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Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE
Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE
X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

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

Contents

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Foreword

This draft European Telecommunication Standard (ETS) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Public Enquiry phase of the ETSI standards approval procedure.

This ETS is part 3 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Completion of Calls to Busy Subscriber (CCBS) supplementary service, as described below:

Part 1: "Protocol specification";

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

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

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

Part 5: "TSS&TP specification for the network";

Part 6: "ATS and partial PIXIT proforma specification for the network".

Proposed transposition dates	
Date of latest announcement of this ETS (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this ETS (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

This third part of ETS 300 359 specifies the user Test Suite Structure and Test Purposes (TSS&TP) of the Completion of Calls to Busy Subscriber (CCBS) supplementary service for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators at the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [7]) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol.

2 Normative references

[1] ETS 300 359-1 (1995): "Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[2] ETS 300 359-2 (1995): "Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

[3] ISO/IEC 9646-1: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 1: General Concepts".

[4] ISO/IEC 9646-2: "Information Technology - OSI 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] ETS 300 196-1 (1993): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

NOTE: ETS 300 196-1 (1993) was initially published as ETS 300 196 (1993).

[7] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".

[8] ETS 300 102-1: "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".

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

[10] CCITT Recommendation E.164 (1991): "Numbering plan for the ISDN era".

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

[12] ETS 300 267-1 (1992): "Integrated Services Digital Network (ISDN); Telephony 7 kHz and videotelephony teleservices; Digital Subscriber Signalling System No. one (DSS1); Part 1: protocol specification".

[13] ETS 300 196-2: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1); Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

3 Definitions

For the purposes of this ETS, the following definitions apply:

3.1 Definitions related to conformance testing

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

abstract test suite: Refer to ISO/IEC 9646-1 [3].

active test: A test case where the IUT is required to send a particular message, but not in reaction to a received message. 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: Refer to ISO/IEC 9646-1 [3].

implicit send event: Refer to ISO/IEC 9646-3 [5].

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

passive test: A test case where the IUT is required to respond to a protocol event (e.g. received message) with another protocol event (sends message) and normally does not require an any special operator intervention such as is associated with the Implicit Send event.

point of control and observation: Refer to ISO/IEC 9646-1 [3].

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

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

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

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

system under test: Refer to ISO/IEC 9646-1 [3].

test purpose: Refer to ISO/IEC 9646-1 [3].

3.2 Definitions related to ETS 300 359-1

Call Held auxiliary state: See ETS 300 196 [6], subclause 7.1.2.

call reference: See ETS 300 102-1 [8], subclause 4.3.

component: See ETS 300 196 [6], subclause 11.2.2.1.

Hold Requested auxiliary state: See ETS 300 196 [6], subclause 7.1.2.

Idle auxiliary state: See ETS 300 196 [6], subclause 7.1.2.

Integrated Services Digital Network (ISDN): See ITU-T Recommendation I.112 [9], definition 308.

invoke component: See ETS 300 196 [6], subclause 11.2.2.1.

ISDN number: A number conforming to the numbering and structure specified in CCITT Recommendation E.164 [10].

Retrieve Requested auxiliary state: See ETS 300 196 [6], subclause 7.1.2.

return error component: See ETS 300 196 [6], subclause 11.2.2.1.

return result component: See ETS 300 196 [6], subclause 11.2.2.1.

served user: The served user is the user who invokes the CCBS supplementary service.

service; telecommunication service: See ITU-T Recommendation I.112 [9], definition 201.

supplementary service: See ITU-T Recommendation I.210 [11], subclause 2.4.

user: The DSS1 protocol entity at the User side of the user-network interface where a T reference point or coincident S and T reference point applies.

user (S/T): The DSS1 protocol entity at the network side of the user-network interface where a coincident S and T reference point applies.

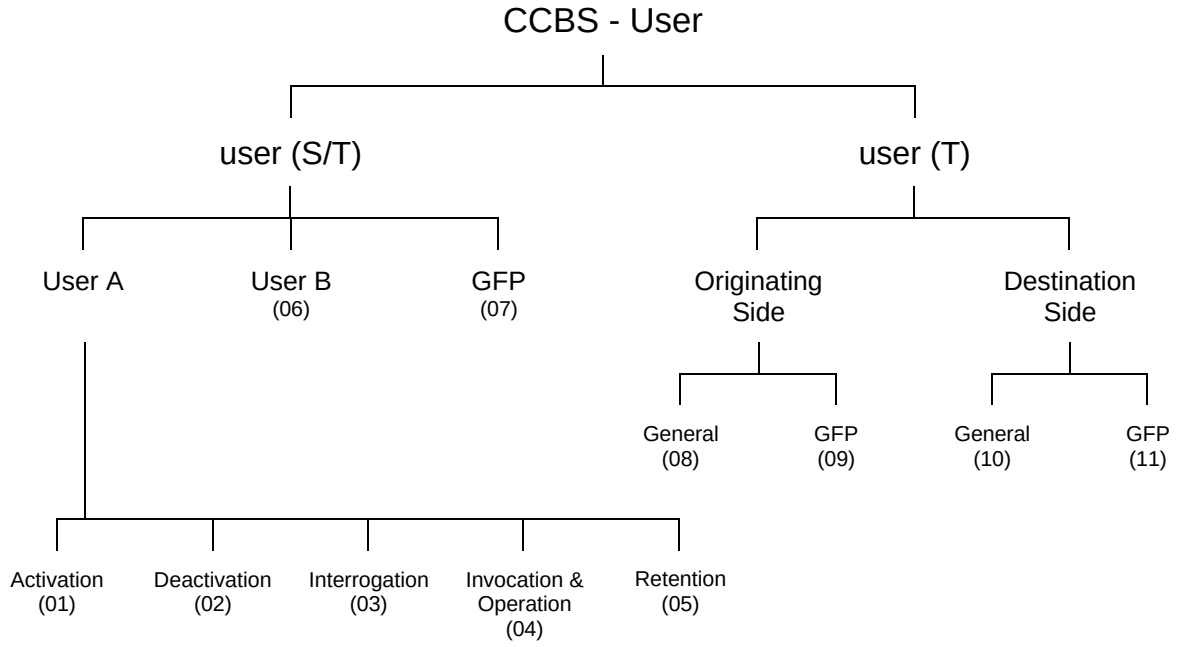
user (T): The DSS1 protocol entity at the User side of the user-network interface where a T reference point applies (User is the Private ISDN).

4 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

ATM	Abstract Test Method
ATS	Abstract Test Suite
CR	Call Reference
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
TP	Test Purpose
TSS	Test Suite Structure
U00	Null Call state
U03	Outgoing Call Proceeding Call state
U04	Call Delivered Call state
U07	Call Received Call state
U08	Connect Request Call state
U09	Incoming Call Proceeding Call state
U10	Active Call state
U25	Overlap Receiving Call state
UI	Unnumbered Information

5 Test Suite Structure (TSS)



NOTE: Numbers in brackets represent group numbers and are used in Test Purpose (TP) identifiers.

Figure 1: Test suite structure

6 Test Purposes

6.1 Introduction

For each test requirement a TP is defined.

6.1.1 TP naming convention

TPs are numbered, starting at 001, within each group. Groups are organized according to the Test Suite Structure (TSS). Additional references are added to identify the actual supplementary service and whether it applies to the network or the user (see table 1).

Table 1: TP identifier naming convention scheme

Identifier:		**<ss>_<iut><group>_<service>_<nnn>**	
<ss>	=	supplementary service:	e.g. "CCBS_"
<iut>	=	type of IUT:	U User N Network.
<group>		group	2 digit field representing group reference according to TSS
<nnn>	=	sequential number	(001-999)

6.1.2 Source of TP definition

The TPs were developed based on ETS 300 359-1 [1].

6.1.3 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 CCBS

TP Part	Text	Example
Header	<Identifier> *tab* <paragraph number in base ETS> *tab* <type of test> *tab* <condition> *CR.*	see Table 1 subclause 0.0.0 valid, invalid, inopportune mandatory, optional, conditional
Stimulus	Ensure that the IUT in the in <basic call state> and in <supplementary service state> <trigger> *see below for message structure* *or* <goal>	 U10, U12, etc. CCBS Idle state and receiving a XXXX message to request a ....
Reaction	<action> <conditions> *if the action is sending* *see below for message structure* <next action>, *etc.* and enters <supplementary service state> *and/or* and remains in the same state(s) *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, ...
NOTE:	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.	

6.1.4 Test strategy

As the base standard contained no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and PICS. The criteria applied included the following:

- only the requirements from the point of view of the T or coincident S and T reference point are considered;

- whether or not a test case can be built from the TP is not considered.

6.2 User TPs for CCBS

6.2.1 User (S/T)

Selection: IUT supports coincident S and T reference point procedures. PICS: R 3.2.

NOTE: Unless stated otherwise, all FACILITY messages in TPs in this subclause, use the dummy call reference as specified in subclause 8.3.2.2 of ETS 300 196-1 (bearer independent connectionless transport mechanism). Where a Unnumbered Information (UI) frame is specified for a FACILITY message the message is sent or received using broadcast procedures; otherwise point-to-point procedures are used.

6.2.1.1 User A

6.2.1.1.1 Activation

CCBS_U01_001 subclause 9.1.1 valid mandatory
Ensure that the IUT in call state U12 and CCBS Idle state, having been informed that the network is performing the Call Information Retention procedure, to activate the CCBS supplementary service,
sends a FACILITY message containing a Facility information element with a CCBSRequest invoke component including the CallLinkageID and enters the CCBS Requested state before expiry of timer T-RETENTION.

CCBS_U01_002 subclause 9.1.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return result component including a RecallMode parameter indicating specificRecall,
sends no message but retains the CCBSReference and enters CCBS Activated state.

CCBS_U01_003 subclause 9.1.1 valid optional
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return result component including a RecallMode parameter indicating globalRecall,
sends no message and enters CCBS Activated state.

CCBS_U01_004 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "invalidCallLinkageID",
sends no message, releases the CallLinkageID and enters CCBS Idle state.

CCBS_U01_005 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "notSubscribed",
sends no message and enters the CCBS Idle state.

CCBS_U01_006 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "callFailureReasonNotBusy",
sends no message and enters the CCBS Idle state.

CCBS_U01_007 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "outgoingCCBSQueueFull",
sends no message and enters the CCBS Idle state.

CCBS_U01_008 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "CCBSIsAlreadyActivated",
sends no message and enters the CCBS Idle state.

CCBS_U01_09 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "supplementaryServiceInteractionNotAllowed",
sends no message and enters the CCBS Idle state.

CCBS_U01_010 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "longTermDenial",
sends no message and enters the CCBS Idle state.

CCBS_U01_011 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest return error component indicating "shortTermDenial",
sends no message and enters the CCBS Idle state.

CCBS_U01_012 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSRequest reject component,
sends no message and enters the CCBS Idle state.

CCBS_U01_013 subclause 9.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Requested state, on expiry of timer T-ACTIVATE,
enters the CCBS Idle state.

6.2.1.1.2 Deactivation

CCBS_U02_001 subclause 9.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, to deactivate a CCBS request,
sends a FACILITY message containing a Facility information element with a CCBSDeactivate invoke component including the CCBSReference parameter and enters the CCBS Deactivation Requested state.

CCBS_U02_002 subclause 9.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, to deactivate a number of CCBS requests,
sends one or more FACILITY messages containing one or more Facility information elements with one or more CCBSDeactivate invoke components including the relevant CCBSReference parameters and enters the CCBS Deactivation Requested state.

CCBS_U02_003 subclause 9.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Deactivation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSDeactivate return result component,
sends no message, releases the CCBSReference and enters the CCBS Idle state.

CCBS_U02_004 subclause 9.2.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Deactivation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSDeactivate return error component indicating "invalidCCBSReference",
sends no message, releases its knowledge of the CCBS request identified by the CCBSReference and enters CCBS Idle state.

CCBS_U02_005 subclause 9.2.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Deactivation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSDeactivate reject component,
sends no message, retains knowledge of the CCBS request identified by the CCBSReference and enters the CCBS Idle state.

CCBS_U02_006 subclause 9.2.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Deactivation Requested state, on expiry of timer T-DEACTIVATE,
sends no message, releases its knowledge of the CCBS request identified by the CCBSReference and enters CCBS Idle state.

6.2.1.1.3 Interrogation

CCBS_U03_001 subclause 9.3.1.1 valid optional
Ensure that the IUT in call state U00 and CCBS Activated state, to perform an interrogation of all CCBS requests,

sends a FACILITY message containing a Facility information element with a CCBSInterrogate invoke component without a CCBSReference parameter and including a partyNumberOfA parameter and enters the CCBS Interrogation Requested state.

Selection: IUT includes partyNumberOfA in CCBSInterrogate invoke component when performing general interrogation.

CCBS_U03_002 subclause 9.3.1.1 valid optional
Ensure that the IUT in call state U00 and CCBS Activated state, to perform an interrogation of all CCBS requests,

sends a FACILITY message containing a Facility information element with a CCBSInterrogate invoke component without a CCBSReference parameter and without a partyNumberOfA parameter and enters the CCBS Interrogation Requested state.

Selection: IUT does NOT include partyNumberOfA in CCBSInterrogate invoke component when performing general interrogation.

CCBS_U03_003 subclause 9.3.1.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate return result component including the RecallMode parameter and a list of the currently active CCBS requests if any,

sends no message, discards details of those active requests detected as incompatible and exits the CCBS Interrogation Requested state.

CCBS_U03_004 subclause 9.3.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate return error component indicating "notSubscribed",

sends no message but removes knowledge of all CCBS requests and exits the CCBS Interrogation Requested state.

CCBS_U03_005 subclause 9.3.1.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate reject component,

sends no message and exits the CCBS Interrogation Requested state.

CCBS_U03_006 subclause 9.3.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, to perform an interrogation of a specific active CCBS request,

sends a FACILITY message containing a Facility information element with a CCBSInterrogate invoke component including a CCBSReference parameter and enters the CCBS Interrogation Requested state.

CCBS_U03_007 subclause 9.3.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate return result component including the RecallMode parameter and details of the currently active CCBS request,

sends no message and exits the CCBS Interrogation Requested state.

CCBS_U03_008 subclause 9.3.2.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate return error component indicating "notSubscribed",

sends no message but removes knowledge of all CCBS requests and exits the CCBS Interrogation Requested state.

CCBS_U03_009 subclause 9.3.2.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate return error component indicating "invalidCCBSReference",

sends no message but removes knowledge of the CCBS request and exits the CCBS Interrogation Requested state.

CCBS_U03_010 subclause 9.3.2.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate reject component,

sends no message but retains knowledge of the CCBS request and exits the CCBS Interrogation Requested state.

CCBS_U03_011 subclause 9.3.1.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Interrogation Requested state, on expiry of timer T-INTERROGATE,

sends no message and exits the CCBS Interrogation Requested state.

6.2.1.1.4 Invocation and operation

CCBS_U04_001 subclause 9.4.1.1 & 9.7.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, where the IUT has subscribed to the specificRecall option, on receipt of a FACILITY message containing a Facility information element with a CCBSRemoteUserFree invoke component including a recallMode parameter indicating "specificRecall", a valid cCBSReference parameter retained by the IUT, the addressOfB parameter and q931InfoElement parameter

sends no message, retains the cCBSReference and enters the CCBS Free state or may proceed to establish a call.

CCBS_U04_002 subclause 9.4.1.2 & 9.7.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, where the IUT has subscribed to the specificRecall option, on receipt of a FACILITY message containing a Facility information element with a CCBSRemoteUserFree invoke component including a recallMode parameter indicating "specificRecall", a cCBSReference parameter not retained by the IUT, the addressOfB parameter and q931InfoElement parameter

ignores the component and remains in the same state or initiates the deactivation procedure.

CCBS_U04_003 subclause 9.4.1.1 & 9.7.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, where the IUT has subscribed to the globalRecall option, on receipt of a FACILITY message containing a Facility information element with a CCBSRemoteUserFree invoke component including a recallMode parameter indicating "globalRecall", a cCBSReference parameter, an addressOfB parameter and a q931InfoElement parameter containing one or more Bearer capability information elements and one or more High layer compatibility information elements which are compatible with the IUT according to Annex B, subclauses B.3.2 and B.3.3 in ETS 300 102-1[8].

sends no message, retains the cCBSReference and enters the CCBS Free state or may proceed to establish a call.

CCBS_U04_004 subclause 9.4.1.2 & 9.7.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, where the IUT has subscribed to the globalRecall option, on receipt of a FACILITY message containing a Facility information element with a CCBSRemoteUserFree invoke component including a recallMode parameter indicating "globalRecall", a cCBSReference parameter, an addressOfB parameter and a q931InfoElement parameter containing one or more Bearer capability information elements and one or more High layer compatibility information elements which are incompatible with the IUT according to Annex B, subclauses B.3.2 and B.3.3 in ETS 300 102-1[8].

ignores the component and remains in the same state or initiates the deactivation procedure.

CCBS_U04_005 subclause 9.4.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Free state, having received a CCBSRemoteUserFree invoke component indicating "specificRecall", to establish the CCBS call,

sends a SETUP message containing the Bearer capability information element(s) of the original call and a Facility information element with a CCBSCall invoke component including the CCBSReference of the CCBSRemoteUserFree invoke component (received prior to entering the CCBS Free state), retains the cCBSReference, enters the CCBS Call Init State and call state U01.

CCBS_U04_006 subclause 9.4.2.1 valid mandatory
Ensure that the IUT in call state U00 and CCBS Free state, having received a CCBSRemoteUserFree invoke component indicating "globalRecall", to establish the CCBS call,

sends a SETUP message containing the Bearer capability information element(s) of the original call and a Facility information element with a CCBSCall invoke component including the CCBSReference of the CCBSRemoteUserFree invoke component (received prior to entering the CCBS Free state) and enters the CCBS Call Init State or CCBS Idle State and call state U01.

CCBS_U04_007 subclause 9.4.2.1 valid optional
Ensure that the IUT in call state U00 and CCBS Free state, on receipt of a FACILITY message (UI frame) containing a Facility information element with a CCBSStopAlerting invoke component including a valid CCBSReference value and the RecallMode parameter in the previously sent CCBSRemoteUserFree invoke component was set to globalRecall,

sends no messages.

Selection: IUT accepts broadcast FACILITY message. PICS: [13] MCu 2.6.

CCBS_U04_08 subclause 9.4.2.2 valid mandatory
Ensure that the IUT in call state U01 and CCBS Call Initiated state, on receipt of a RELEASE COMPLETE message containing a Facility information element with a CCBSCall return error component indicating "invalidCCBSReference",

sends no message, removes knowledge of the CCBSReference value and enters the CCBS Idle state and the Null call state (U00).

CCBS_U04_09 subclause 9.4.2.2 valid mandatory
Ensure that the IUT in call state U01 and CCBS Call Initiated state, on receipt of a RELEASE COMPLETE message containing a Facility information element with a CCBSCall return error component indicating "alreadyAccepted",

sends no message and enters the CCBS Idle state and the Null call state (U00).

CCBS_U04_010 subclause 9.4.2.2 valid mandatory
Ensure that the IUT in call state U01 and CCBS Call Initiated state, on receipt of a RELEASE COMPLETE message containing a Facility information element with a CCBSCall return error component indicating "notReadyForCall",

sends no message and enters the CCBS Idle state and the Null call state (U00).

CCBS_U04_011 subclause 9.4.2.2 valid mandatory
Ensure that the IUT in call state U01 and CCBS Call Initiated state, on receipt of a FACILITY message containing a Facility information element with a CCBSCall reject component,

sends no message, retains knowledge of the CCBSReference value and remains in the same states.

CCBS_U04_012 subclause 9.4.4.1 inopportune mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with a CCBSErase invoke component,

sends no messages, removes knowledge of CCBS Reference and enters the CCBS Idle state.

CCBS_U04_013 subclause 9.4.5.1 valid mandatory
Ensure that the IUT in call state U10 and CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with a compatible CCBSBFree invoke component,

sends no messages.

CCBS_U04_014 subclause 9.4.5.1 valid mandatory
Ensure that the IUT in call state U10 and CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with an incompatible CCBSBFree invoke component,
sends no messages.

CCBS_U04_015 subclause 9.4.6.1 inopportune mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with an incompatible CCBSStatusRequest invoke component,
sends no messages.

CCBS_U04_016 subclause 9.4.6.1 & subclause 9.7 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with a compatible CCBSStatusRequest invoke component including the RecallMode, CCBSReference, q931InfoElement,
responds with a FACILITY message containing a Facility information element with a CCBSStatusRequest return result component including an indication of the user status (Free).

CCBS_U04_017 subclause 9.4.6.1 & subclause 9.7 valid mandatory
Ensure that the IUT in call state U10 and CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with a compatible CCBSStatusRequest invoke component including the RecallMode, CCBSReference, q931InfoElement,
responds with a FACILITY message containing a Facility information element with a CCBSStatusRequest return result component including an indication of the user status (Busy).

CCBS_U04_018 subclause 9.4.6.2 valid mandatory
Ensure that the IUT in call state U00 and CCBS Activated state, having sent a FACILITY message containing a Facility information element with a CCBSStatusRequest return result component, on receipt of a FACILITY message containing a Facility information element with a CCBSStatusRequest reject component,
sends no message.

6.2.1.1.5 Retention

CCBS_U05_001 subclause 9.6.1 valid optional
Ensure that the IUT in call state U01 and Retention Idle state, having sent a SETUP message (using enbloc sending), on receipt of a RELEASE COMPLETE message containing a Facility information element with a CallInfoRetain invoke component including a valid CallLinkageID,
sends no message, retains the CallLinkageID, enters Retention Active state and call state U00.
Selection: IUT supports option to retain CallLinkageID on receipt of CallInfoRetain invoke component. PICS: SC 1.

CCBS_U05_002 subclause 9.6.1 valid optional
Ensure that the IUT in call state U01 and Retention Idle state, having sent a SETUP message (using enbloc sending), on receipt of a RELEASE COMPLETE message containing a Facility information element with a CallInfoRetain invoke component including a valid CallLinkageID,
sends no message, releases the CallLinkageID, enters Retention Active state and call state U00.
Selection: IUT does NOT support option to retain CallLinkageID on receipt of CallInfoRetain invoke component. PICS: NOT SC 1.

CCBS_U05_003 subclause 9.6.1 valid mandatory
Ensure that the IUT in call state U00 and Retention Active state, on receipt of a FACILITY message containing a Facility information element with a EraseCallLinkageID invoke component including a known CallLinkageID,
sends no message, removes knowledge of the CallLinkageID and enters Retention Idle state.

6.2.1.2 User B

NOTE: If User B supports the subscription option "status request procedures for existing services" or if it can handle calls not using "existing services" then it must be conformant with the procedures of ETS 300 196-1 [6] subclause 10.3. For the relevant TPs see part 3 of ETS 300 196.

6.2.1.3 GFP

CCBS_U07_001 subclause 9 & ETS 300 196-1 subclause 8.3.2.2.2 invalid mandatory
Ensure that the IUT, in call state U00 and in the CCBS Activated state receiving a FACILITY message containing a Facility information element with an invalid protocol profile
ignores the message.

CCBS_U07_002 subclause 9 & ETS 300 196-1 subclause 8.3.2.4.2 invalid optional
Ensure that the IUT, in call state U00 and in the CCBS Activated state receiving a FACILITY message (UI frame) containing a Facility information element with an invalid protocol profile
ignores the message.
Selection: IUT accepts broadcast FACILITY message. PICS: [13] MCu 2.6.

CCBS_U07_003 subclause 9 & ETS 300 196-1 subclause 8.3.2.2.2 invalid mandatory
Ensure that the IUT, in call state U00 and in the CCBS Activated state receiving FACILITY message without a Facility information element
ignores the message.

CCBS_U07_004 subclause 9 & ETS 300 196-1 subclause 8.3.2.4.2 invalid optional
Ensure that the IUT, in call state U00 and in the CCBS Activated state receiving FACILITY message (UI frame) without a Facility information element
ignores the message.
Selection: IUT accepts broadcast FACILITY message. PICS: [13] MCu 2.6.

CCBS_U07_005 subclause 9 & ETS 300 196-1 subclauses 8.3.2.2.2 & 8.3.2.4.2 invalid mandatory
Ensure that the IUT, in call state U00 and in the CCBS Activated state receiving a message other than FACILITY with a dummy call reference and this message does not apply to some other application of the dummy call reference
ignores the message.

CCBS_U07_006 subclause 9 & ETS 300 196-1 subclause 8.4.2 invalid mandatory
Ensure that the IUT, in call state U00 and CCBS Interrogation Requested state, having been in the CCBS Activated state, on receipt of a FACILITY message containing a Facility information element with a CCBSInterrogate return result component including a CallDetails parameter of incorrect type
ignores the (optional) CallDetails parameter and does not reject the component with problem code of "mistyped result".

6.2.2 User (T)

NOTE: The private network procedures use the bearer independent connection-oriented transport mechanism as well as the bearer related transport mechanism. Different call references are used to differentiate between the two mechanisms. In the following TPs these are identified by CR followed by a number. CR1 = normal (bearer related) call reference; CR2 = call reference used for bearer independent transport mechanism. The values of CR1 and CR2 may vary from one TP to another, but when both are used in the same TP their values are distinct.

Selection: IUT supports T reference point procedures. PICS: R 3.2.

6.2.2.1 Originating side

6.2.2.1.1 General

CCBS_U08_001 subclause 10.1.1.1 & 10.1.2.1 valid optional
Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U12 and with CR2 in call state U00, having received a DISCONNECT message with CR1 containing a Facility information element with a CCBS-T-Available invoke component, to set up the signalling connection with the public network and to request the activation of CCBS,

sends a REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component including the Bearer capability information element, destinationAddress, retentionSupported set to TRUE, and if available the High layer compatibility and Low layer compatibility information elements, and enters state U31 for CR2 and continues basic call clearing for CR1.

Selection: The IUT supports the CCBS Request retention option. PICS: MC 4.

CCBS_U08_002 subclause 10.1.1.1 & 10.1.2.1 valid optional
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, having received a RELEASE COMPLETE message with CR1 containing a Facility information element with a CCBS-T-Available invoke component, to set up the signalling connection with the public network and to request the activation of CCBS,

responds with a REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component including the Bearer capability information element, destinationAddress, retentionSupported set to TRUE, and if available the High layer compatibility and Low layer compatibility information elements , and enters state U31 for CR2.

Selection: The IUT supports the CCBS Request retention option. PICS: MC 4.

CCBS_U08_003 subclause 10.1.1.1 & 10.1.2.1 valid optional
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U12 and CR2 in call state U00, having received a DISCONNECT message with CR1 containing a Facility information element with a CCBS-T-Available invoke component, to set up the signalling connection with the public network and to request the activation of CCBS,

responds with a REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component including the Bearer capability information element, destinationAddress, retentionSupported set to FALSE, and if available the High layer compatibility and Low layer compatibility information elements, and enters state U31 for CR2 and continues basic call clearing for CR1.

Selection: The IUT does NOT support the CCBS Request retention option. PICS: NOT MC 4.

CCBS_U08_004 subclause 10.1.1.1 & 10.1.2.1 valid optional
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, having received a RELEASE COMPLETE message with CR1 containing a Facility information element with a CCBS-T-Available invoke component, to set up the signalling connection with the public network and to request the activation of CCBS,

responds with a REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component including the Bearer capability information element, destinationAddress, retentionSupported set to FALSE, and if available the High layer compatibility and Low layer compatibility information elements, and enters state U31 for CR2.

Selection: The IUT does NOT support the CCBS Request retention option. PICS: NOT MC 4.

CCBS_U08_005 subclause 10.1.2.1 valid mandatory
Ensure that the IUT in the CCBS Requested state, with CR1 in call state U00 and CR2 in call state U31, on receipt of a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Request return result component,

does not respond and remains in the same states for CR1 and CR2.

CCBS_U08_006 subclause 10.1.2.2 valid mandatory
Ensure that the IUT in the CCBS Requested state, with CR1 in call state U00 and CR2 in call state U31, on receipt of a FACILITY with CR2 message containing a Facility information element with a reject component,

sends a RELEASE message with CR2 and with cause #31, retains CR1 in its state and enters state U19 for CR2.

CCBS_U08_007 subclause 10.1.3.1 & 10.1.6 valid mandatory
Ensure that the IUT in the CCBS Activated state, with CR1 in call state U00 and CR2 in call state U31, on receipt of a FACILITY message with CR2 containing a Facility information element with a CCBS-T-RemoteUserFree invoke component and it does not need to suspend CCBS,

responds with a SETUP message with CR1 using the call establishment information used in the original call attempt and includes a Facility information element with a CCBS-T-Call invoke component, retains CR2 in its state and enters state U01 for CR1.

CCBS_U08_008 subclause 10.1.4.1 & 10.1.3 valid mandatory
Ensure that the IUT in the CCBS Activated state, with CR1 in call state U00 and CR2 in call state U31, on receipt of a FACILITY message with CR2 containing a Facility information element with a CCBS-T-RemoteUserFree invoke component and it needs to suspend CCBS,

responds with a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Suspend invoke component and retains CR1 and CR2 in their states and enters the CCBS Free state.

CCBS_U08_009 subclause 10.1.4.2 valid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31, (after sending a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Suspend invoke component) on receipt of a FACILITY message with CR2 containing a Facility information element with a reject component,

responds with a RELEASE message with CR2 and with cause #31, retains CR1 in its state and enters state U19 for CR2.

CCBS_U08_010 subclause 10.1.5.1 valid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31, and after suspending CCBS, to request resumption of the CCBS request

sends a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Resume invoke component and retains CR1 and CR2 in their states.

CCBS_U08_011 subclause 10.1.5.2 valid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31, (after sending a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Resume invoke component) on receipt of a FACILITY message with CR2 containing a Facility information element with a reject component,

responds with a RELEASE message with CR2 and with cause #31, retains CR1 in its state and enters state U19 for CR2.

CCBS_U08_012 subclause 10.1.6.1 valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U10 and CR2 in call state U31, on receipt of a RELEASE message with CR2,

responds with a RELEASE COMPLETE message with CR2, retains CR1 in its state and enters state U00 for CR2.

CCBS_U08_013 subclause 10.1.6.2 paragraph 2 valid optional
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U03 and CR2 in call state U31, on receipt of a RELEASE COMPLETE message with CR1, cause #17, containing a Facility information element with a CCBS-T-Available invoke component,

enters state U00 for CR1 and remains in state U31 for CR2 and does not request activation of CCBS.

Selection: IUT supports CCBS Request Retention option. PICS: MC 4.

CCBS_U08_014 subclause 10.1.6.2 paragraph 3 valid optional
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U03 and CR2 in call state U31, on receipt of a RELEASE COMPLETE message with CR1, Cause #17, containing a Facility information element with a CCBS-T-Available invoke component and a RELEASE message with CR2,

enters state U00 for CR1 and enters state U19 for CR2 and requests, or is capable of requesting, activation of CCBS.

Selection: IUT does not support CCBS Request Retention option. PICS: NOT MC 4.

CCBS_U08_015 subclause 10.1.6.2 paragraph 4 valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U03 and CR2 in call state U31, on receipt of a RELEASE COMPLETE message with CR1, with a Cause indicating call failure at the destination other than busy (NOT Cause #17), and a RELEASE message with CR2,
enters state U00 for CR1 and enters state U19 for CR2 and does not request activation of CCBS.

CCBS_U08_016 subclause 10.1.6.2 paragraph 5 valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U01 and CR2 in call state U31, on receipt of a RELEASE COMPLETE message with CR1, with a Cause indicating call failure before reaching the destination (NOT Cause #17),
enters state U00 for CR1, sends a RELEASE message with CR2, enters state U19 for CR2 and does not request activation of CCBS.

CCBS_U08_017 subclause 10.1.6.2 paragraph 6 valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U01 and CR2 in call state U31, on receipt of a FACILITY message with CR1 containing a Facility information element encoded as CCBS-T-Call reject component,
sends a DISCONNECT or RELEASE COMPLETE message with CR1 to clear the call attempt and a RELEASE message with CR2 to clear the signalling association, enters state U00 or U11 for CR1 and enters state U19 for CR2.

CCBS_U08_018 subclause 10.1.7.1 valid mandatory
Ensure that the IUT in the CCBS Activated state, with CR1 in call state U00 and CR2 in call state U31, to deactivate the CCBS request,
sends a RELEASE message with CR2 and with cause #31, retains CR1 in its state and enters state U19 for CR2.

6.2.2.1.2 GFP

CCBS_U09_001 subclause 10.1 & ETS 300 196-1 subclause 8.3.2.1.2.2
Ensure that the IUT, in the CCBS Activated state, with CR1 in call state U00 and with CR2 in call state U31, on receipt of a message other than FACILITY, RELEASE, RELEASE COMPLETE, STATUS or STATUS ENQUIRY with CR2
ignores the message and sends a STATUS message with CR2 and with a Cause information element containing the cause value #101 and a Call state information element containing the call state value 31.

CCBS_U09_002 subclause 10.1 & ETS 300 196-1 subclause 8.3.2.1.2.2
Ensure that the IUT, in the CCBS Activated state, with CR1 in call state U00 and with CR2 in call state U31, on receipt of a FACILITY message with CR2 containing a Facility information element with an invalid protocol profile
ignores the message and sends a STATUS message with CR2 and with a Cause information element containing the cause value #100.

6.2.2.2 Destination side

6.2.2.2.1 General

CCBS_U10_001 subclause 10.2.1.1 valid mandatory
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U06, on receipt of a busy indication and CCBS is available to the destination,
sends a DISCONNECT or RELEASE COMPLETE message with CR1 containing a Facility information element encoded as CCBS-T-Available invoke component and enters state U00 or U11 for CR1.

CCBS_U10_002 subclause 10.2.2.1 valid optional
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, on receipt of a REGISTER message with CR2 containing a Facility information element encoded as CCBS-T-Request invoke component including the parameter retentionSupported set to TRUE,

responds with a FACILITY message with CR2 containing a Facility information element encoded as CCBS-T-Request return result component including retentionSupported set to TRUE, retains CR1 in its state and enters state U31 for CR2.

Selection: The IUT supports the CCBS request retention option. PICS: MC 4.

CCBS_U10_003 subclause 10.2.2.1 valid optional
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, on receipt of a REGISTER message with CR2 containing a Facility information element encoded as CCBS-T-Request invoke component including the parameter retentionSupported set to TRUE,

responds with a FACILITY message with CR2 containing a Facility information element encoded as CCBS-T-Request return result component including retentionSupported set to FALSE, retains CR1 in its state and enters state U31 for CR2.

Selection: The IUT does NOT support the CCBS request retention option. PICS: NOT MC 4.

CCBS_U10_004 subclause 10.2.2.2 inopportune mandatory
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, on receipt of REGISTER message with CR2 containing a Facility information element with a CCBS-related invoke component different from CCBS-T-Request invoke component,

sends a RELEASE message with cause #29, retains CR1 in its state and enters state U19 for CR2.

CCBS_U10_005 subclause 10.2.2.2 inopportune mandatory
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, on receipt of REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component but the supplementary service CCBS is not available to the destination,

responds with a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Request return error component indicating "longTermDenial" and then sends a RELEASE message cause #31 with CR2 to clear the signalling connection, retains CR1 in its state and enters state U19 for CR2

or

responds with a RELEASE message with CR2 and cause #31 containing a Facility information element with a CCBS-T-Request return error component indicating "longTermDenial", retains CR1 in its state and enters state U19 for CR2.

CCBS_U10_006 subclause 10.2.2.2 invalid mandatory
Ensure that the IUT in the CCBS Idle state, with CR1 in call state U00 and CR2 in call state U00, on receipt of REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component but the supplementary service CCBS is not available to the destination at this time,

responds with a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Request return error component indicating "shortTermDenial" and then sends a RELEASE message with CR2 and cause #31, retains CR1 in its state and enters state U19 for CR2

or

responds with a RELEASE message with CR2 and cause #31 containing a Facility information element with a CCBS-T-Request return error component indicating "shortTermDenial", retains CR1 in its state and enters state U19 for CR2.

CCBS_U10_007 subclause 10.2.3.1 valid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31 and when ready to accept a CCBS call,

sends a FACILITY message with CR2 containing a Facility information element with a CCBS-T-RemoteUserFree invoke component and retains CR1 and CR2 in their states.

CCBS_U10_008 subclause 10.2.3.2 invalid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31 (after sending a FACILITY message with CR2 containing a Facility information element with a CCBS-T-RemoteUserFree invoke component) on receipt of a FACILITY message with CR2 containing a Facility information element with a reject component,

sends a RELEASE message with CR2 and cause #31, retains CR1 in its state and enters state U19 for CR2.

CCBS_U10_009 subclause 10.2.4.1 valid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31, on receipt of a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Suspend invoke component,

sends no messages and awaits resumption of the CCBS request and retains CR1 and CR2 in their states.

CCBS_U10_010 subclause 10.2.5.1 valid mandatory
Ensure that the IUT with CR1 in call state U00 and CR2 in call state U31, having previously received a CCBS-T-Suspend invoke component, on receipt of a FACILITY message with CR2 containing a Facility information element with a CCBS-T-Resume invoke component,

sends no messages and resumes monitoring of the destination for being not busy and retains CR1 and CR2 in their states.

CCBS_U10_011 subclause 10.2.6.1, 2nd Paragraph. valid mandatory
Ensure that the IUT in the CCBS Free state, with CR1 in call state U00 and CR2 in call state U31, on receipt of a SETUP with CR1 using the call establishment information used in the original call attempt and including a Facility information element with a CCBS-T-Call invoke component,

enters state U06 for CR1, sends either a SETUP ACKNOWLEDGE, CALL PROCEEDING, ALERTING or CONNECT message with CR1 and retains CR2 in its state.

CCBS_U10_012 subclause 10.2.6.1, 3rd Paragraph. valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U07 or U08 and CR2 in call state U31, after sending an ALERTING or CONNECT message with CR1, to clear the signalling connection

sends a RELEASE message with CR2, retains CR1 in its state and enters state U19 for CR2.

CCBS_U10_013 subclause 10.2.6.2 valid optional
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U06 and CR2 in call state U31, on receipt of an indication that the called user is busy again,

sends a DISCONNECT or RELEASE COMPLETE message with CR1 and including a Facility information element with a CCBS-T-Available invoke component, retains CR2 in its state and enters state U00 or U11 for CR1.

Selection: The IUT supports the CCBS request retention option. PICS: MC 4.

CCBS_U10_014 subclause 10.2.6.2 valid optional
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U06 and CR2 in call state U31, on receipt of an indication that the called user is busy again,

sends a DISCONNECT or RELEASE COMPLETE message with CR1 with a CCBS-T-Available invoke component to clear the attempted call and a RELEASE message with CR2 and with cause #31 to clear the signalling connection, enters state U00 or U11 for CR1 and enters state U19 for CR2.

Selection: The IUT does NOT support the CCBS request retention option. PICS: NOT MC 4.

CCBS_U10_015 subclause 10.2.6.2 valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U06 and CR2 in call state U31, but the call fails at the destination side due to any reason other than the user at that side is busy,

sends a DISCONNECT or RELEASE COMPLETE message with CR1 to clear the attempted call and a RELEASE message with CR2 to clear the signalling connection, enters state U00 or U11 for CR1 and enters state U19 for CR2.

CCBS_U10_016 subclause 10.2.6.2 5th Paragraph. valid mandatory
Ensure that the IUT in the CCBS Call Init state, with CR1 in call state U06 and CR2 in call state U31, but the call fails before reaching the destination,

sends a DISCONNECT or RELEASE COMPLETE message with CR1 to clear the attempted call and does not send a RELEASE message to clear the signalling connection to the public network, enters state U00 or U11 for CR1 and remains in state U31 for CR2.

CCBS_U10_017 subclause 10.2.7.1 valid mandatory
Ensure that the IUT in the CCBS Activated state, with CR1 in call state U00 and CR2 in call state U31, to deactivate the CCBS request

sends a RELEASE message with CR2 and with cause #31 to clear the signalling connection, retains CR1 in its state and enters state U19 for CR2.

6.2.2.2.2 GFP

CCBS_U11_001 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.1.2 inopportune mandatory
Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U00 and with CR2 in call state U10, on receipt of a REGISTER message with CR2 (a call reference in use) containing a Facility information element with a CCBS-T-Request invoke component

ignores the message and sends a STATUS message with CR2 and with a Cause information element containing the cause value #101, a Call state information element containing the call state (U10) and remains in the same states.

CCBS_U11_002 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.1.2 invalid mandatory
Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U00 and with CR2 in call state U00, on receipt of a REGISTER message with CR2 containing a Facility information element with an invalid protocol profile

sends a RELEASE COMPLETE message with CR2 containing cause #100.

CCBS_U11_003 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.1.1 & ETS 300 102 subclause 5.8.3.2 d inopportune mandatory
Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U00 and with CR2 in call state U00, on receipt of a REGISTER message with CR2, a call reference not recognised as relating to a call and with the call reference flag set to "1"

ignores the message.

CCBS_U11_004 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.1.1 & ETS 300 102 subclause 5.8.6.1 inopportune mandatory
Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U00 and with CR2 in call state U00, on receipt of a REGISTER message with CR2 which has one mandatory information element missing

sends a RELEASE COMPLETE message with CR2 and with cause #96.

CCBS_U11_005 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.1.1 & ETS 300 102 subclause 5.8.6.2 invalid mandatory
Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U00 and with CR2 in call state U00, on receipt of a REGISTER message with CR2 and which has one mandatory information element with invalid contents

ignores the message and sends a STATUS message with CR2 and with a Cause information element containing the cause value #100, a Call state information element containing the call state and remains in the same states.

CCBS_U11_006 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.2.2 inopportune mandatory
Ensure that the IUT, in the CCBS Free state, with CR1 in call state U00 and with CR2 in call state U31, on receipt of a message other than FACILITY, RELEASE, RELEASE COMPLETE, STATUS or STATUS ENQUIRY with CR2

ignores the message and sends a STATUS message with CR2 and with a Cause information element containing the cause value #101 and a Call state information element containing the call state value 31.

CCBS_U11_007 subclause 10.2 & ETS 300 196-1 subclause 8.3.2.1.2.2 invalid mandatory

Ensure that the IUT, in the CCBS Free state, with CR1 in call state U00 and with CR2 in call state U31, on receipt of a FACILITY message with CR2 containing a Facility information element with an invalid protocol profile

ignores the message and sends a STATUS message with CR2 and with a Cause information element containing the cause value #100.

CCBS_U11_008 subclause 10.2 & ETS 300 196-1 subclause 8.4.2 invalid mandatory

Ensure that the IUT, in the CCBS Idle state, with CR1 in call state U00 and with CR2 in call state U00, on receipt of a REGISTER message with CR2 containing a Facility information element with a CCBS-T-Request invoke component including an originatingAddress parameter of incorrect type

ignores the (optional) originatingAddress parameter and does not reject the component with problem code of "mistyped argument".

7 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 6;
b) use a test suite structure which is an appropriate subset of the whole of the test suite structure specified in clause 5;
c) use the same naming conventions for the test groups and test cases;
d) maintain the relationship specified in clause 6 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;
e) comply with ISO/IEC 9646-2 [4].

In the case of a) or b) above, a subset shall be used only where a particular Abstract Test Method (ATM) makes some TPs untestable. All testable TPs from clause 6 shall be included in a compliant ATS.

8 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [4], shall be used by any organization claiming to provide a comprehensive testing service for user equipment claiming conformance to ETS 300 359-1 [1].

History

Document history			
October 1995	Public Enquiry	PE 94:	1995-10-23 to 1996-02-16
June 1996	Converted into Adobe Acrobat Portable Document Format (PDF)		