

# EN 300 771-6 V1.1.2 (1999-03)

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*European Standard (Telecommunications series)*

**Broadband Integrated Services Digital Network (B-ISDN);  
Digital Subscriber Signalling System No. two (DSS2) protocol;  
B-ISDN user-network interface layer 3  
specification for point-to-multipoint call/bearer control;  
Part 6: Abstract Test Suite (ATS) and partial Protocol  
Implementation eXtra Information for Testing (PIXIT)  
proforma specification for the network**

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Reference

REN/SPS-05085-6C (751i0idc.PDF)

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Keywords

B-ISDN, DSS2, UNI, layer 3, basic, ATS, PIXIT,  
network, ISDN, multipoint, broadband

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

## Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS).

The present document is part 6 of a multi-part EN covering the Digital Subscriber Signalling System No. two (DSS2) protocol specification for the Broadband Integrated Services Digital Network (B-ISDN) signalling user-network layer 3 specification for point-to-multipoint call/bearer control, as described below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2971 (1995), modified]";
- Part 2: "Protocol Implementation Conformance Statement (PICS) specification proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) for the user";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";
- Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".**

| <b>National transposition dates</b>                                                    |                   |
|----------------------------------------------------------------------------------------|-------------------|
| Date of adoption of this EN:                                                           | 5 June 1998       |
| Date of latest announcement of this EN (doa):                                          | 30 September 1998 |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 31 March 1999     |
| Date of withdrawal of any conflicting National Standard (dow):                         | 31 March 1999     |

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# 1 Scope

This sixth part of EN 300 771 specifies the network Abstract Test Suite (ATS) for the  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point (as defined in ITU-T Recommendation I.413 [8]) of implementations conforming to the standards for the signalling user-network layer 3 specification for point-to-multipoint call/bearer control of the Digital Subscriber Signalling System No. two (DSS2) protocol for the pan-European Broadband Integrated Services Digital Network (B-ISDN), ETS 300 771-1 [1].

A further part of this EN specifies the Test Suite Structure and Test Purposes (TSS&TP) related to this ATS and partial PIXIT proforma. Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the user side of the  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point of implementations conforming to ETS 300 771-1 [1].

---

# 2 References

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

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

- [1] ETS 300 771-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for point-to-multipoint call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2971 (1995), modified]".
- [2] ETS 300 771-2: "Broadband Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for point-to-multipoint call/bearer control; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1: "Information technology - Open System Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-2: "Information technology - Open System Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification".
- [5] ISO/IEC 9646-3: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 3: The Tree and Tabular Combined Notation".
- [6] ISO/IEC 9646-4: "Information technology - Open System Interconnection - Conformance testing methodology and framework - Part 4: Test realization".
- [7] ISO/IEC 9646-5: "Information technology - Open System Interconnection Conformance testing methodology and framework, Part 5: Requirements on test laboratories and clients for the conformance assessment process".
- [8] ITU-T Recommendation I.413 (1993): "B-ISDN user-network interface".
- [9] EN 300 443-2: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

## 3 Definitions and abbreviations

### 3.1 Definitions

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

**Implementation Under Test (IUT):** see ISO/IEC 9646-1 [3].

**System Under Test (SUT):** see ISO/IEC 9646-1 [3].

**Abstract Test Suite (ATS):** see ISO/IEC 9646-1 [3].

**Protocol Implementation Conformance Statement (PICS):** see ISO/IEC 9646-1 [3].

**PICS proforma:** see ISO/IEC 9646-1 [3].

**Protocol Implementation Extra Information For Testing (PIXIT):** see ISO/IEC 9646-1 [3].

**PIXIT proforma:** see ISO/IEC 9646-1 [3].

**Lower Tester (LT):** see ISO/IEC 9646-1 [3].

**Upper Tester (UT):** see ISO/IEC 9646-1 [3].

**Point Of Control And Observation (PCO):** see ISO/IEC 9646-1 [3].

### 3.2 Abbreviations

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

|        |                                                       |
|--------|-------------------------------------------------------|
| ATM    | Abstract Test Method                                  |
| ATS    | Abstract Test Suite                                   |
| B-ISDN | Broadband Integrated Services Digital Network         |
| CM     | Coordination Message                                  |
| CP     | Coordination Point                                    |
| DSS2   | Digital Subscriber Signalling System No. two          |
| ExTS   | Executable Test Suite                                 |
| IUT    | Implementation Under Test                             |
| LT     | Lower Tester                                          |
| MOT    | Means Of Testing                                      |
| MTC    | Main Test Component                                   |
| 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 |
| PTC    | Parallel Test Component                               |
| SUT    | System Under Test                                     |
| TCP    | Test Co-ordination Procedures                         |
| TP     | Test Purpose                                          |
| TTCN   | Tree and Tabular Combined Notation                    |
| UT     | Upper Tester                                          |
| TP     | Test Purpose                                          |
| TSS    | Test Suite Structure                                  |

## 4 Abstract Test Method (ATM)

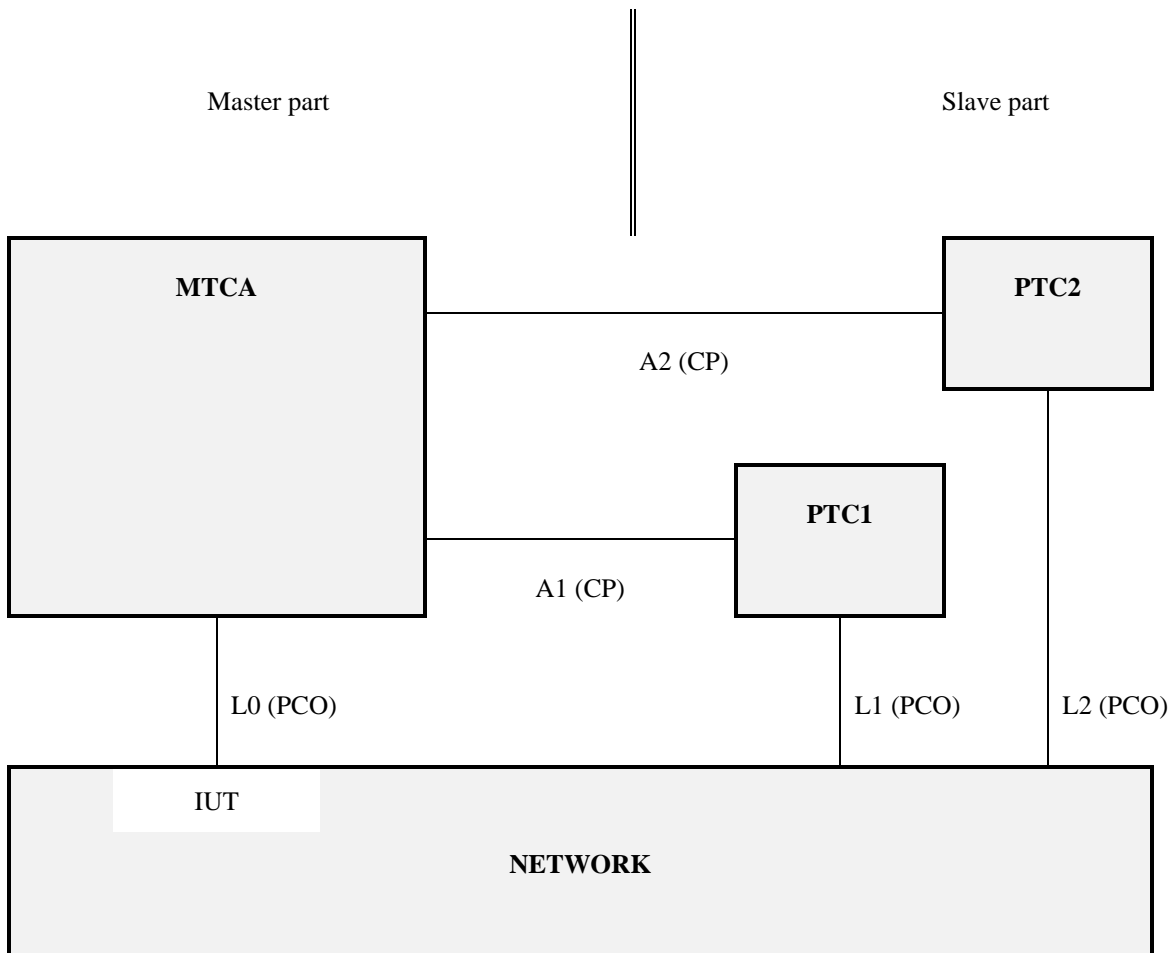
### 4.1 Description of ATM used

The requirement for testing the network IUT is to focus on the behaviour of the network IUT at the user-network interface where a  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point applies. Thus the IUT is the network DSS2 protocol entity at a particular user-network interface and is not the whole network.

It is possible to specify an ATS based on a Single party (remote) test method for such an IUT. However, it is considered that an ATS based on such an approach is of limited use as the only way to specify IUT 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. One very important limitation here is that tests are focused on one particular interface. Thus the test system is made up one Main Test Component (MTC) and one or more Parallel Test Components (PTC), see figure 1.

### 4.2 Conventions for test components and PCOs



**Figure 1: Multi-party test method**

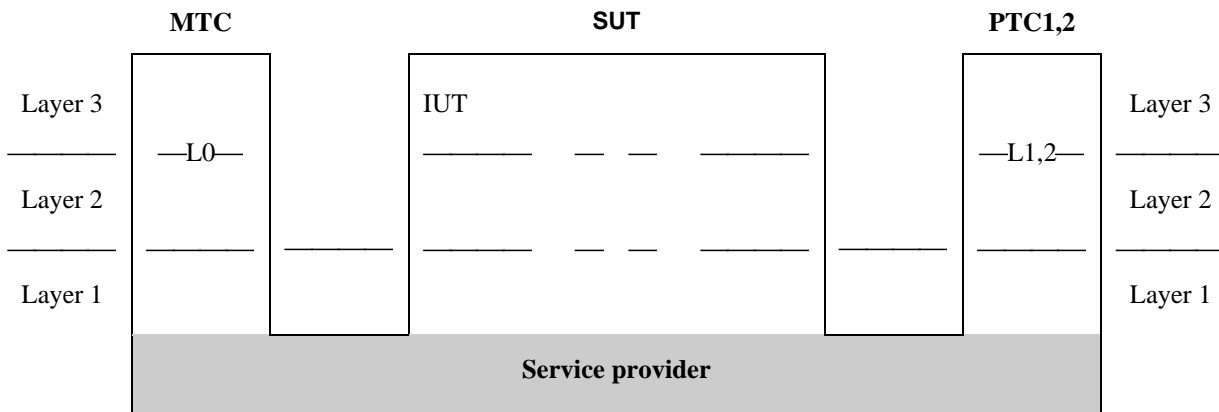
In a master/slave arrangement, the MTC is considered to be the master while the PTCs are the slaves. The "slave" testers are only an explicit description of how to deal with the remote interfaces during the testing process, i.e. "how to make the IUT send the required message".



This means, in particular, that the verdict will only be assigned from the protocol aspects observed on the interface under test (i.e. by the "master" tester), as it would be observed by a terminal connected to this interface. A failure in the correlation between the protocol at the different interfaces to which the different testers are connected, i.e. in the mechanism of the functional service itself, will not cause a FAIL verdict. For instance, if the IUT fails to send a message on the tested interface after another interface has received the proper stimulus, the verdict will be INCONCLUSIVE.

The MTC MTCA has two functions in this configuration. Firstly, it has the MTC function of controlling the one or more PTCs. Thus it is responsible for starting the PTCs and afterwards coordinates activities by exchanging Coordination Messages (CM) with the PTCs. Secondly it is responsible for the behaviour of the Lower Tester (LT) at PCO L0.

A combination of the remote and multi-party test methods is applied. As can be seen from figure 1, several Point of Control and Observations (PCOs) are used. All PCOs reside at the service access points between layers 2 and 3.



**Figure 2: Combination of the remote and multi-party test methods**

The MTC PCO is named "L0" ("L" for Lower). The L0 PCO is used to control and observe the behaviour of the IUT and test case verdicts are assigned depending on the behaviour observed at this PCO. The PTCs PTC1, PTC2 etc. use PCOs L1, L2 etc. These PCOs are used to control and, in a limited way, observe the behaviour of the network equipment at interfaces other than the one under test. No verdicts are assigned at these PCOs.

As stated in a previous paragraph, the non-receipt of network generated messages at L0, which are stimulated by events at the L1, L2 etc., will result in INCONCLUSIVE rather than FAIL verdicts being assigned.

PTC2 is only activated in that test cases that test the procedures at the access between a root user and the IUT, when more than one party is involved in the call between the root user and the IUT. In test cases which verify that the IUT rejects invalid or unacceptable SETUP messages, no PTC is activated at all, as these rejection procedures are considered local to the access between IUT and MTC.

---

## 5 Untestable test purposes

There are no untestable test purposes associated with this ATS.

---

## 6 ATS to TP map

The identifiers used for the TPs 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 Protocol Conformance Test Report (PCTR), is required, as specified in ISO/IEC 9646-5 [7], to produce a PCTR conformant with the PCTR template given in annex B of ISO/IEC 9646-5 [7].

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 [6], 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 IUT.

A test laboratory, offering testing for the ATS specification contained in annex C, is required, as specified in ISO/IEC 9646-5 [7], 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 MOT and Executable Test Suite (ExTS) for this ATS specification, shall comply with the requirements of ISO/IEC 9646-4. 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 [7].

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

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PCTR proforma in this annex so that it can be used for its intended purposes and may further publish the completed PCTR.

### 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

|                          |             |
|--------------------------|-------------|
| <b>Name:</b>             |             |
| Version:                 |             |
| Protocol specification:  | ETS 300 771 |
| PICS:                    |             |
| Previous PCTRs (if any): |             |

#### A.1.3 Testing environment

|                                      |                                              |
|--------------------------------------|----------------------------------------------|
| PIXIT reference number:              |                                              |
| ATS specification:                   | EN 300 771-6                                 |
| 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.*

.....

.....

.....

.....

## 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 / 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 this report) and there are no "FAIL" verdicts to be recorded (in clause A.6) strike the word "has", otherwise strike the words "has not".*

---

## A.3 Static conformance summary

The PICS for this IUT is / 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 / did not reveal errors in the IUT.

*Strike the appropriate words in this sentence. If there are no "FAIL" verdicts to be recorded (in clause A.6 of this report) strike the word "did", otherwise strike the words "did not".*

Summary of the results of groups of tests:

.....

.....

.....

.....

---

## A.5 Static conformance review report

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

.....

.....

.....

.....

.....

.....

## A.6 Test campaign report

| ATS reference                                                                                                    | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|------------------------------------------------------------------------------------------------------------------|--------------------|---------------|---------|--------------|
| <b>Signalling procedures at the coincident <math>S_B/T_B</math> and at the <math>T_B</math> reference points</b> |                    |               |         |              |
| L3MN_01_01                                                                                                       |                    |               |         |              |
| L3MN_01_02                                                                                                       |                    |               |         |              |
| L3MN_01_03                                                                                                       |                    |               |         |              |
| L3MN_01_04                                                                                                       |                    |               |         |              |
| L3MN_01_05                                                                                                       |                    |               |         |              |
| L3MN_01_06                                                                                                       |                    |               |         |              |
| L3MN_02_01                                                                                                       |                    |               |         |              |
| L3MN_02_02                                                                                                       |                    |               |         |              |
| L3MN_03_01                                                                                                       |                    |               |         |              |
| L3MN_03_02                                                                                                       |                    |               |         |              |
| L3MN_04_01                                                                                                       |                    |               |         |              |
| L3MN_04_02                                                                                                       |                    |               |         |              |
| L3MN_05_01                                                                                                       |                    |               |         |              |
| L3MN_05_02                                                                                                       |                    |               |         |              |
| L3MN_05_03                                                                                                       |                    |               |         |              |
| L3MN_05_04                                                                                                       |                    |               |         |              |
| L3MN_05_05                                                                                                       |                    |               |         |              |
| L3MN_05_06                                                                                                       |                    |               |         |              |
| L3MN_05_07                                                                                                       |                    |               |         |              |
| L3MN_05_08                                                                                                       |                    |               |         |              |
| L3MN_05_09                                                                                                       |                    |               |         |              |
| L3MN_05_10                                                                                                       |                    |               |         |              |
| L3MN_06_01                                                                                                       |                    |               |         |              |
| L3MN_06_02                                                                                                       |                    |               |         |              |
| L3MN_06_03                                                                                                       |                    |               |         |              |
| L3MN_07_01                                                                                                       |                    |               |         |              |
| L3MN_07_02                                                                                                       |                    |               |         |              |
| L3MN_07_03                                                                                                       |                    |               |         |              |
| L3MN_07_04                                                                                                       |                    |               |         |              |
| L3MN_07_05                                                                                                       |                    |               |         |              |
| L3MN_07_06                                                                                                       |                    |               |         |              |
| L3MN_07_07                                                                                                       |                    |               |         |              |
| L3MN_07_08                                                                                                       |                    |               |         |              |
| L3MN_07_09                                                                                                       |                    |               |         |              |
| L3MN_07_10                                                                                                       |                    |               |         |              |
| L3MN_07_11                                                                                                       |                    |               |         |              |
| L3MN_07_12                                                                                                       |                    |               |         |              |
| L3MN_07_13                                                                                                       |                    |               |         |              |
| L3MN_07_14                                                                                                       |                    |               |         |              |
| L3MN_07_15                                                                                                       |                    |               |         |              |
| L3MN_07_16                                                                                                       |                    |               |         |              |
| L3MN_07_17                                                                                                       |                    |               |         |              |
| L3MN_07_18                                                                                                       |                    |               |         |              |
| L3MN_07_19                                                                                                       |                    |               |         |              |
| L3MN_07_20                                                                                                       |                    |               |         |              |
| L3MN_07_21                                                                                                       |                    |               |         |              |
| L3MN_07_22                                                                                                       |                    |               |         |              |
| L3MN_07_23                                                                                                       |                    |               |         |              |
| L3MN_07_24                                                                                                       |                    |               |         |              |
| L3MN_07_25                                                                                                       |                    |               |         |              |
| L3MN_07_26                                                                                                       |                    |               |         |              |
| L3MN_07_27                                                                                                       |                    |               |         |              |
| L3MN_07_28                                                                                                       |                    |               |         |              |
| L3MN_07_29                                                                                                       |                    |               |         |              |
| L3MN_07_30                                                                                                       |                    |               |         |              |
| L3MN_07_31                                                                                                       |                    |               |         |              |
| L3MN_07_32                                                                                                       |                    |               |         |              |
| L3MN_07_33                                                                                                       |                    |               |         |              |
| L3MN_07_34                                                                                                       |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_07_35    |                    |               |         |              |
| L3MN_07_36    |                    |               |         |              |
| L3MN_07_37    |                    |               |         |              |
| L3MN_07_38    |                    |               |         |              |
| L3MN_07_39    |                    |               |         |              |
| L3MN_07_40    |                    |               |         |              |
| L3MN_07_41    |                    |               |         |              |
| L3MN_08_01    |                    |               |         |              |
| L3MN_08_02    |                    |               |         |              |
| L3MN_08_03    |                    |               |         |              |
| L3MN_08_04    |                    |               |         |              |
| L3MN_08_05    |                    |               |         |              |
| L3MN_08_06    |                    |               |         |              |
| L3MN_08_07    |                    |               |         |              |
| L3MN_08_08    |                    |               |         |              |
| L3MN_08_09    |                    |               |         |              |
| L3MN_09_01    |                    |               |         |              |
| L3MN_09_02    |                    |               |         |              |
| L3MN_09_03    |                    |               |         |              |
| L3MN_09_04    |                    |               |         |              |
| L3MN_09_05    |                    |               |         |              |
| L3MN_09_06    |                    |               |         |              |
| L3MN_09_07    |                    |               |         |              |
| L3MN_09_08    |                    |               |         |              |
| L3MN_09_09    |                    |               |         |              |
| L3MN_09_10    |                    |               |         |              |
| L3MN_10_01    |                    |               |         |              |
| L3MN_10_02    |                    |               |         |              |
| L3MN_10_03    |                    |               |         |              |
| L3MN_10_04    |                    |               |         |              |
| L3MN_10_05    |                    |               |         |              |
| L3MN_10_06    |                    |               |         |              |
| L3MN_10_07    |                    |               |         |              |
| L3MN_10_08    |                    |               |         |              |
| L3MN_10_09    |                    |               |         |              |
| L3MN_10_10    |                    |               |         |              |
| L3MN_10_11    |                    |               |         |              |
| L3MN_10_12    |                    |               |         |              |
| L3MN_10_13    |                    |               |         |              |
| L3MN_10_14    |                    |               |         |              |
| L3MN_11_01    |                    |               |         |              |
| L3MN_11_02    |                    |               |         |              |
| L3MN_11_03    |                    |               |         |              |
| L3MN_11_04    |                    |               |         |              |
| L3MN_11_05    |                    |               |         |              |
| L3MN_11_06    |                    |               |         |              |
| L3MN_11_07    |                    |               |         |              |
| L3MN_12_01    |                    |               |         |              |
| L3MN_12_02    |                    |               |         |              |
| L3MN_12_03    |                    |               |         |              |
| L3MN_12_04    |                    |               |         |              |
| L3MN_12_05    |                    |               |         |              |
| L3MN_13_01    |                    |               |         |              |
| L3MN_13_02    |                    |               |         |              |
| L3MN_13_03    |                    |               |         |              |
| L3MN_13_04    |                    |               |         |              |
| L3MN_13_05    |                    |               |         |              |
| L3MN_14_01    |                    |               |         |              |
| L3MN_14_02    |                    |               |         |              |
| L3MN_14_03    |                    |               |         |              |
| L3MN_14_04    |                    |               |         |              |
| L3MN_14_05    |                    |               |         |              |
| L3MN_14_06    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_15_01    |                    |               |         |              |
| L3MN_15_02    |                    |               |         |              |
| L3MN_15_03    |                    |               |         |              |
| L3MN_15_04    |                    |               |         |              |
| L3MN_15_05    |                    |               |         |              |
| L3MN_15_06    |                    |               |         |              |
| L3MN_15_07    |                    |               |         |              |
| L3MN_15_08    |                    |               |         |              |
| L3MN_15_09    |                    |               |         |              |
| L3MN_15_10    |                    |               |         |              |
| L3MN_15_11    |                    |               |         |              |
| L3MN_15_12    |                    |               |         |              |
| L3MN_15_13    |                    |               |         |              |
| L3MN_15_14    |                    |               |         |              |
| L3MN_15_15    |                    |               |         |              |
| L3MN_15_16    |                    |               |         |              |
| L3MN_15_17    |                    |               |         |              |
| L3MN_15_18    |                    |               |         |              |
| L3MN_15_19    |                    |               |         |              |
| L3MN_15_20    |                    |               |         |              |
| L3MN_15_21    |                    |               |         |              |
| L3MN_15_22    |                    |               |         |              |
| L3MN_15_23    |                    |               |         |              |
| L3MN_15_24    |                    |               |         |              |
| L3MN_15_25    |                    |               |         |              |
| L3MN_15_26    |                    |               |         |              |
| L3MN_15_27    |                    |               |         |              |
| L3MN_15_28    |                    |               |         |              |
| L3MN_15_29    |                    |               |         |              |
| L3MN_15_30    |                    |               |         |              |
| L3MN_15_31    |                    |               |         |              |
| L3MN_15_32    |                    |               |         |              |
| L3MN_15_33    |                    |               |         |              |
| L3MN_15_34    |                    |               |         |              |
| L3MN_15_35    |                    |               |         |              |
| L3MN_16_01    |                    |               |         |              |
| L3MN_16_02    |                    |               |         |              |
| L3MN_16_03    |                    |               |         |              |
| L3MN_16_04    |                    |               |         |              |
| L3MN_16_05    |                    |               |         |              |
| L3MN_16_06    |                    |               |         |              |
| L3MN_16_07    |                    |               |         |              |
| L3MN_16_08    |                    |               |         |              |
| L3MN_16_09    |                    |               |         |              |
| L3MN_16_10    |                    |               |         |              |
| L3MN_16_11    |                    |               |         |              |
| L3MN_16_12    |                    |               |         |              |
| L3MN_16_13    |                    |               |         |              |
| L3MN_16_14    |                    |               |         |              |
| L3MN_16_15    |                    |               |         |              |
| L3MN_16_16    |                    |               |         |              |
| L3MN_16_17    |                    |               |         |              |
| L3MN_16_18    |                    |               |         |              |
| L3MN_16_19    |                    |               |         |              |
| L3MN_16_20    |                    |               |         |              |
| L3MN_16_21    |                    |               |         |              |
| L3MN_16_22    |                    |               |         |              |
| L3MN_16_23    |                    |               |         |              |
| L3MN_16_24    |                    |               |         |              |
| L3MN_16_25    |                    |               |         |              |
| L3MN_16_26    |                    |               |         |              |
| L3MN_16_27    |                    |               |         |              |
| L3MN_16_28    |                    |               |         |              |



| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_16_29    |                    |               |         |              |
| L3MN_16_30    |                    |               |         |              |
| L3MN_16_31    |                    |               |         |              |
| L3MN_16_32    |                    |               |         |              |
| L3MN_16_33    |                    |               |         |              |
| L3MN_16_34    |                    |               |         |              |
| L3MN_16_35    |                    |               |         |              |
| L3MN_16_36    |                    |               |         |              |
| L3MN_16_37    |                    |               |         |              |
| L3MN_16_38    |                    |               |         |              |
| L3MN_16_39    |                    |               |         |              |
| L3MN_16_40    |                    |               |         |              |
| L3MN_16_41    |                    |               |         |              |
| L3MN_16_42    |                    |               |         |              |
| L3MN_16_43    |                    |               |         |              |
| L3MN_16_44    |                    |               |         |              |
| L3MN_16_45    |                    |               |         |              |
| L3MN_17_01    |                    |               |         |              |
| L3MN_17_02    |                    |               |         |              |
| L3MN_17_03    |                    |               |         |              |
| L3MN_17_04    |                    |               |         |              |
| L3MN_17_05    |                    |               |         |              |
| L3MN_17_06    |                    |               |         |              |
| L3MN_17_07    |                    |               |         |              |
| L3MN_17_08    |                    |               |         |              |
| L3MN_17_09    |                    |               |         |              |
| L3MN_17_10    |                    |               |         |              |
| L3MN_17_11    |                    |               |         |              |
| L3MN_17_12    |                    |               |         |              |
| L3MN_17_13    |                    |               |         |              |
| L3MN_17_14    |                    |               |         |              |
| L3MN_17_15    |                    |               |         |              |
| L3MN_17_16    |                    |               |         |              |
| L3MN_17_17    |                    |               |         |              |
| L3MN_17_18    |                    |               |         |              |
| L3MN_17_19    |                    |               |         |              |
| L3MN_17_20    |                    |               |         |              |
| L3MN_17_21    |                    |               |         |              |
| L3MN_17_22    |                    |               |         |              |
| L3MN_17_23    |                    |               |         |              |
| L3MN_18_00    |                    |               |         |              |
| L3MN_18_01    |                    |               |         |              |
| L3MN_18_02    |                    |               |         |              |
| L3MN_18_03    |                    |               |         |              |
| L3MN_18_04    |                    |               |         |              |
| L3MN_18_05    |                    |               |         |              |
| L3MN_18_06    |                    |               |         |              |
| L3MN_18_07    |                    |               |         |              |
| L3MN_18_08    |                    |               |         |              |
| L3MN_18_09    |                    |               |         |              |
| L3MN_18_10    |                    |               |         |              |
| L3MN_18_11    |                    |               |         |              |
| L3MN_18_12    |                    |               |         |              |
| L3MN_18_13    |                    |               |         |              |
| L3MN_18_14    |                    |               |         |              |
| L3MN_18_15    |                    |               |         |              |
| L3MN_18_16    |                    |               |         |              |
| L3MN_18_17    |                    |               |         |              |
| L3MN_18_18    |                    |               |         |              |
| L3MN_18_19    |                    |               |         |              |
| L3MN_18_20    |                    |               |         |              |
| L3MN_18_21    |                    |               |         |              |
| L3MN_18_22    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_18_23    |                    |               |         |              |
| L3MN_18_24    |                    |               |         |              |
| L3MN_18_25    |                    |               |         |              |
| L3MN_18_26    |                    |               |         |              |
| L3MN_18_27    |                    |               |         |              |
| L3MN_18_28    |                    |               |         |              |
| L3MN_18_29    |                    |               |         |              |
| L3MN_18_30    |                    |               |         |              |
| L3MN_18_31    |                    |               |         |              |
| L3MN_18_32    |                    |               |         |              |
| L3MN_18_33    |                    |               |         |              |
| L3MN_18_34    |                    |               |         |              |
| L3MN_18_35    |                    |               |         |              |
| L3MN_19_01    |                    |               |         |              |
| L3MN_19_02    |                    |               |         |              |
| L3MN_19_03    |                    |               |         |              |
| L3MN_19_04    |                    |               |         |              |
| L3MN_19_05    |                    |               |         |              |
| L3MN_19_06    |                    |               |         |              |
| L3MN_19_07    |                    |               |         |              |
| L3MN_19_08    |                    |               |         |              |
| L3MN_19_09    |                    |               |         |              |
| L3MN_19_10    |                    |               |         |              |
| L3MN_19_11    |                    |               |         |              |
| L3MN_19_12    |                    |               |         |              |
| L3MN_19_13    |                    |               |         |              |
| L3MN_19_14    |                    |               |         |              |
| L3MN_19_15    |                    |               |         |              |
| L3MN_19_16    |                    |               |         |              |
| L3MN_19_17    |                    |               |         |              |
| L3MN_19_18    |                    |               |         |              |
| L3MN_19_19    |                    |               |         |              |
| L3MN_19_20    |                    |               |         |              |
| L3MN_20_01    |                    |               |         |              |
| L3MN_20_02    |                    |               |         |              |
| L3MN_20_03    |                    |               |         |              |
| L3MN_20_04    |                    |               |         |              |
| L3MN_20_05    |                    |               |         |              |
| L3MN_20_06    |                    |               |         |              |
| L3MN_20_07    |                    |               |         |              |
| L3MN_20_08    |                    |               |         |              |
| L3MN_20_09    |                    |               |         |              |
| L3MN_20_10    |                    |               |         |              |
| L3MN_20_11    |                    |               |         |              |
| L3MN_20_12    |                    |               |         |              |
| L3MN_21_01    |                    |               |         |              |
| L3MN_21_02    |                    |               |         |              |
| L3MN_21_03    |                    |               |         |              |
| L3MN_21_04    |                    |               |         |              |
| L3MN_21_05    |                    |               |         |              |
| L3MN_21_06    |                    |               |         |              |
| L3MN_21_07    |                    |               |         |              |
| L3MN_21_08    |                    |               |         |              |
| L3MN_21_09    |                    |               |         |              |
| L3MN_21_10    |                    |               |         |              |
| L3MN_21_11    |                    |               |         |              |
| L3MN_21_12    |                    |               |         |              |
| L3MN_22_01    |                    |               |         |              |
| L3MN_22_02    |                    |               |         |              |
| L3MN_22_03    |                    |               |         |              |
| L3MN_22_04    |                    |               |         |              |
| L3MN_22_05    |                    |               |         |              |
| L3MN_22_06    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_22_07    |                    |               |         |              |
| L3MN_22_08    |                    |               |         |              |
| L3MN_22_09    |                    |               |         |              |
| L3MN_22_10    |                    |               |         |              |
| L3MN_22_11    |                    |               |         |              |
| L3MN_22_12    |                    |               |         |              |
| L3MN_22_13    |                    |               |         |              |
| L3MN_22_14    |                    |               |         |              |
| L3MN_22_15    |                    |               |         |              |
| L3MN_22_16    |                    |               |         |              |
| L3MN_22_17    |                    |               |         |              |
| L3MN_22_18    |                    |               |         |              |
| L3MN_22_19    |                    |               |         |              |
| L3MN_22_20    |                    |               |         |              |
| L3MN_22_21    |                    |               |         |              |
| L3MN_22_22    |                    |               |         |              |
| L3MN_22_23    |                    |               |         |              |
| L3MN_22_24    |                    |               |         |              |
| L3MN_22_25    |                    |               |         |              |
| L3MN_22_26    |                    |               |         |              |
| L3MN_22_27    |                    |               |         |              |
| L3MN_22_28    |                    |               |         |              |
| L3MN_22_29    |                    |               |         |              |
| L3MN_22_30    |                    |               |         |              |
| L3MN_22_31    |                    |               |         |              |
| L3MN_22_32    |                    |               |         |              |
| L3MN_22_33    |                    |               |         |              |
| L3MN_22_34    |                    |               |         |              |
| L3MN_22_35    |                    |               |         |              |
| L3MN_22_36    |                    |               |         |              |
| L3MN_22_37    |                    |               |         |              |
| L3MN_22_38    |                    |               |         |              |
| L3MN_22_39    |                    |               |         |              |
| L3MN_22_40    |                    |               |         |              |
| L3MN_22_41    |                    |               |         |              |
| L3MN_22_42    |                    |               |         |              |
| L3MN_22_43    |                    |               |         |              |
| L3MN_22_44    |                    |               |         |              |
| L3MN_22_45    |                    |               |         |              |
| L3MN_23_01    |                    |               |         |              |
| L3MN_23_02    |                    |               |         |              |
| L3MN_23_03    |                    |               |         |              |
| L3MN_23_04    |                    |               |         |              |
| L3MN_23_05    |                    |               |         |              |
| L3MN_23_06    |                    |               |         |              |
| L3MN_23_07    |                    |               |         |              |
| L3MN_23_08    |                    |               |         |              |
| L3MN_23_09    |                    |               |         |              |
| L3MN_23_10    |                    |               |         |              |
| L3MN_23_11    |                    |               |         |              |
| L3MN_23_12    |                    |               |         |              |
| L3MN_23_13    |                    |               |         |              |
| L3MN_23_14    |                    |               |         |              |
| L3MN_24_01    |                    |               |         |              |
| L3MN_24_02    |                    |               |         |              |
| L3MN_25_01    |                    |               |         |              |
| L3MN_25_02    |                    |               |         |              |
| L3MN_25_03    |                    |               |         |              |
| L3MN_25_04    |                    |               |         |              |
| L3MN_26_01    |                    |               |         |              |
| L3MN_26_02    |                    |               |         |              |
| L3MN_26_03    |                    |               |         |              |
| L3MN_26_04    |                    |               |         |              |

| ATS reference                                                                                | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|----------------------------------------------------------------------------------------------|--------------------|---------------|---------|--------------|
| L3MN_26_05                                                                                   |                    |               |         |              |
| L3MN_26_06                                                                                   |                    |               |         |              |
| L3MN_26_07                                                                                   |                    |               |         |              |
| L3MN_26_08                                                                                   |                    |               |         |              |
| L3MN_27_01                                                                                   |                    |               |         |              |
| L3MN_27_02                                                                                   |                    |               |         |              |
| L3MN_27_03                                                                                   |                    |               |         |              |
| L3MN_27_04                                                                                   |                    |               |         |              |
| L3MN_27_05                                                                                   |                    |               |         |              |
| L3MN_27_06                                                                                   |                    |               |         |              |
| L3MN_27_07                                                                                   |                    |               |         |              |
| L3MN_27_08                                                                                   |                    |               |         |              |
| L3MN_27_09                                                                                   |                    |               |         |              |
| L3MN_27_10                                                                                   |                    |               |         |              |
| L3MN_27_11                                                                                   |                    |               |         |              |
| L3MN_27_12                                                                                   |                    |               |         |              |
| L3MN_28_01                                                                                   |                    |               |         |              |
| L3MN_28_02                                                                                   |                    |               |         |              |
| L3MN_28_03                                                                                   |                    |               |         |              |
| L3MN_28_04                                                                                   |                    |               |         |              |
| L3MN_28_05                                                                                   |                    |               |         |              |
| L3MN_28_06                                                                                   |                    |               |         |              |
| L3MN_28_07                                                                                   |                    |               |         |              |
| L3MN_28_08                                                                                   |                    |               |         |              |
| L3MN_28_09                                                                                   |                    |               |         |              |
| <b>Procedures at the T<sub>B</sub> reference point for interworking with private B-ISDNs</b> |                    |               |         |              |
| L3MN_29_01                                                                                   |                    |               |         |              |
| L3MN_29_02                                                                                   |                    |               |         |              |
| L3MN_30_01                                                                                   |                    |               |         |              |
| L3MN_30_02                                                                                   |                    |               |         |              |
| L3MN_31_01                                                                                   |                    |               |         |              |
| L3MN_31_02                                                                                   |                    |               |         |              |
| L3MN_32_01                                                                                   |                    |               |         |              |
| L3MN_32_02                                                                                   |                    |               |         |              |
| L3MN_32_03                                                                                   |                    |               |         |              |
| L3MN_33_01                                                                                   |                    |               |         |              |
| L3MN_33_02                                                                                   |                    |               |         |              |
| L3MN_33_03                                                                                   |                    |               |         |              |
| L3MN_33_04                                                                                   |                    |               |         |              |
| L3MN_33_05                                                                                   |                    |               |         |              |
| L3MN_34_01                                                                                   |                    |               |         |              |
| L3MN_34_02                                                                                   |                    |               |         |              |
| L3MN_35_01                                                                                   |                    |               |         |              |
| L3MN_35_02                                                                                   |                    |               |         |              |
| L3MN_35_03                                                                                   |                    |               |         |              |
| L3MN_35_04                                                                                   |                    |               |         |              |
| L3MN_35_05                                                                                   |                    |               |         |              |
| L3MN_35_06                                                                                   |                    |               |         |              |
| L3MN_35_07                                                                                   |                    |               |         |              |
| L3MN_36_01                                                                                   |                    |               |         |              |
| L3MN_36_02                                                                                   |                    |               |         |              |
| L3MN_36_03                                                                                   |                    |               |         |              |
| L3MN_36_04                                                                                   |                    |               |         |              |
| L3MN_36_05                                                                                   |                    |               |         |              |
| L3MN_36_06                                                                                   |                    |               |         |              |
| L3MN_36_07                                                                                   |                    |               |         |              |
| L3MN_36_08                                                                                   |                    |               |         |              |
| L3MN_36_09                                                                                   |                    |               |         |              |
| L3MN_36_10                                                                                   |                    |               |         |              |
| L3MN_36_11                                                                                   |                    |               |         |              |
| L3MN_36_12                                                                                   |                    |               |         |              |
| L3MN_36_13                                                                                   |                    |               |         |              |
| L3MN_37_01                                                                                   |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_37_02    |                    |               |         |              |
| L3MN_37_03    |                    |               |         |              |
| L3MN_37_04    |                    |               |         |              |
| L3MN_37_05    |                    |               |         |              |
| L3MN_37_06    |                    |               |         |              |
| L3MN_37_07    |                    |               |         |              |
| L3MN_37_08    |                    |               |         |              |
| L3MN_37_09    |                    |               |         |              |
| L3MN_37_10    |                    |               |         |              |
| L3MN_37_11    |                    |               |         |              |
| L3MN_37_12    |                    |               |         |              |
| L3MN_37_13    |                    |               |         |              |
| L3MN_37_14    |                    |               |         |              |
| L3MN_37_15    |                    |               |         |              |
| L3MN_38_01    |                    |               |         |              |
| L3MN_38_02    |                    |               |         |              |
| L3MN_38_03    |                    |               |         |              |
| L3MN_38_04    |                    |               |         |              |
| L3MN_38_05    |                    |               |         |              |
| L3MN_39_01    |                    |               |         |              |
| L3MN_39_02    |                    |               |         |              |
| L3MN_39_03    |                    |               |         |              |
| L3MN_39_04    |                    |               |         |              |
| L3MN_39_05    |                    |               |         |              |
| L3MN_40_01    |                    |               |         |              |
| L3MN_40_02    |                    |               |         |              |
| L3MN_40_03    |                    |               |         |              |
| L3MN_40_04    |                    |               |         |              |
| L3MN_40_05    |                    |               |         |              |
| L3MN_40_06    |                    |               |         |              |
| L3MN_40_07    |                    |               |         |              |
| L3MN_40_08    |                    |               |         |              |
| L3MN_40_09    |                    |               |         |              |
| L3MN_40_10    |                    |               |         |              |
| L3MN_40_11    |                    |               |         |              |
| L3MN_40_12    |                    |               |         |              |
| L3MN_40_13    |                    |               |         |              |
| L3MN_40_14    |                    |               |         |              |
| L3MN_40_15    |                    |               |         |              |
| L3MN_40_16    |                    |               |         |              |
| L3MN_40_17    |                    |               |         |              |
| L3MN_40_18    |                    |               |         |              |
| L3MN_40_19    |                    |               |         |              |
| L3MN_40_20    |                    |               |         |              |
| L3MN_40_21    |                    |               |         |              |
| L3MN_40_22    |                    |               |         |              |
| L3MN_40_23    |                    |               |         |              |
| L3MN_40_24    |                    |               |         |              |
| L3MN_40_25    |                    |               |         |              |
| L3MN_40_26    |                    |               |         |              |
| L3MN_40_27    |                    |               |         |              |
| L3MN_40_28    |                    |               |         |              |
| L3MN_40_29    |                    |               |         |              |
| L3MN_40_30    |                    |               |         |              |
| L3MN_40_31    |                    |               |         |              |
| L3MN_40_32    |                    |               |         |              |
| L3MN_40_33    |                    |               |         |              |
| L3MN_40_34    |                    |               |         |              |
| L3MN_40_35    |                    |               |         |              |
| L3MN_40_36    |                    |               |         |              |
| L3MN_40_37    |                    |               |         |              |
| L3MN_40_38    |                    |               |         |              |
| L3MN_40_39    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_40_40    |                    |               |         |              |
| L3MN_40_41    |                    |               |         |              |
| L3MN_40_42    |                    |               |         |              |
| L3MN_40_43    |                    |               |         |              |
| L3MN_40_44    |                    |               |         |              |
| L3MN_40_45    |                    |               |         |              |
| L3MN_40_46    |                    |               |         |              |
| L3MN_40_47    |                    |               |         |              |
| L3MN_40_48    |                    |               |         |              |
| L3MN_40_49    |                    |               |         |              |
| L3MN_40_50    |                    |               |         |              |
| L3MN_40_51    |                    |               |         |              |
| L3MN_40_52    |                    |               |         |              |
| L3MN_40_53    |                    |               |         |              |
| L3MN_40_54    |                    |               |         |              |
| L3MN_40_55    |                    |               |         |              |
| L3MN_40_56    |                    |               |         |              |
| L3MN_40_57    |                    |               |         |              |
| L3MN_40_58    |                    |               |         |              |
| L3MN_40_59    |                    |               |         |              |
| L3MN_41_01    |                    |               |         |              |
| L3MN_41_02    |                    |               |         |              |
| L3MN_41_03    |                    |               |         |              |
| L3MN_41_04    |                    |               |         |              |
| L3MN_41_05    |                    |               |         |              |
| L3MN_41_06    |                    |               |         |              |
| L3MN_41_07    |                    |               |         |              |
| L3MN_41_08    |                    |               |         |              |
| L3MN_41_09    |                    |               |         |              |
| L3MN_41_10    |                    |               |         |              |
| L3MN_41_11    |                    |               |         |              |
| L3MN_41_12    |                    |               |         |              |
| L3MN_41_13    |                    |               |         |              |
| L3MN_41_14    |                    |               |         |              |
| L3MN_41_15    |                    |               |         |              |
| L3MN_41_16    |                    |               |         |              |
| L3MN_41_17    |                    |               |         |              |
| L3MN_41_18    |                    |               |         |              |
| L3MN_41_19    |                    |               |         |              |
| L3MN_41_20    |                    |               |         |              |
| L3MN_41_21    |                    |               |         |              |
| L3MN_41_22    |                    |               |         |              |
| L3MN_41_23    |                    |               |         |              |
| L3MN_41_24    |                    |               |         |              |
| L3MN_41_25    |                    |               |         |              |
| L3MN_41_26    |                    |               |         |              |
| L3MN_41_27    |                    |               |         |              |
| L3MN_41_28    |                    |               |         |              |
| L3MN_41_29    |                    |               |         |              |
| L3MN_41_30    |                    |               |         |              |
| L3MN_41_31    |                    |               |         |              |
| L3MN_41_32    |                    |               |         |              |
| L3MN_41_33    |                    |               |         |              |
| L3MN_41_34    |                    |               |         |              |
| L3MN_41_35    |                    |               |         |              |
| L3MN_41_36    |                    |               |         |              |
| L3MN_41_37    |                    |               |         |              |
| L3MN_41_38    |                    |               |         |              |
| L3MN_41_39    |                    |               |         |              |
| L3MN_41_40    |                    |               |         |              |
| L3MN_41_41    |                    |               |         |              |
| L3MN_41_42    |                    |               |         |              |
| L3MN_41_43    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_41_44    |                    |               |         |              |
| L3MN_41_45    |                    |               |         |              |
| L3MN_41_46    |                    |               |         |              |
| L3MN_41_47    |                    |               |         |              |
| L3MN_41_48    |                    |               |         |              |
| L3MN_41_49    |                    |               |         |              |
| L3MN_41_50    |                    |               |         |              |
| L3MN_41_51    |                    |               |         |              |
| L3MN_41_52    |                    |               |         |              |
| L3MN_41_53    |                    |               |         |              |
| L3MN_41_54    |                    |               |         |              |
| L3MN_41_55    |                    |               |         |              |
| L3MN_41_56    |                    |               |         |              |
| L3MN_41_57    |                    |               |         |              |
| L3MN_41_58    |                    |               |         |              |
| L3MN_41_59    |                    |               |         |              |
| L3MN_41_60    |                    |               |         |              |
| L3MN_41_61    |                    |               |         |              |
| L3MN_41_62    |                    |               |         |              |
| L3MN_41_63    |                    |               |         |              |
| L3MN_41_64    |                    |               |         |              |
| L3MN_41_65    |                    |               |         |              |
| L3MN_41_66    |                    |               |         |              |
| L3MN_41_67    |                    |               |         |              |
| L3MN_41_68    |                    |               |         |              |
| L3MN_41_69    |                    |               |         |              |
| L3MN_41_70    |                    |               |         |              |
| L3MN_41_71    |                    |               |         |              |
| L3MN_41_72    |                    |               |         |              |
| L3MN_41_73    |                    |               |         |              |
| L3MN_41_74    |                    |               |         |              |
| L3MN_41_75    |                    |               |         |              |
| L3MN_41_76    |                    |               |         |              |
| L3MN_41_77    |                    |               |         |              |
| L3MN_41_78    |                    |               |         |              |
| L3MN_41_79    |                    |               |         |              |
| L3MN_42_01    |                    |               |         |              |
| L3MN_42_02    |                    |               |         |              |
| L3MN_42_03    |                    |               |         |              |
| L3MN_42_04    |                    |               |         |              |
| L3MN_42_05    |                    |               |         |              |
| L3MN_42_06    |                    |               |         |              |
| L3MN_42_07    |                    |               |         |              |
| L3MN_42_08    |                    |               |         |              |
| L3MN_42_09    |                    |               |         |              |
| L3MN_42_10    |                    |               |         |              |
| L3MN_42_11    |                    |               |         |              |
| L3MN_42_12    |                    |               |         |              |
| L3MN_42_13    |                    |               |         |              |
| L3MN_42_14    |                    |               |         |              |
| L3MN_42_15    |                    |               |         |              |
| L3MN_42_16    |                    |               |         |              |
| L3MN_42_17    |                    |               |         |              |
| L3MN_42_18    |                    |               |         |              |
| L3MN_42_19    |                    |               |         |              |
| L3MN_42_20    |                    |               |         |              |
| L3MN_42_21    |                    |               |         |              |
| L3MN_42_22    |                    |               |         |              |
| L3MN_42_23    |                    |               |         |              |
| L3MN_42_24    |                    |               |         |              |
| L3MN_42_25    |                    |               |         |              |
| L3MN_42_26    |                    |               |         |              |
| L3MN_42_27    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_42_28    |                    |               |         |              |
| L3MN_43_01    |                    |               |         |              |
| L3MN_43_02    |                    |               |         |              |
| L3MN_43_03    |                    |               |         |              |
| L3MN_43_04    |                    |               |         |              |
| L3MN_43_05    |                    |               |         |              |
| L3MN_43_06    |                    |               |         |              |
| L3MN_43_07    |                    |               |         |              |
| L3MN_43_08    |                    |               |         |              |
| L3MN_43_09    |                    |               |         |              |
| L3MN_43_10    |                    |               |         |              |
| L3MN_43_11    |                    |               |         |              |
| L3MN_43_12    |                    |               |         |              |
| L3MN_43_13    |                    |               |         |              |
| L3MN_43_14    |                    |               |         |              |
| L3MN_43_15    |                    |               |         |              |
| L3MN_43_16    |                    |               |         |              |
| L3MN_43_17    |                    |               |         |              |
| L3MN_43_18    |                    |               |         |              |
| L3MN_43_19    |                    |               |         |              |
| L3MN_43_20    |                    |               |         |              |
| L3MN_43_21    |                    |               |         |              |
| L3MN_43_22    |                    |               |         |              |
| L3MN_43_23    |                    |               |         |              |
| L3MN_43_24    |                    |               |         |              |
| L3MN_43_25    |                    |               |         |              |
| L3MN_43_26    |                    |               |         |              |
| L3MN_43_27    |                    |               |         |              |
| L3MN_43_28    |                    |               |         |              |
| L3MN_43_29    |                    |               |         |              |
| L3MN_43_30    |                    |               |         |              |
| L3MN_43_31    |                    |               |         |              |
| L3MN_43_32    |                    |               |         |              |
| L3MN_43_33    |                    |               |         |              |
| L3MN_43_34    |                    |               |         |              |
| L3MN_43_35    |                    |               |         |              |
| L3MN_43_36    |                    |               |         |              |
| L3MN_43_37    |                    |               |         |              |
| L3MN_43_38    |                    |               |         |              |
| L3MN_43_39    |                    |               |         |              |
| L3MN_43_40    |                    |               |         |              |
| L3MN_43_41    |                    |               |         |              |
| L3MN_44_01    |                    |               |         |              |
| L3MN_44_02    |                    |               |         |              |
| L3MN_44_03    |                    |               |         |              |
| L3MN_44_04    |                    |               |         |              |
| L3MN_44_05    |                    |               |         |              |
| L3MN_44_06    |                    |               |         |              |
| L3MN_44_07    |                    |               |         |              |
| L3MN_44_08    |                    |               |         |              |
| L3MN_44_09    |                    |               |         |              |
| L3MN_44_10    |                    |               |         |              |
| L3MN_44_11    |                    |               |         |              |
| L3MN_44_12    |                    |               |         |              |
| L3MN_44_13    |                    |               |         |              |
| L3MN_44_14    |                    |               |         |              |
| L3MN_44_15    |                    |               |         |              |
| L3MN_44_16    |                    |               |         |              |
| L3MN_45_01    |                    |               |         |              |
| L3MN_45_02    |                    |               |         |              |
| L3MN_45_03    |                    |               |         |              |
| L3MN_45_04    |                    |               |         |              |
| L3MN_45_05    |                    |               |         |              |



| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_45_06    |                    |               |         |              |
| L3MN_45_07    |                    |               |         |              |
| L3MN_45_08    |                    |               |         |              |
| L3MN_45_09    |                    |               |         |              |
| L3MN_45_10    |                    |               |         |              |
| L3MN_45_11    |                    |               |         |              |
| L3MN_45_12    |                    |               |         |              |
| L3MN_46_01    |                    |               |         |              |
| L3MN_46_02    |                    |               |         |              |
| L3MN_46_03    |                    |               |         |              |
| L3MN_46_04    |                    |               |         |              |
| L3MN_46_05    |                    |               |         |              |
| L3MN_46_06    |                    |               |         |              |
| L3MN_46_07    |                    |               |         |              |
| L3MN_46_08    |                    |               |         |              |
| L3MN_46_09    |                    |               |         |              |
| L3MN_46_10    |                    |               |         |              |
| L3MN_46_11    |                    |               |         |              |
| L3MN_46_12    |                    |               |         |              |
| L3MN_47_01    |                    |               |         |              |
| L3MN_47_02    |                    |               |         |              |
| L3MN_47_03    |                    |               |         |              |
| L3MN_47_04    |                    |               |         |              |
| L3MN_47_05    |                    |               |         |              |
| L3MN_47_06    |                    |               |         |              |
| L3MN_47_07    |                    |               |         |              |
| L3MN_47_08    |                    |               |         |              |
| L3MN_47_09    |                    |               |         |              |
| L3MN_47_10    |                    |               |         |              |
| L3MN_47_11    |                    |               |         |              |
| L3MN_47_12    |                    |               |         |              |
| L3MN_47_13    |                    |               |         |              |
| L3MN_47_14    |                    |               |         |              |
| L3MN_47_15    |                    |               |         |              |
| L3MN_47_16    |                    |               |         |              |
| L3MN_47_17    |                    |               |         |              |
| L3MN_47_18    |                    |               |         |              |
| L3MN_47_19    |                    |               |         |              |
| L3MN_47_20    |                    |               |         |              |
| L3MN_47_21    |                    |               |         |              |
| L3MN_47_22    |                    |               |         |              |
| L3MN_47_23    |                    |               |         |              |
| L3MN_47_24    |                    |               |         |              |
| L3MN_47_25    |                    |               |         |              |
| L3MN_47_26    |                    |               |         |              |
| L3MN_47_27    |                    |               |         |              |
| L3MN_47_28    |                    |               |         |              |
| L3MN_47_29    |                    |               |         |              |
| L3MN_47_30    |                    |               |         |              |
| L3MN_47_31    |                    |               |         |              |
| L3MN_47_32    |                    |               |         |              |
| L3MN_47_33    |                    |               |         |              |
| L3MN_47_34    |                    |               |         |              |
| L3MN_47_35    |                    |               |         |              |
| L3MN_47_36    |                    |               |         |              |
| L3MN_47_37    |                    |               |         |              |
| L3MN_47_38    |                    |               |         |              |
| L3MN_47_39    |                    |               |         |              |
| L3MN_47_40    |                    |               |         |              |
| L3MN_47_41    |                    |               |         |              |
| L3MN_47_42    |                    |               |         |              |
| L3MN_47_43    |                    |               |         |              |
| L3MN_47_44    |                    |               |         |              |

| ATS reference | Selected?<br>(Y/N) | Run?<br>(Y/N) | Verdict | Observations |
|---------------|--------------------|---------------|---------|--------------|
| L3MN_47_45    |                    |               |         |              |
| L3MN_47_46    |                    |               |         |              |
| L3MN_47_47    |                    |               |         |              |
| L3MN_47_48    |                    |               |         |              |
| L3MN_47_49    |                    |               |         |              |
| L3MN_47_50    |                    |               |         |              |
| L3MN_47_51    |                    |               |         |              |
| L3MN_47_52    |                    |               |         |              |
| L3MN_47_53    |                    |               |         |              |
| L3MN_48_01    |                    |               |         |              |
| L3MN_48_02    |                    |               |         |              |
| L3MN_48_03    |                    |               |         |              |
| L3MN_48_04    |                    |               |         |              |
| L3MN_48_05    |                    |               |         |              |
| L3MN_48_06    |                    |               |         |              |
| L3MN_48_07    |                    |               |         |              |
| L3MN_48_08    |                    |               |         |              |
| L3MN_48_09    |                    |               |         |              |
| L3MN_48_10    |                    |               |         |              |
| L3MN_48_11    |                    |               |         |              |
| L3MN_48_12    |                    |               |         |              |
| L3MN_48_13    |                    |               |         |              |
| L3MN_48_14    |                    |               |         |              |
| L3MN_48_15    |                    |               |         |              |
| L3MN_48_16    |                    |               |         |              |
| L3MN_48_17    |                    |               |         |              |
| L3MN_48_18    |                    |               |         |              |
| L3MN_49_01    |                    |               |         |              |
| L3MN_49_02    |                    |               |         |              |
| L3MN_50_01    |                    |               |         |              |
| L3MN_50_02    |                    |               |         |              |
| L3MN_50_03    |                    |               |         |              |
| L3MN_50_04    |                    |               |         |              |
| L3MN_51_01    |                    |               |         |              |
| L3MN_51_02    |                    |               |         |              |
| L3MN_51_03    |                    |               |         |              |
| L3MN_51_04    |                    |               |         |              |
| L3MN_51_05    |                    |               |         |              |
| L3MN_51_06    |                    |               |         |              |
| L3MN_51_07    |                    |               |         |              |
| L3MN_51_08    |                    |               |         |              |
| L3MN_52_01    |                    |               |         |              |
| L3MN_52_02    |                    |               |         |              |
| L3MN_52_03    |                    |               |         |              |
| L3MN_52_04    |                    |               |         |              |
| L3MN_52_05    |                    |               |         |              |
| L3MN_52_06    |                    |               |         |              |
| L3MN_52_07    |                    |               |         |              |
| L3MN_52_08    |                    |               |         |              |
| L3MN_52_09    |                    |               |         |              |
| L3MN_52_10    |                    |               |         |              |
| L3MN_52_11    |                    |               |         |              |
| L3MN_52_12    |                    |               |         |              |
| L3MN_53_01    |                    |               |         |              |
| L3MN_53_02    |                    |               |         |              |
| L3MN_53_03    |                    |               |         |              |
| L3MN_53_04    |                    |               |         |              |
| L3MN_53_05    |                    |               |         |              |
| L3MN_53_06    |                    |               |         |              |
| L3MN_53_07    |                    |               |         |              |
| L3MN_53_08    |                    |               |         |              |
| L3MN_53_09    |                    |               |         |              |



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## Annex B (normative): Partial PIXIT proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PIXIT proforma in this annex so that it can be used for its intended purposes and may further publish the completed PIXIT.

---

### B.1 Identification summary

PIXIT number:

.....

Test laboratory name:

.....

Date of issue:

.....

Issued to:

.....

---

### B.2 Abstract test suite summary

Protocol specification: ETS 300 771-1

ATS specification: EN 300 771-6

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 System Under Test (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: ETS 300 771-1

Protocol version:

PICS reference:

NOTE: The PICS reference should reference a completed PICS which is conformant with the PICS proforma contained in EN 300 443-2 and ETS 300 771-2.

### B.6.2 Configuration to be tested

**Table B.1: Configuration to be tested**

| Item | Configuration:<br>Is the access to be tested ...         | Supported?<br>(Y/N) |
|------|----------------------------------------------------------|---------------------|
| 1.1  | of the T <sub>B</sub> reference point type?              |                     |
| 1.2  | releasing layer 2 after entering the Null link state NO? |                     |

### B.6.3 Stimuli for the IUT

**Table B.2: Actions required to stimulate the IUT**

| Item | Action:<br>What actions, if possible, have to be taken to cause the IUT to ...             | Supported<br>Y/N | Stimulus (action taken) |
|------|--------------------------------------------------------------------------------------------|------------------|-------------------------|
|      |                                                                                            |                  |                         |
| 2.1  | drop all parties towards the root user?                                                    |                  |                         |
| 2.2  | drop all parties towards a private B-ISDN? (only, if PIXIT item 1.1 is supported)          |                  |                         |
| 2.3  | send a NOTIFY message towards the root user (actions to be performed at one of the leafs)? |                  |                         |

### B.6.4 Test management timers

**Table B.3: Timer values**

| Item | Timer:<br>Give a value for the timer that is used ...                                                   | Value<br>(in seconds) |
|------|---------------------------------------------------------------------------------------------------------|-----------------------|
| 3.1  | as user side value for T313 (default value 4 seconds).                                                  |                       |
| 3.2  | as user side value for T399 (no default value).                                                         |                       |
| 3.3  | to wait for the IUT to respond to a stimulus sent by the tester (TAC).                                  |                       |
| 3.4  | to control that the IUT does not respond to a stimulus sent by the tester (TNOAC).                      |                       |
| 3.5  | to wait for the test operator to perform an implicit send action or to wait for a PTC to react (TWAIT). |                       |

NOTE: The IUT provider may fill in a value range rather than a fixed value for the test management timers. During test execution the test laboratory will choose specific values for the timers dependant on the means of testing used. These specific values may even be beyond the range given by the IUT provider, if this is necessary for achieving satisfactory test results.

## B.6.5 Parameter values

**Table B.4: Parameter values**

| Item                                                                 | Parameter values:<br>Give ...                                                                                                                                                                                         | Value |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 4.1                                                                  | a coding of an AAL parameters information element, which the IUT is compatible with, for the purpose of accepting outgoing calls.                                                                                     |       |
| 4.2                                                                  | a coding of a Bearer capability information element, which the IUT is compatible with, for the purpose of accepting outgoing calls.                                                                                   |       |
| 4.3                                                                  | a coding of a Low layer compatibility information element, which the IUT is compatible with, for the purpose of accepting outgoing calls.                                                                             |       |
| 4.4                                                                  | a coding of the Type of number and the Addressing/Numbering plan identification fields of the Called party number information elements to be sent to the IUT.                                                         |       |
| 4.5                                                                  | a coding of the number digits of the access related to the PTC1.                                                                                                                                                      |       |
| 4.6                                                                  | a coding of the number digits of the access related to the PTC2.                                                                                                                                                      |       |
| 4.7                                                                  | a coding of the number digits of a first subscriber at the access related to the MTC.                                                                                                                                 |       |
| 4.8                                                                  | a coding of the number digits of a second subscriber at the access related to the MTC (only, if PIXIT item 1.1 is supported)                                                                                          |       |
| 4.9                                                                  | a coding of an invalid set of number digits for the purpose of rejecting outgoing calls (note)                                                                                                                        |       |
| 4.10                                                                 | a coding of the forward peak cell rate (CLP = 0) to be sent to the IUT.                                                                                                                                               |       |
| 4.11                                                                 | a coding of the forward peak cell rate (CLP = 0 + 1) to be sent to the IUT.                                                                                                                                           |       |
| 4.12                                                                 | a coding of a Notification indicator information element to be sent to the IUT.                                                                                                                                       |       |
| 4.13                                                                 | an invalid coding of a Notification indicator information element to be sent to the IUT for the purpose of testing the IUT's reaction on the receipt of a non-mandatory information element with content error (note) |       |
| 4.14                                                                 | a value for the preferred VPCI.                                                                                                                                                                                       |       |
| 4.15                                                                 | a value for the preferred VCI.                                                                                                                                                                                        |       |
| 4.16                                                                 | a value for an unrecognized message type.                                                                                                                                                                             |       |
| 4.17                                                                 | a value for an unrecognized information element identifier.                                                                                                                                                           |       |
| NOTE: This field need only be completed if an invalid coding exists. |                                                                                                                                                                                                                       |       |

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## 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 [5].

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.

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

The TTCN.GR representation of this ATS is contained in a Portable Document Format file (771\_6\_2.PDF contained in archive 751i0idc.ZIP) which accompanies the present document.

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

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (771\_6\_2.MP contained in archive 751i0idc.ZIP) which accompanies the present document.

NOTE: According to ISO/IEC 9646-3 [5], in case of a conflict in interpretation of the operational semantics of TTCN.GR and TTCN.MP, the operational semantics of the TTCN.GR representation takes precedence.



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## History

| <b>Document history</b> |            |                              |
|-------------------------|------------|------------------------------|
| Edition 1               | June 1998  | Publication as ETS 300 771-6 |
| V1.1.2                  | March 1999 | Publication                  |
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