.4	M	
3	Advanced connection control	subclause 7.3.2.4	C17301	

C17301: IF A.91/3 THEN M ELSE O

Table A.174: ETS 300 476-6 [17] table A.62 basic connection control (receipt P to F)

Item	MAC control ( $M_T$ ) messages -Basic connection control	Reference EN 300 175-3 [3]	Status	Support
1	Basic CC - access request	subclause 7.2.5.2.2	M	
6	Basic CC - release	subclause 7.2.5.2.2	M	
7	Basic CC - wait	subclause 7.2.5.2.3	M	

Table A.175: ETS 300 476-6 [17] table A.63 basic connection control (sending F to P)

Item	MAC control ( $M_T$ ) messages -Basic connection control	Reference EN 300 175-3 [3]	Status	Support
5	Basic CC - bearer confirm	subclause 7.2.5.2.2	M	
6	Basic CC - release	subclause 7.2.5.2.2	M	
7	Basic CC - wait	subclause 7.2.5.2.3	M	

#### A.3.4.5.8 B-field messages supported

Table A.176: ETS 300 476-6 [17] table A.74 B - field messages supported (receipt P to F)

Prerequisite: A.91/3				
Item	B - Field messages	Reference EN 300 434-2 [10]	Status	Support
1	X001 - Advanced connection control	subclause 7.3.3	M	
2	X010 - Null message	subclause 7.3.3	M	

Table A.177: ETS 300 476-6 [17] table A.75 B - field messages supported (sending F to P)

Prerequisite: A.91/3				
Item	B - Field messages	Reference EN 300 434-2 [10]	Status	Support
1	X001 - Advanced connection control	subclause 7.3.3	M	
2	X010 - Null message	subclause 7.3.3	M	

Table A.178: ETS 300 476-6 [17] table A.76 B - field adv. connection control msg (receipt P to F)

Prerequisite: A.91/3				
Item	B - Field Advanced CC messages	Reference	Status	Support
1	Access request	EN 300 434-2 [10], subclause 7.3.3	M	
6	Wait	EN 300 434-2 [10], subclause 7.3.3	M	
7	Attributes_B.request	EN 300 175-3 [3], subclause 7.3.3.5	M	
8	Attributes_B.confirm	EN 300 175-3 [3], subclause 7.3.3.5	M	
9	Bandwidth_B.request	EN 300 175-3 [3], subclause 7.3.3.6	M	
10	Bandwidth_B.confirm	EN 300 175-3 [3], subclause 7.3.3.6	M	
11	Channel list	EN 300 175-3 [3], subclause 7.3.3.7	M	
14	Release	EN 300 434-2 [10], subclause 7.3.3	M	

Table A.179: ETS 300 476-6 [17] table A.77 B - field adv. connection control msg (sending F to P)

Prerequisite: A.91/3				
Item	B - Field Advanced CC messages	Reference	Status	Support
5	Bearer confirm	EN 300 434-2 [10], subclause 7.3.3	M	
6	Wait	EN 300 434-2 [10], subclause 7.3.3	M	
7	Attributes_B.request	EN 300 175-3 [3], subclause 7.3.3.5	M	
8	Attributes_B.confirm	EN 300 175-3 [3], subclause 7.3.3.5	M	
9	Bandwidth_B.request	EN 300 175-3 [3], subclause 7.3.3.6	M	
10	Bandwidth_B.confirm	EN 300 175-3 [3], subclause 7.3.3.6	M	
11	Channel list	EN 300 175-3 [3], subclause 7.3.3.7	M	
14	Release	EN 300 434-2 [10], subclause 7.3.3	M	

Table A.180: ETS 300 476-6 [17] table A.78 B - field null messages (receipt P to F)

Prerequisite: A.91/3				
Item	B - Field - Null messages	Reference EN 300 434-2 [10]	Status	Support
1	No C <sub>F</sub> or CL <sub>F</sub> data in the B-field	subclause 7.3.3	M	

Table A.181: ETS 300 476-6 [17] table A.79 B - field null messages (sending F to P)

Prerequisite: A.91/3				
Item	B - Field - Null messages	Reference EN 300 434-2 [10]	Status	Support
1	No C <sub>F</sub> or CL <sub>F</sub> data in the B-field	subclause 7.3.3	M	



**A.3.4.5 MAC messages format and field value**

**A.3.4.5.1 QT - fixed part capability**

**Table A.182: ETS 300 476-6 [17] table A.88 QT - fixed part capability (sending F to P)**

Item	QT - Fixed part capability	Reference	Status	Support	Allowed Value	Supported Value
1	QT header	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0011"B	
2	Extended FP info.	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
3	Reserved	EN 300 175-3 [3], subclause 7.2.3.4.2	M		1 bit	
4	Reserved	EN 300 175-3 [3], subclause 7.2.3.4.2	M		1 bit	
5	Double slot	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
6	Half slot	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
7	Full slot	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
8	Frequency control	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
9	Page repetition	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
10	Dummy bearer setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
11	C/L uplink	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
12	C/L downlink	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
13	Basic A-field setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
14	Adv. A-field setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
15	B-field setup	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
16	CF messages	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
17	IN minimum delay	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
18	IN normal delay	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
19	IP error detection	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
20	IP error correction	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
21	Multibearer connection	EN 300 175-3 [3], subclause 7.2.3.4.2	M		"0"B , "1"B	
22	Higher layer info.	EN 300 434-1 [9], clause A.1	M		C18201	

C18201: IF A.91/3 THEN 15 bits value followed by 1 bit set to 1 ELSE 16 bits value

**A.3.5 Tables for FP PH layer**

**A.3.5.1 Services**

**Table A.183: ETS 300 476-7 [18] table A.13 RFP services supported**

Item	Service name	Reference EN 300 175-2 [2]	Status	Support
1	10 RF Carriers implemented	subclause 4.1.1	M	
2	Centre Frequency of each is as defined in 4.1.1	subclause 4.1.1	M	
3	RF carrier accuracy is $F_c \pm 50$ kHz	subclause 4.1.2	M	
4	RF carrier rate of change < 15 kHz per slot	subclause 4.1.2	M	
5	Reference timer stability and accuracy better than 10 ppm at extreme conditions	subclause 4.2.2	M	
8	RFP jitter of a packet transmission < $\pm 1$ $\mu$ s at extreme conditions	subclause 4.2.3	M	
9	Jitter between p0 and every other bit in a packet within $\pm 0,1$ $\mu$ s	subclause 4.2.3	M	

**A.3.5.2 Physical layer procedures**

**Table A.184: ETS 300 476-7 [18] table A.14 physical channels supported**

Item	Procedure name	Reference EN 300 175-2 [2]	Status	Support
1	Short physical channel R00	subclause 4.5.2	M	
2	Basic physical channel R32	subclause 4.5.3	M	
4	The high capacity physical channel R80	subclause 4.5.5	C18401	

C18401: IF A.91/3 THEN M ELSE O

**Table A.185: ETS 300 476-7 [18] table A.15 PH layer procedures supported**

Item	Procedure name	Reference	Status	Support
1	Addition of synchronization (S) field and transmission	EN 300 175-2 [2], subclause 8.1	M	
3	Packet reception and removal of synchronization (S) field	EN 300 175-2 [2], subclause 8.2	M	
5	Measurement of signalling strength	EN 300 175-2 [2], subclause 8.3	M	
6	Synchronization pulse detection	EN 300 175-2 [2], subclause 8.4	M	
9	Basic physical channel R32 management	EN 300 434-2 [10], subclause 7.1.1	M	
11	The high capacity physical channel R80 management	EN 300 434-2 [10], subclause 7.1.1	C18501	

C18501: IF A.91/3 THEN M ELSE O

**Table A.186: ETS 300 476-7 [18] table A.16 management procedures supported**

Item	Procedure name	Reference EN 300 175-2 [2]	Status	Support
1	List of quietest physical channels	subclause 9.1	M	
2	Physical channels with greatest field strength (PP only)	subclause 9.2	M	
3	Extract timing	subclause 9.3	M	

### A.3.5.3 Protocol Data Units

Table A.187: ETS 300 476-7 [18] table A.17 frame structure supported

Item	Structure	Reference EN 300 175-2 [2]	Status	Support
1	TDMA frame structure	subclause 4.2.1	M	

Table A.188: ETS 300 476-7 [18] table A.18 packet types supported

Item	Packet type	Reference EN 300 175-2 [2]	Status	Support
1	Short physical packet P00 transmission	subclauses 4.4, 4.4.1	M	
3	Basic physical packet P32 transmission and reception	subclauses 4.4, 4.4.2	M	
5	High capacity physical packet P80 transmission and reception	subclauses 4.4, 4.4.4	C18801	

C18801: IF A.91/3 THEN M ELSE O

### A.3.5.4 Transmitter characteristics

Table A.189: ETS 300 476-7 [18] table A.27 transmitter requirements supported

Item	Transmitter characteristic	Reference EN 300 175-2 [2]	Status	Support
1	Transmitter Attack Time < 10 $\mu$ s	subclause 5.2.1	M	
2	Transmitter Release Time < 10 $\mu$ s	subclause 5.2.2	M	
3	Transmitter Minimum Power > NTP - 1 dB	subclause 5.2.3	M	
4	Transmitter Maximum Power < NTP + 1 dB	subclause 5.2.4	M	
6	Maintenance of transmission power for 0,5 $\mu$ s after packet end > NTP - 6 dB	subclause 5.2.5	M	
7	Transmitter Idle Power < 20 nW	subclause 5.2.6	M	
8	Peak Power Per Transceiver < 250 mW	subclause 5.3.1	M	
9	RF Carrier Modulation Gaussian Frequency Shift Keying	subclause 5.4	M	
10	Emissions Due to Modulation according to table 1	subclause 5.5.1	M	
11	Emissions due to Transmitter Transients according to table 2	subclause 5.5.1	M	
12	Emissions due to Intermodulation < 1 $\mu$ W	subclause 5.5.3	M	
13	Out of Band Emissions when Transmitting	subclause 5.5.4	M	

### A.3.5.5 Receiver characteristics

Table A.190: ETS 300 476-7 [18] table A.28 receiver requirements supported

Item	Receiver characteristic	Reference EN 300 175-2 [2]	Status	Support
1	Radio Receiver Sensitivity > -83 dBm	subclause 6.2	M	
2	Receiver Reference Bit Error Rate is 0,00001 in the D-field	subclause 6.3	M	
3	Receiver Interference Performance	subclause 6.4	M	
4	Rx Blocking (out-of-band, in slot signals)	subclause 6.5.1	M	
5	Rx Blocking (in band, out-of-slot signals)	subclause 6.5.2	M	
6	Rx Intermodulation Performance	subclause 6.6	M	
7	Out of band emissions when receiving or idling	subclause 6.7.1	M	
8	In band emissions when receiving or idling	subclause 6.7.2	M	

## **Annex B (informative): Bibliography**

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## History

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