



TECHNICAL
BASIS for
REGULATION

TBR 40

June 1998

Source: DECT

Reference: DTBR/DECT-030061

ICS: 33.020

Key words: DECT, ISDN, radio, terminal, type approval

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

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Foreword

This Technical Basis for Regulation (TBR) has been produced by the Digital Enhanced Cordless Telecommunications (DECT) Project of the European Telecommunications Standards Institute (ETSI).

The present document has been produced by ETSI in response to a mandate from the European Commission issued under Council Directive 83/189/EEC (as amended) laying down a procedure for the provision of information in the field of technical standards and regulations.

The present document is intended to become a Harmonized Standard as requested by the above mentioned mandate, the reference of which will be published in the Official Journal of the European Communities referencing the Council Directive relating to telecommunications terminal equipment and satellite earth station equipment, including the mutual recognition of their conformity (Directive 98/13/EC).

A common technical regulation may be established by the European Commission in accordance with the Directive.

Technical specifications relevant to the 98/13/EC Directive are given in the TBR-Requirements Table (TBR-RT) in annex A.

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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] Council Directive 98/13/EC of 12 February 1998 relating to telecommunications terminal equipment and satellite earth station equipment, including the mutual recognition of their conformity.

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 5 of the Council Directive 98/13/EC [39] applying to terminal equipment, given in this clause. The column Terminal Directive Category (TD Cat) identifies the applicable clauses of Article 5 of Council Directive 98/13/EC [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

| Test Group Reference | Test Group Objective |
|-----------------------------|--|
| 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 a 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.

| | |
|--------------------------|--|
| Item | 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. |
| Cat | the category in which the relative item falls under the Article 5 in the Council Directive 98/13/EC [39]. |
| Reference | references to EN 300 434-1 [9] and EN 300 434-2 [10], the DECT/ISDN IAP specification, unless otherwise specified. |
| Prerequisite line | 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. |
| Status | contains the status required for implementation conforming to this DECT/ISDN IAP TBR. |
| Support | 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 5 of Council Directive 98/13/EC [39];
- e falls under item (e) from Article 5 of Council Directive 98/13/EC [39];
- f falls under item (f) from Article 5 of Council Directive 98/13/EC [39];
- g falls under item (g) from Article 5 of Council Directive 98/13/EC [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 _S 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 | IN / 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 _S 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

| Prerequisite: A.39/4 | | | | |
|----------------------|---------------------------|---------------------------------------|--------|---------|
| 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 | 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

| Prerequisite: A.45/1 | | | | |
|----------------------|-----------------|--------------------------------|--------|---------|
| Item | D-MAP | Reference EN 300 434-2 [10] | Status | Support |
| 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

| Prerequisite: A.45/3 | | | | |
|----------------------|--------------------------------|--------------------------------|--------|---------|
| 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 | 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

| Prerequisite: A.45/5 | | | | |
|----------------------|----------------|--------------------------------|--------|---------|
| Item | E/U MUX | Reference EN 300 434-2 [10] | Status | Support |
| 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_T) message

Table A.68: ETS 300 476-3 [14] table A.55 Identities information (N_T) 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_T) 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_T) messages

Table A.70: ETS 300 476-3 [14] table A.57 system information (Q_T) 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_T) messages

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

| Item | Paging tail (P _T) 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_T) messages

Table A.72: ETS 300 476-3 [14] table A.60 MAC control (M_T) messages (sending P to F)

| 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 | 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_T) messages (receipt 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 | 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 _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.75: ETS 300 476-3 [14] table A.63 basic connection control (receipt 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.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 _F or CL _F 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 _F or CL _F 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 _T 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 < ± 2 μ s at extreme conditions | subclause 4.2.4 | M | |
| 8 | Jitter between p0 and every other bit in a packet within $\pm 0,1$ μ 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 μ s | subclause 5.2.1 | M | |
| 2 | Transmitter Release Time < 10 μ 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 μ 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 μ 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

| Prerequisite: C.92/6 | | | | |
|-----------------------------|---|---|---------------|----------------|
| Item | Functional protocol procedures for CRSS | Reference EN 300 434-1 [9] | Status | Support |
| 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

| Prerequisite: C.92/7 | | | | |
|-----------------------------|--|---------------------------------------|---------------|----------------|
| Item | Functional protocol procedures for CISS | Reference EN 300 434-1 [9] | Status | Support |
| 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

| Prerequisite: C.92/9 | | | | |
|-----------------------------|---|---------------------------------------|---------------|----------------|
| 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 | 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 _{ciss} - FACILITY _{ciss} | subclause 5.2.4.1.9 | O | |
| 10 | FACILITY _{crss} - FACILITY _{crss} | 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 _{crss} | 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 _{ciss} - FACILITY _{ciss} | subclause 5.2.4.2.14 | O | |
| 15 | FACILITY _{crss} - FACILITY _{crss} | 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 _S 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

| Prerequisite: A.129/1 | | | | |
|-----------------------|--|-------------------------------|--------|---------|
| 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.131: ETS 300 476-5 [16] table A.28 LU7 active phase procedures

| Prerequisite: A.129/2 | | | | |
|-----------------------|-----------------------------|-------------------------------|--------|---------|
| 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.132: ETS 300 476-5 [16] table A.29 LU7 exceptional procedures

| Prerequisite: A.129/4 | | | | |
|-----------------------|----------------------------|-------------------------------|--------|---------|
| 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.3.3.2.7 Management procedures

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

| Prerequisite: A.122 | | | | |
|---------------------|---------------------------|-------------------------------|--------|---------|
| 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.134: ETS 300 476-5 [16] table A.31 MAC connection management procedures

| Prerequisite: A.133/1 | | | | |
|-----------------------|--------------------------------------|-------------------------------|--------|---------|
| 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.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 EN 300 434-2 [10] | Status | Support |
| 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 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.143: ETS 300 476-6 [17] table A.12 symmetric connection oriented services

| Prerequisite: A.141/2 | | | | |
|-----------------------|--|--------------------------------|--------|---------|
| 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 | 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 EN 300 434-2 [10] | Status | Support |
| 1 | Only C _S 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 | | ≤ -93 dBm | |
| 2 | Band resolution | clause 11.4.1 | M | | ≤ 6 dB | |
| 3 | RSSI variation between checking | clause 11.4.2 | M | | ≤ 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_T) message

Table A.168: ETS 300 476-6 [17] table A.55 identities information (N_T) 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_T) 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_T) messages

Table A.170: ETS 300 476-6 [17] table A.57 system information (Q_T) 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_T) messages

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

| Item | Paging tail (P _T) 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_T) messages

Table A.172: ETS 300 476-6 [17] table A.60 MAC control (M_T) messages (receipt P to F)

| 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 | 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 _F or CL _F 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 _F or CL _F 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 < ± 1 μ s at extreme conditions | subclause 4.2.3 | M | |
| 9 | Jitter between p0 and every other bit in a packet within $\pm 0,1$ μ 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 μ s | subclause 5.2.1 | M | |
| 2 | Transmitter Release Time < 10 μ 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 μ 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 μ 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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- CEPT Recommendation T/SGT SF2 (89) 6/0: "Draft Recommendation T/SF Services and Facilities of Digital European Cordless Telecommunications".
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- ETR 041: "Transmission and Multiplexing (TM); Digital European Cordless Telecommunication (DECT); Transmission aspects 3,1 kHz telephony; Interworking with other networks".
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History

| Document history | |
|------------------|--|
| September 1997 | Public Enquiry PE 9803: 1997-09-19 to 1998-01-16 |
| April 1998 | Vote V 9824: 1998-04-14 to 1998-06-12 |
| June 1998 | First Edition |
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