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*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**

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DEN/SPS-05193-2 (dgo90ie0.PDF)

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# Contents

Intellectual Property Rights .....	4
Foreword .....	4
1 Scope.....	5
2 References .....	5
3 Definitions and abbreviations .....	6
3.1 Definitions .....	6
3.1.1 Definitions related to conformance testing.....	6
3.1.2 Definitions related to ETS 300 693.....	7
3.2 Abbreviations.....	8
4 Test Suite Structure (TSS).....	8
5 Test Purposes (TP) .....	8
5.1 Introduction .....	8
5.1.1 TP naming convention .....	9
5.1.2 Source of TP definition .....	9
5.1.3 TP structure.....	9
5.1.4 Test strategy .....	9
5.2 TPs for SS-CTRL .....	10
5.2.1 SS-CTRL signalling procedures for location registration .....	10
5.2.1.1 Actions at the Visitor PINX for location registration .....	10
5.2.1.2 Additional actions at the Visitor PINX for enquiry to the previous Visitor PINX .....	11
5.2.1.3 Additional actions at the Visitor PINX for enquiry to a Directory PINX.....	11
5.2.1.4 Actions at the Home PINX for location registration.....	12
5.2.1.5 Actions at the previous Visitor PINX for location registration.....	12
5.2.1.6 Additional actions at the previous Visitor PINX for enquiry from the Visitor PINX.....	13
5.2.1.7 Actions at the Directory PINX for enquiry from the Visitor PINX .....	13
5.2.2 SS-CTRL signalling procedures for location deregistration.....	14
5.2.2.1 Actions at the Visitor PINX for location deregistration .....	14
5.2.2.2 Actions at the Home PINX for location deregistration.....	14
6 Compliance .....	15
7 Requirements for a comprehensive testing service .....	15
Bibliography .....	16
History.....	17

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## Foreword

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

The present document is part 1 of a multi-part EN covering the Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Cordless Terminal Location Registration (CTLR) supplementary service, as identified below:

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

Part 2: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT)".

<b>Proposed national transposition dates</b>	
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

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# 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 & TP specification is to provide conformance tests which give a greater probability of interoperability. The TSS & TP 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 Test Suite Structure and Test Purposes specified in the present document are only intended for VPN scenarios at the "b" service entry point.

The VPN "b" service entry point is defined in EN 301 060-1 [5] and ETR 172 [14].

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# 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 300 239: "Private Telecommunication Network (PTN); Inter-exchange signalling protocol; Generic functional protocol for the support of supplementary services; ECMA-QSIG-GF".
- [2] ETS 300 415: "Private Integrated Services Network (PISN); Terms and definitions".
- [3] ETS 300 692: "Private Integrated Services Network (PISN); Cordless Terminal Mobility (CTM); Location handling services; Functional capabilities and information flows".
- [4] ETS 300 693: "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Cordless Terminal Location Registration (CTLR) supplementary service; ECMA-QSIG-CTLR".
- [5] 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 (VPN) applications; Part 1: Protocol specification".
- [6] ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [7] ISO/IEC 11571 (1998): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Networks - Addressing".
- [8] ISO/IEC 11579-1 (1994): "Information technology - Telecommunications and information exchange between systems - Private integrated services network - Part 1: Reference configuration 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 (1998): "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] ETR 172: "Business TeleCommunications (BTC); Virtual Private Networking (VPN); Services and Networking aspects; Standardization requirements and work items".
- [15] EN 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]".
- [16] I-ETS 300 808: "Private Integrated Services Network (PISN); Cordless Terminal Mobility (CTM); Inter-exchange signalling protocol; Cordless terminal outgoing call additional network feature".

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## 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].

**active test:** test case where the IUT is required to send a particular message, but not in reaction to a received message.

NOTE: This would usually involve the use of PIXIT information to see how this message can be generated and quite often is specified in an ATS using an implicit send event.

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

**implicit send event:** refer to ISO/IEC 9646-3 [11].

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

**passive test:** test case where the IUT is required to respond to a protocol event (e.g. received message) with another protocol event (e.g. send message) which normally does not require any special operator intervention as associated with the implicit send event.

**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].

**system under test:** refer to ISO/IEC 9646-1 [9].

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

### 3.1.2 Definitions related to ETS 300 693

**Application Protocol Data Unit (APDU):** see ETS 300 239 [1].

**Basic Service:** see ITU-T Recommendation I.210 [13].

**Complete Number:** see ISO/IEC 11571 [7].

**Co-ordination Function:** see ETS 300 239 [1].

**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].

**Network Facility Extension (NFE):** see ETS 300 239 [1].

**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 ITU-T Recommendation I.112 [12].

**Supplementary Service:** see ITU-T Recommendation I.210 [13].

**Supplementary Services Control Entity:** see ETS 300 239 [1].

**Terminating PINX:** see ETS 300 239 [1].

**Transit PINX:** see ETS 300 239 [1].

**User:** see EN 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].

**Virtual Private Network (VPN):** refer to EN 301 060-1 [5] and ETR 172 [14].

## 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
ISDN	Integrated Services Digital Network
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

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## 4 Test Suite Structure (TSS)

<b>Signalling protocol for the support of SS-CTLR</b>	<b>Group</b>
<b>SS-CTLR signalling procedures for location registration</b>	
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
<b>SS-CTLR signalling procedures for location deregistration</b>	
Actions at the Visitor PINX for location deregistration	Visit04
Actions at the Home PINX for location deregistration	Home02

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## 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 CCNR**

TP part	Text	Example
<b>Header</b>	<Identifier> <i>tab</i> <paragraph number in base EN> <i>tab</i>	see table 1 <b>subclause 0.0.0</b>
<b>Stimulus</b>	Ensure that the IUT in the <basic call state> or <CTLR state> <trigger> <i>see below for message structure</i> <i>or</i> <goal>	state 3 or CTLR-Idle, etc. receiving a XXXX message to request a ...
<b>Reaction</b>	<action> <conditions> <i>if the action is sending</i> <i>see below for message structure</i> <next action>, etc. and remains in the same state <i>or</i> and enters state <state>	sends, saves, does, etc. using en bloc sending, ...
<b>Message structure</b>	<message type> message containing a <i>a)</i> <info element> information element with <i>b)</i> a <field name> encoded as <i>or</i> including <coding of the field> and <i>back to a or b,</i>	SETUP, FACILITY, CONNECT, ...  Bearer capability, Facility, ...
<b>NOTE:</b>	Text in italics will not appear in TPs and text between <> is filled in for each TP and may differ from one TP to the next.	

### 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 proforma 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]).

## 5.2 TPs for SS-CTRL

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:

- 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.

### 5.2.1 SS-CTRL 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-CTRL. PICS: A1.

##### **CTRL\_Visit01\_001**      **subclause 6.5.1.1**

Ensure that the IUT, in state U00 and in the VisitIdle 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 pisinNumber 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 state VisitUpdate.

##### **CTRL\_Visit01\_002**      **subclause 6.5.1.1**

Ensure that the IUT in state VisitUpdate, 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 message, enters state U10.

##### **CTRL\_Visit01\_003**      **subclause 6.5.1.2**

Ensure that the IUT in state VisitUpdate, 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 message, enters state U10.

##### **CTRL\_Visit01\_004**      **subclause 6.5.1.2**

Ensure that the IUT in state VisitUpdate, on expire of T1 clears the call independent signalling connection or does/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 state U00 and in the VisitIdle 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 pisenquiry invoke APDU, the identifier provided by the CTM user included in the alternativeId argument, enters state VisitEnquiry.

#### **CTLR\_Visit02\_002** subclause 6.5.2.1

Ensure that the IUT in state VisitEnquiry, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisenquiry return result APDU, the PISN number received in the pisenquiry return result argument, sends CONNECT ACKNOWLEDGEMENT message, enters state U10.

#### **CTLR\_Visit02\_003** subclause 6.5.2.2

Ensure that the IUT in state VisitEnquiry, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisenquiry return error or reject APDU, sends CONNECT ACKNOWLEDGEMENT message, enters state U10.

#### **CTLR\_Visit02\_004** subclause 6.5.2.2

Ensure that the IUT in state VisitEnquiry, 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 state U00 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 pisenquiry invoke APDU, the identifier provided by the CTM user included in the alternativeId argument, enters state VisitEnquiry.

#### **CTLR\_Visit03\_002** subclause 6.5.3.1

Ensure that the IUT in state VisitEnquiry, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisenquiry return result APDU, the PISN number received in the pisenquiry return result argument, sends CONNECT ACKNOWLEDGEMENT message, enters state U10.

#### **CTLR\_Visit03\_003** subclause 6.5.3.2

Ensure that the IUT in state VisitEnquiry, on receipt of a CONNECT (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pisenquiry return error or reject APDU, sends CONNECT ACKNOWLEDGEMENT message, enters state U10.

#### **CTLR\_Visit03\_004** subclause 6.5.3.2

Ensure that the IUT in state VisitEnquiry, on expire of T2, clear 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 state N00 and in state HomeIdle, 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 pisinNumber 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 pisinNumber argument and the basic service for which the CTM user has registered included in the basicService argument enters state HomeDelete.

##### **CTLR\_Home01\_002** subclause 6.5.4.2

Ensure that the IUT, in state U00 and in state HomeIdle, 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 pisinNumber 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 state U00 and in state HomeIdle, 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 pisinNumber 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 state HomeDelete, 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 message, enters call state N10.

##### **CTLR\_Home01\_005** subclause 6.5.4.2

Ensure that the IUT in state HomeDelete, 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 message, enters state N10.

##### **CTLR\_Home01\_006** subclause 6.5.4.2

Ensure that the IUT in state HomeDelete, on expire 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 state U00 and in state VisitIdle, 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 pisinNumber 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 state U00 and in state VisitIdle, 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 pismNumber 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 state U00 and in state VisitIdle, 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 pismNumber 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 state U00 and in state VisitIdle, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pismEnquiry 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 pismEnquiry return result APDU, CTM user's PISN number included in the pismNumber argument.

**CTLR\_PrevVisit02\_002 subclause 6.5.7.2**

Ensure that the IUT, in state U00 and in state VisitIdle, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pismEnquiry 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 pismEnquiry 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 state U00 and in state DirectoryIdle, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pismEnquiry 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 pismEnquiry return result APDU, CTM user's PISN number included in the pismNumber argument.

**CTLR\_Direct\_002 subclause 6.5.8.2**

Ensure that the IUT, in state U00 and in state DirectoryIdle, on receipt of a SETUP (sc) message using the call reference of a call independent signalling connection containing in the Facility IE a pismEnquiry 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 pismEnquiry 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 state U00 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 pismNumber argument, the basic service for which the CTM user is to be deregistered included in the basicService argument, enters state VisitDeReg.

#### **CTLR\_Visit04\_002**      **subclause 6.6.1.1**

Ensure that the IUT in state VisitDeReg, 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 message, enters state U10.

#### **CTLR\_Visit04\_003**      **subclause 6.6.1.2**

Ensure that the IUT in state VisitDeReg, 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 message, enters state U10.

#### **CTLR\_Visit04\_004**      **subclause 6.6.1.2**

Ensure that the IUT in state VisitDeReg, on expire of T3 clear 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 state U00 and in state HomeIdle, 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 pismNumber 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 state U00 and in state HomeIdle, 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 pismNumber 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 not Available.

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

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## 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 I-ETS 300 808 [16].

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## Bibliography

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

- EN 300 172 (1997): "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Circuit-mode basic services [ISO/IEC 11572 (1996) modified]".
- EN 301 061-1 (1998): Integrated Services Digital Network (ISDN): Digital Subscriber System No. one (DSS1) protocol; Generic functional protocol for the support of supplementary services at the "b" service entry point for Virtual Private Network (VPN) applications; Part 1 Protocol specification".
- ITU-T Recommendation E.164 (1997): "The international public telecommunication numbering plan".



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## History

<b>Document history</b>			
V1.1.3	September 1999	Public Enquiry	PE 9958: 1999-09-08 to 2000-01-07