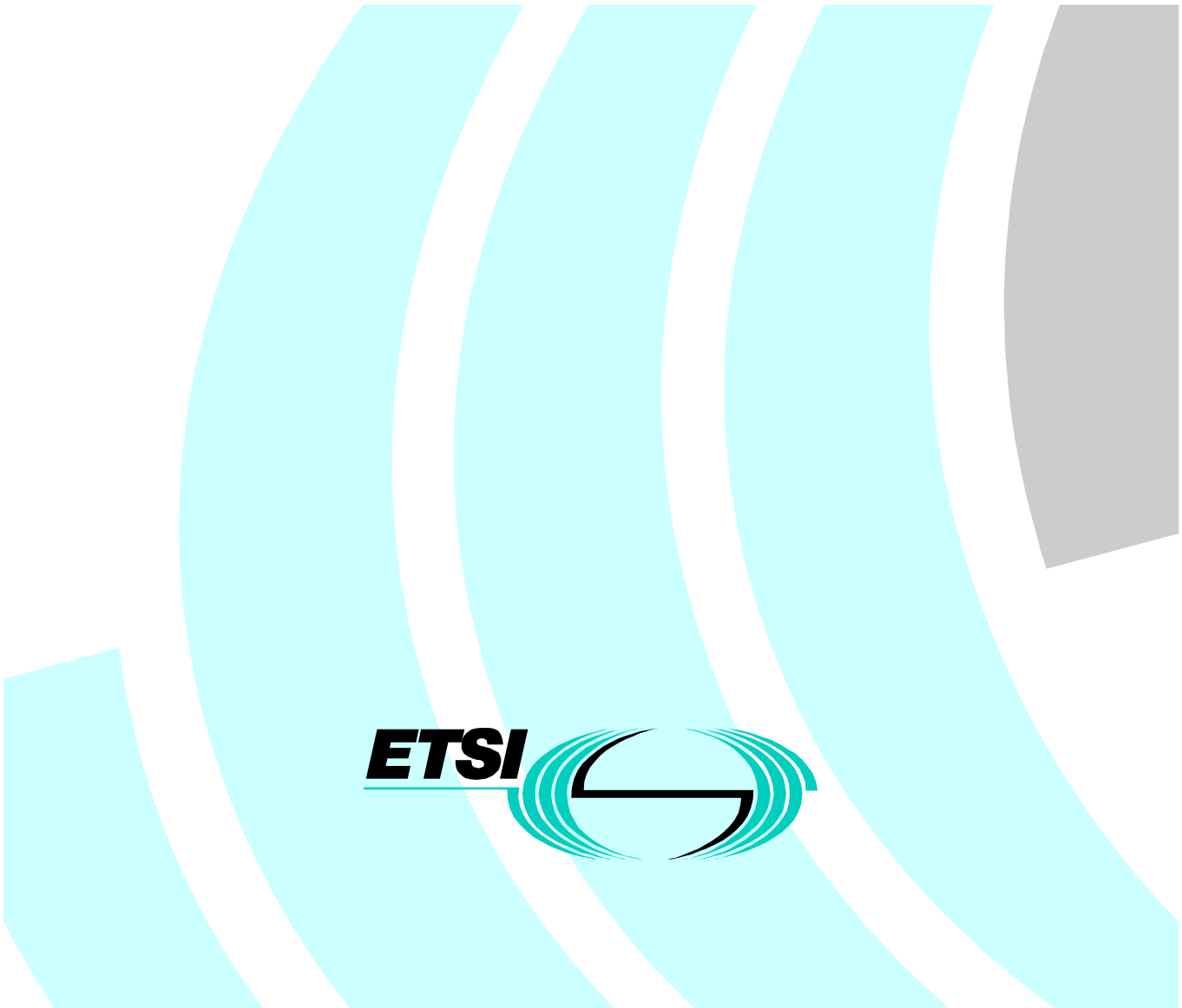
Final draft ETSI EN 301 454-1 V1.1.4 (2000-07)

European Standard (Telecommunications series)

Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Cordless Terminal Location Registration (CTLR) supplementary service; Part 1: Test Suite Structure and Test Purposes (TSS&TP) specification



Reference
DEN/SPS-05193-2

Keywords
CTM, PISN, PSS1, mobility, TSS&TP, QSIG,
supplementary service

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Contents

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://www.etsi.org/ipr).

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

Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS), and is now submitted for the Voting phase of the ETSI standards Two-step Approval Procedure.

The present document is part 1 of a multi-part deliverable covering the Private Integrated Service Network (PISN) Inter-exchange signalling protocol - Call Completion supplementary service - Test Suite Structure and Test Purposes (TSS&TP) specification, as identified below:

Part 1: "Test Suite Structure and Test Purposes (TSS&TP) specification";

Part 2: "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Implementation eXtra Information for Testing (PIXIT) proforma".

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

1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for the Cordless Terminal Location Registration supplementary service of the Inter-exchange signalling protocol for Private Integrated Services Networks (PISN).

The objective of this TSS and TPs specification is to provide conformance tests which give a greater probability of inter-operability. The TSS and TPs specification covers the procedures described in ETS 300 693 [4].

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [9], ISO/IEC 9646-2 [10] and ISO/IEC 9646-3 [11]) is used as basis for the test methodology.

The TSS and TPs specification standard is applicable for the support of Cordless Terminal Location Registration supplementary service, between Private Integrated Services Network Exchanges (PINXs) connected together within a PISN.

The Test Suite Structure and Test Purposes specified in the present document are only intended for VPN scenarios at the "b" service entry point.

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] ETSI ETS 300 239 (1995): "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Generic functional protocol for the support of supplementary services [ISO/IEC 11582 (1995), modified]". 2nd edition.

[2] ETSI ETS 300 415: "Private Integrated Services Network (PISN); Terms and definitions".

[3] ETSI ETS 300 692 (V1.2.1): "Private Integrated Services Network (PISN); Cordless Terminal Mobility (CTM); Location handling services; Functional capabilities and information flows".

[4] ETSI ETS 300 693: "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Cordless Terminal Location Registration (CTLR) supplementary service".

[5] ETSI EN 301 060-1: Integrated Services Digital Network (ISDN): Digital Subscriber System No. one (DSS1) protocol; Basic call control: Enhancement at the "b" service entry point for Virtual Private Network applications; Part 1 Protocol specification".

[6] ETSI ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[7] ISO/IEC 11571 (1994): " Information technology - Telecommunications and information exchange between systems - Numbering and Sub-addressing in Private Integrated Services Network".

[8] ISO/IEC 11579-1 (1994): " Information Technology - Telecommunications and information exchange between systems - Private integrated services network - Part 1: Reference configurations for PISN exchanges (PINX)".

[9] ISO/IEC 9646-1 (1994): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 1: General concepts".

[10] ISO/IEC 9646-2 (1994): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 2: Abstract test suite specification".

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

[12] ITU-T Recommendation I.112 (1993): "Vocabulary of terms for ISDNs".

[13] ITU-T Recommendation I.210 (1993): "Principles of the telecommunication services supported by an ISDN and the means to describe them".

[14] ETSI EN 300 239: "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Generic functional protocol for the support of supplementary services".

[15] ETSI ETS 300 171: "Private Integrated Services Network (PISN); Specification, functional models and information flows; Control aspects of circuit-mode basic services [ISO/IEC 11574 (1994) modified]".

3 Definitions and abbreviations

3.1 Definitions

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

3.1.1 Definitions related to conformance testing

abstract test case: Refer to ISO/IEC 9646-1 [9].

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1 [9].

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1 [9].

lower tester: Refer to ISO/IEC 9646-1 [9].

point of control and observation: Refer to ISO/IEC 9646-1 [9].

Protocol Implementation Conformance Statement (PICS): Refer to ISO/IEC 9646-1 [9].

PICS proforma: Refer to ISO/IEC 9646-1 [9].

Protocol Implementation eXtra Information for Testing (PIXIT): Refer to ISO/IEC 9646-1 [9].

PIXIT proforma: Refer to ISO/IEC 9646-1 [9].

Test Purpose (TP): Refer to ISO/IEC 9646-1 [9].

Virtual Private Network (VPN): Refer to EN 301 060-1 [5].

3.1.2 Definitions related to ETS 300 693

Application Protocol Data Unit (APDU): See EN 300 239 [14]

Basic Service: See CCITT Recommendation I.210 [13]

Complete Number: See ISO/IEC 11571 [7]

CTM user: See ETS 300 692 [3]

Directory PINX: See ETS 300 692 [3]

End PINX: See ETS 300 239 [1]

Home data base (HDB): See ETS 300 415 [2]

Location Area: See ETS 300 692 [3]

Home PINX: See ETS 300 692 [3]

Originating PINX: See ETS 300 239 [1]

Private Integrated Services Network (PISN): See ISO/IEC 11579-1 [8]

Private Integrated Services Network Exchange (PINX): See ISO/IEC 11579-1 [8]

PISN Number: See ISO/IEC 11571 [7]

Signalling: See CCITT Recommendation I.112 [12]

Supplementary Service: See CCITT Recommendation I.210 [13]

Terminating PINX: See ETS 300 239 [1]

Transit PINX: See ETS 300 239 [1]

User: See ETS 300 171 [15]

Visitor area: See ETS 300 415 [2]

Visitor data base (VDB): See ETS 300 415 [2]

Visitor PINX: See ETS 300 692 [3]

3.2 Abbreviations

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

APDU	Application Protocol Data Unit
ATS	Abstract Test Suite
CTM	Cordless Terminal Mobility
IE	Information Element
IUT	Implementation Under Test
PICS	Protocol Implementation Conformance Statement
PINX	Private Integrated Services Network eXchange
PISN	Private Integrated Services Network
PIXIT	Protocol Implementation eXtra Information for Testing
PSS1	Private Integrated Signalling System Number 1
sc	call independent signalling connection
SS-CTLR	Cordless Terminal Location Registration Supplementary Service
T1	Timer T1
T2	Timer T2
T3	Timer T3
T4	Timer T4
TP	Test Purpose
TSS	Test Suite Structure
VPN	Virtual Private Network

4 Test Suite Structure (TSS)

Signalling protocol for the support of SS-CTLR	**Group**
SS-CTLR signalling procedures for location registration	
Actions at the Visitor PINX for location registration	Visit01
Additional actions at the Visitor PINX for enquiry to the previous Visitor PINX	Visit02
Additional actions at the Visitor PINX for enquiry to a Directory PINX	Visit03
Actions at the Home PINX for location registration	Home01
Actions at the previous Visitor PINX for location registration	PrevVisit01
Additional actions at the previous Visitor PINX for enquiry from the Visitor PINX	PrevVisit02
Actions at the Directory PINX for enquiry from the Visitor PINX	Direct
SS-CTLR signalling procedures for location deregistration	
Actions at the Visitor PINX for location deregistration	Visit04
Actions at the Home PINX for location deregistration	Home02

5 Test Purposes (TP)

5.1 Introduction

For each test requirement a TP is defined.

5.1.1 TP naming convention

TPs are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see Table 1).

Table 1: TP identifier naming convention scheme

Identifier: **<ss>_<group>_<nnn>**

<ss>	=	supplementary service:	"CTLR"
<group>	=	group	up to 8 digit field representing group reference according to TSS
<nnn>	=	sequential number	(001-999)

5.1.2 Source of TP definition

The TPs are based on ETS 300 693 [4].

5.1.3 TP structure

Each TP has been written in a manner which is consistent with all other TPs. The intention of this is to make the TPs more readable and checkable. A particular structure has been used and this is illustrated in Table 2. This table should be read in conjunction with any TP, i.e. use a TP as an example to fully understand the table.

Table 2: Structure of a single TP for CTLR

TP part	Text	Example
Header	**<Identifier>** *tab* **<paragraph number in base ETS>** *tab*	see Table 1 **subclause 0.0.0**
Stimulus	Ensure that the IUT in the <basic call state> or <CTLR state> <trigger> *see below for message structure* *or* <goal>	 state 3 or CTLR-Idle, etc. receiving a XXXX message to request a...
Reaction	<action> <conditions> *if the action is sending* *see below for message structure* <next action>, *etc.* and remains in the same state *or* and enters state <state>	sends, saves, does, etc. using en bloc sending,...
Message structure	<message type> message containing a *a)* <info element> information element with *b)* a <field name> encoded as *or* including <coding of the field> and *back to a or b,*	SETUP, FACILITY, CONNECT,... Bearer capability, Facility,...
Selection	Selection criteria reference	Behaviour as Home PINX for SS-CTLR. PICS: A2
NOTE 1:	In order to use the same structure as for test group selection, the selection criteria is indicated at the bottom of the test purpose.	
NOTE 2:	Unless specified the messages are valid and contain at least the mandatory information elements and possibly optional information elements, the information elements are valid and contain at least the mandatory parameters and possibly optional parameters.	

5.1.4 Test strategy

As the base standard ETS 300 693 [4] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the corresponding PICS proforma.

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

All the test purposes are mandatory unless they have a selection criteria. Optional test purposes (with selection criteria), are applicable according to the configuration options of the IUT. The configuration option shall be covered by a PICS item.

5.2 TPs for SS-CTLR

All PICS items referred to in this subclause are as specified in ETS 300 693 [4] unless indicated otherwise by another numbered reference.

Unless specified:

- Only the requirements from the point of view of the VPN "b" service entry point are considered. This implies that the interactions with other networks are out of scope of this specification and causes that the corresponding Test Purposes are not included in this specification.

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

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

The following wording convention was defined to make the test purposes more readable:

- When a message is to be sent or received on a call independent signalling connection, the message name shall be followed by a '(sc)', e.g. CONNECT (sc) means that the CONNECT message is conveyed on a call independent signalling connection.

All the test purposes are valid for both user and network side of the VPN b interface. In order to simplify the text and to make the test purposes more readable, only the User side Call states (Ux) are indicated in the test purposes. For the network side of the VPNb interface, the mapping table below indicates which network call state (Ny) corresponds to the user call state used in the test purpose. Equivalent call state means there that the same message flow applies from the IUT point of view (e.g.: IUT sends a SETUP message gives the call state U01 or N06).

User side call state	Equivalent network side call state
U00	N00
U03	N09
U10	N10

Example:

Ensure that the IUT in the call state U03 …

is equivalent to the following network side test purpose:

Ensure that the IUT in the call state N09 …

5.2.1 SS-CTLR signalling procedures for location registration

5.2.1.1 Actions at the Visitor PINX for location registration

Selection: Behaviour as Visitor PINX and previous Visitor PINX for SS-CTLR. PICS: A1.

CTLR_Visit01_001 subclause 6.5.1.1

Ensure that the IUT in the call state U00 (sc) and in theVisitIdle state, on receipt of a valid location registration request from a CTM user that is not already registered in the Visitor area to initiate a location registration request:

- sends a SETUP (sc) message to the Home PINX using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate invoke APDU, the PISN number of the CTM user included in the pisnNumber argument, the basic service for which the CTM user is registering included in the basicService argument, and a PISN number identifying the Visitor PINX included in the visitPINX argument,

- enters the VisitUpdate state.

CTLR_Visit01_002 subclause 6.5.1.1

Ensure that the IUT in the call state U03 (sc) and in the VisitUpdate state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate return result APDU:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,

- enters the call state U10 (sc).

CTLR_Visit01_003 subclause 6.5.1.2

Ensure that the IUT in the call state U03 (sc) and in theVisitUpdate state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate return error or reject APDU from the Home PINX:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_Visit01_004 subclause 6.5.1.2

Ensure that the IUT, in the call state U03 (sc) and in theVisitUpdate state, on expire of T1:

- clears the call independent signalling connection or does not take any action.

5.2.1.2 Additional actions at the Visitor PINX for enquiry to the previous Visitor PINX

Selection: Support as a Visitor PINX of enquiry to previous Visitor PINX. PICS: A4.

CTLR_ Visit02 _001 subclause 6.5.2.1

Ensure that the IUT in the call state U00 (sc) and in theVisitIdle state, in order to make an enquiry to the previous Visitor PINX to translate an identifier provided by the CTM user in the location registration request into a PISN number:

- sends a SETUP (sc) message to the previous Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry invoke APDU, the identifier provided by the CTM user included in the alternativeId argument,
- enters the VisitEnquiry state.

CTLR_ Visit02 _002 subclause 6.5.2.1

Ensure that the IUT, in the call state U03 (sc) and in theVisitEnquiry state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return result APDU, the PISN number received in the pisnNumber argument:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_ Visit02 _003 subclause 6.5.2.2

Ensure that the IUT, in the call state U03 (sc) and in theVisitEnquiry state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return error or reject APDU:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_ Visit02 _004 subclause 6.5.2.2

Ensure that the IUT, in the call state U03 (sc) and in theVisitEnquiry state, on expire of T2:

- clear the call independent signalling connection or does not take any action.

5.2.1.3 Additional actions at the Visitor PINX for enquiry to a Directory PINX

Selection: Support as a Visitor PINX of enquiry to Directory PINX. PICS: A5.

CTLR_Visit03_001 subclause 6.5.3.1

Ensure that the IUT in the call state U00 (sc) and in the VisitIdle state, in order to make an enquiry to a Directory PINX to translate an identifier provided by the CTM user in the location registration request into a PISN number:

- sends a SETUP (sc) message to the Directory PINX using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry invoke APDU, the identifier provided by the CTM user included in the alternativeId argument,
- enters the VisitEnquiry state.

CTLR_Visit03_002 subclause 6.5.3.1

Ensure that the IUT, in the call state U03 (sc) and in theVisitEnquiry state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return result APDU, the PISN number received in the pisnNumber argument:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_Visit03_003 subclause 6.5.3.2

Ensure that the IUT, in the call state U03 (sc) and in theVisitEnquiry state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return error or reject APDU:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_Visit03_004 subclause 6.5.3.2

Ensure that the IUT, in the call state U03 (sc) and in the VisitEnquiry state, on expiry of T2:

- clears the call independent signalling connection or does not take any action.

5.2.1.4 Actions at the Home PINX for location registration

Selection: Behaviour as Home PINX for SS-CTLR. PICS: A2.

CTLR_Home01_001 subclause 6.5.4.1

Ensure that the IUT in the call state U00 (sc) and in the HomeIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate invoke APDU, the CTM user's PISN number included in the pisnNumber argument:

- sends a CONNECT (sc) message to Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate return result APDU,
- sends a SETUP (sc) message to previous Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locDelete invoke APDU, the PISN number of the CTM user included in the pisnNumber argument and the basic service for which the CTM user has registered included in the basicService argument,
- enters the HomeDelete state.

CTLR_Home01_002 subclause 6.5.4.2

Ensure that the IUT in the call state U00 (sc) and in the HomeIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate invoke APDU, an invalid PISN number included in the pisnNumber argument:

- sends a CONNECT (sc) message to Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate return error APDU containing the error invalidservedUserNumber.

CTLR_Home01_003 subclause 6.5.4.2

Ensure that the IUT in the call state U00 (sc) and in the HomeIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate invoke APDU, an invalid PISN number included in the pisnNumber argument:

- sends a CONNECT (sc) message to Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locUpdate return error APDU containing the error notAuthorized.

CTLR_Home01_004 subclause 6.5.4.2

Ensure that the IUT in the call state U03 (sc) and in the HomeDelete state, on a receipt of a CONNECT (sc) message from the previous Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locDelete return result APDU:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_Home01_005 subclause 6.5.4.2

Ensure that the IUT in the call state U03 (sc) and in the HomeDelete state, on a receipt of a CONNECT (sc) message from the previous Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locDelete return error or reject APDU:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_ Home01_006 subclause 6.5.4.2

Ensure that the IUT in the call state U03 (sc) and in the HomeDelete state, on expiry of T4:

- clears the call independent signalling connection or does not take any action.

5.2.1.5 Actions at the previous Visitor PINX for location registration

Selection: Behaviour as Visitor PINX and previous Visitor PINX for SS-CTLR. PICS: A1.

CTLR_PrevVisit01_001 subclause 6.5.6.1

Ensure that the IUT in the call state U00 (sc) and in the VisitIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDelete invoke APDU, the basic service included in basicService argument and the CTM user's PISN number included in the pisnNumber argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDelete return result APDU.

CTLR_PrevVisit01_002 subclause 6.5.6.2

Ensure that the IUT in the call state U00 (sc) and in the VisitIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDelete invoke APDU, the basic service included in basicService argument and an invalid PISN number included in the pisnNumber argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDelete return result APDU.

CTLR_PrevVisit01_003 subclause 6.5.6.2

Ensure that the IUT in the call state U00 (sc) and in theVisitIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDelete invoke APDU, the basic service included in basicService argument and an invalid PISN number included in the pisnNumber argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDelete return error APDU containing the error temporarilyUnavailable.

5.2.1.6 Additional actions at the previous Visitor PINX for enquiry from the Visitor PINX

Selection: Behaviour as Visitor PINX and previous Visitor PINX for SS-CTLR. PICS: A1

CTLR_PrevVisit02_001 subclause 6.5.7.1

Ensure that the IUT in the call state U00 (sc) and in the VisitIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry invoke APDU with a valid value in the alternativeId argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return result APDU, CTM user's PISN number included in the pisnNumber argument.

CTLR_PrevVisit02_002 subclause 6.5.7.2
Ensure that the IUT in the call state U00 (sc) and in the VisitIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry invoke APDU with an invalid value in the alternativeId argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return error APDU containing the error invalidServedUserNumber.

5.2.1.7 Actions at the Directory PINX for enquiry from the Visitor PINX

Selection: Behaviour as Directory PINX for SS-CTLR. PICS: A3.

CTLR_Direct_001 subclause 6.5.8.1

Ensure that the IUT in the call state U00 (sc) and in the DirectoryIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry invoke APDU with a valid value in the alternativeId argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return result APDU, CTM user's PISN number included in the pisnNumber argument.

CTLR_Direct_002 subclause 6.5.8.2

Ensure that the IUT in the call state U00 (sc) and in the DirectoryIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry invoke APDU with an invalid value in the alternativeId argument:

- sends a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisnEnquiry return error APDU containing the error invalidServedUserNumber.

5.2.2 SS-CTLR signalling procedures for location deregistration

5.2.2.1 Actions at the Visitor PINX for location deregistration

Selection: Behaviour as Visitor PINX and previous Visitor PINX for SS-CTLR. PICS: A1.

CTLR_Visit04 001 subclause 6.6.1.1

Ensure that the IUT in the call state U00 (sc) and in the VisitIdle state, on receipt of a valid location deregistration request from a CTM user to initiate a location deregistration request:

- sends a SETUP (sc) message to the Home PINX using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg invoke APDU, the PISN number of the CTM user included in the pisnNumber argument, the basic service for which the CTM user is to be deregistered included in the basicService argument,
- enters the VisitDeReg state.

CTLR_Visit04_002 subclause 6.6.1.1

Ensure that the IUT in the call state U03 (sc) and in the VisitDeReg state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg return result APDU:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_Visit04_003 subclause 6.6.1.2

Ensure that the IUT in the call state U03 (sc) and in the VisitDeReg state, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg return error or reject APDU from the Home PINX:

- sends CONNECT ACKNOWLEDGEMENT (sc) message,
- enters the call state U10 (sc).

CTLR_Visit04_004 subclause 6.6.1.2

Ensure that the IUT in the call state U03 (sc) and in the VisitDeReg state, on expiry of T3:

- clears the call independent signalling connection or does not take any action.

5.2.2.2 Actions at the Home PINX for location deregistration

Selection: Behaviour as Home PINX for SS-CTLR. PICS: A2.

CTLR_Home02_001 subclause 6.6.2.1

Ensure that the IUT in the call state U00 (sc) and in the HomeIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg invoke APDU, the basic service included in the basicService argument, the CTM user's PISN number included in the pisnNumber argument. If the CTM user may deregister:

- sends a CONNECT (sc) message to Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg return result APDU.

CTLR_Home02_002 subclause 6.6.2.2

Ensure that the IUT in the call state U00 (sc) and in the HomeIdle state, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg invoke APDU, the basic service included in the basicService argument, the CTM user's PISN number included in the pisnNumber argument. If the CTM user may not deregister:

- sends a CONNECT (sc) message to Visitor PINX using the call reference of a call independent signalling connection containing in the Facility IE a locDeReg return error APDU containing the error notAvailable.

6 Compliance

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

a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 5;

b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;

c) use the same naming conventions for the test groups and test cases;

d) maintain the relationship specified in clause 5 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;

e) comply with ISO/IEC 9646-2 [10].

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

7 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [10], shall be used by any organization claiming to provide a comprehensive testing service for network equipment claiming conformance to ETS 300 693 [4].

History

Document history			
V1.1.3	September 1999	Public Enquiry	PE 9958: 1999-09-08 to 2000-01-07
V1.1.4	July 2000	Vote	V 20000922: 2000-07-24 to 2000-09-22