



Technical Specification

**Digital Enhanced Cordless Telecommunications (DECT);
Ultra Low Energy (ULE);
Machine to Machine Communications;
Part 1: Test Framework and Profile Test Specification (PTS)
for Home Automation Network (phase 1)**

Reference

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Contents

Intellectual Property Rights	5
Foreword.....	5
1 Scope	6
2 References	6
2.1 Normative references	6
2.2 Informative references.....	7
3 Definitions and abbreviations.....	7
3.1 Definitions.....	7
3.2 Symbols and abbreviations.....	8
4 Overview and structure	8
4.1 Structure of the present document.....	8
4.2 Overview of the different sections	9
4.2.1 Overview and Structure	9
4.2.2 Test framework and test architecture	9
4.2.3 Test interface specification	9
4.2.4 Profile Test Specification, Introduction and conventions	9
4.2.5 Profile Test Specification, Test Cases and Test Purposes (definition view).....	9
4.2.6 ULE Services, features and procedures to Test Cases traceability table.....	9
4.2.7 Description format of U-plane test vectors	10
4.2.8 Parameters for static and negotiated capabilities	10
4.2.9 PT and FT Test Case Library.....	10
4.2.10 Run time view of the Test Specification.....	10
4.2.11 Protocol Implementation Conformance Statement (PICS).....	10
5 Test Framework and test architecture.....	10
5.1 Overall ULE protocol architecture	11
5.2 ULE standards ecosystem	12
5.2.1 ULE DECT subsystem.....	12
5.2.2 Interfaces (Service Access Points) of the DECT subsystem.....	12
5.2.3 Routing and addressing sub-system.....	13
5.2.4 Application logic	13
5.3 Problem and solution to the testing of ULE phase 1	13
5.4 Test configurations: general approach.....	13
5.4.1 Test configuration for PT conformance testing	13
5.4.2 Test configuration for FT conformance testing	15
5.5 Test configurations: implementation by means of Man-Machine Interfaces	16
5.5.1 Test configuration for PT conformance testing: implementation of TP1 by means of Man-Machine Interfaces.....	16
5.5.2 Test configuration for FT conformance testing: implementation of TF1 by means of Man-Machine Interfaces.....	18
6 Test interfaces	19
6.1 Level of definition: functional definition	19
6.1.1 Possible implementations	19
6.2 General conventions.....	19
6.2.1 Definitions and terminology	19
6.2.1.1 "Commands" and "signals"	20
6.2.1.2 TP1 and TF1.....	20
6.2.1.3 Instance indicator	20
6.2.1.4 "Upstream" and "downstream"	20
6.2.2 Organization of the messages	20
6.3 Semantic definition for interfaces TP1 and TF1.....	21
6.3.1 Test preparation commands	21
6.3.2 Execution commands and signals	22
6.3.2.1 Execution commands and signals: U-plane transmission.....	22

6.3.2.2	Execution commands and signals: MAC control over ULE connection.....	22
6.3.2.3	Execution commands and signals: Mobility Management.....	23
6.3.2.4	Binding control commands.....	24
6.3.2.5	Execution commands and signals: CC Service call.....	24
6.3.2.6	Execution commands and signals: CC VC control.....	25
6.3.2.7	Execution commands and signals: IWU-to-IWU transport.....	26
6.3.2.8	Execution commands and signals: Paging descriptors.....	27
6.3.2.9	Execution commands and signals: Paging.....	28
6.3.3	Test post-processing commands.....	28
7	Profile Test Specification.....	29
7.1	Introduction and conventions.....	29
7.1.1	Overview.....	29
7.1.1.1	Description of the different views.....	29
7.1.2	Test Purposes and Test Cases conventions.....	29
7.1.2.1	Organization and terminology.....	29
7.1.2.2	Format for Test Purposes (TPs).....	30
7.1.2.3	Format for Test Cases (TCs).....	30
7.1.2.4	Column "status".....	30
7.1.3	General remarks.....	30
7.2	Profile Test Specification, Test Cases and Test Purposes (definition view).....	32
7.2.1	Portable Part Test Purposes.....	32
7.2.2	Fixed Part Test Purposes.....	50
7.3	ULE Services, features and procedures to Test Cases traceability tables.....	66
7.3.1	Purpose of this clause.....	66
7.3.2	Physical layer (PHL).....	66
7.3.3	MAC layer.....	67
7.3.4	DLC layer.....	76
7.3.5	Network (NWK) layer.....	82
7.3.6	Application layer.....	86
7.3.7	Management Entity.....	87
7.3.8	U-plane and interworking services.....	88
	Annex A (normative): Format conventions and content of U-plane test vectors.....	90
A.1	General conventions.....	90
A.1.1	Definition of U-plane test vector.....	90
A.1.2	Vector identification.....	90
A.1.3	Transmission input vector buffers.....	90
A.1.3.1	Maximum limits for input vector buffers.....	90
A.1.3.2	Identification and storage of the test vectors in the transmission input buffers.....	91
A.1.4	Transmission of a vector during the execution of the Test Cases.....	91
A.1.5	Reception buffers.....	91
A.1.5.1	Maximum limits for the reception buffers.....	91
A.2	Description Format of the Test vectors.....	92
	Annex B (normative): Parameters.....	93
B.1	Parameters for static and negotiated capabilities.....	93
B.1.1	Static and negotiated capabilities.....	93
B.1.1.1	Parameters for static capabilities.....	93
B.1.1.2	Parameters for dynamic or negotiated capabilities.....	94
	Annex C (informative): Bibliography.....	96
	History.....	97

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Foreword

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

The present document is part 1 of a multi-part deliverable covering the test specification of DECT Ultra Low Energy (ULE); as identified below:

Part 1: Test Framework and Profile Test Specification (PTS) for Home Automation Network (phase 1);

Part 2: Test Case Library (TCL) for Home Automation Network (phase 1);

Part 3: Protocol Implementation Conformance Statement (PICS) for Home Automation Network (phase 1).

The present document defines the Test Framework and the Profile Test Specification (PTS) for Home Automation Network (phase 1). Home Automation Network (phase 1) is defined as the functionality provided by TS 102 939-1 [10]. Further parts of this multi-part deliverable covering the Test Case Library or additional test specifications for ULE phase 1 or further phases will be defined in the future by other parts of this multi-part deliverable.

The present document is part of the testing specification of DECT Ultra Low Energy (ULE).

The present document is based on TS 102 939-1 [10] (DECT ULE; Home Automation Network - phase 1) and on EN 300 175, parts 1 to 8 [1] to [8] (DECT Common Interface).

The present document has been developed in accordance to the rules of documenting a profile specification as described in ISO/IEC 9646-6 [i.6].

The information in the present document is believed to be correct at the time of publication. However, DECT standardization is a rapidly changing area, and it is possible that some of the information contained in the present document may become outdated or incomplete within relatively short time-scales.

1 Scope

The present document contains the Test Framework and the Profile Test Specification (PTS) for "DECT Ultra Low Energy (ULE); Machine to Machine Communications; Part 1: Home Automation Network (phase 1) (TS 102 939-1 [10])". The present document covers both the Portable (PT) and the Fixed (FT) Radio terminations.

The objective of the present document is to provide a basis for approval tests of DECT Ultra Low Energy Part 1 equipment giving a high probability of air interface inter-operability between different manufacturer's DECT equipment.

The scope of the present document does not cover radio conformance test. The radio conformance is covered by the following documents:

- For devices operating in the DECT frequency band (1 880 MHz to 1 900 MHz): the radio test specification EN 300 176-1 [i.1] and EN 301 406 [i.2].
- For devices operating in the IMT-2000 frequency band (1 900 MHz to 1 920 MHz and other frequency bands): EN 301 908-10 [i.3].

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [i.4] and ISO/IEC 9646-2 [i.5]) as well as the ETSI rules for conformance testing (ETS 300 406 [i.8]) are used as a basis for the test methodology.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] ETSI EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] ETSI EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".
- [3] ETSI EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] ETSI EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] ETSI EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] ETSI EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] ETSI EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".