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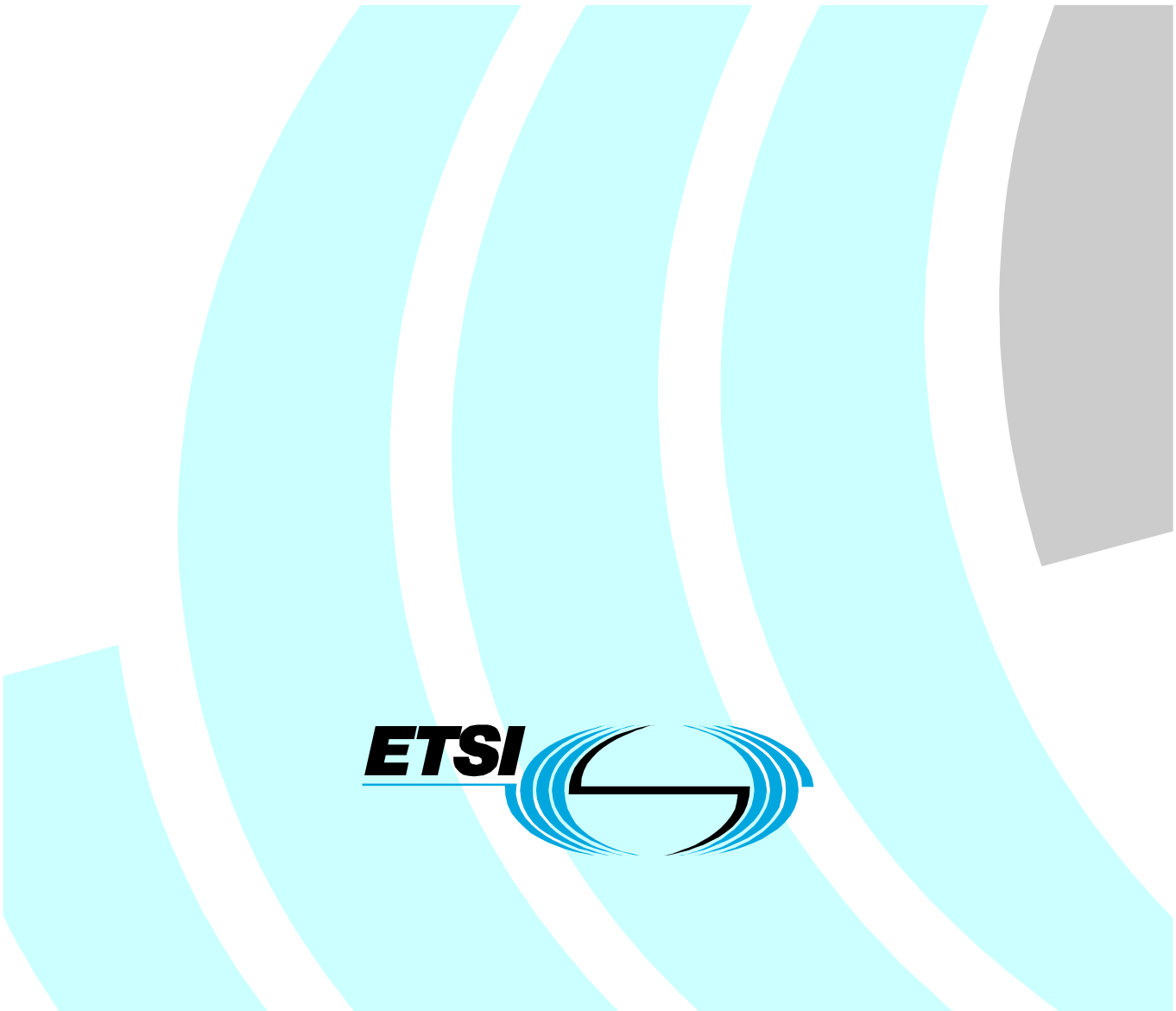
European Standard (Telecommunications series)

Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 4: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification



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Contents

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN), and is now submitted for the Vote phase of the ETSI standards Two-step Approval Procedure.

The present document is part 4 of a multi-part deliverable covering Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1), as identified below:

Part 1: "Protocol specification [ITU-T Recommendation Q.699, modified]";

Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";

Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification";

Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

1 Scope

The present document specifies the network Abstract Test Suite (ATS) for the interworking between ISDN [13] and non-ISDN access and the ISDN User Part functions and protocol of Signalling System No. 7 [2] to [5]. The interworking between the above signalling protocols is described in EN 300 899-1 [1] and occurs in an exchange with ISDN local exchange functionality and is specified in the context of a typical call in a pure ISDN or mixed ISDN/non-ISDN environment. The non-ISDN access defined in the present document means the analogue line access. The present document applies only to exchanges having implemented the ISUP V2 protocol specification.

A further part of the present document specifies the Test Suite Structure and Test Purposes (TSS&TP) related to this ATS and partial PIXIT proforma.

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.

[1] ETSI EN 300 899-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 1: Protocol specification [ITU-T Recommendation Q.699, modified]".

[2] ITU-T Recommendation Q.761: "Signalling System No. 7 - ISDN User Part functional description".

[3] ITU-T Recommendation Q.762: "Signalling System No. 7 - ISDN User Part general functions of messages and signals".

[4] ITU-T Recommendation Q.763: "Signalling System No. 7 - ISDN User Part formats and codes".

[5] ITU-T Recommendation Q.764: "Signalling System No. 7 - ISDN User Part signalling procedures".

[6] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[7] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification".

[8] ISO/IEC 9646-3: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation (TTCN)".

[9] ISO/IEC 9646-5: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 5: Requirements on test laboratories and clients for the conformance assessment process".

[10] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[11] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".

[12] ISO/IEC 9646-4: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 4: Test realization".

[13] ITU-T Recommendation Q.931: "ISDN user-network interface layer 3 specification for basic call control".

[14] ITU-T Recommendation Q.699: "Interworking between ISDN access and non-ISDN access over ISDN User Part of Signalling System No. 7".

[15] ETSI EN 300 899-3: "Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in:

- ISDN/ISUP interworking reference specification [14];
- ISDN layer 3 reference specification [13];
- ISDN User Part (ISUP) reference specification [2] to [5];
- ISO/IEC 9646-1 [6], ISO/IEC 9646-3 [8] and in ISO/IEC 9646-7 [10];

and the following apply:

Abstract Test Case (ATC): complete and independent specification of the actions required to achieve a specific test purpose, defined at the level of abstraction of a particular Abstract Test Method, starting in a stable testing state and ending in a stable testing state (see ISO/IEC 9646-1, clause 3.3.3)

Abstract Test Method (ATM): description of how an IUT is to be tested, given at an appropriate level of abstraction to make the description independent of any particular realization of a Means of Testing, but with enough detail to enable abstract test cases to be specified for this method (see ISO/IEC 9646-1, clause 3.3.5)

Abstract Test Suite (ATS): test suite composed of abstract test cases (see ISO/IEC 9646-1, clause 3.3.6)

Implementation Under Test (IUT): implementation of one or more OSI protocols in an adjacent user/provider relationship, being part of a real open system which is to be studied by testing (see ISO/IEC 9646-1, clause 3.3.43)

ISDN number: number conforming to the numbering and structure specified in ITU-T Recommendation E.164

Means of Testing (MOT): combination of equipment and procedures that can perform the derivation, selection, parameterization and execution of test cases, in conformance with a reference standardized ATS, and can produce a conformance log (see ISO/IEC 9646-1, clause 3.3.54)

PICS proforma: document, in the form of a questionnaire, which when completed for an implementation or system becomes the PICS

PIXIT proforma: document, in the form of a questionnaire, which when completed for the IUT becomes the PIXIT

Point of Control and Observation: point within a testing environment where the occurrence of test events is to be controlled and observed, as defined in an Abstract Test Method (see ISO/IEC 9646-1, clause 3.3.64)

Pre-test condition: setting or state in the IUT which cannot be achieved by providing stimulus from the test environment

Protocol Implementation Conformance Statement (PICS): statement made by the supplier of a protocol claimed to conform to a given specification, stating which capabilities have been implemented (see ISO/IEC 9646-1, clause 3.3.39 and clause 3.3.80)

Protocol Implementation eXtra Information for Testing (PIXIT): statement made by a supplier or implementor of an IUT (protocol) which contains or references all of the information related to the IUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the IUT (see ISO/IEC 9646-1, clause 3.3.41 and clause 3.3.81)

System Under Test (SUT): real open system in which the IUT resides (see ISO/IEC 9646-1, clause 3.3.103)

User: access protocol entity at the User side of the user-network interface where a T reference point or coincident S and T reference point applies

3.2 Abbreviations

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

ATC	Abstract Test Case
ATM	Abstract Test Method
ATS	Abstract Test Suite
CIC	Circuit Identification Code
DSS1	Digital Subscriber System No. 1
HLC	High Layer Compatibility
ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
IUT	Implementation Under Test
LLC	Low Layer Compatibility
LT	Lower Tester
MMI	Man Machine Interface
MOT	Means Of Testing
MTC	Main Test Component
NCI	Nature of Connection Indicators
NNI	Network-Network Interface
OBCI	Optional Backward Call Indicators
PCO	Point of Control and Observation
PCTR	Protocol Conformance Test Report
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
SCS	System Conformance Statement
SP	Signalling Point
SUT	System Under Test
TMR	Transmission Medium Requirement
TP	Test Purpose
TSS&TP	Test Suite Structure and Test Purposes
TSS	Test Suite Structure
TTCN	Tree and Tabular Combined Notation
UNI	User-Network Interface

NOTE: The ISUP message acronyms can be found in table 2/ITU-T Recommendation Q.762 [3].

4 Abstract Test Method

4.1 Identification of the system and implementation under test

The system under test (SUT) is a local exchange where calls originate and terminate.

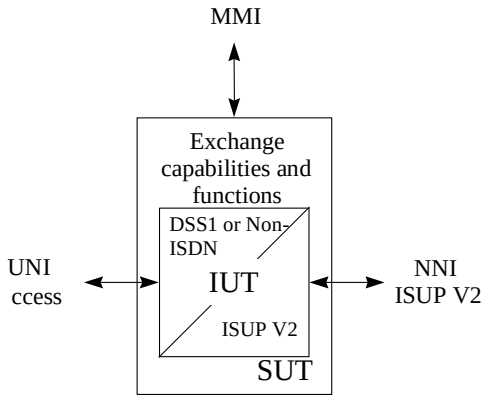

Figure 1: Exchange as SUT

The implementation under test (IUT) is the interworking implementation between the ISDN access or non-ISDN access signalling system and the ISUP V2 in this exchange, as shown in figure 1.

Circuit supervision is done mainly through the MMI (man machine interface) of the exchange. The MMI interface is implementation dependent and thus not standardized.

The effects of ISDN access signalling procedures can be observed on the D-channel on the UNI (user-network interface). The ISUP signalling protocol can be observed on the SS No. 7 link on the network-network interface (NNI).

4.2 ATM and testing configuration

The Abstract Test Method (ATM) chosen for this testing specification is the distributed multiparty test method. The ATM is defined at an appropriate level of abstraction so that the test cases may be specified appropriately, without adding restrictions to the implementation under test. The testing architectures are described in the following clauses.

The ATS is written in concurrent TTCN.

4.2.1 Test method

The requirement for testing the network SUT is to focus on both the behaviour of the network SUT at the user-network interface where a T reference point or coincident S and T reference point applies and on the behaviour of the ISUP circuit at the network-network interface.

It is possible to specify an ATS based on a Single party (remote) test method for such a SUT. However, it is considered that an ATS based on such an approach is of limited use as the only way to specify SUT generated PDUs is to use the "implicit send" statement. Many users of such an ATS would replace the "implicit send" statements with descriptions of the behaviour at other interfaces.

An ATS based on a multi-party test method is considered to be more useful in that it is closer to how a real test suite would be constructed. Such a test method specifies behaviour at multiple network interfaces. The test system is made up of one Main Test Component (MTC) and one or more Parallel Test Components (PTC), see figure 2.

To observe the mapping between DSS 1 layer 3 parameters and information elements and ISUP parameters and indicators, as defined in EN 300 899-1 [1], for each side a Point of Control and Observation (PCO) is needed. The PCO used by the LT to control the ISDN signalling is abbreviated with 'L1'; the ISUP signalling link is abbreviated with 'L2'. The ISDN and the ISUP PDUs to be sent and observed on the L1 and the L2 PCO side allow for PDU constraints to be specified and coded down to the bit level.

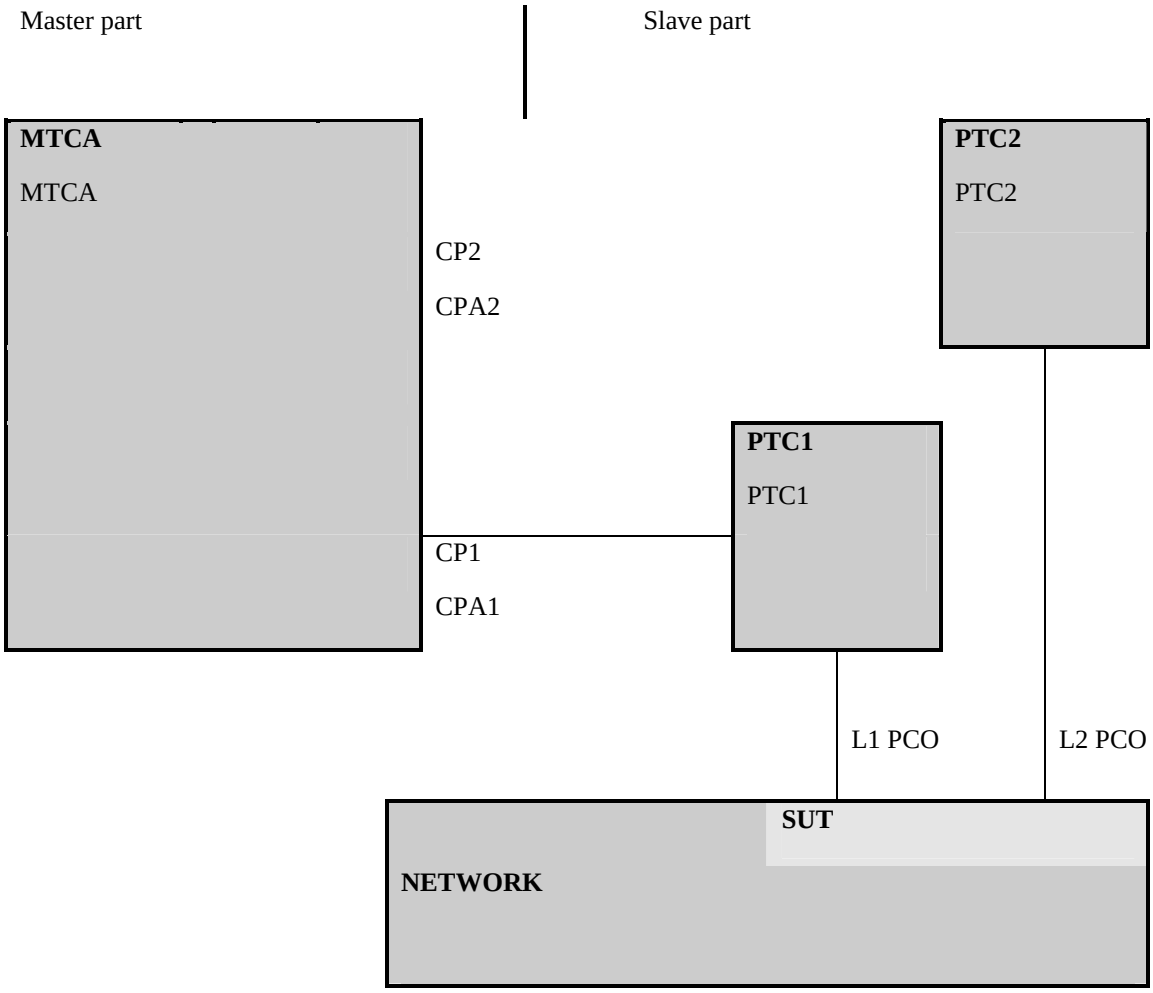

Figure 2: Test method

As EN 300 899-1 [1] focuses on the mapping between DSS 1 layer 3 parameters and information elements and ISUP parameters and indicators, no PCO for traffic channel functionality such as connectivity, tones and announcements is used in this testing recommendation.

In a master/slave arrangement, the MTC is considered to be the master while the PTCs are the slaves. The MTC MTCA has only one function in this configuration. It has the pure MTC function of controlling the two or more PTCs. Thus it is responsible for starting the PTCs and afterwards coordinates activities by exchanging Coordination Messages (CM) with the PTCs.

The "slave" testers are an explicit description of how to deal with the user-network and the network-network interfaces during the testing process, i.e. "how to make the SUT send the required message".

5 Untestable test purposes

The test purposes of the two test groups:

- Interworking from Non-ISDN access to ISUP (outgoing call), TP20xxxx;
- Interworking from ISUP to Non-ISDN access (incoming call), TP40xxxx;

have not been converted into TTCN code, as the behaviour of the non-ISDN part cannot be coded properly in TTCN, when using a test method as described above.

The test purposes of the two test groups:

- DSS1 Data link reset and Data Link failure procedures (outgoing call), TP111xxx;
- DSS1 Data link reset and Data Link failure procedures (incoming call), TP311xxx;

have not been converted into TTCN code, as the behaviour of the data link cannot be coded properly in TTCN, when using a test method as described in clause 4.2.1.

6 ATS to TP map

The identifiers used for the TPs (see EN 300 899-3 [15]) are reused as test case names. Thus there is a straightforward one-to-one mapping.

7 PCTR conformance

A test laboratory, when requested by a client to produce a PCTR, is required, as specified in ISO/IEC 9646-5 [9], to produce a PCTR conformant with the PCTR template given in annex B of ISO/IEC 9646-5 [9].

Furthermore, a test laboratory, offering testing for the ATS specification contained in annex C, when requested by a client to produce a PCTR, is required to produce a PCTR conformant with the PCTR proforma contained in annex A of the present document.

A PCTR which conforms to this PCTR proforma specification shall preserve the content and ordering of the clauses contained in annex A. Clause A.6 of the PCTR may contain additional columns. If included, these shall be placed to the right of the existing columns. Text in italics may be retained by the test laboratory.

8 PIXIT conformance

A test realizer, producing an executable test suite for the Abstract Test Suite (ATS) specification contained in annex C, is required, as specified in ISO/IEC 9646-4 [12], to produce an augmented partial PIXIT proforma conformant with this partial PIXIT proforma specification.

An augmented partial PIXIT proforma which conforms to this partial PIXIT proforma specification shall, as a minimum, have contents which are technically equivalent to annex B. The augmented partial PIXIT proforma may contain additional questions that need to be answered in order to prepare the Means Of Testing (MOT) for a particular Implementation Under Test (IUT).

A test laboratory, offering testing for the ATS specification contained in annex C, is required, as specified in ISO/IEC 9646-5 [9], to further augment the augmented partial PIXIT proforma to produce a PIXIT proforma conformant with this partial PIXIT proforma specification.

A PIXIT proforma which conforms to this partial PIXIT proforma specification shall, as a minimum, have contents which are technically equivalent to annex B. The PIXIT proforma may contain additional questions that need to be answered in order to prepare the test laboratory for a particular IUT.

9 ATS conformance

The test realizer producing a Means Of Testing (MOT) and Executable Test Suite (ExTS) for this Abstract Test Suite (ATS) specification shall comply with the requirements of ISO/IEC 9646-4 [12]. In particular, these concern the realization of an ExTS based on each ATS. The test realizer shall provide a statement of conformance of the MOT to this ATS specification.

An ExTS which conforms to this ATS specification shall contain test groups and test cases which are technically equivalent to those contained in the ATS in annex C. All sequences of test events comprising an abstract test case shall be capable of being realized in the executable test case. Any further checking which the test system might be capable of performing is outside the scope of this ATS specification and shall not contribute to the verdict assignment for each test case.

Test laboratories running conformance test services using this ATS shall comply with ISO/IEC 9646-5 [9].

A test laboratory which claims to conform to this ATS specification shall use an MOT which conforms to this ATS.

Annex A (normative): Protocol Conformance Test Report (PCTR) proforma

A.1 Identification summary

A.1.1 Protocol conformance test report

PCTR number:	
PCTR Date:	
Corresponding SCTR number:	
Corresponding SCTR date:	
Test Laboratory identification:	
Test Laboratory Manager:	
Signature:	

A.1.2 IUT identification

Name:	
Version:	
Protocol specification:	EN 300 899-1
PICS:	
Previous PCTRs (if any):	

A.1.3 Testing environment

PIXIT Reference number:	
ATS Specification:	EN 300 899-4
Abstract Test Method:	Multi-Party test method (see ISO/IEC 9646-2)
Means of Testing identification:	
Dates of testing:	
Conformance Log reference(s):	
Retention Date for Log reference(s):	

A.1.4 Limits and reservations

Additional information relevant to the technical contents or further use of the test report, or to the rights and obligations of the test laboratory and the client, may be given here. Such information may include restriction on the publication of the report.

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A.1.5 Comments

Additional comments may be given by either the client or the test laboratory on any of the contents of the PCTR, for example, to note disagreement between the two parties.

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A.2 IUT Conformance status

This IUT has or has not been shown by conformance assessment to be non-conforming to the specified protocol specification.

Strike the appropriate words in this sentence. If the PICS for this IUT is consistent with the static conformance requirements (as specified in clause A.3 of the present document) and there are no "FAIL" verdicts to be recorded (in clause A.6) strike the words "has or", otherwise strike the words "or has not".

A.3 Static conformance summary

The PICS for this IUT is or is not consistent with the static conformance requirements in the specified protocol.

Strike the appropriate words in this sentence.

A.4 Dynamic conformance summary

The test campaign did or did not reveal errors in the IUT.

Strike out the appropriate words in this sentence. If there are no "FAIL" verdicts to be recorded (in clause A.6 of EN 300 899-4) strike the words "did or", otherwise strike the words "or did not".

Summary of the results of groups of tests:

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A.5 Static conformance review report

If clause A.3 indicates non-conformance, this clause itemizes the mismatches between the PICS and the static conformance requirements of the specified protocol specification.

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A.6 Test campaign report

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
ATS Interworking_ISDN_ISUP				
TC101001				
TC101002				
TC101003				
TC101004				
TC101005_01				
TC101005_02				
TC101005_03				
TC101005_04				
TC101005_05				
TC101005_06				
TC101005_07				
TC101005_08				
TC101005_09				
TC101005_10				
TC101005_11				
TC101005_12				
TC101005_13				
TC101005_14				
TC101005_15				
TC101005_16				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC101005_17				
TC101005_18				
TC101006				
TC101007				
TC101008				
TC101009				
TC101010				
TC101011				
TC101012_01				
TC101012_02				
TC101014_01				
TC101014_02				
TC101014_03				
TC101014_04				
TC101014_05				
TC101014_06				
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TC103006				
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TC103008_04				
TC103008_05				
TC103009				
TC103010				
TC103011				
TC103012				
TC103013				
TC103014				
TC103015				
TC103016				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC103017_01				
TC103017_02				
TC103017_03				
TC103017_04				
TC103017_05				
TC103018				
TC103019_01				
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TC107003				

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TC107005				
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TC107007				
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ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
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TC108074				
TC108075				
TC108076				
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TC108093				
TC108094				
TC108095				
TC108096				
TC108101				
TC108102				
TC108103				
TC108111				
TC108112				
TC108113				
TC108114				
TC108115				
TC108116				
TC108121				
TC108122				
TC108123				
TC109001				
TC109002				
TC109003				
TC109004				
TC109005				
TC109006				
TC109007				
TC109008				
TC109009				
TC109010				
TC109011				
TC109012				
TC109013				
TC109014				
TC109015				
TC112001				
TC113001				
TC114001				
TC115001				
TC115002				
TC115003				
TC115004				
TC115005				
TC115006				
TC115007				
TC115008				
TC115009				
TC115010				
TC115011				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC115012				
TC115013				
TC301001				
TC301002				
TC301003				
TC301004				
TC301005				
TC301006				
TC301007				
TC301008				
TC301009				
TC301011				
TC301012				
TC301013				
TC301014				
TC301015				
TC301016				
TC302001				
TC303001				
TC303002				
TC303003				
TC303004				
TC303005_01				
TC303005_02				
TC303006_01				
TC303006_02				
TC303007_01				
TC303007_02				
TC303008_01				
TC303008_02				
TC303009				
TC303010				
TC303011				
TC303012				
TC303013_01				
TC303013_02				
TC303014_01				
TC303014_02				
TC303015_01				
TC303015_02				
TC303016_01				
TC303016_02				
TC303017_01				
TC303017_02				
TC303018_01				
TC303018_02				
TC303019				
TC303020				
TC303021				
TC303022				
TC303023				
TC303024				
TC303025				
TC303026				
TC303027				
TC303028				
TC303029				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC304001				
TC304002				
TC304003				
TC304004				
TC304005_01				
TC304005_02				
TC304006_01				
TC304006_02				
TC304007				
TC304008				
TC304009				
TC304010				
TC304011				
TC304012				
TC304013_01				
TC304013_02				
TC304014_01				
TC304014_02				
TC304015_01				
TC304015_02				
TC304016_01				
TC304016_02				
TC304017				
TC304018				
TC304019				
TC304020				
TC304021				
TC304023_01				
TC304023_02				
TC304024_01				
TC304024_02				
TC304025_01				
TC304025_02				
TC304026_01				
TC304026_02				
TC304027_01				
TC304027_02				
TC304028				
TC304029				
TC305001				
TC305002				
TC305003				
TC305004				
TC305005				
TC305006				
TC305007				
TC305008				
TC305009				
TC305010				
TC305011_01				
TC305011_02				
TC305012_01				
TC305012_02				
TC305013				
TC305014				
TC305015_01				
TC305015_02				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC305016_01				
TC305016_02				
TC305017				
TC305018				
TC305019				
TC305020				
TC305021_01				
TC305021_02				
TC305022_01				
TC305022_02				
TC305023				
TC305024				
TC305025				
TC305026				
TC305027				
TC305028_01				
TC305028_02				
TC305029				
TC305030_01				
TC305030_02				
TC305031				
TC305032				
TC305033_01				
TC305033_02				
TC306001				
TC306002				
TC306003				
TC306004				
TC306005				
TC306006				
TC306007				
TC306008				
TC306009				
TC306010				
TC306011				
TC306012				
TC306013				
TC306014				
TC306015				
TC306016_01				
TC306016_02				
TC306017_01				
TC306017_02				
TC306018_01				
TC306018_02				
TC306019				
TC306020				
TC306021				
TC306022_01				
TC306022_02				
TC306023_01				
TC306023_02				
TC306024_01				
TC306024_02				
TC306025				
TC306026				
TC306027				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC306028				
TC306029				
TC306030				
TC306031_01				
TC306031_02				
TC306032_01				
TC306032_02				
TC306033_01				
TC306033_02				
TC307101				
TC307102				
TC307103				
TC307104				
TC307105				
TC307106				
TC307107				
TC307108				
TC307109				
TC307110				
TC307111				
TC307202				
TC307203				
TC307204				
TC307205				
TC307206				
TC307207				
TC307208				
TC307209				
TC307301				
TC308011				
TC308012				
TC308013				
TC308021				
TC308022				
TC308023				
TC308031				
TC308032				
TC308033				
TC308041				
TC308042				
TC308043				
TC308051				
TC308052				
TC308053				
TC308061				
TC308062				
TC308063				
TC308071				
TC308072				
TC308073				
TC308081				
TC308082				
TC308083				
TC308091				
TC308092				
TC308093				
TC308101				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC308102				
TC308103				
TC308111				
TC308112				
TC308113				
TC308121				
TC308131				
TC308132				
TC308133				
TC309001				
TC309002				
TC309003				
TC309004				
TC309005				
TC309006				
TC309007				
TC309008				
TC309009				
TC309010				
TC309011				
TC309012				
TC309013				
TC309014				
TC309015				
TC312001				
TC312002				
TC312003				
TC312004				
TC312005				
TC312006				
TC313101				
TC313102				
TC313103				
TC313104				
TC313105				
TC313106				
TC313107				
TC313108				
TC313109				
TC313110				
TC313111				
TC313112				
TC313201				
TC313202				
TC313203				
TC313204				
TC313205				
TC313206				
TC313207				
TC313208				
TC313209				
ATS Interworking_PMP				
TC314001				
TC314002_01				
TC314002_02				
TC314003_01				
TC314003_02				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC314003_03				
TC314004_01				
TC314004_02				
TC314004_03				
TC314005_01				
TC314005_02				
TC314006				
TC314007				
TC314008_01				
TC314008_02				
TC314008_03				
TC314009				
TC314010				
TC314011_01				
TC314011_02				
TC314012_01				
TC314012_02				
TC314013				
TC314014				
TC314015_01				
TC314015_02				
TC314015_03				
TC314015_04				
TC314016_01				
TC314016_02				
TC314017_01				
TC314017_02				
TC314017_03				
TC314018_01				
TC314018_02				
TC314019_01				
TC314019_02				
TC314019_03				
TC314020_01				
TC314020_02				
TC314021_01				
TC314021_02				
TC314021_03				
TC314022				
TC314023_01				
TC314023_02				
TC314024_01				
TC314024_02				
TC315001				
TC315002				
TC315003				
TC315004				
TC315005				
TC315006				
TC316001				
TC316002				
TC316003				
TC316004				
TC316005				
TC316006				
ATS ISDN_ISUP_SS3				
TC505101_01				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC505101_02				
TC505102_01				
TC505102_02				
TC505103_01				
TC505103_02				
TC505104_01				
TC505104_02				
TC505105_01				
TC505105_02				
TC505106_01				
TC505106_02				
TC505107_01				
TC505107_02				
TC505108_01				
TC505108_02				
TC505109_01				
TC505109_02				
TC505110_01				
TC505110_02				
TP505111_01				
TP505111_02				
TC505112_01				
TC505112_02				
TC505113_01				
TC505113_02				
TC505114_01				
TC505114_02				
TC505115_01				
TC505115_02				
TC505116_01				
TC505116_02				
TC505117_01				
TC505117_02				
TC505118_01				
TC505118_02				
TC505119_01				
TC505119_02				
TC505120_01				
TC505120_02				
TC505121_01				
TC505121_02				
TC505121_03				
TC505121_04				
TC505122_01				
TC505122_02				
TC505122_03				
TC505122_04				
TC505123_01				
TC505123_02				
TC505123_03				
TC505123_04				
TC505123_05				
TC505123_06				
TC505123_07				
TC505123_08				
TC505123_09				
TC505123_10				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC505124_01				
TC505124_02				
TC505124_03				
TC505124_04				
TC505124_05				
TC505124_06				
TC505124_07				
TC505124_08				
TC505124_09				
TC505124_10				
TC505201_01				
TC505201_02				
TC505202_01				
TC505202_02				
TC505203_01				
TC505203_02				
TC505204_01				
TC505204_02				
TC505205_01				
TC505205_02				
TC505206_01				
TC505206_02				
TC505207_01				
TC505207_02				
TC505208_01				
TC505208_02				
TC505209_01				
TC505209_02				
TC505210_01				
TC505210_02				
TC505211_01				
TC505211_02				
TC505212_01				
TC505212_02				
TC505213				
TC505214				
TC505215				
TC505216				
TC505217				
TC505218				
TC513101_01				
TC513101_02				
TC513102				
TP513103_01				
TP513103_02				
TP513104_01				
TP513104_02				
TP513105_01				
TP513105_02				
TP513106				
TP513201_01				
TP513201_02				
TP513202				
TP515101				
TP515102				
TP515103				
TP515104_01				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TP515104_02				
TP515105_01				
TP515105_02				
TP515106_01				
TP515106_02				
TP515107				
TP515201				
TP515202				
TP515203				
TC605001_01				
TC605001_02				
TC605001_03				
TC605001_04				
TC605001_05				
TC605001_06				
TC605002_01				
TC605002_02				
TC605002_03				
TC605002_04				
TC605002_05				
TC605002_06				
TC605003_01				
TC605003_02				
TC605003_03				
TC605003_04				
TC605003_05				
TC605003_06				
TC605004_01				
TC605004_02				
TC605004_03				
TC605004_04				
TC605004_05				
TC605004_06				
TC605005_01				
TC605005_02				
TC605005_03				
TC605005_04				
TC605005_05				
TC605005_06				
TC605006_01				
TC605006_02				
TC605006_03				
TC605006_04				
TC605006_05				
TC605006_06				
TC605006_07				
TC605006_08				
TC605006_09				
TC605006_10				
TC605006_11				
TC605006_12				
TC605007_01				
TC605007_02				
TC605007_03				
TC605007_04				
TC605007_05				
TC605007_06				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC605007_07				
TC605007_08				
TC605007_09				
TC605007_10				
TC605007_11				
TC605007_12				
TC605008_01				
TC605008_02				
TC605008_03				
TC605008_04				
TC605008_05				
TC605008_06				
TC605008_07				
TC605008_08				
TC605008_09				
TC605008_10				
TC605008_11				
TC605008_12				
TC605009_01				
TC605009_02				
TC605009_03				
TC605009_04				
TC605009_05				
TC605009_06				
TC605009_07				
TC605009_08				
TC605009_09				
TC605009_10				
TC605009_11				
TC605009_12				
TC605010_01				
TC605010_02				
TC605010_03				
TC605010_04				
TC605010_05				
TC605010_06				
TC605010_07				
TC605010_08				
TC605010_09				
TC605010_10				
TC605010_11				
TC605010_12				
TC605011_01				
TC605011_02				
TC605011_03				
TC605011_04				
TC605011_05				
TC605011_06				
TC605012_01				
TC605012_02				
TC605012_03				
TC605012_04				
TC605012_05				
TC605012_06				
TC605013_01				
TC605013_02				
TC605013_03				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC605013_04				
TC605013_05				
TC605013_06				
TC605014_01				
TC605014_02				
TC605014_03				
TC605014_04				
TC605014_05				
TC605014_06				
TC605015_01				
TC605015_02				
TC605015_03				
TC605015_04				
TC605015_05				
TC605015_06				
TC605016_01				
TC605016_02				
TC605016_03				
TC605016_04				
TC605016_05				
TC605016_06				
TC605017_01				
TC605017_02				
TC605017_03				
TC605017_04				
TC605017_05				
TC605017_06				
TC605018_01				
TC605018_02				
TC605018_03				
TC605018_04				
TC605018_05				
TC605018_06				
TC605019_01				
TC605019_02				
TC605019_03				
TC605019_04				
TC605019_05				
TC605019_06				
TC605020_01				
TC605020_02				
TC605020_03				
TC605020_04				
TC605020_05				
TC605020_06				
TC605021_01				
TC605021_02				
TC605021_03				
TC605021_04				
TC605021_05				
TC605021_06				
TC605022_01				
TC605022_02				
TC605022_03				
TC605022_04				
TC605022_05				
TC605022_06				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC605023_01				
TC605023_02				
TC605023_03				
TC605023_04				
TC605023_05				
TC605023_06				
TC605024_01				
TC605024_02				
TC605024_03				
TC605024_04				
TC605024_05				
TC605024_06				
TC605025_01				
TC605025_02				
TC605025_03				
TC605025_04				
TC605025_05				
TC605025_06				
TP613101_01				
TP613101_02				
TP613102_01				
TP613102_02				
TP613103_01				
TP613103_02				
TP613104				
TP623201_01				
TP613201_02				
TP613202_01				
TP613202_02				
TP613203_01				
TP613203_02				
TP613204				
TP615101				
TP615102				
TP615103				
TP615201				
TP615202				
TP615203				
ATS ISDN_ISUP_SS4				
TP510101				
TP510102				
TP510103				
TP510104				
TP510201				
TP510202				
TP510203				
TP510204				
TP510205				
TP510206				
TP510207				
TP510208				
TP510209				
TP510210				
TP510211				
TP510301				
TP510302				
TP510303				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC511101				
TC511102				
TC511103				
TC511104				
TC511105				
TC511106				
TC511107				
TC511108				
TC511109_01				
TC511109_02				
TC511110				
TC511111				
TC511112				
TC511113				
TC511114				
TC511201				
TP512101				
TP512102				
TP512103				
TP512104				
TP512105				
TP512106				
TP512107				
TP512108				
TP512109				
TP512110				
TP512111				
TP512112				
TP512113				
TP512114				
TP512201				
TP512202				
TP512203				
TP512204				
TP512205				
TP512206				
TP512207				
TP512208				
TP512209				
TP512210				
TP512211				
TP512212				
TP512213				
TP512214				
TP512215				
TP512216				
TP512217				
TP512218				
TP512219				
TP512220				
TP512221				
TP512222				
TP512223				
TP512224_01				
TP512224_02				
TP512225				
TP512226				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TP512227				
TP512228				
TP512229				
TP512230				
TP512231				
TP512232				
TP512233				
TP512234				
TP512235				
TP610101				
TP610102				
TP610103				
TP610104				
TP610201				
TP610202				
TP610203				
TP610204				
TP610205				
TP610206				
TP610207				
TP610208				
TP610209				
TP610210				
TP610211				
TP610301				
TP610302				
TP610303				
TC611101_01				
TC611101_02				
TC611101_03				
TC611101_04				
TC611102_01				
TC611102_02				
TC611102_03				
TC611102_04				
TC611103_01				
TC611103_02				
TC611103_03				
TC611103_04				
TC611104_01				
TC611104_02				
TC611105_01				
TC611105_02				
TC611106_01				
TC611106_02				
TC611107				
TC611108				
TC611109				
TC611110_01				
TC611110_02				
TC611111				
TC611112				
TC611113				
TC611201				
TP612101				
TP612102				
TP612103				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TP612104				
TP612105				
TP612106				
TP612107				
TP612108				
TP612109				
TP612110				
TP612111				
TP612112				
TP612113				
TP612114				
TP612115				
TP612201				
TP612202				
TP612203				
TP612204				
TP612205				
TP612206				
TP612207				
TP612208				
TP612209				
TP612210				
TP612211				
TP612212				
TP612213				
TP612214				
TP612215				
TP612216				
TP612217				
TP612218				
TP612219				
TP612220				
TP612221				
TP612222				
TP612223				
TP612224				
TP612225				
TP612226				
TP612227				
TP612228				
TP612229				
TP612230				
TP612231				
TP612232				
TP612233				
TP612234				
TP612235				
TP612236				
TP612237				
TP612238				
TP612239				
TP612240				
TP612241				
TP612242				
TP612243				
TP612244				
TP612245				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TP612246				
TP612247				
TP612248				
TP612249				
TP612250				
ATS ISDN_ISUP_SS5				
TC501101				
TC501102				
TC501103				
TC501104				
TC501105_01				
TC501105_02				
TC501106_01				
TC501106_02				
TC501107_01				
TC501107_02				
TC501108_01				
TC501108_02				
TC501201				
TC501202				
TC501203				
TC501204				
TC501205				
TC501206				
TC501207_01				
TC501207_02				
TC501208_01				
TC501208_02				
TC501209_01				
TC501209_02				
TC501210_01				
TC501210_02				
TC501211_01				
TC501211_02				
TC501212_01				
TC501212_02				
TC501213_01				
TC501213_02				
TC501214_01				
TC501214_02				
TC502101				
TC502102_01				
TC502102_02				
TC502103				
TC502104_01				
TC502104_02				
TC502105				
TC502201				
TC502202_01				
TC502202_02				
TC502203				
TC502204_01				
TC502204_02				
TC502205				
TC503101_01				
TC503101_02				
TC503101_03				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC503101_04				
TC503102_01				
TC503102_02				
TC503102_03				
TC503102_04				
TC503103_01				
TC503103_02				
TC503103_03				
TC503103_04				
TC503104_01				
TC503104_02				
TC503104_03				
TC503104_04				
TC503105_01				
TC503105_02				
TC503106_01				
TC503106_02				
TC503107_01				
TC503107_02				
TC503108_01				
TC503108_02				
TC503109				
TC503110				
TC503111				
TC503112				
TC503113				
TC503114				
TC503115				
TC503116				
TC503117				
TC503118				
TC503119				
TC503120				
TC503201				
TC503202				
TC503203				
TC503204				
TC504001				
TC506001				
TC506002				
TC506003				
TC506004				
TC507101				
TC507102				
TC507201				
TC507202				
TC507203				
TC507204				
TC507301				
TC507302				
TC508101				
TC508102				
TC508103				
TC508104				
TC508201				
TC508202				
TC508301				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC508302				
TC601101_01				
TC601101_02				
TC601101_03				
TC601101_04				
TC601102_01				
TC601102_02				
TC601102_03				
TC601102_04				
TC601103_01				
TC601103_02				
TC601104_01				
TC601104_02				
TC601105_01				
TC601105_02				
TC601106_01				
TC601106_02				
TC601107				
TC601108				
TC601109				
TC601110				
TC601111				
TC601112				
TC601113				
TC601114				
TC601201				
TC601202				
TC602101				
TC602102				
TC602103				
TC602104				
TC602105				
TC602106				
TC602107				
TC602108				
TC602109_01				
TC602109_02				
TC602110_01				
TC602110_02				
TC602111_01				
TC602111_02				
TC602112_01				
TC602112_02				
TC602113_01				
TC602113_02				
TC602114_01				
TC602114_02				
TC602115_01				
TC602115_02				
TC602116_01				
TC602116_02				
TC602201				
TC602202				
TC602203				
TC602204				
TC602205				
TC602206				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC602207				
TC602208				
TC602209				
TC602210				
TC602211				
TC602212				
TC602213_01				
TC602213_02				
TC602214_01				
TC602214_02				
TC602215_01				
TC602215_02				
TC602216_01				
TC602216_02				
TC602217_01				
TC602217_02				
TC602218_01				
TC602218_02				
TC602219_01				
TC602219_02				
TC602220_01				
TC602220_02				
TC602221_01				
TC602221_02				
TC602222_01				
TC602222_02				
TC602223_01				
TC602223_02				
TC602224_01				
TC602224_02				
TC602225_01				
TC602225_02				
TC602226_01				
TC602226_02				
TC602227_01				
TC602227_02				
TC602228_01				
TC602228_02				
TC603101				
TC603102				
TC603103_01				
TC603103_02				
TC603104_01				
TC603104_02				
TC603105				
TC603106				
TC603107_01				
TC603107_02				
TC603108_01				
TC603108_02				
TC603109				
TC603110				
TC603201				
TC603202				
TC603203_01				
TC603203_02				
TC603204_01				

ATS Reference	Selected? (Y/N)	Run? (Y/N)	Verdict	Observations
TC603204_02				
TC603205				
TC603206				
TC603207_01				
TC603207_02				
TC603208_01				
TC603208_02				
TC603209				
TC603210				
TC604001				
TC606101				
TC606102				
TC606103				
TC606201				
TC606202				
TC606203				
TC606204				
TC606205				
TC607101				
TC607102				
TC607103				
TC607104				
TC607201				
TC607202				
TC607301				
TC607302				
TC608101				
TC608102				
TC608103				
TC608104				
TC608201				
TC608202				
TC608301				
TC608302				

A.7 Observations

Additional information relevant to the technical content of the PCTR is given here.

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Annex B (normative): Partial PIXIT proforma

B.1 Identification summary

PIXIT Number:

_____

Test laboratory name:

_____

Date of issue:

_____

Issued to:

_____

B.2 Abstract test suite summary

Protocol Specification:	EN 300 899-1
ATS Specification:	EN 300 899-4
Abstract Test Method:	Multi-party test method (see ISO/IEC 9646-2)

B.3 Test laboratory

Test Laboratory identification:

_____

Accreditation status of the test service:

_____

Accreditation reference:

_____

Test laboratory manager:

_____

Test laboratory contact:

_____

Means of testing:

_____

Test laboratory instructions for completion:

_____

B.4 Client (of the test laboratory)

Client identification:

_____

Client test manager:

_____

Client contact:

_____

Test facilities required:

_____

B.5 SUT

Name:

_____

Version:

_____

SCS reference:

_____

Machine configuration:

_____

Operating system identification:

_____

IUT identification:

_____

PICS (all layers):

_____

Limitations of the SUT:

_____

Environmental Conditions:

_____

B.6 Protocol information

B.6.1 Protocol identification

Specification reference: EN 300 899-1

Protocol Version:

PICS Reference:

NOTE: The PICS Reference should reference a completed PICS which is conformant with the PICS proforma contained in EN 300 899-2.

B.6.2 Introduction

The abstract test suite has been split into five different Sub-ATSs due to the number of tests and due to technical reasons related to the different test configurations involved. The content of the different ATSs is as following:

Interworking_ISDN_ISUP: Tests for basic call at ISDN T and coincident S/T reference point.

Interworking_PMP: Test for basic call at coincident S/T reference point in multi-point configuration with more than one terminal attached.

ISDN_ISUP_SS3: Tests for supplementary services at ISDN T and coincident S/T reference point. Call Diversion, CCBS, CCNR.

ISDN_ISUP_SS4: Tests for supplementary services at ISDN T and coincident S/T reference point. 3PTY, CUG, UUS1.

ISDN_ISUP_SS5: Tests for supplementary services at ISDN T and coincident S/T reference point. CLIP, CLIR, COLP, COLR, CW, HOLD, SUB, TP.

B.6.3 Parameters for ATS Interworking_ISDN_ISUP

B.6.3.1 PICS questions

NOTE: The PICS questions relevant to this ATS have been repeated here to help the test operator.

B.6.3.1.1 ISUP side

PXP_AUTO_ACM

Possible values: YES/NO

YES: The system under test automatically transmits an ACM message in response to an IAM message carrying the end-of-pulsing (ST) indication.

NO: The system under test does not automatically transmit an ACM message in response to an IAM message carrying the end-of-pulsing (ST) indication. The ACM message has to be triggered explicitly by a CALL PROCEEDING message on the ISDN side.

Value:	

PCP_ENBLOC

Possible values: YES/NO

YES: The system under test uses the en-bloc sending operation in the forward address signalling.

NO: The system under test does not use the en-bloc sending operation in the forward address signalling.

Value:	

PCP_OVERLAP

Possible values: YES/NO

YES: The system under test uses the overlap sending operation in the forward address signalling.

NO: The system under test does not use the overlap sending operation in the forward address signalling.

Value:	

PCP_SPFBACK

Possible values: YES/NO

YES: The system under test supports signalling procedures for connections allowing fallback.

NO: The system under test does not support signalling procedures for connections allowing fallback.

Value:	

PCP_ST

Possible values: YES/NO

YES: The system under test supports sending of the end-of-pulsing (ST).

NO: The system under test does not support sending of the end-of-pulsing (ST).

Value:	

PCP_SPEECH

Possible values: YES/NO

YES: The system under test supports the connection type speech.

NO: The system under test does not support connection type speech.

Value:	

PCP_3_1KHZ

Possible values: YES/NO

YES: The system under test supports the connection type 3,1 kHz audio.

NO: The system under test does not support connection type 3,1 kHz audio.

Value:	

PCP_64KB

Possible values: YES/NO

YES: The system under test supports the connections with a transfer rate of 64 kbit/s.

NO: The system under test does not support connections with a transfer rate of 64 kbit/s.

Value:	

PCP_2×64KB

Possible values: YES/NO

YES: The system under test supports the connections with a transfer rate of 2 × 64 kbit/s.

NO: The system under test does not support connections with a transfer rate of 2 × 64 kbit/s.

Value:	

PCP_384KB

Possible values: YES/NO

YES: The system under test supports the connections with a transfer rate of 384 kbit/s.

NO: The system under test does not support connections with a transfer rate of 384 kbit/s.

Value:	

PCP_1 536KB

Possible values: YES/NO

YES: The system under test supports the connections with a transfer rate of 1 536 kbit/s.

NO: The system under test does not support connections with a transfer rate of 1 536 kbit/s.

Value:	

PCP_1 920KB

Possible values: YES/NO

YES: The system under test supports the connections with a transfer rate of 1 920 kbit/s.

NO: The system under test does not support connections with a transfer rate of 1 920 kbit/s.

Value:	

B.6.3.1.2 ISDN side

PC_BASIC

Possible values: YES/NO

YES: The ISDN access under test is of the basic access type.

NO: The ISDN access under test is of the primary rate access type.

Value:	

PC_STREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the coincident S/T reference point type.

NO: The ISDN access under test is not of the coincident S/T reference point type.

Value:	

PC_TREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the T reference point type.

NO: The ISDN access under test is not of the T reference point type.

Value:	

PC_PT_PT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-point.

NO: The ISDN access under test is not configured point-to-point.

Value:	

PC_MPT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-multipoint.

NO: The ISDN access under test is not configured point-to-multipoint.

Value:	

PC_ENBLOC

Possible values: YES/NO

YES: The system under test supports the en-bloc sending procedures (i.e. sends all address information in the SETUP message).

NO: The system under test does not support the en-bloc sending procedures.

Value:	

PC_OVERLAP

Possible values: YES/NO

YES: The system under test supports the overlap sending procedures (i.e. sends the address information split across in the SETUP and in one or several INFORMATION messages).

NO: The system under test does not support the overlap sending procedures.

Value:	

PC_SPEECH

Possible values: YES/NO

YES: The system under test supports the information transfer capability speech.

NO: The system under test does not support the information transfer capability speech.

Value:	

PC_3_1KHZ

Possible values: YES/NO

YES: The system under test supports the information transfer capability 3,1 kHz audio.

NO: The system under test does not support the information transfer capability 3,1 kHz audio.

Value:	

PC_UDI

Possible values: YES/NO

YES: The system under test supports the information transfer capability unrestricted digital information.

NO: The system under test does not support the information transfer capability unrestricted digital information.

Value:	

PC_UDITA

Possible values: YES/NO

YES: The system under test supports the information transfer capability unrestricted digital information with tones/announcements.

NO: The system under test does not support the information transfer capability unrestricted digital information with tones/announcements.

Value:	

PC_64KB

Possible values: YES/NO

YES: The system under test supports the information transfer rate 64 kbit/s.

NO: The system under test does not support the information transfer rate 64 kbit/s.

Value:	

PC_2×64KB

Possible values: YES/NO

YES: The system under test supports the information transfer rate 2 × 64 kbit/s.

NO: The system under test does not support the information transfer rate 2 × 64 kbit/s.

Value:	

PC_384KB

Possible values: YES/NO

YES: The system under test supports the information transfer rate 384 kbit/s.

NO: The system under test does not support the information transfer rate 384 kbit/s.

Value:	

PC_1 536KB

Possible values: YES/NO

YES: The system under test supports the information transfer rate 1 536 kbit/s.

NO: The system under test does not support the information transfer rate 1 536 kbit/s.

Value:	

PC_1 920KB

Possible values: YES/NO

YES: The system under test supports the information transfer rate 1 920 kbit/s.

NO: The system under test does not support the information transfer rate 1 920 kbit/s.

Value:	

PC_MULT

Possible values: YES/NO

YES: The system under test supports the information transfer rate multirate.

NO: The system under test does not support the information transfer rate multirate.

Value:	

PC_RATE MULT_6

Possible values: YES/NO

YES: The system under test supports the information transfer rate multiplier 6.

NO: The system under test does not support the information transfer rate multiplier 6.

Value:	

PC_RATE MULT_24

Possible values: YES/NO

YES: The system under test supports the information transfer rate multiplier 24.

NO: The system under test does not support the information transfer rate multiplier 24.

Value:	

PC_RATE MULT_30

Possible values: YES/NO

YES: The system under test supports the information transfer rate multiplier 30.

NO: The system under test does not support the information transfer rate multiplier 30.

Value:	

B.6.3.2 PIXIT questions

B.6.3.2.1 ISUP side

B.6.3.2.1.1 Address signals, to be received on the ISUP side

PXP_ADSG_OVERL

Value type: HEXSTRING

Address signal of a Calling Party Number parameter to be received in an IAM message including the end of pulsing signal ST, if necessary. The receiving of this information on the ISUP side is triggered by sending the number information as given in PX_CGPN_L_P and PX_CGPN_V_P (see below) on the ISDN side.

Value:	

PXP_ADSG_OVERL

Value type: HEXSTRING

Complete address signal of a Called Party Number parameter to be received in an IAM message including the end of pulsing signal ST, if necessary. The receiving of this information on the ISUP side is triggered by sending the complete number information on the ISDN side.

Value:	

PXP_CGPN_V

Value type: HEXSTRING

Address signal of a Subsequent Number parameter to be received in a SAM message including the end of pulsing signal ST, if necessary. The receiving of this information on the ISUP side is triggered by sending the number information as given in PX_ADSG_OVERL_N22_P (see below) on the ISDN side.

Value:	

B.6.3.2.1.2 Address signals, to be sent on the ISUP side

PXP_CDPNL_ST

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_ST_P.

Value:	

PXP_CDPNV_ST

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing the complete address information and the end of pulsing signal ST, if necessary. This value is used in an IAM message.

Value:	

PXP_CDPNL_OVERL1

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_OVERL1_P.

Value:	

PXP_CDPNV_OVERL1

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing not enough address information to cause the sending of a SETUP message on the ISDN side and not containing the end of pulsing signal ST. This value is used in an IAM message.

Value:	

PXP_CDPNL_OVERL2

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_OVERL2_P.

Value:	

PXP_CDPNV_OVERL2

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing enough address information to cause the sending of a SETUP message on the ISDN side and not containing the end of pulsing signal ST. This value is used in a SAM message.

Value:	

PXP_CDPNL_OVERL3

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_OVERL3_P.

Value:	

PXP_CDPNV_OVERL3

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing enough address information to cause the sending of a SETUP message on the ISDN side and containing the end of pulsing signal ST. This value is used in a SAM message.

Value:	

B.6.3.2.1.3 Message header

PXP_NI_R

Value type: BITSTRING [2]

Network indicator value.

Value:	

PXP_SP_IUT

Value type: INTEGER

Signalling point code value for the ISUP access under test. (DPC seen from the tester)

Value:	

PXP_SP_TISUP

Value type: INTEGER

Signalling point code value for the tester. (OPC seen from the tester)

Value:	

PXP_SLS

Value type: BITSTRING [4]

Signalling link selection value.

Value:	

PXP_CIC_R

Value type: BITSTRING [12]

Circuit identification code value to be sent by the IUT.

Value:	

PXP_CIC_S

Value type: BITSTRING [12]

Circuit identification code value to be sent to the IUT.

Value:	

B.6.3.2.1.4 Backward call indicators

PXP_ISUPI

Value type: BITSTRING [1]

ISDN user part indicator value of the backward call indicator.

Value:	

PXP_ISDNAI

Value type: BITSTRING [1]

ISDN access indicator value of the backward call indicator.

Value:	

PXP_OBCI

Value type: BITSTRING [1]

In-band information value of the optional backward call indicator.

Value:	

B.6.3.2.1.5 Forward call indicator

PXP_NI_CALL_IND

Value type: BITSTRING [1]

National/international call indicator value of the forward call indicator.

Value:	

PXP_EE_METHOD

Value type: BITSTRING [2]

End-to-end method indicator value of the forward call indicator.

Value:	

PXP_EE_INFO_IND

Value type: BITSTRING [1]

End-to-end information indicator value of the forward call indicator.

Value:	

PXP_SCCP_IND

Value type: BITSTRING [2]

SSCP method indicator value of the forward call indicator.

Value:	

B.6.3.2.1.6 Nature of connection indicator

PXP_NCI_SATE

Value type: BITSTRING [2]

Satellite indicator value of the nature of connection indicator.

Value:	

PXP_NCI_CONT_CHECK

Value type: BITSTRING [2]

Continuity check indicator value of the nature of connection indicator.

Value:	

PXP_NCI_ECHO_CTRL

Value type: BITSTRING [1]

Echo control device indicator value of the nature of connection indicator.

Value:	

B.6.3.2.1.7 Calling party's category

PXP_CGPG

Value type: BITSTRING [8]

Calling party's category field value.

Value:	

B.6.3.2.1.8 Transmission Medium Requirement

PXP_TMR

Value type: OCTETSTRING [1]

Transmission medium requirement field value.

Value:	

PXP_TMRP

Value type: OCTETSTRING [1]

Transmission medium requirement prime field value.

Value:	

B.6.3.2.1.9 User Service Information

PXP_USI_LENGTH

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_USI_VALUE_P.

Value:	

PXP_USI_VALUE

Value type: OCTETSTRING

User service information value.

Value:	

B.6.3.2.1.10 Cause Indicators

PXP_CAU_LOC_ISUP

Value type: BITSTRING [4]

Location value on the ISUP side.

Value:	

PXP_CAU_VAL_ISUP

Value type: BITSTRING [7]

Cause value on the ISUP side.

Value:	

B.6.3.2.1.11 Timer

PXP_T_GUARD

Value type: INTEGER

Value for the timer that controls the execution of the tests; value in seconds.

This timer should be set to a value of a minimum of 30 seconds. Higher values may be required for tests checking the correct implementation of protocol timers.

Value:	

PXP_T6MIN

Value type: INTEGER

Minimum value for timer T6; value in seconds.

Value:	

PXP_T6MAX

Value type: INTEGER

Maximum value for timer T6; value in seconds.

Value:	

B.6.3.2.2 ISDN side

B.6.3.2.2.1 Address signals

PX_CDPN_ND

Possible values: All octet string codings valid for number digits

Complete number digits associated with the ISUP access of the first parallel test component to be included in the Called party number information element which the system under test accepts in incoming SETUP messages.

Value:	

PX_CDPN_OCTET3

Value type: OCTETSTRING [1]

Octet 3 of the Called party number information element (Type of Number and Numbering Plan Identification parameter) which the system under test accepts in incoming SETUP messages.

Value:	

PX_CDPN_OVERL_N21_ND

Possible values: All octet string codings valid for number digits

Partial number digits (enough to cause the sending of the IAM message) associated with the ISUP access of the first parallel test component to be included in the Called party number information element which the system under test accepts in incoming SETUP messages.

Value:	

PX_LCDPN_OVERL_N21

Value type: OCTETSTRING [1]

Length of the Called party number information element given in PX_CDPN_OVERL_N21_ND_P and PX_CDPN_OCTET3_P.

Value:	

PX_CDPN_OVERL_N22_ND

Possible values: All octet string codings valid for number digits

Additional number digits associated with the ISUP access of the first parallel test component to be included in the Called party number information element of an INFORMATION message.

Value:	

PX_LCDPN_OVERL_N22

Value type: OCTETSTRING [1]

Length of the Called party number information element given in PX_CDPN_OVERL_N22_ND_P and PX_CDPN_OCTET3_P.

Value:	

PX_CDPN_OVERL_N1_ND

Possible values: All octet string codings valid for number digits

Partial number digits (not enough to cause the sending of the IAM message) associated with the ISUP access of the first parallel test component to be included in the Called party number information element which the system under test accepts in incoming SETUP messages.

Value:	

PX_LCDPN_OVERL_N1

Value type: OCTETSTRING [1]

Length of the Called party number information element given in PX_CDPN_OVERL_N1_ND_P and PX_CDPN_OCTET3_P.

Value:	

PX_CDPN_OVERL_N2_ND

Possible values: All octet string codings valid for number digits

Additional number digits (enough to cause the sending of the IAM message) associated with the ISUP access of the first parallel test component to be included in the Called party number information element of an INFORMATION message.

Value:	

PX_LCDPN_OVERL_N2

Value type: OCTETSTRING [1]

Length of the Called party number information element given in PX_CDPN_OVERL_N2_ND_P and PX_CDPN_OCTET3_P.

Value:	

PX_CGPN_L

Value type: OCTETSTRING [1]

Length of the Called party number information element given in PX_CGPN_V.

Value:	

PX_CGPN_V

Possible values: All octet string codings valid for number digits

Coding for a Calling Party Number information element (all octets following the length field).

Value:	

B.6.3.2.2.2 Access related information

PX_CH_NUM

Possible values: 1, 2, if PC_BASIC_P = YES; 1 .. 30, if PC_BASIC_P = NO

Value for a B-channel number which the system can accept at the access associated with the main test component.

Value:	

PX_CR_LENGTH

Value type: BITSTRING [4]

'0001'B: The system under test is of the basic access type.

'0010'B: The system under test is of the primary rate access type.

Value:	

PX_L2_INIT

Possible values: YES/NO

YES: The layer 2 multiple frame established operation should be re-established before the start of each test.

NO: The layer 2 multiple frame established operation should not be re-established before the start of each test.

Value:	

PX_WAIT_RESTART

Possible values: YES/NO

YES: The system sends a RESTART message after the establishment of the layer 2 multiple frame established operation.

NO: The system does not send a RESTART message after the establishment of the layer 2 multiple frame established operation.

Value:	

B.6.3.2.2.3 Service information (BCAP, HLC, LLC)

PX_BCAPL

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_P.

Value:	

PX_BCAPV

Possible values: All octet string codings valid for Bearer capability

Value for the Bearer capability information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_HLCL1

Value type: OCTETSTRING [1]

Length of the High layer compatibility information element given in PX_HLCV1_P.

Value:	

PX_HLCV1

Possible values: All octet string codings valid for High layer compatibility

Value for the High layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_HLCL2

Value type: OCTETSTRING [1]

Length of the High layer compatibility information element given in PX_HLCV2_P.

Value:	

PX_HLCV2

Possible values: All octet string codings valid for High layer compatibility

Value for a second High layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_HLCL_INVAL

Value type: OCTETSTRING [1]

Length of the High layer compatibility information element given in PX_HLCV_INVAL_P.

Value:	

PX_HLCV_INVAL

Possible values: All octet string codings valid for High layer compatibility

Value for a High layer compatibility information element containing an invalid value.

Value:	

PX_LLCL

Value type: OCTETSTRING [1]

Length of the Low layer compatibility information element given in PX_LLCV_P.

Value:	

PX_LLCV

Possible values: All octet string codings valid for Low layer compatibility

Value for the Low layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_LLCL_INVAL

Value type: OCTETSTRING [1]

Length of the High layer compatibility information element given in PX_LLCV_INVAL_P.

Value:	

PX_LLCV_INVAL

Possible values: All octet string codings valid for Low layer compatibility

Value for a Low layer compatibility information element containing an invalid value.

Value:	

B.6.3.2.2.4 Cause

PXP_CAU_LOC_ISDN

Value type: BITSTRING [4]

Location value on the ISDN side.

Value:	

PXP_CAU_VAL_ISDN

Value type: BITSTRING [7]

Cause value on the ISDN side.

Value:	

B.6.3.2.2.5 Progress Indicator

PXP_PI_LOC

Value type: BITSTRING [4]

Location value on the ISDN side.

Value:	

PXP_PI_PD

Value type: INTEGER

Progress description on the ISDN side.

Value:	

PXP_PI_PD_NOT8

Value type: INTEGER

Progress description (value other than 8) on the ISDN side.

Value:	

PXP_PI_INVAL_LOC

Value type: BITSTRING [4]

Location value for use in an invalid Progress descriptor information element.

Value:	

PXP_PI_INVAL_PD

Value type: INTEGER

Progress description for use in an invalid Progress descriptor information element.

Value:	

B.6.3.2.2.6 Timer

PX_TAC

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by stimulus messages sent by the test tool; value in seconds.

Value:	

PX_TNOAC

Value type: INTEGER

Value for the timer that controls the inactivity of the system under test to stimulus messages sent by the test tool; value in seconds.

Value:	

PX_T_RESTART

Value type: INTEGER

Value for the timer that controls the receipt of RESTART message sent by the system under test after the establishment of the layer 2 multiple frame established operation (only relevant, if PX_WAIT_RESTART_P is supported); value in seconds.

Value:	

PX_TWAIT

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by the parallel test component or the test operator; value in seconds.

Value:	

PXP_T301MIN

Value type: INTEGER

Minimum value for timer T301; value in seconds.

Value:	

PXP_T301MAX

Value type: INTEGER

Maximum value for timer T301; value in seconds.

Value:	

PXP_T303MIN

Value type: INTEGER

Minimum value for timer T303; value in seconds.

Value:	

PXP_T303MAX

Value type: INTEGER

Maximum value for timer T303; value in seconds.

Value:	

PXP_T310MIN

Value type: INTEGER

Minimum value for timer T310; value in seconds.

Value:	

PXP_T310MAX

Value type: INTEGER

Maximum value for timer T310; value in seconds.

Value:	

B.6.3.2.2.7 Bearer capabilities

PX_BCAPL_SPEECH

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_SPEECH_P.

Value:	

PX_BCAPV_SPEECH

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = speech, octet 3 onwards).

Value:	

PX_BCAPL_3_1KHZ_AUDIO

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_3_1KHZ_AUDIO_P.

Value:	

PX_BCAPV_3_1KHZ_AUDIO

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = 3,1 kHz audio, octet 3 onwards).

Value:	

PX_BCAPL_UDI_64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_64KB_P.

Value:	

PX_BCAPV_UDI_64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = 64 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDI_2×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_2×64KB_P.

Value:	

PX_BCAPV_UDI_2×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = 2 × 64 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDI_384KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_384KB_P.

Value:	

PX_BCAPV_UDI_384KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = 384 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDI_1 536KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_1 536KB_P.

Value:	

PX_BCAPV_UDI_1 536KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = 1 536 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDI_1 920KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_1 920KB_P.

Value:	

PX_BCAPV_UDI_1 920KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = 1 920 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDI_MULTI_6×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_MULTI_6×64KB_P.

Value:	

PX_BCAPV_UDI_MULTI_6×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = multirate, rate multiplier = 6, octet 3 onwards).

Value:	

PX_BCAPL_UDI_MULTI_24×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_MULTI_24×64KB_P.

Value:	

PX_BCAPV_UDI_MULTI_24×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = multirate, rate multiplier = 24, octet 3 onwards).

Value:	

PX_BCAPL_UDI_MULTI_30×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDI_MULTI_30×64KB_P.

Value:	

PX_BCAPV_UDI_MULTI_30×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information, transfer rate = multirate, rate multiplier = 30, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_64KB_P.

Value:	

PX_BCAPV_UDITA_64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = 64 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_2×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_2×64KB_P.

Value:	

PX_BCAPV_UDITA_2×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = 2 × 64 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_384KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_384KB_P.

Value:	

PX_BCAPV_UDITA_384KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = 384 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_1 536KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_1 536KB_P.

Value:	

PX_BCAPV_UDITA_1 536KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = 1 536 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_1 920KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_1 920KB_P.

Value:	

PX_BCAPV_UDITA_1 920KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = 1 920 kbit/s, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_MULTI_6×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_MULTI_6×64KB_P.

Value:	

PX_BCAPV_UDITA_MULTI_6×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = multirate, rate multiplier = 6, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_MULTI_24×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_MULTI_24×64KB_P.

Value:	

PX_BCAPV_UDITA_MULTI_24×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = multirate, rate multiplier = 24, octet 3 onwards).

Value:	

PX_BCAPL_UDITA_MULTI_30×64KB

Value type: OCTETSTRING [1]

Length of the Bearer capability information element given in PX_BCAPV_UDITA_MULTI_30×64KB_P.

Value:	

PX_BCAPV_UDITA_MULTI_30×64KB

Possible values: All octet string codings valid for Bearer capability

Value for a Bearer capability information element (information transfer capability = unrestricted digital information with tones/announcements, transfer rate = multirate, rate multiplier = 30, octet 3 onwards).

Value:	

B.6.4 Parameters for ATS Interworking_PMP

PXP_AUTO_ACM

Possible values: YES/NO

YES: The system under test automatically transmits an ACM message in response to an IAM message carrying the end-of-pulsing (ST) indication.

NO: The system under test does not automatically transmit an ACM message in response to an IAM message carrying the end-of-pulsing (ST) indication. The ACM message has to be triggered explicitly by a CALL PROCEEDING message on the ISDN side.

Value:	

PC_BASIC

Possible values: YES/NO

YES: The ISDN access under test is of the basic access type.

NO: The ISDN access under test is of the primary rate access type.

NOTE 1: This item shall always be set to "YES"!.

Value:	

PC_ENBLOC

Possible values: YES/NO

YES: The system under test supports the en-bloc sending procedures (i.e. sends all address information in the SETUP message).

NO: The system under test does not support the en-bloc sending procedures.

Value:	

PX_CH_NUM

Possible values: 1, 2

Value for a B-channel number which the system can accept at the access associated with the main test component.

Value:	

PX_CR_LENGTH

Value type: BITSTRING [4]

NOTE 2: This item shall always be set to '0001'B!.

Value:	

PX_LLCL

Value type: OCTETSTRING [1]

Length of the Low layer compatibility information element given in PX_LLCV_P.

Value:	

PX_LLCV

Possible values: All octet string codings valid for Low layer compatibility

Value for the Low layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_L2_INIT

Possible values: YES/NO

YES: The layer 2 multiple frame established operation should be re-established before the start of each test.

NO: The layer 2 multiple frame established operation should not be re-established before the start of each test.

Value:	

PXP_PI_PD

Value type: INTEGER

Progress description on the ISDN side.

Value:	

PX_TAC

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by stimulus messages sent by the test tool; value in seconds.

Value:	

PX_TNOAC

Value type: INTEGER

Value for the timer that controls the inactivity of the system under test to stimulus messages sent by the test tool; value in seconds.

Value:	

PX_T_RESTART

Value type: INTEGER

Value for the timer that controls the receipt of RESTART message sent by the system under test after the establishment of the layer 2 multiple frame established operation (only relevant, if PX_WAIT_RESTART_P is supported); value in seconds.

Value:	

PX_TWAIT

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by the parallel test component or the test operator; value in seconds.

Value:	

PX_WAIT_RESTART

Possible values: YES/NO

YES: The system sends a RESTART message after the establishment of the layer 2 multiple frame established operation.

NO: The system does not send a RESTART message after the establishment of the layer 2 multiple frame established operation.

Value:	

PXP_CDPNL_ST_S

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_ST_P.

Value:	

PXP_CDPNV_ST_S

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing the complete address information and the end of pulsing signal ST, if necessary. This value is used in an IAM message.

Value:	

PXP_CGPG

Value type: BITSTRING [8]

Calling party's category field value.

Value:	

PXP_CIC_R

Value type: BITSTRING [12]

Circuit identification code value to be sent by the IUT.

Value:	

PXP_CIC_S

Value type: BITSTRING [12]

Circuit identification code value to be sent to the IUT.

Value:	

PXP_EE_METHOD

Value type: BITSTRING [2]

End-to-end method indicator value of the forward call indicator.

Value:	

PXP_EE_INFO_IND

Value type: BITSTRING [1]

End-to-end information indicator value of the forward call indicator.

Value:	

PXP_NI_CALL_IND

Value type: BITSTRING [1]

National/international call indicator value of the forward call indicator.

Value:	

PXP_SCCP_IND

Value type: BITSTRING [2]

SSCP method indicator value of the forward call indicator.

Value:	

PXP_NI_R

Value type: BITSTRING [2]

Network indicator value.

Value:	

PXP_SLS

Value type: BITSTRING [4]

Signalling link selection value.

Value:	

PXP_SP_IUT

Value type: INTEGER

Signalling point code value for the ISUP access under test. (DPC seen from the tester)

Value:	

PXP_SP_TISUP

Value type: INTEGER

Signalling point code value for the tester. (OPC seen from the tester)

Value:	

PXP_TMR

Value type: OCTETSTRING [1]

Transmission medium requirement field value.

Value:	

PXP_T_GUARD

Value type: INTEGER

Value for the timer that controls the execution of the tests; value in seconds.

This timer should be set to a value of a minimum of 30 s. Higher values may be required for tests checking the correct implementation of protocol timers.

Value:	

B.6.5 Parameters for ATS ISDN_ISUP_SS3

B.6.5.1 ISDN-Configuration

PC_STREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the coincident S/T reference point type.

NO: The ISDN access under test is not of the coincident S/T reference point type.

Value:	

PC_TREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the T reference point type.

NO: The ISDN access under test is not of the T reference point type.

Value:	

PC_PT_PT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-point.

NO: The ISDN access under test is not configured point-to-point.

Value:	

PC_MPT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-multipoint.

NO: The ISDN access under test is not configured point-to-multipoint.

Value:	

PC_CCNR_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the CCNR supplementary service.

NO: The ISDN access under test is not subscribed to the CCNR supplementary service.

Value:	

PC_CCBS_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the CCBS supplementary service.

NO: The ISDN access under test is not subscribed to the CCBS supplementary service.

Value:	

PC_CCBS_request_retention

Possible values: YES/NO

YES: The network option "CCBS request retention" of the system under test has the value "yes".

NO: The network option "CCBS request retention" of the system under test has the value "no".

Value:	

PX_L2_INIT

Possible values: YES/NO

YES: The layer 2 multiple frame established operation should be re-established before the start of each test.

NO: The layer 2 multiple frame established operation should not be re-established before the start of each test.

Value:	

PX_WAIT_RESTART

Possible values: YES/NO

YES: The system sends a RESTART message after the establishment of the layer 2 multiple frame established operation.

NO: The system does not send a RESTART message after the establishment of the layer 2 multiple frame established operation.

Value:	

B.6.5.2 ISDN-Parameter

B.6.5.2.1 Address signals

PX_CDPN_OCTET3

Value type: OCTETSTRING [1]

Octet 3 of the Called party number information element (Type of Number and Numbering Plan Identification parameter) which the system under test accepts in outgoing SETUP messages.

Value:	

PX_CDPN_ND

Possible values: All octet string codings valid for number digits

Complete number digits associated with the ISUP access of the parallel test component to be included in the Called party number information element which the system under test accepts in incoming SETUP messages.

Value:	

PX_RNGN_First_CDIV_V

Possible values: All octet string codings valid for number digits

Number digits of the first Redirecting information element expected to be sent by the system under test. The sending of those number digits is triggered on the ISUP side with the address signals as given in PXP_CDIV_OCDNB_V_P.

Value:	

PX_RNGN_Last_CDIV_V

Possible values: All octet string codings valid for number digits

Number digits of the second Redirecting information element expected to be sent by the system under test. The sending of those number digits is triggered on the ISUP side with the address signals as given in PXP_CDIV_RGNB_V_P.

Value:	

PX_RONN_CDIV_V

Possible values: All octet string codings valid for number digits

Number digits of the Redirection information element expected to be sent by the system under test. The sending of those number digits is triggered on the ISUP side with the address signals as given in PXP_CDIV_RNNB_V_P.

Value:	

PX_Number_of_B

Possible values: All hex string codings valid for number digits

Value for the addressOfB field which the system under test accepts in CCBS-T-Request invoke components of incoming REGISTER messages.

Value:	

B.6.5.2.2 Service information (BCAP, HLC)

PX_BCAPV

Possible values: All octet string codings valid for Bearer capability

Value for the Bearer capability information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_HLCV1

Possible values: All octet string codings valid for High layer compatibility

Value for the High layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_Q931Information

Possible values: All octet string codings valid for Q.931 information elements

Value for the q931InfoElement field (typically containing BCAP, HLC, LLC) which the system under test accepts in CCBS-T-Request invoke components of incoming REGISTER messages.

Value:	

B.6.5.3 ISUP-Parameter

B.6.5.3.1 Message header

PXP_NI_R

Value type: BITSTRING [2]

Network indicator value.

Value:	

PXP_SP_IUT

Value type: INTEGER

Signalling point code value for the ISUP access under test. (DPC seen from the tester)

Value:	

PXP_SP_TISUP

Value type: INTEGER

Signalling point code value for the tester. (OPC seen from the tester)

Value:	

PXP_SLS

Value type: BITSTRING [4]

Signalling link selection value.

Value:	

PXP_CIC_S

Value type: BITSTRING [12]

Circuit identification code value to be sent to the IUT.

Value:	

B.6.5.3.2 Forward call indicator

PXP_NI_CALL_IND

Value type: BITSTRING [1]

National/international call indicator value of the forward call indicator.

Value:	

PXP_EE_METHOD

Value type: BITSTRING [2]

End-to-end method indicator value of the forward call indicator.

Value:	

PXP_EE_INFO_IND

Value type: BITSTRING [1]

End-to-end information indicator value of the forward call indicator.

Value:	

PXP_SCCP_IND

Value type: BITSTRING [2]

SSCP method indicator value of the forward call indicator.

Value:	

B.6.5.3.3 Calling party's category

PXP_CGPG

Value type: BITSTRING [8]

Calling party's category field value.

Value:	

B.6.5.3.4 Transmission Medium Requirement

PXP_TMR

Value type: OCTETSTRING [1]

Transmission medium requirement field value.

Value:	

B.6.5.3.5 Address signals, to be sent on the ISUP side

PXP_CDPNL_NO_ST

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_NO_ST_P.

Value:	

PXP_CDPNV_NO_ST

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing the complete address information and no end of pulsing signal ST. This value is used in an IAM message.

Value:	

PXP_CDIV_OCDNB_OE

Value type: BITSTRING [1]

Coding for the odd/even indicator for address information as given in PXP_CDIV_OCDNB_V_P.

Value:	

PXP_CDIV_OCNB_V

Value type: OCTETSTRING

Coding for the address signal of an Original Called Party Number parameter (all octets following octet 3 including the filler, if needed). This value is used in an IAM message.

Value:	

PXP_CDIV_RGNB_OE

Value type: BITSTRING [1]

Coding for the odd/even indicator for address information as given in PXP_CDIV_RGNB_V_P.

Value:	

PXP_CDIV_RGNB_V

Value type: OCTETSTRING

Coding for the address signal of a Redirecting Party Number parameter (all octets following octet 3 including the filler, if needed). This value is used in an IAM message.

Value:	

PXP_CDIV_RNNB_OE

Value type: BITSTRING [1]

Coding for the odd/even indicator for address information as given in PXP_CDIV_RNNB_V_P.

Value:	

PXP_CDIV_RNNB_V

Value type: OCTETSTRING

Coding for the address signal of a Redirection Party Number parameter (all octets following octet 3 including the filler, if needed). This value is used in an IAM message.

Value:	

B.6.5.4 Timer

PXP_T_GUARD

Value type: INTEGER

Value for the timer that controls the execution of the tests; value in seconds.

This timer should be set to a value of a minimum of 30 s. Higher values may be required for tests checking the correct implementation of protocol timers.

Value:	

PX_TAC

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by stimulus messages sent by the test tool; value in seconds.

Value:	

PX_TNOAC

Value type: INTEGER

Value for the timer that controls the inactivity of the system under test to stimulus messages sent by the test tool; value in seconds.

Value:	

PX_T_RESTART

Value type: INTEGER

Value for the timer that controls the receipt of RESTART message sent by the system under test after the establishment of the layer 2 multiple frame established operation (only relevant, if PX_WAIT_RESTART_P is supported); value in seconds.

Value:	

PX_TWAIT

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by the parallel test component or the test operator; value in seconds.

Value:	

B.6.6 Parameters for ATS ISDN_ISUP_SS4

B.6.6.1 ISDN-Configuration and Parameter

B.6.6.1.1 Configuration

PC_STREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the coincident S/T reference point type.

NO: The ISDN access under test is not of the coincident S/T reference point type.

Value:	

PC_TREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the T reference point type.

NO: The ISDN access under test is not of the T reference point type.

Value:	

PC_PT_PT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-point.

NO: The ISDN access under test is not configured point-to-point.

Value:	

PC_MPT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-multipoint.

NO: The ISDN access under test is not configured point-to-multipoint.

Value:	

PX_L2_INIT

Possible values: YES/NO

YES: The layer 2 multiple frame established operation should be re-established before the start of each test.

NO: The layer 2 multiple frame established operation should not be re-established before the start of each test.

Value:	

PX_WAIT_RESTART

Possible values: YES/NO

YES: The system sends a RESTART message after the establishment of the layer 2 multiple frame established operation.

NO: The system does not send a RESTART message after the establishment of the layer 2 multiple frame established operation.

Value:	

PC_3PTY_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the 3PTY supplementary service.

NO: The ISDN access under test is not subscribed to the 3PTY supplementary service.

Value:	

PC_CUG_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the CUG supplementary service.

NO: The ISDN access under test is not subscribed to the CUG supplementary service.

Value:	

PC_CUG_Barring_Dif_OC

Possible values: YES/NO

YES: The CUG subscription option "Barring within the CUG" of the system under test has a value other than "outgoing call".

NO: The CUG subscription option "Barring within the CUG" of the system under test has the value "outgoing call".

Value:	

PC_CUG_Barring_Dif_IC

Possible values: YES/NO

YES: The CUG subscription option "Barring within the CUG" of the system under test has a value other than "outgoing call".

NO: The CUG subscription option "Barring within the CUG" of the system under test has the value "outgoing call".

Value:	

PC_CUG_Pref_Nom

Possible values: YES/NO

YES: The ISDN number subscription option "preferential CUG" of the system under test has the value "nominated CUGIndex".

NO: The ISDN number subscription option "preferential CUG" of the system under test has the value "none designated".

Value:	

PC_CUG_Outgoing_Allowed

Possible values: YES/NO

YES: The ISDN number subscription option "outgoing access" of the system under test has the value "allowed".

NO: The ISDN number subscription option "outgoing access" of the system under test has the value "not allowed".

Value:	

PC_CUG_Incoming_Allowed

Possible values: YES/NO

YES: The ISDN number subscription option "incoming access" of the system under test has the value "allowed".

NO: The ISDN number subscription option "incoming access" of the system under test has the value "not allowed".

Value:	

PC_UUS1_imp_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the USS1 supplementary service, implicit request.

NO: The ISDN access under test is not subscribed to the UUS1 supplementary service, implicit request.

Value:	

PC_UUS1_exp_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the USS1 supplementary service, explicit request.

NO: The ISDN access under test is not subscribed to the UUS1 supplementary service, explicit request.

Value:	

B.6.6.1.2 Address signals

PX_CDPN_ND

Possible values: All octet string codings valid for number digits

Complete number digits associated with the ISUP access of the parallel test component to be included in the Called party number information element which the system under test accepts in incoming SETUP messages.

Value:	

PX_CDPN_OCTET3

Value type: OCTETSTRING [1]

Octet 3 of the Called party number information element (Type of Number and Numbering Plan Identification parameter) which the system under test accepts in outgoing SETUP messages.

Value:	

B.6.6.1.3 Service information (BCAP, HLC)

PX_BCAPV

Possible values: All octet string codings valid for Bearer capability

Value for the Bearer capability information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_HLCV1

Possible values: All octet string codings valid for High layer compatibility

Value for the High layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_CUG_Index

Valid type: INTEGER

Value for the CUG index.

Value:	

B.6.6.2 ISUP-Parameter

B.6.6.2.1 Address signals, to be sent on the ISUP side

PXP_CDPNL_NO_ST

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_NO_ST_P.

Value:	

PXP_CDPNV_NO_ST

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing the complete address information and no end of pulsing signal ST. This value is used in an IAM message.

Value:	

B.6.6.2.2 Message header

PXP_NI_R

Value type: BITSTRING [2]

Network indicator value.

Value:	

PXP_SP_IUT

Value type: INTEGER

Signalling point code value for the ISUP access under test. (DPC seen from the tester)

Value:	

PXP_SP_TISUP

Value type: INTEGER

Signalling point code value for the tester. (OPC seen from the tester)

Value:	

PXP_SLS

Value type: BITSTRING [4]

Signalling link selection value.

Value:	

PXP_CIC_S

Value type: BITSTRING [12]

Circuit identification code value to be sent to the IUT.

Value:	

PXP_CIC_S2

Value type: BITSTRING [12]

Circuit identification code value for a second call to be sent to the IUT.

Value:	

B.6.6.2.3 Forward call indicator

PXP_NI_CALL_IND

Value type: BITSTRING [1]

National/international call indicator value of the forward call indicator.

Value:	

PXP_EE_METHOD

Value type: BITSTRING [2]

End-to-end method indicator value of the forward call indicator.

Value:	

PXP_EE_INFO_IND

Value type: BITSTRING [1]

End-to-end information indicator value of the forward call indicator.

Value:	

PXP_SCCP_IND

Value type: BITSTRING [2]

SSCP method indicator value of the forward call indicator.

Value:	

B.6.6.2.4 Calling party's category

PXP_CGPG

Value type: BITSTRING [8]

Calling party's category field value.

Value:	

B.6.6.2.5 Transmission Medium Requirement

PXP_TMR_PPXP_CUG_IC

Value type: OCTETSTRING [1]

Transmission medium requirement field value.

Value:	

B.6.6.2.6 CUG Interlock codes

PXP_CUG_IC

Value type: OCTETSTRING [4]

CUG interlock code of the CUG the ISDN access under test belongs to.

Value:	

PXP_WCUG_IC

Value type: OCTETSTRING [4]

CUG interlock code of a CUG the ISDN access under test does not belong to.

Value:	

B.6.6.3 Timer

PXP_T_GUARD

Value type: INTEGER

Value for the timer that controls the execution of the tests; value in seconds.

This timer should be set to a value of a minimum of 30 seconds. Higher values may be required for tests checking the correct implementation of protocol timers.

Value:	

PX_TAC

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by stimulus messages sent by the test tool; value in seconds.

Value:	

PX_TNOAC

Value type: INTEGER

Value for the timer that controls the inactivity of the system under test to stimulus messages sent by the test tool; value in seconds.

Value:	

PX_T_RESTART

Value type: INTEGER

Value for the timer that controls the receipt of RESTART message sent by the system under test after the establishment of the layer 2 multiple frame established operation (only relevant, if PX_WAIT_RESTART_P is supported); value in seconds.

Value:	

PX_TWAIT

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by the parallel test component or the test operator; value in seconds.

Value:	

B.6.7 Parameters for ATS ISDN_ISUP_SS3

B.6.7.1 ISDN-Configuration

B.6.7.1.1 Configuration details

PC_STREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the coincident S/T reference point type.

NO: The ISDN access under test is not of the coincident S/T reference point type.

Value:	

PC_TREFPT

Possible values: YES/NO

YES: The ISDN access under test is of the T reference point type.

NO: The ISDN access under test is not of the T reference point type.

Value:	

PC_PT_PT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-point.

NO: The ISDN access under test is not configured point-to-point.

Value:	

PC_MPT

Possible values: YES/NO

YES: The ISDN access under test is configured point-to-multipoint.

NO: The ISDN access under test is not configured point-to-multipoint.

Value:	

PX_L2_INIT

Possible values: YES/NO

YES: The layer 2 multiple frame established operation should be re-established before the start of each test.

NO: The layer 2 multiple frame established operation should not be re-established before the start of each test.

Value:	

PX_WAIT_RESTART

Possible values: YES/NO

YES: The system sends a RESTART message after the establishment of the layer 2 multiple frame established operation.

NO: The system does not send a RESTART message after the establishment of the layer 2 multiple frame established operation.

Value:	

B.6.7.1.2 Address signals

PX_CDPN_OCTET3

Value type: OCTETSTRING [1]

Octet 3 of the Called party number information element (Type of Number and Numbering Plan Identification parameter) which the system under test accepts in outgoing SETUP messages.

Value:	

PX_CDPN_ND

Possible values: All octet string codings valid for number digits

Complete number digits associated with the ISUP access of the parallel test component to be included in the Called party number information element which the system under test accepts in incoming SETUP messages.

Value:	

B.6.7.1.3 Service information (BCAP, HLC)

PX_BCAPV

Possible values: All octet string codings valid for Bearer capability

Value for the Bearer capability information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PX_HLCV1

Possible values: All octet string codings valid for High layer compatibility

Value for the High layer compatibility information element (octet 3 onwards) which the system under test accepts in incoming SETUP messages.

Value:	

PC_CCNR_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the CCNR supplementary service.

NO: The ISDN access under test is not subscribed to the CCNR supplementary service.

Value:	

B.6.7.2 ISDN-Subscription Options

PC_CLIP_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the CLIP supplementary service.

NO: The ISDN access under test is not subscribed to the CLIP supplementary service.

Value:	

PC_CLIP_special_arrangement

Possible values: YES/NO

YES: The special arrangement (no screening) applies for the CLIP supplementary service.

NO: The special arrangement (no screening) does not apply for the CLIP supplementary service.

Value:	

PC_CLIP_two_calling_party

Possible values: YES/NO

YES: The delivery of two calling party information elements in a SETUP message is supported.

NO: The delivery of two calling party information elements in a SETUP message is not supported.

Value:	

PC_CLIP_Failure_screening

Possible values: YES/NO

YES: The failure of the CLIP screening function can be provoked.

NO: The failure of the CLIP screening function cannot be provoked.

Value:	

PC_CLIR_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the CLIR supplementary service.

NO: The ISDN access under test is not subscribed to the CLIR supplementary service.

Value:	

PC_CLIR_special_arrangement

Possible values: YES/NO

YES: The special arrangement (no screening) applies for the CLIR supplementary service.

NO: The special arrangement (no screening) does not apply for the CLIR supplementary service.

Value:	

PC_CLIR_permanent_mode

Possible values: YES/NO

YES: The permanent mode applies for the CLIR supplementary service.

NO: The permanent mode does not apply for the CLIR supplementary service.

Value:	

PC_CLIR_Temporary_restricted

Possible values: YES/NO

YES: The temporary mode with default value "restricted" applies for the CLIR supplementary service.

NO: The temporary mode with default value "restricted" does not apply for the CLIR supplementary service.

Value:	

PC_CLIR_Temporary_allowed

Possible values: YES/NO

YES: The temporary mode with default value "not restricted" applies for the CLIR supplementary service.

NO: The temporary mode with default value "not restricted" does not apply for the CLIR supplementary service.

Value:	

PC_COLP_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the COLP supplementary service.

NO: The ISDN access under test is not subscribed to the COLP supplementary service.

Value:	

PC_COLP_special_arrangement

Possible values: YES/NO

YES: The special arrangement (no screening) applies for the COLP supplementary service.

NO: The special arrangement (no screening) does not apply for the COLP supplementary service.

Value:	

PC_COLP_Failure_screening

Possible values: YES/NO

YES: The failure of the COLP screening function can be provoked.

NO: The failure of the COLP screening function cannot be provoked.

Value:	

PC_COLR_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the COLR supplementary service.

NO: The ISDN access under test is not subscribed to the COLR supplementary service.

Value:	

PC_COLR_special_arrangement

Possible values: YES/NO

YES: The special arrangement (no screening) applies for the COLR supplementary service.

NO: The special arrangement (no screening) does not apply for the COLR supplementary service.

Value:	

PC_COLR_permanent_mode

Possible values: YES/NO

YES: The permanent mode applies for the COLR supplementary service.

NO: The permanent mode does not apply for the COLR supplementary service.

Value:	

PC_COLR_Temporary_restricted

Possible values: YES/NO

YES: The temporary mode with default value "restricted" applies for the COLR supplementary service.

NO: The temporary mode with default value "restricted" does not apply for the COLR supplementary service.

Value:	

PC_COLR_Temporary_allowed

Possible values: YES/NO

YES: The temporary mode with default value "not restricted" applies for the COLR supplementary service.

NO: The temporary mode with default value "not restricted" does not apply for the COLR supplementary service.

Value:	

PC_SUB_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the SUB supplementary service.

NO: The ISDN access under test is not subscribed to the SUB supplementary service.

Value:	

PC_CW_Notification_delivered

Possible values: YES/NO

YES: The Notification of CW (received in the ALERTING) is passed to an ISUP message (ACM or CPG).

NO: The Notification of CW (received in the ALERTING) is not passed to an ISUP message (ACM or CPG).

Value:	

PC_HOLD_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the HOLD supplementary service.

NO: The ISDN access under test is not subscribed to the HOLD supplementary service.

Value:	

PC_HOLD_N4_supported

Possible values: YES/NO

YES: The activation of the HOLD supplementary service in call state N4 is supported.

NO: The activation of the HOLD supplementary service in call state N4 is not supported.

Value:	

PC_TP_subscribed

Possible values: YES/NO

YES: The ISDN access under test is subscribed to the TP supplementary service.

NO: The ISDN access under test is not subscribed to the TP supplementary service.

Value:	

B.6.7.3 ISUP-Parameter

B.6.7.3.1 Address signals, to be sent on the ISUP side

PXP_CDPNL_NO_ST

Value type: OCTETSTRING [1]

Length (number of octets) in PXP_CDPNV_NO_ST_P.

Value:	

PXP_CDPNV_NO_ST

Value type: OCTETSTRING

Coding for a Called Party Number parameter (all octets following the length field) containing the complete address information and no end of pulsing signal ST. This value is used in an IAM message.

Value:	

B.6.7.3.2 Message header

PXP_NI_R

Value type: BITSTRING [2]

Network indicator value.

Value:	

PXP_SP_IUT

Value type: INTEGER

Signalling point code value for the ISUP access under test. (DPC seen from the tester)

Value:	

PXP_SP_TISUP

Value type: INTEGER

Signalling point code value for the tester. (OPC seen from the tester)

Value:	

PXP_SLS

Value type: BITSTRING [4]

Signalling link selection value.

Value:	

PXP_CIC_S

Value type: BITSTRING [12]

Circuit identification code value to be sent to the IUT.

Value:	

B.6.7.3.3 Forward call indicator

PXP_NI_CALL_IND

Value type: BITSTRING [1]

National/international call indicator value of the forward call indicator.

Value:	

PXP_EE_METHOD

Value type: BITSTRING [2]

End-to-end method indicator value of the forward call indicator.

Value:	

PXP_EE_INFO_IND

Value type: BITSTRING [1]

End-to-end information indicator value of the forward call indicator.

Value:	

PXP_SCCP_IND

Value type: BITSTRING [2]

SSCP method indicator value of the forward call indicator.

Value:	

B.6.7.3.4 Calling party's category

PXP_CGPG

Value type: BITSTRING [8]

Calling party's category field value.

Value:	

B.6.7.3.5 Transmission Medium Requirement

PXP_TMR

Value type: OCTETSTRING [1]

Transmission medium requirement field value.

Value:	

B.6.7.4 ISDN-ISUP-Numbers

B.6.7.4.1 ISDN number digits, sent to the SUT

PX_NAT_NUMBER

Value type: OCTETSTRING

Coding for the number digits of a complete and valid national number.

Value:	

PX_INTERNAT_NUMBER

Value type: OCTETSTRING

Coding for the number digits of a complete and valid international number.

Value:	

PX_INCOMP_NUMBER

Value type: OCTETSTRING

Coding for the number digits of an incomplete but valid number.

Value:	

PX_SUBSCR_NUMBER

Value type: OCTETSTRING

Coding for the number digits of a complete and valid subscriber number.

Value:	

PX_INV_NUMBER

Value type: OCTETSTRING

Coding for the number digits of an invalid number.

Value:	

B.6.7.4.2 ISDN number digits, sent to the tester

PX_NAT_NUMBER_R

Value type: OCTETSTRING

Coding for the number digits of a national number. The sending of those number digits is triggered on the ISUP side with the address signals as given in PXP_NAT_NUMBER_P.

Value:	

PX_INTERNAT_NUMBER_R

Value type: OCTETSTRING

Coding for the number digits of an international number. The sending of those number digits is triggered on the ISUP side with the address signals as given in PXP_INTERNAT_NUMBER_P.

Value:	

B.6.7.4.3 ISUP address signals, sent to the tester

PXP_DEFAULT_NUMBER

Value type: OCTETSTRING

Coding for the address digits of the network provided default number.

Value:	

PXP_NAT_NUMBER_R

Value type: OCTETSTRING

Coding for the address digits of a national number. The sending of those address signals is triggered on the ISDN side with the number digits as given in PX_NAT_NUMBER_P.

Value:	

PXP_INTERNAT_NUMBER_R

Value type: OCTETSTRING

Coding for the address digits of an international number. The sending of those address signals is triggered on the ISDN side with the number digits as given in PX_INTERNAT_NUMBER_P.

Value:	

PXP_INCOMP_NUMBER_R

Value type: OCTETSTRING

Coding for the address digits of an incomplete number that has been completed by the network. The sending of those address signals is triggered on the ISDN side with the number digits as given in PX_INCOMP_NUMBER_P.

Value:	

PXP_SUBSCR_NUMBER_R

Value type: OCTETSTRING

Coding for the address digits of a subscriber number. The sending of those address signals is triggered on the ISDN side with the number digits as given in PX_NAT_SUBSCR_NUMBER_P.

Value:	

B.6.7.4.4 ISUP address signals, sent to the SUT

PXP_NAT_NUMBER_OE

Value type: BITSTRING [1]

Coding for the odd/even indicator for address information as given in PXP_NAT_NUMBER_P.

Value:	

PXP_NAT_NUMBER

Value type: OCTETSTRING

Coding for the address signals of a complete and valid national number

Value:	

PXP_INTERNAT_NUMBER_OE

Value type: BITSTRING [1]

Coding for the odd/even indicator for address information as given in PXP_INTERNAT_NUMBER_P.

Value:	

PXP_INTERNAT_NUMBER

Value type: OCTETSTRING

Coding for the address signals of a complete and valid international number

Value:	

B.6.7.5 Timer

PXP_T_GUARD

Value type: INTEGER

Value for the timer that controls the execution of the tests; value in seconds.

This timer should be set to a value of a minimum of 30 seconds. Higher values may be required for tests checking the correct implementation of protocol timers.

Value:	

PX_TAC

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by stimulus messages sent by the test tool; value in seconds.

Value:	

PX_TNOAC

Value type: INTEGER

Value for the timer that controls the inactivity of the system under test to stimulus messages sent by the test tool; value in seconds.

Value:	

PX_T_RESTART

Value type: INTEGER

Value for the timer that controls the receipt of RESTART message sent by the system under test after the establishment of the layer 2 multiple frame established operation (only relevant, if PX_WAIT_RESTART_P is supported); value in seconds.

Value:	

PX_TWAIT

Value type: INTEGER

Value for the timer that controls test events initiated at the system under test by the parallel test component or the test operator; value in seconds.

Annex C (normative): Abstract Test Suite (ATS)

This ATS has been produced using the Tree and Tabular Combined Notation (TTCN) according to ISO/IEC 9646-3 [8].

The ATS was developed on a separate TTCN software tool and therefore the TTCN tables are not completely referenced in the table of contents. The ATS itself contains a test suite overview part which provides additional information and references.

C.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representations of these five ATSs are contained in Adobe Portable Document Format™ files contained in archive en_30089904v010101v0.ZIP which accompanies the present document.

The names of the Adobe Portable Document Format™ files for the ATSs are:

Interworking_ISDN_ISUP: isupp25.pdf

Interworking_PMP: isupm7.pdf

ISDN_ISUP_SS3: isupsw15.pdf

ISDN_ISUP_SS4: isups_x7.pdf

ISDN_ISUP_SS5: isups_y6.pdf

C.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representations corresponding to these five ATSs are contained in ASCII files contained in archive en_30089904v010101v0.ZIP which accompanies the present document.

The names of the ASCII files for the ATSs are:

Interworking_ISDN_ISUP: isupp25.mp

Interworking_PMP: isupm7.mp

ISDN_ISUP_SS3: isupsw15.mp

ISDN_ISUP_SS4: isups_x7.mp

ISDN_ISUP_SS5: isups_y6.mp

NOTE: Where an ETSI Abstract Test Suite (in TTCN) is published in both .GR and .MP format these two forms shall be considered equivalent. In the event that there appears to be syntactical or semantic differences between the two then the problem shall be resolved and the erroneous format (whichever it is) shall be corrected.

Annex D (informative): Bibliography

- ETSI EN 300 899-2: "Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- ETSI ETS 300 356-1 (1995): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 2 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (1993), modified]".
- ETSI EN 300 403-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".
- ETSI EN 300 485: "Integrated Services Digital Network (ISDN); Definition and usage of cause and location in Digital Subscriber Signalling System No. one (DSS1) and Signalling System No. 7 (SS7) ISDN User Part (ISUP) [ITU-T Recommendation Q.850 (1998) with addendum modified]".
- ETSI ETS 300 356-9 (1995): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 2 for the international interface; Part 9: Closed User Group (CUG) supplementary service [ITU-T Recommendation Q.735, clause 1 (1993), modified]".
- ETSI EN 300 092-1: "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 093-1: "Integrated Services Digital Network (ISDN); Calling Line Identification Restriction (CLIR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 097-1: "Integrated Services Digital Network (ISDN); Connected Line Identification Presentation (COLP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 098-1: "Integrated Services Digital Network (ISDN); Connected Line Identification Restriction (COLR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 207-1: "Integrated Services Digital Network (ISDN); Diversion supplementary services; Digital Subscriber Signalling System No. One (DSS1); Part 1: Protocol specification".
- ETSI EN 300 061-1: "Integrated Services Digital Network (ISDN); Subaddressing (SUB) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 058-1: "Integrated Services Digital Network (ISDN); Call Waiting (CW) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 141-1: "Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 055-1: "Integrated Services Digital Network (ISDN); Terminal Portability (TP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 185-1: "Integrated Services Digital Network (ISDN); Conference call, add-on (CONF) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 188-1: "Integrated Services Digital Network (ISDN); Three-Party (3PTY) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

- ETSI EN 300 138-1: "Integrated Services Digital Network (ISDN); Closed User Group (CUG) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 286-1: "Integrated Services Digital Network (ISDN); User-to-User Signalling (UUS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 359-1: "Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 369-1: "Integrated Services Digital Network (ISDN); Explicit Call Transfer (ECT) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 301 065-1: "Integrated Services Digital Network (ISDN); Completion of Calls on No Reply (CCNR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ETSI EN 300 356-20: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface; Part 20: Completion of Calls on No Reply (CCNR) supplementary service [ITU-T Recommendation Q.733, clause 5 (1999) modified]".
- ETSI EN 300 356-9: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface; Part 9: Closed User Group (CUG) supplementary service [ITU-T Recommendation Q.735, clause 1 (1993) modified]".

History

Document history				
V1.1.1	September 2001	Public Enquiry	PE 20020111:	2001-09-12 to 2002-01-11
V1.1.1	January 2002	Vote	V 20020329:	2002-01-28 to 2002-03-29