

ETSI TS 101 811-2-3 V1.2.1 (2003-07)

Technical Specification

**Broadband Radio Access Networks (BRAN);
HIPERLAN Type 2;
Conformance testing for the packet based convergence layer;
Part 2: Ethernet Service Specific Convergence Sublayer (SSCS);
Sub-part 3: Abstract Test Suite (ATS) specification**



Reference

RTS/BRAN-0024TA4-2-3

Keywords

access, ATS, HIPERLAN, testing

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - 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-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at

<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, send your comment to:

editor@etsi.org

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 2003.
All rights reserved.

DECT™, **PLUGTESTS™** and **UMTS™** are Trade Marks of ETSI registered for the benefit of its Members.
TIPHON™ and the **TIPHON logo** are Trade Marks currently being registered by ETSI for the benefit of its Members.
3GPP™ is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

Contents

Intellectual Property Rights	5
Foreword.....	5
1 Scope	6
2 References	6
3 Definitions and abbreviations.....	7
3.1 Definitions	7
3.2 Abbreviations	7
4 Abstract Test Method (ATM).....	8
4.1 Test architecture	8
4.2 Test Configurations	9
4.2.1 Test Configurations for MT	9
4.2.2 Test Configurations for AP.....	9
5 Untestable Test Purposes (TP)	10
6 ATS conventions	10
6.1 Naming conventions.....	10
6.1.1 Declarations part.....	10
6.1.1.1 General	10
6.1.1.2 Test suite operations definition	10
6.1.1.3 Test suite parameter declarations	10
6.1.1.4 Test case selection expression definition	11
6.1.1.5 Test suite constant declarations.....	11
6.1.1.6 Test suite variable declarations	11
6.1.1.7 Test case variable declarations	11
6.1.1.8 Timer declarations.....	11
6.1.1.9 ASP type definitions	11
6.1.1.10 PDU type definitions.....	12
6.1.1.11 CM type definitions.....	12
6.1.1.12 Alias definitions	12
6.1.2 Constraints part.....	12
6.1.2.1 General	12
6.1.3 Dynamic part	12
6.1.3.1 General	12
6.1.3.2 Test Case (TC) identifier.....	12
6.1.3.3 Test step identifier.....	13
6.1.3.4 Default identifier	13
6.1.3.5 Label identifier	13
6.1.3.6 ATS abbreviations.....	13
6.2 Implementation conventions	14
6.2.1 Declaration part	14
6.2.2 Constraint part	14
6.2.3 Dynamic part	14
7 Abstract testing service primitives	14
7.1 Tester primitives.....	14
7.2 RLC primitives	14
Annex A (normative): Abstract Test Suite (ATS)	15
A.1 The TTCN Graphical form (TTCN.GR)	15
A.2 The TTCN Machine Processable form (TTCN.MP).....	15
Annex B (normative): Partial PIXIT proforma for H/2 Ethernet SSCS MT	16
B.1 Identification summary.....	16

B.2	ATS summary	16
B.3	Test laboratory.....	16
B.4	Client identification.....	17
B.5	SUT	17
B.6	Protocol layer information.....	17
B.6.1	Protocol identification	17
B.6.2	IUT information	18
Annex C (normative): Partial PIXIT proforma for H/2 Ethernet SSCS AP		28
C.1	Identification summary.....	28
C.2	ATS summary	28
C.3	Test laboratory.....	28
C.4	Client identification.....	29
C.5	SUT	29
C.6	Protocol layer information.....	29
C.6.1	Protocol identification	29
C.6.2	IUT information	30
Annex D (normative): PCTR Proforma for H/2 Ethernet SSCS MT		39
D.1	Identification summary.....	39
D.1.1	Protocol conformance test report.....	39
D.1.2	IUT identification	39
D.1.3	Testing environment.....	39
D.1.4	Limits and reservation	40
D.1.5	Comments.....	40
D.2	IUT Conformance status	40
D.3	Static conformance summary	40
D.4	Dynamic conformance summary.....	41
D.5	Static conformance review report.....	41
D.6	Test campaign report.....	42
D.7	Observations.....	42
Annex E (normative): PCTR Proforma for H/2 Ethernet SSCS AP		43
E.1	Identification summary.....	43
E.1.1	Protocol conformance test report.....	43
E.1.2	IUT identification	43
E.1.3	Testing environment.....	43
E.1.4	Limits and reservation	44
E.1.5	Comments.....	44
E.2	IUT Conformance status	44
E.3	Static conformance summary	44
E.4	Dynamic conformance summary.....	45
E.5	Static conformance review report.....	45
E.6	Test campaign report.....	46
E.7	Observations.....	46
History		47

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 ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://webapp.etsi.org/IPR/home.asp>).

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 Broadband Radio Access Networks (BRAN).

The present document is part 2, sub-part 3 of a multi-part deliverable. Full details of the entire series can be found in part 1, sub-part 1 [10].

1 Scope

The present document contains the Test Suite Structure (TSS) and Test Purposes (TP) to test TS 101 493-2 [2].

The objective of the present document is to provide a basis for conformance tests for BRAN, HIPERLAN Type 2 equipment giving a high probability of air interface inter-operability between different manufacturer's BRAN, HIPERLAN Type 2 equipment.

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [5] and ISO/IEC 9646-2 [6]) as well as the ETSI rules for conformance testing (ETS 300 406 [4]) are used as a basis for the test methodology.

Annex A provides the Tree and Tabular Combined Notation (TTCN) part of the ATS.

Annex B provides the Partial Protocol Implementation Extra Information for Testing (PIXIT) Proforma of the MT side ATS.

Annex C provides the Partial Protocol Implementation Extra Information for Testing (PIXIT) Proforma of the AP side ATS.

Annex D provides the Protocol Conformance Test Report (PCTR) Proforma of the MT side ATS.

Annex E provides the Protocol Conformance Test Report (PCTR) Proforma of the AP side ATS.

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 and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

- [1] ETSI TS 101 493-1 (V1.1.1): "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Packet based Convergence Layer; Part 1: Common Part".
- [2] ETSI TS 101 493-2 (V1.2.1): "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Packet based Convergence Layer; Part 2: Ethernet Service Specific Convergence Sublayer (SSCS)".
- [3] ETSI TS 101 823-2-3 (V1.3.1): "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Conformance Testing for the Data Link Control (DLC) Protocol; Part 2: Radio Link Control (RLC) Sublayer; Sub-part 3: Abstract Test Suite (ATS) specification".
- [4] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [5] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [6] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification".
- [7] ISO/IEC 9646-3: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The tree and tabular combined notation".