



SLOVENSKI STANDARD PSIST TS 101 679:2000

01-julij-2000

8 [[]HJbY]nVc`^yUbYvfYnj fj] bYHfY_ca i b]_UMfYfb 97 HL!`ü]fc_cdUgcj bc`ca fYy^Y
n`X][]HJb]a]`glcf]hj Ua]`f6 !=G8 BL!`A YXgYVc`bc`XYcj Ub^Y`8 97 H#6 !=G8 B

Digital Enhanced Cordless Telecommunications (DECT); Broadband Integrated Services
Digital Network (B-ISDN); DECT/B-ISDN interworking

iteh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: **PSIST TS 101 679:2000 TS 101 679 Version 1.1.1**

<https://standards.iteh.ai/catalog/standards/sist/9ebbc5b5-7229-4510-89bc-4b6b0c6c7e94/psist-ts-101-679-2000>

ICS:

- | | | |
|-----------|---|--|
| 33.070.30 | Öä åæ ^Á à [zæ ^
à!^: ç çã } ^Á ^\ [{ ~ } ä æ å
ÇÖÓÓVD | Digital Enhanced Cordless
Telecommunications (DECT) |
| 33.080 | Digitalno omrežje z
integriranimi storitvami
(ISDN) | Integrated Services Digital
Network (ISDN) |

PSIST TS 101 679:2000

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

PSIST TS 101 679:2000

<https://standards.iteh.ai/catalog/standards/sist/9ebbe3b5-7229-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000>

TS 101 679 V1.1.1 (1999-07)

Technical Specification

Digital Enhanced Cordless Telecommunications (DECT); Broadband Integrated Services Digital Network (B-ISDN); DECT/B-ISDN interworking

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[PSIST TS 101 679:2000](#)

<https://standards.iteh.ai/catalog/standards/sist/9ebbe3b5-7229-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000>



Reference

DTS/DECT-030130 (fjo00icr.PDF)

Keywords

B-ISDN, DECT, interworking, profile, radio

ETSI

Postal address

F-06921 Sophia Antipolis Cedex - FRANCE

Office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C

Association à but non lucratif enregistrée à la
Sous-Prefecture de Grasse (06) N° 7803/88

<https://standards.etsi.org/standards-search/030130-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000>

Internet

secretariat@etsi.fr

Individual copies of this ETSI deliverable
can be downloaded from

<http://www.etsi.org>

If you find errors in the present document, send your
comment to: editor@etsi.fr

Copyright Notification

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

© European Telecommunications Standards Institute 1999.
All rights reserved.

Contents

Intellectual Property Rights	6
Foreword	6
Introduction	6
1 Scope	7
2 References	7
3 Definitions, symbols and abbreviations	10
3.1 Definitions	10
3.2 Symbols	12
3.3 Abbreviations	12
3.3.1 DECT abbreviations	12
3.3.2 ISDN abbreviations	13
3.3.3 ISO 9646 abbreviations	13
4 Inter-working requirements	14
4.1 Reference configurations and interface	14
4.1.1 Reference Model	14
4.1.2 End system reference configuration	14
4.1.3 Interfaces	15
4.1.3.1 B-ISDN interfaces	15
4.1.3.2 Interfaces supported for a DECT end system	15
4.2 Protocol architecture models	15
4.3 Service requirements	16
4.3.1 Bearer service requirements	16
4.3.2 Interworking of bearer services	16
4.3.2.1 Circuit-mode 64 kbit/s Unrestricted, (ITU-T Recommendation I.231.1)	17
4.3.2.2 Circuit-mode Speech, (ITU-T Recommendation I.231.2)	17
4.3.2.3 Circuit-mode 3,1 kHz Audio, (ITU-T Recommendation I.231.3)	17
4.3.2.4 Other Services	17
4.3.3 End-to-end Compatibility of Information Transfer Attributes	17
4.3.3.1 Default Coding	17
4.3.3.2 ISDN Service Coding	18
4.3.4 Teleservice requirements	19
4.3.5 Supplementary service requirements	19
5 Inter-working mappings	19
5.1 Symbols for map columns	19
5.2 DFS C-plane IWU mappings	20
5.2.1 Call Control (CC) IWU procedures	20
5.2.1.1 Call establishment procedures	20
5.2.1.1.1 Outgoing call	20
5.2.1.1.2 Incoming call	23
5.2.1.1.3 Fall-back procedures	24
5.2.1.2 Call information procedures	24
5.2.1.3 Call release procedures	24
5.2.1.3.1 Call release initiated by the DPS	25
5.2.1.3.2 Call release initiated by the B-NT	25
5.2.2 Supplementary services IWU procedures	27
5.2.3 Other IWU procedures	27
5.2.3.1 Segmentation	27
5.2.3.2 Identity mapping procedures	27
5.2.4 Message mappings	27
5.2.4.1 Message Mapping - DECT to B-ISDN	27
5.2.4.1.1 CC-ALERTING - ALERTING	28

5.2.4.1.2	CC-CALL-PROC - CALL PROCEEDING	28
5.2.4.1.3	CC-CONNECT - CONNECT	29
5.2.4.1.4	CC_INFO (F-02) - INFORMATION (U2)	29
5.2.4.1.5	CC_INFO - INFORMATION	30
5.2.4.1.6	CC-RELEASE - RELEASE	30
5.2.4.1.7	CC-RELEASE-COM - RELEASE COMPLETE	31
5.2.4.1.8	CC-SETUP - SETUP	32
5.2.4.2	Message Mapping - B-ISDN to DECT	33
5.2.4.2.1	ALERTING - CC-ALERTING	33
5.2.4.2.2	CALL PROCEEDING - CC-CALL-PROC	34
5.2.4.2.3	CONNECT - CC-CONNECT	34
5.2.4.2.4	CONNECT ACKNOWLEDGE - CC-CONNECT-ACK	35
5.2.4.2.5	INFORMATION - CC-INFO	35
5.2.4.2.6	RELEASE - CC-RELEASE	36
5.2.4.2.7	RELEASE COMPLETE - CC-RELEASE-COM	36
5.2.4.2.8	SETUP - CC-SETUP	37
5.2.4.2.9	SETUP ACKNOWLEDGE - CC-SETUP-ACK	38
5.2.5	Information Element mapping	38
5.2.5.1	B-ISDN to DECT and DECT to B-ISDN	38
5.2.5.1.1	Basic Service - AAL parameters	38
5.2.5.1.2	Basic Service - ATM Traffic descriptor	38
5.2.5.1.3	Basic Service - Broadband Bearer Capability	38
5.2.5.1.3.1	DECT to B-ISDN	38
5.2.5.1.3.2	B-ISDN to DECT	38
5.2.5.1.4	Called Party Number - Called Party Number	39
5.2.5.1.5	Called Party Sub-address - Called Party Sub-address	39
5.2.5.1.6	Calling Party Number - Calling Party Number	39
5.2.5.1.7	IWU Attributes - AAL parameters	40
5.2.5.1.8	IWU Attributes - ATM Traffic descriptor	41
5.2.5.1.9	IWU Attributes - Broadband Bearer Capability	42
5.2.5.1.10	IWU Attributes - Broadband Low Layer Information	43
5.2.5.1.11	IWU to IWU - B-ISDN Information Element	44
5.2.5.1.12	Keypad - Called Party Number	44
5.2.5.1.13	Progress Indicator - Progress Indicator	44
5.2.5.1.14	Sending Complete - Broadband Sending Complete	45
5.2.6	Information Element Coding mapping	45
5.2.6.1	Coding standard - Coding standard	45
5.2.6.2	Configuration - User plane connection configuration	45
5.2.6.3	ID for Information Element - Information Element Identifier	45
5.2.6.4	Info Transfer Capability - AAL Subtype	46
5.2.6.5	Info Transfer Rate - CBR Rate	46
5.2.6.6	Info Transfer Rate - Peak Cell Rates	47
5.2.6.7	L2 Protocol ID - User Information Layer 2 Protocol	47
5.2.6.8	L3 protocol ID - User Information Layer 3 Protocol	48
5.2.6.9	Length of contents - Length of contents	48
5.2.6.10	Location - Location	49
5.2.6.11	Message type - Message type	50
5.2.6.12	Numbering Plan Identification - Numbering Plan Identification	51
5.2.6.13	Number Type - Type Of Number	51
5.2.6.14	Odd/even - Odd/Even Indicator	52
5.2.6.15	Portable Identity - Call Reference	52
5.2.6.16	Progress Description - Progress Description	53
5.2.6.17	Protocol Discriminator - Protocol Discriminator	53
5.2.6.18	Protocol Identifier Coding - Protocol Identifier Coding	54
5.2.6.19	Rate multiplier - Multiplier	54
5.2.6.20	Release Reason - Cause	55
5.2.6.20.1	DECT to B-ISDN	55
5.2.6.20.2	B-ISDN to DECT	56
5.2.6.21	Sub-address Type - Type Of Sub-Address	57
5.2.6.22	Transaction Identifier - Call Reference	57

5.2.6.22.1	Transaction Flag - Call reference Flag.....	57
5.2.6.22.2	Transaction Value - Call Reference	57
5.2.6.23	Transfer Mode - AAL Type.....	57
5.2.6.24	Transfer Mode - Bearer Class.....	58
5.2.6.25	Unit Rate - CBR rate	58
Annex A (informative): Inter-working state machine.....		59
A.1	IWU Call Control State Transition Diagram.....	59
A.2	IWU Call Control States.....	59
A.3	IWU Call Control Transition Procedures	59
Annex B (informative): DECT OVERLAP SENDING in B-ISDN NULL state		61
Bibliography		64
History.....		67

iTeh STANDARD PREVIEW (standards.iteh.ai)

[PSIST TS 101 679:2000](https://standards.iteh.ai/catalog/standards/sist/9ebbe3b5-7229-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000)

<https://standards.iteh.ai/catalog/standards/sist/9ebbe3b5-7229-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000>

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available **free of charge** from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI Project Digital Enhanced Cordless Telecommunications (DECT).

Introduction

The present document specifies how Broadband Integrated Services Digital Network (B-ISDN) services are provided over the DECT air interface.

One of the main objectives is to describe how the B-ISDN services are mapped across the DECT air interface in a formal way, so that inter-operability of different manufacturers' equipment can be achieved.

[PSIST TS 101 679:2000](https://standards.iteh.ai/catalog/standards/sist/9ebbe3b5-7229-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000)

<https://standards.iteh.ai/catalog/standards/sist/9ebbe3b5-7229-4510-896e-4b6b0c6c7e94/psist-ts-101-679-2000>

1 Scope

The present document specifies how B-ISDN services can be accessed with a DECT terminal and describes the interworking between B-ISDN and the DECT end system.

The present document covers interworking between B-ISDN constant bit rate (Class A) services and the following DECT services:

- circuit mode 64 kbits/s unrestricted (ITU-T Recommendation I.231.1 [30]);
- circuit mode Speech (ITU-T Recommendation I.231.2 [31]);
- circuit mode 3,1 kHz Audio (ITU-T Recommendation I.231.3 [32]).

The DECT end system reference configuration is used where the DECT fixed system and the DECT portable system together form an end system with the behaviour of a B-ISDN Terminal Equipment (B-ISDN-TE).

Mobility management is outside the scope of the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ECMA TR/44 (1989): "An architectural framework for private networks".
- [2] EN 300 102-1: "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".
- [3] EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [4] EN 300 242: "Terminal Equipment (TE); Group 3 facsimile equipment".
- [5] EN 300 443-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".
- [6] ETS 300 080: "Integrated Services Digital Network (ISDN); ISDN lower layer protocols for telematic terminals".
- [7] ETS 300 081: "Integrated Services Digital Network (ISDN); Teletex end-to-end protocol over the ISDN".
- [8] ETS 300 111: "Integrated Services Digital Network (ISDN); Telephony 3,1 kHz teleservice; Service description".
- [9] ETS 300 112: "Integrated Services Digital Network (ISDN); Facsimile group 4 class 1 equipment on the ISDN; End-to-end protocols".

- [10] ETS 300 120: "Integrated Services Digital Network (ISDN); Service requirements for telefax group 4".
- [11] ETS 300 262: "Integrated Services Digital Network (ISDN); Syntax-based Videotex teleservice; Service description".
- [12] ETS 300 263: "Integrated Services Digital Network (ISDN); Telephony 7 kHz teleservice; Service description".
- [13] ETS 300 264: "Integrated Services Digital Network (ISDN); Videotelephony teleservice; Service description".
- [14] ETS 300 434-1: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for end system configuration; Part 1: Interworking specification".
- [15] ETR 056: "Digital Enhanced Cordless Telecommunications (DECT); System description document".
- [16] GSM 04.06: "Digital cellular telecommunications system; Mobile Station; Base Station System (MS - BSS) interface Data Link (DL) layer specification".
- [17] GSM 04.08: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 specification".
- [18] ISO 1745 (1975): "Information processing; Basic mode control procedures for data communication systems".
- [19] ISO/IEC 4335 (1993): "Information technology; Telecommunications and information exchange between systems; High-level data link control (HDLC) procedures; Elements of procedures".
- [20] ISO/IEC 7776 (1995): "Information technology; Telecommunications and information exchange between systems; High-level data link control procedures; Description of the X.25 LAPB-compatible DTE data link procedures".
- [21] ISO/IEC 8208 (1995): "Information technology; Data communications; X.25 Packet Layer Protocol for Data Terminal Equipment".
- [22] ISO/IEC 8348 (1996): "Information technology; Open Systems Interconnection; Network Service Definition".
- [23] ISO/IEC 8473 (1996): "Information technology; Protocol for providing the connectionless-mode network service".
- [24] ISO/IEC 8802-2 (1998): "Information technology; Telecommunications and information exchange between systems; Local and metropolitan area networks; Specific requirements; Part 2: Logical link control".
- [25] ISO/IEC 8878 (1992): "Information technology; Telecommunications and information exchange between systems; Use of X.25 to provide the OSI Connection-mode Network Service".
- [26] ISO/IEC 9577 (1996): "Information technology; Protocol identification in the network layer".
- [27] ISO/IEC 9646-1 (1991): "Information Technology - Open System Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [28] ISO/IEC 9646-3 (1991): "Information Technology - Open System Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation".
- [29] ITU-T Recommendation I.230 (1988): "Definition of bearer service categories".
- [30] ITU-T Recommendation I.231.1 (1988): "Circuit-mode 64 kbit/s unrestricted; 8 kHz structured bearer service".

- [31] ITU-T Recommendation I.231.2 (1988): "Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for speech information transfer".
- [32] ITU-T Recommendation I.231.3 (1988): "Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for 3,1 kHz audio information transfer".
- [33] ITU-T Recommendation I.241.2 (1988): "Teletex".
- [34] ITU-T Recommendation I.241.3 (1988): "Telefax 4".
- [35] ITU-T Recommendation I.241.5 (1988): "Videotex".
- [36] ITU-T Recommendation I.241.6 (1988): "Telex".
- [37] ITU-T Recommendation I.413 (1993): "B-ISDN user-network interface".
- [38] ITU-T Recommendation I.432 (1996): "B-ISDN User-Network Interface; Physical layer specification".
- [39] ITU-T Recommendation Q.921 (1997): "ISDN user-network interface; Data link layer specification".
- [40] ITU-T Recommendation Q.922 (1992): "ISDN data link layer specification for frame mode bearer services".
- [41] ITU-T Recommendation Q.2931 (1995): "Digital Subscriber Signalling System No. 2 (DSS 2); User-Network Interface (UNI) layer 3 specification for basic call/connection control".
- [42] ITU-T Recommendation T.70 (1993): "Network-independent basic transport service for the telematic services".
- [43] ITU-T Recommendation T.71 (1988): "Link access protocol balanced (LAPB) extended for half-duplex physical level facility".
- [44] ITU-T Recommendation V.42 (1996): "Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion".
- [45] ITU-T Recommendation X.25 (1996): "Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit".
- [46] ITU-T Recommendation X.75 (1996): "Packet-switched signalling system between public networks providing data transmission services".
- [47] ITU-T Recommendation X.213 (1995): "Information technology; Open Systems Interconnection; Network service definition".
- [48] ITU-T Recommendation X.223 (1993): "Use of X.25 to provide the OSI connection-mode network service for ITU-T applications".
- [49] ITU-T Recommendation X.233 (1997): "Information technology; Protocol for providing the connectionless-mode network service: Protocol specification".
- [50] ITU-T Recommendation E.164 (1997): "The international public telecommunication numbering plan".
- [51] ITU-T Recommendation X.121 (1996): "International numbering plan for public data networks".
- [52] ITU-T Recommendation I.241.1: "Telephony".

3 Definitions, symbols and abbreviations

3.1 Definitions

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

bearer service: type of telecommunication service that provides a defined capability for the transmission of signals between user-network interfaces.

broadcast: simplex point-to-multipoint mode of transmission.

C-plane: control plane of the DECT protocol stacks, which contains all of the internal DECT protocol control, but may also include some external user information.

NOTE 1: The C-plane stack always contains protocol entities up to and including the network layer.

call: all of the NetWorK (NWK) layer processes involved in one network layer peer-to-peer association.

NOTE 2: Call may sometimes be used to refer to processes of all layers, since lower layer processes are implicitly required.

DECT Fixed System (DFS): logical grouping that contains all the functions between the DECT D reference point and the reference point on the fixed side of the DECT air interface.

NOTE 3: The DFS = Fixed radio Termination (FT) + (local network up to the fixed side ISDN reference point (including fixed side IWU)), see System Description Document (SDD).

DECT NetWork (DNW): network that uses the DECT air interface to interconnect a local network to one or more portable applications. The logical boundaries of the DECT network are defined to be at the top of the DECT network layer.

NOTE 4: A DNW is a logical grouping that contains one or more FTs plus their associated portable radio termination. The boundaries of the DECT network are not physical boundaries.

DECT Portable System (DPS): logical grouping that contains all the functions between the DECT D reference point and the user interface on the portable side of the DECT air interface.

NOTE 5: The DPS = PT + (PA (portable application)), see SDD.

End System (ES): logical grouping that contains application processes and supports telecommunication services.

NOTE 6: From the Open Systems Interconnection (OSI) point of view, end systems are considered as sources and sinks of information.

Fixed Part (DECT Fixed Part) (FP): physical grouping that contains all of the elements in the DECT network between the local network and the DECT air interface.

NOTE 7: A FP contains the logical elements of at least one FT, plus additional implementation specific elements.

Fixed radio Termination (FT): logical group of functions that contains all of the DECT processes and procedures on the fixed side of the DECT air interface.

NOTE 8: A FT only includes elements that are defined in the DECT CI standard. This includes radio transmission elements together with a selection of layer 2 and layer 3 elements.

Global NetWork (GNW): telecommunication network capable of offering a long distance telecommunication service.

NOTE 9: The term does not include legal or regulatory aspects, nor does it indicate if the network is a public or a private network.

incoming call: call received at a portable part.

inter-operability: capability of FPs and portable parts, that enable a portable part to obtain access to teleservices in more than one location area and/or from more than one operator (more than one service provider).

InterWorking Unit (IWU): unit that is used to interconnect sub-networks.

NOTE 10: The IWU will contain the inter-working functions necessary to support the required sub-network inter-working.

ISDN Access Profile (IAP): defined part of the DECT/ISDN inter-working standard that ensures inter-operability between FPs and portable parts for the access of ISDN services.

Local NetWork (LNW): telecommunication network capable of offering local telecommunication services.

NOTE 11: The term does not include legal or regulatory aspects, nor does it indicate if the network is a public network or a private network.

MAC Connection (connection): association between one source Medium Access Control (MAC) Multi-Bearer Control (MBC) entity and one destination MAC MBC entity. This provides a set of related MAC services (a set of logical channels), and it can involve one or more underlying MAC bearers.

outgoing call: call originating from a portable part.

paging: process of broadcasting a message from a DECT FP to one or more DECT portable parts.

NOTE 12: Different types of paging message are possible. For example, the {LCE_REQUEST-PAGE} message orders the recipient to respond with a call set-up attempt.

Portable Application (PA): logical grouping that contains all the elements that lie beyond the DECT network boundary on the portable side.

NOTE 13: The functions contained in the portable application may be physically distributed, but any such distribution is invisible to the DECT network.

Portable Part (DECT Portable Part) (PP): physical grouping that contains all elements between the user and the DECT air interface. Portable part is a generic term that may describe one or several physical pieces.

NOTE 14: A PP is logically divided into one portable termination plus one or more portable applications.

Portable radio Termination (PT): logical group of functions that contains all of the DECT processes and procedures on the portable side of the DECT air interface.

NOTE 15: A PT only includes elements that are defined in the DECT CI standard. This includes radio transmission elements (layer 1) together with a selection of layer 2 and layer 3 elements.

Public Access Profile (PAP): defined part of the DECT common interface standard (DECT CI) that ensures inter-operability between FPs and portable parts for public access services.

Radio Fixed Part (RFP): one physical sub-group of a FP that contains all the Radio End Points (REP) (one or more) that are connected to a single system of antennas.

segment: one of the pieces of data that is produced by the process of segmentation.

NOTE 16: In general, one segment only represents a portion of a complete message.

segmentation: process of partitioning one service data unit from a higher layer into more than one protocol data unit. The reverse process is assembly.

supplementary service: service that modifies or supplements a basic telecommunication service.

teleservice: type of telecommunication service that provides the complete capability, including terminal equipment functions, for communication between users, according to protocols that are established by agreement.

U-Plane: user plane of the DECT protocol stacks. This plane contains most of the end-to-end (external) user information and user control.

NOTE 17: The U-plane protocols do not include any internal DECT protocol control, and it may be null at the network layer and at the Data Link Control (DLC) layers for some services.

3.2 Symbols

For the purposes of the present document the following symbols apply:

<>	timer
<<>>	information element
{ }	message

3.3 Abbreviations

3.3.1 DECT abbreviations

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

CC	Call Control
CI	Common Interface
CISS	Call Independent Supplementary Services
CLMS	ConnectionLess Message Service
CLSS	ConnectionLess Supplementary Service
COMS	Connection Oriented Message Service
D	DECT reference point for end system
DECT	Digital European Cordless Telecommunications
DFS	DECT Fixed System
DLC	Data Link Control, Layer 2b of the DECT protocol stack
DPS	DECT Portable System
FP	Fixed Part, (see definitions)
FT	Fixed radio Termination, (see definitions)
IAP	ISDN Access Profile
IWU	InterWorking Unit, (see definitions)
LCE	Link Control Entity
MAC	Medium Access Control, Layer 2a of the DECT protocol stack
MM	Mobility Management, a NWK layer functional grouping
NWK	NetWorK, Layer 3 of the DECT protocol stack
PAP	Public Access Profile
PP	Portable Part
PT	Portable radio Termination, (see definition)
REP	Radio End Point, (see definitions)
RFP	Radio Fixed Part, (see definitions)
SDD	System Description Document
TI	Transaction Identifier

3.3.2 ISDN abbreviations

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

3PTY	Three party
ADPCM	Adaptive Differential Pulse Code Modulation
AOC	Advice Of Charge
AOC-D	Advice Of Charge: charging information during the call
AOC-E	Advice Of Charge: charging information at the end of the call
AOC-S	Advice Of Charge: charging information at call set-up time
BC	Bearer Capability
B-NT	Network Termination for B-ISDN
CCBS	Completion of Calls to Busy Subscriber
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
COLP	Connected Line Identification Presentation
COLR	Connected Line Identification Restriction
CONF	Conference call, add-on
CUG	Closed User Group
CW	Call Waiting
DDI	Direct Dialling In
ECT	Explicit Call Transfer
FPH	Freephone
HLC	High Layer Compatibility
HOLD	Call Hold
ISDN	Integrated Services Digital Network
ISDN-TE	ISDN Terminal Equipment
LLC	Low Layer Compatibility
MCID	Malicious Call Identification
MSN	Multiple Subscriber Number
NT	Network Termination for ISDN
SS	Supplementary Services
SUB	Subaddressing
TP	Terminal Portability
UUS	User-to-User Signalling
UUS1	UUS service 1
UUS2	UUS service 2
UUS3	UUS service 3

3.3.3 ISO 9646 abbreviations

For the purposes of the present document, the following ISO/IEC 9646-1 [27] and ISO/IEC 9646-3 [28] abbreviation applies:

OSI	Open Systems Interconnection
-----	------------------------------