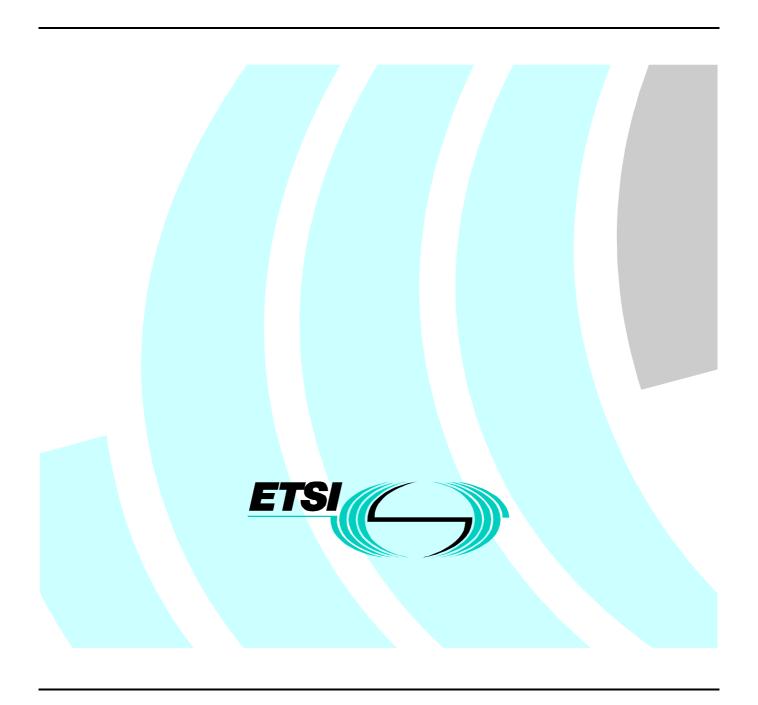
ETSI EN 301 067-5 V1.2.1 (2000-09)

European Standard (Telecommunications series)

Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
Connection characteristics;
Negotiation during call/connection establishment phase;
Part 5: Test Suite Structure and Test Purposes (TSS&TP)
specification for the network



Reference

REN/SPAN-05241-5

Keywords

ATM, ATS, B-ISDN, broadband, DSS2, ISDN, layer 3, network, PIXIT, UNI, TSS&TP

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: <u>http://www.etsi.org</u>

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://www.etsi.org/tb/status/

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 2000.
All rights reserved.

Contents

Intellectual Property Rights4					
Forev	word	4			
1	Scope				
2	References				
3	Definitions and abbreviations				
3.1	Definitions				
3.1.1	Definitions related to conformance testing	6			
3.1.2	Definitions related to EN 300 443-1				
3.2	Abbreviations	6			
4	Test Suite Structure (TSS)	7			
5	Test Purposes (TP)				
5.1	Introduction				
5.1.1	TP naming convention				
5.1.2	Source of TP definition				
5.1.3	Test strategy				
5.1.4	Test of call states	8			
5.2	TPs for the traffic parameters negotiation, network	8			
5.2.1	Signalling procedures at the coincident S_B/T_B and at the T_B reference points	8			
5.2.1.	Negotiating the traffic parameters at the origination interface	8			
5.2.1.					
5.2.1.	1.2 Negotiation acceptance (02)	11			
5.2.1.					
5.2.1.					
5.2.1.					
6	Compliance	14			
7	Requirements for a comprehensive testing service				
111810	ory	13			

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://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 ETSI 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 European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 5 of a multi-part standard covering the Digital Subscriber Signalling System No. 2 (DSS2) protocol specification for the B-ISDN connection negotiation during call/connection establishment phase, as identified below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2962 [8] (1996), modified]";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";
- Part 4: "Abstract Test Suite (ATS) and Partial Protocol Implementations eXtra Information for Testing (PIXIT) proforma specification for the user";
- Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

National transposition dates				
Date of adoption of this EN:	22 September 2000			
Date of latest announcement of this EN (doa):	31 December 2000			
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 June 2001			
Date of withdrawal of any conflicting National Standard (dow):	30 June 2001			

1 Scope

The present document specifies the network Test Suite Structure and Test Purposes (TSS&TP) for the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [5]) of implementations conforming to the standards for the signalling user-network layer 3 specification for connection negotiation during call/connection establishment phase of the Digital Subscriber Signalling System No. two (DSS2) protocol for the pan-European Broadband Integrated Services Digital Network (B-ISDN), EN 301 067-1 [1].

A further part of the present document specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on 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.
- [1] ETSI EN 301 067-1 (V1.1): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Negotiation during call/connection establishment phase; Part 1: Protocol specification [ITU-T Recommendation Q.2962 (1996), modified]".
- [2] ETSI EN 301 067-2 (V1.1): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Negotiation during call/connection establishment phase; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1: "Information technology Open Systems Interconnection Conformance testing methodology and framework; Part 1: General Concepts".
- [4] ISO/IEC 9646-2: "Information technology Open Systems Interconnection Conformance testing methodology and framework; Part 2: Abstract Test Suite specification".
- [5] ITU-T Recommendation I.413 (1993): "B-ISDN user-network interface".
- [6] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [7] ETSI 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]".
- [8] ITU-T Recommendation Q.2962: "Digital Subscriber Signalling System No. 2 Connection characteristics negotiation during call/connection establishment phase".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 301 067-1 [1] and EN 300 443-1 [7] and the following apply:

3.1.1 Definitions related to conformance testing

abstract test case: refer to ISO/IEC 9646-1 [3]

Abstract Test Method (ATM): refer to ISO/IEC 9646-1 [3]

Abstract Test Suite (ATS): refer to ISO/IEC 9646-1 [3]

Implementation Under Test (IUT): refer to ISO/IEC 9646-1 [3]

lower tester: refer to ISO/IEC 9646-1 [3]

Protocol Implementation Conformance Statement (PICS): refer to ISO/IEC 9646-1 [3]

PICS proforma: refer to ISO/IEC 9646-1 [3]

Protocol Implementation eXtra Information for Testing (PIXIT): refer to ISO/IEC 9646-1 [3]

PIXIT proforma: refer to ISO/IEC 9646-1 [3]

Test Purpose (TP): refer to ISO/IEC 9646-1 [3]

3.1.2 Definitions related to EN 300 443-1

network: DSS2 protocol entity at the Network side of the user-network interface where a T_B reference point or coincident S_B and T_B reference point applies

network (S_B/T_B): DSS2 protocol entity at the Network side of the user-network interface where a coincident S_B and T_B reference point applies

network (T_B): DSS2 protocol entity at the Network side of the user-network interface where a T_B reference point applies (user is the private ISDN)

3.2 Abbreviations

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

ATM Abstract Test Method ATS Abstract Test Suite

B-ISDN Broadband Integrated Services Digital Network DSS2 Digital Subscriber Signalling System No. two

IUT Implementation Under Test

N0 Null link state

N1 Call Initiated link state N10 Active link state

N3 Outgoing Call Proceeding link state

N4 Call Delivered link stateN6 Call Present link stateN7 Call Received link state

N9 Incoming Call Proceeding link state

PICS Protocol Implementation Conformance Statement
PIXIT Protocol Implementation eXtra Information for Testing

TP Test Purpose

TSS

Test Suite Structure

4 Test Suite Structure (TSS)

Signalling procedures at the coincident S_B/T_B and at the T_B reference points

Figure 1: Test suite structure

5 Test Purposes (TP)

5.1 Introduction

For each test requirement a TP is defined.

5.1.1 TP naming convention

TPs are numbered, starting at 01, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite (see table 1).

Table 1: TP identifier naming convention scheme

Identifier:	<sui< th=""><th>ite_id>_<group>_<nnn></nnn></group></th><th></th></sui<>	ite_id>_ <group>_<nnn></nnn></group>	
<suite_id></suite_id>	=	service + type of IUT:	"NEGN" for connection NEG otiation, IUT = N etwork
<group></group>	=	group number:	two-character field representing the group reference according to TSS
<nn></nn>	=	sequential number:	(01-99)

5.1.2 Source of TP definition

The TPs are based on EN 301 067-1 [1].

5.1.3 Test strategy

As the base standard EN 301 067-1 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification EN 301 067-2 [2].

The TPs are only based on conformance requirements related to the externally observable behaviour of the IUT, and are limited to conceivable situations to which a real implementation is likely to be faced (ETS 300 406 [6]).

5.1.4 Test of call states

Many TPs include a reference to the IUT's final call state after the realization of the TP. In these cases the TP includes the requirement to ensure that the IUT has entered this particular final call state. Ensuring that the IUT is in a particular call state shall be realized by following the procedures described in clause 5.6.11 of EN 300 443-1 [7]. According to these procedures, the IUT on receipt of a STATUS ENQUIRY message, shall respond with a STATUS message indicating, in the fifth octet of the Call state information element, the current call state of the IUT. This exchange of messages is not mentioned explicitly in each TP but is considered to be implicit in the reference to the final call state. This way of phrasing the TPs has been used to avoid over-complicating the text and structure of the TPs and to improve the readability.

5.2 TPs for the traffic parameters negotiation, network

All PICS items referred to in this clause are as specified in EN 301 067-2 [2] unless indicated otherwise by another numbered reference.

Unless specified:

- the messages indicated are valid and contain at least the mandatory information elements and possibly optional information elements;
- the information elements indicated are valid and contain at least the mandatory parameters and possibly optional parameters.

5.2.1 Signalling procedures at the coincident S_B/T_B and at the T_B reference points

5.2.1.1 Negotiating the traffic parameters at the origination interface

Test purposes for EN 301 067-1 [1] clause 9.1.

5.2.1.1.1 Traffic parameter negotiation procedures (01)

Test purposes for EN 301 067-1 [1] clause 9.1.2.

NEGN 01 01

Ensure that the IUT in N0, on receipt of a SETUP message, with both alternative ATM traffic descriptor information element, and minimum acceptable ATM traffic descriptor information element included,

- sends a RELEASE COMPLETE message with a cause information element indicating a cause value 73 "unsupported combination of traffic parameters" and remains in N0.

NEGN 01 02

Ensure that the IUT in N0, on receipt of a SETUP message, with the alternative ATM traffic descriptor information element (with not allowed combination of traffic parameters),

- processes the message as valid, optionally sends a STATUS message with a Cause information element indicating a cause value 100 "invalid information element contents" and enters N1.

$NEGN_01_03$

Ensure that the IUT in N0, on receipt of a SETUP message, with the minimum acceptable ATM traffic descriptor information element (with not allowed combination of traffic parameters),

- processes the message as valid, optionally send a STATUS message with a Cause information element indicating a cause value 100 "invalid information element contents" and enters N1.

NEGN 01 04

Ensure that the IUT in N0, on receipt of a SETUP message, with acceptable traffic parameters included in the ATM traffic descriptor information element, and acceptable traffic parameters included in the minimum acceptable ATM traffic descriptor information element,

 accept the message (resulting in sending a SETUP message including both the ATM traffic descriptor information element and the minimum acceptable ATM traffic descriptor information element) and enters the N1.

NEGN 01 05

Ensure that the IUT in N0, on receipt of a SETUP message, with acceptable traffic parameters included in the ATM traffic descriptor information element, and acceptable traffic parameters included in the alternative ATM traffic descriptor information element,

- accept the message (resulting in sending a SETUP message including both the ATM traffic descriptor information element and the alternative ATM traffic descriptor information element) and enters N1.

NEGN 01 06

Ensure that the IUT in N0, on receipt of a SETUP message, with acceptable traffic parameters included in the ATM traffic descriptor information element, and unacceptable traffic parameters included in the alternative ATM traffic descriptor information element,

- accept the message (resulting in sending a SETUP message including only the ATM traffic descriptor information element) and enters N1.

NEGN 01 07

Ensure that the IUT in N0, on receipt of a SETUP message, with unacceptable traffic parameters included in the ATM traffic descriptor information element, and unacceptable traffic parameters included in the minimum acceptable ATM traffic descriptor information element,

- sends a RELEASE COMPLETE message with a cause information element indicating a cause value 37 "user cell rate unavailable" and remains in NO.

NEGN 01 08

Ensure that the IUT in N0, on receipt of a SETUP message, with unacceptable traffic parameters included in the ATM traffic descriptor information element, and unacceptable traffic parameters included in the alternative ATM traffic descriptor information element,

- sends a RELEASE COMPLETE message with a cause information element indicating a cause value 37 "user cell rate unavailable" and remains in N0.

NEGN_01_09

Ensure that the IUT in N0, on receipt of a SETUP message, with unacceptable traffic parameters included in the ATM traffic descriptor information element, and traffic parameters included in the minimum acceptable ATM traffic descriptor information element such, that the IUT is able to provide traffic rates between the two sets of values,

- accept the message (resulting in sending a SETUP message including the ATM traffic descriptor information element with the adapted traffic parameters) and a minimum acceptable ATM traffic descriptor information element with traffic parameters which are still less than the corresponding parameter in the modified ATM traffic descriptor information element and enters N1.

NEGN_01_10

Ensure that the IUT in N0, on receipt of a SETUP message, with unacceptable traffic parameters included in the ATM traffic descriptor information element, and traffic parameters included in the minimum acceptable ATM traffic descriptor information element, which are the highest values the IUT is able to support,

- accept the message (resulting in sending a SETUP message including the ATM traffic descriptor information element containing traffic parameters, values of modified ones equal to traffic parameter values in the received minimum acceptable ATM traffic descriptor information element) and enters N1.

NEGN 01 11

Ensure that the IUT in N0, on receipt of a SETUP message, with unacceptable traffic parameters included in the ATM traffic descriptor information element, and acceptable traffic parameters included in the alternative ATM traffic descriptor information element,

- accept the message (resulting in sending a SETUP message including the ATM traffic descriptor information element with the adapted traffic parameters) and enters N1.

NEGN_01_12

Ensure that the IUT in N0, on receipt of a SETUP message, with an acceptable ATM traffic descriptor information element and an alternative ATM traffic descriptor information element (IE_flag = 0) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- sends a RELEASE COMPLETE message with a cause information element indicating a cause value 100 "invalid information element contents" and remains in N0.

NEGN 01 13

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and an alternative ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard IE, proceed and report status) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- discards the alternative ATM traffic descriptor information element (sends a SETUP at the remote interface with ATM traffic descriptor information element including original traffic parameter values only), sends a STATUS message (cause value = 100, call state value = 1) and enters N1.

NEGN 01 14

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and an alternative ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and ignore) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- sends no message and remains in N0.

NEGN 01 15

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and an alternative ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and report status) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- sends a STATUS message (cause value = 100, call state value = 0) and remains in NO.

NEGN_01_16

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and a minimum acceptable ATM traffic descriptor information element ($IE_flag = 0$) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- sends a RELEASE COMPLETE message with a cause information element indicating a cause value 100 "invalid information element contents" and remains in No.

NEGN 01 17

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and a minimum acceptable ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard IE, proceed and report status) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- discards the minimum acceptable ATM traffic descriptor information element (sends a SETUP at the remote interface with ATM traffic descriptor information element including original traffic parameter values only), sends a STATUS message (cause value = 100, call state value = 1) and enters N1.

NEGN_01_18

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and a minimum acceptable ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and ignore) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- sends no message and remains in N0.

NEGN 01 19

Ensure that the IUT in N0, on receipt of a SETUP message, with an ATM traffic descriptor information element and a minimum acceptable ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and report status) containing traffic parameters increased compared to those in the ATM traffic descriptor information element,

- sends a STATUS message (cause value = 100, call state value = 0) and remains in No."

NEGN_01_20

Ensure that the IUT in N4, on receipt of an ADD PARTY message when the SETUP message previously contained an ATM traffic descriptor information element and a minimum acceptable ATM traffic descriptor information element,

- sends an ADD PARTY REJECT message with a cause information element indicating a cause value 111 "protocol error, unspecified" and remains in N4.

Selection: IUT supports point-to-multipoint connection procedures

NEGN 01 21

Ensure that the IUT in N4, on receipt of an ADD PARTY message when the SETUP message previously contained an ATM traffic descriptor information element and an alternative ATM traffic descriptor information element,

- sends an ADD PARTY REJECT message with a cause information element indicating a cause value 111 "protocol error, unspecified" and remains in N4.

Selection: IUT supports point-to-multipoint connection procedures

5.2.1.1.2 Negotiation acceptance (02)

Test purposes for EN 301 067-1 [1] clause 9.1.3.

NEGN 02 01

Ensure that the IUT in N3, to indicate that the remote user has answered the call, with acceptable traffic parameters included in the ATM traffic descriptor information element,

- sends a CONNECT message including the ATM traffic descriptor information element, and enters N10.

NEGN 02 02

Ensure that the IUT in N4, to indicate that the remote user has answered the call, with acceptable traffic parameters included in the ATM traffic descriptor information element,

- sends a CONNECT message including the ATM traffic descriptor information element, and enters N10.

NEGN 02 03

Ensure that the IUT in N3, when the SETUP message contained a minimum acceptable ATM traffic descriptor information element and the remote user has answered the call without the ATM traffic descriptor information element,

- sends a CONNECT message with an ATM traffic descriptor information element, including the same set and values of traffic parameters as it was in the ATM traffic descriptor information element of the SETUP message, and enters N10.

NEGN 02 04

Ensure that the IUT in N4, when the SETUP message contained a minimum acceptable ATM traffic descriptor information element and the remote user has answered the call without the ATM traffic descriptor information element,

- sends a CONNECT message with an ATM traffic descriptor information element, including the same set and values of traffic parameters as it was in the ATM traffic descriptor information element of the SETUP message, and enters N10.

NEGN 02 05

Ensure that the IUT in N3, when the SETUP message contained an alternative ATM traffic descriptor information element and the remote user has answered the call without the ATM traffic descriptor information element,

- sends a CONNECT message with an ATM traffic descriptor information element, including the same set and values of traffic parameters as it was in the ATM traffic descriptor information element of the SETUP message, and enters N10.

NEGN 02 06

Ensure that the IUT in N4, when the SETUP message contained an alternative ATM traffic descriptor information element and the remote user has answered the call without the ATM traffic descriptor information element,

- sends a CONNECT message with an ATM traffic descriptor information element, including the same set and values of traffic parameters as it was in the ATM traffic descriptor information element of the SETUP message, and enters N10.

5.2.1.2 Negotiating the traffic parameters at the destination interface

Test purposes for EN 301 067-1 [1] clause 9.2.

5.2.1.2.1 Negotiation request (03)

Test purposes for EN 301 067-1 [1] clause 9.2.1.

NEGN 03 01

Ensure that the IUT in N0, to indicate the arrival of a call with negotiation of the traffic parameters (including an acceptable ATM traffic descriptor information element, and an acceptable minimum acceptable ATM traffic descriptor information element),

- sends a SETUP message with both the ATM traffic descriptor information element and the minimum acceptable ATM descriptor information element included and enters N6.

NEGN 03 02

Ensure that the IUT in N0, to indicate the arrival of a call with negotiation of the traffic parameters (including an acceptable ATM traffic descriptor information element, and an acceptable alternative ATM traffic descriptor information element),

- sends a SETUP message with both the ATM traffic descriptor information element and the alternative ATM descriptor information element included and enters N6.

5.2.1.2.2 Negotiation confirmation (04)

Test purposes for EN 301 067-1 [1] clause 9.2.3.

NEGN 04 01

Ensure that the IUT in N9 (having sent a SETUP message with the alternative ATM traffic descriptor information element), on receipt of a CONNECT message including an acceptable ATM traffic descriptor information element,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN_04_02

Ensure that the IUT in N9 (having sent a SETUP message with the alternative ATM traffic descriptor information element), on receipt of a CONNECT message without ATM traffic descriptor information element included,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN 04 03

Ensure that the IUT in N7 (having sent a SETUP message with the alternative ATM traffic descriptor information element), on receipt of a CONNECT message including an acceptable ATM traffic descriptor information element,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN 04 04

Ensure that the IUT in N7 (having sent a SETUP message with the alternative ATM traffic descriptor information element), on receipt of a CONNECT message without ATM traffic descriptor information element included,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN 04 05

Ensure that the IUT in N9 (having sent a SETUP message with the minimum acceptable ATM traffic descriptor information element), on receipt of a CONNECT message including an acceptable ATM traffic descriptor information element.

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN_04_06

Ensure that the IUT in N9 (having sent a SETUP message with the minimum acceptable ATM traffic descriptor information element), on receipt of a CONNECT message without ATM traffic descriptor information element included.

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN 04 07

Ensure that the IUT in N7 (having sent a SETUP message the minimum acceptable ATM traffic descriptor information element), on receipt of a CONNECT message including an acceptable ATM traffic descriptor information element,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN_04_08

Ensure that the IUT in N7 (having sent a SETUP message with the minimum acceptable ATM traffic descriptor information element), on receipt of a CONNECT message without ATM traffic descriptor information element included,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN_04_09

Ensure that the IUT in N7, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 0) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- sends a STATUS message (cause value = 100, call state value = 7) and remains in N7.

NEGN 04 10

Ensure that the IUT in N7, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard IE, proceed and report status) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- discards the IE (sends a CONNECT message with a correct ATM traffic description IE at the remote interface), sends a STATUS message (cause value = 100, call state value = 8), sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN 04 11

Ensure that the IUT in N7, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and ignore) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- sends no message and remains in N7.

NEGN 04 12

Ensure that the IUT in N7, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and report status) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- sends a STATUS message (cause value = 100, call state value = 7) and remains in N7.

NEGN_04_13

Ensure that the IUT in N9, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 0) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- sends a STATUS message (cause value = 100, call state value = 9) and remains in N9.

NEGN 04 14

Ensure that the IUT in N9, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard IE, proceed and report status) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- discards the IE (sends a CONNECT message with a correct ATM traffic description IE at the remote interface), sends a STATUS message (cause value = 100, call state value = 8), sends a CONNECT ACKNOWLEDGE message and enters N10.

NEGN 04 15

Ensure that the IUT in N9, on receipt of a CONNECT message with an ATM traffic descriptor information element ($IE_flag = 1$, $IE_AI = discard$ message and ignore) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- sends no message and remains in N9.

NEGN 04 16

Ensure that the IUT in N9, on receipt of a CONNECT message with an ATM traffic descriptor information element (IE_flag = 1, IE_AI = discard message and report status) including a different set of parameters as contained in the ATM traffic descriptor information element of the SETUP message,

- sends a STATUS message (cause value = 100, call state value = 9) and remains in N9.

6 Compliance

An ATS which complies with this TSS&TP specification shall:

- a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 5;
- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 5 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;
- e) comply with ISO/IEC 9646-2 [4].

In the case of a) or b) above, a subset shall be used only where a particular Abstract Test Method (ATM) makes some TPs untestable. All testable TPs from clause 5 shall be included in a compliant ATS.

7 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [4], shall be used by any organization claiming to provide a comprehensive testing service for network equipment claiming conformance to EN 301 067-1 [1].

History

Document history						
V1.1.3	November 1999	Publication				
V1.2.1	May 2000	One-step Approval Procedure OAP 20000922: 2000-05-24 to 2000-09-22				
V1.2.1	September 2000	Publication				