Draft EN 300 182-3 V1.2.3 (1998-02)

European Standard (Telecommunications series)

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



European Telecommunications Standards Institute

Reference

REN/SPS-05145-K-3 (1oor0iq0.PDF)

Keywords

ISDN, DSS1, supplementary service, AOC, testing, TSS&TP, user

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X.400

c= fr; a=atlas; p=etsi; s=secretariat

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Contents

Intel	lectual Property Rights	4
Fore	word	4
1	Scope	5
2	Normative references	5
3	Definitions	6
3.1	Definitions related to conformance testing	
3.2	Definitions related to EN 300 182-1	
4	Abbreviations	
5	Test Suite Structure (TSS)	8
6	Test Purposes (TP)	8
6.1	Introduction	
6.1.1	TP naming convention	
6.1.2		
6.1.3		
6.1.4		
6.2	User TPs for AOC	
6.2.1	Subscription option dependent	
6.2.1.	.1 Per-call basis	9
6.2.1.	.1.1 Activation	10
6.2.1.	.1.1.1 Normal	10
6.2.1.	.1.1.2 Exceptions	12
6.2.1.		
6.2.1.	.2 All calls	16
6.2.1.		
	.2.1.1 Transfer - call establishment phase	
	.2.1.2 Exceptions	
	.2.1.3 GFP	
6.2.2	T T	
6.2.2.	1	
6.2.2.		
6.2.2.		
6.2.2.	ı	
6.2.2.	61	
7	Compliance	
8	Requirements for a comprehensive testing service	28
Ann	ex A (informative): Changes with respect to the previous ETS 300 182-3	29
Histo	nrv	30

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Foreword

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

The present document 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) Advice of Charge (AOC) 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".

The present version updates the references to the basic call specifications.

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

This third part of EN 300 182 specifies the Test Suite Structure and Test Purposes (TSS&TP) for the User side of the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [7]) of implementations conforming to the stage three standard for the Advice of Charge (AOC) supplementary service for the pan-European Integrated Services Digital Network (ISDN) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol, EN 300 182-1 [1].

A further part of this EN specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document. Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the Network side of the T reference point or coincident S and T reference point of implementations conforming to EN 300 182-1 [1].

2 Normative references

References may be made to:

[9]

[10]

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case 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.

amoer.	
[1]	EN 300 182-1 (V1.2): "Integrated Services Digital Network (ISDN); Advice of Charge (AOC) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
[2]	EN 300 182-2 (V1.2): "Integrated Services Digital Network (ISDN); Advice of Charge (AOC) 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]	EN 300 196-1: "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".
[7]	ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".
[8]	EN 300 403-1: "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".

ITU-T Recommendation I.112: "Vocabulary and terms for ISDNs".

CCITT Recommendation E.164: "Numbering plan for the ISDN era".

- [11] ITU-T Recommendation I.210: "Principles of the telecommunication services supported by an ISDN and the means to describe them".
- [12] EN 300 196-2: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

3 Definitions

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

3.1 Definitions related to conformance testing

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

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

Implementation Under Test (IUT): 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].

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 (TP): Refer to ISO/IEC 9646-1 [3].

3.2 Definitions related to EN 300 182-1

call reference: See EN 300 403-1 [8], subclause 4.3.

component: See EN 300 196-1 [6], subclause 11.2.2.1.

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

invoke component: See EN 300 196-1 [6], subclause 11.2.2.1.

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

return error component: See EN 300 196-1 [6], subclause 11.2.2.1.

return result component: See EN 300 196-1 [6], subclause 11.2.2.1.

served user: The served user is the user who invokes the AOC 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 User 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 a Private ISDN).

4 Abbreviations

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

AOC Advice of Charge
ATM Abstract Test Method
ATS Abstract Test Suite
DSS1 Digital Subscriber Signalling System No. one
GFP Generic Functional Protocol

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

U02 Overlap Sending call state

U03 Outgoing Call Proceeding call state

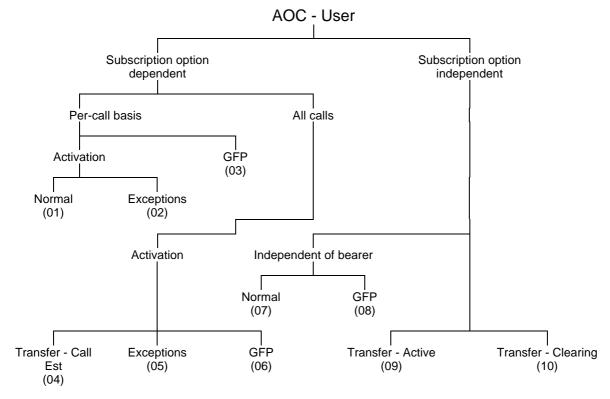
U04 Call Delivered call state
U06 Call Present call state
U07 Call Received call state
U08 Connect Request call state

U09 Incoming Call Proceeding call state

U10 Active call state

U12 Disconnect Indication call state
U19 Release Request call state
U25 Overlap Receiving call state

5 Test Suite Structure (TSS)



NOTE: Numbers in brackets represent group numbers and are used in TP identifiers.

Figure 1: Test suite structure

6 Test Purposes (TP)

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 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

6.1.2 Source of TP definition

The TPs are based on EN 300 182-1 [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

TP part	Text	Example				
Header	<ld><ldentifier> tab</ldentifier></ld>	see table 1				
	<pre><paragraph base="" ets="" in="" number=""> tab</paragraph></pre>	subclause 0.0.0				
	<type of="" test=""> tab</type>	valid, invalid, inopportune				
	<condition> CR</condition>	mandatory, optional, conditional				
Stimulus	Ensure that the IUT in the					
	<basic call="" state=""></basic>	U10 etc.				
	/ <supplementary service="" state=""></supplementary>	/AOC-S Idle,				
	<trigger> see below for message structure</trigger>	receiving a XXXX message				
	or <goal></goal>	to request a				
Reaction	<action></action>	sends, saves, does, etc.				
	<conditions></conditions>	using en bloc sending,				
	if the action is sending					
	see below for message structure					
	<next action="">, etc.</next>					
	and remains in the same state					
	or and enters state <state></state>					
Message	<message type=""></message>	SETUP, FACILITY, CONNECT,				
structure	message containing a					
	a) <info element=""></info>	Bearer capability, Facility,				
	information element with					
	b) a <field name=""></field>					
	encoded as <i>or</i> including					
	<pre><coding field="" of="" the=""> and back to a or b,</coding></pre>					
NOTE: Text in italics will not appear in TPs and text between <> is filled in for each TP and may differ						
T	TP to the next.					

6.1.4 Test strategy

As the base standard EN 300 182-1 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification EN 300 182-2 [2]. The criteria applied include 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 AOC

All PICS items referred to in this subclause are as specified in EN 300 182-2 [2] unless indicated otherwise by another numbered reference.

6.2.1 Subscription option dependent

6.2.1.1 Per-call basis

Selection: IUT supports procedures related to the subscription option "AOC requested on a per-call basis" (this applies to whole group). PICS: SC 1 or SC 2 or SC 3.

6.2.1.1.1 Activation

6.2.1.1.1.1 Normal

AOC_U01_001 subclause 9.1.1

valid optional

Ensure that the IUT in U00/AOC Idle state in order to activate the AOC-S supplementary service, sends a SETUP message including a Facility information element coded as chargingRequest invoke component indicating AOC-S and enters the U01/AOC Request state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U01_002 subclause 9.1.1

valid optional

Ensure that the IUT in U00/AOC Idle state in order to activate the AOC-D supplementary service, sends a SETUP message including a Facility information element coded as chargingRequest invoke component indicating AOC-D and enters the U01/AOC Request state.

Selection: AOC-D supported. PICS: MC 2.

AOC U01 003 subclause 9.1.1

valid optional

Ensure that the IUT in U00/AOC Idle state in order to activate the AOC-E supplementary service, sends a SETUP message including a Facility information element coded as chargingRequest invoke component indicating AOC-E and enters the U01/AOC Request state.

Selection: AOC-E supported. PICS: MC 3.

AOC U01 004 subclause 9.2.1.1

valid optional

Ensure that the IUT in U01/AOC Request state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element coded as chargingRequest return result component indicating "AOCSCurrencyInfoList", enters the U02/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U01_005 subclause 9.2.1.1

valid optional

Ensure that the IUT in U01/AOC Request state, on receipt of a CALL PROCEEDING message including a Facility information element coded as chargingRequest return result component indicating "AOCSCurrencyInfoList", enters the U03/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC U01 006 subclause 9.2.1.1

valid

optiona

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element coded as chargingRequest return result component indicating "AOCSCurrencyInfoList", enters the U03/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC U01 007 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element coded as chargingRequest return result component indicating "AOCSCurrencyInfoList", accepts the provided information, enters the U04/AOC Active state and sends no message.

Selection: AOC-S supported. PICS: MC 1.

AOC_U01_008 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element coded as chargingRequest return result component indicating "AOCSCurrencyInfoList",

sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters the U10/AOC Active state.

AOC U01 009 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element coded as chargingRequest return result component indicating "AOCSCurrencyInfoList", enters the U01/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U01_010 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U01/AOC Request state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element coded as chargingRequest return result component indicating "AOCSSpecialArrInfo", enters the U02/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC U01 011 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U01/AOC Request state, on receipt of a CALL PROCEEDING message including a Facility information element coded as chargingRequest return result component indicating "AOCSSpecialArrInfo", enters the U03/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U01_012 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element coded as chargingRequest return result component indicating "AOCSSpecialArrInfo", enters the U03/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC U01 013 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element coded as chargingRequest return result component indicating "AOCSSpecialArrInfo", enters the U04/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC U01 014 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element coded as chargingRequest return result component indicating "AOCSSpecialArrInfo",

sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters the U10/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U01_015 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element coded as charging Request return result component indicating "AOCSS pecial ArrInfo",

enters the U01/AOC Active state.

Selection: AOC-S supported. PICS: MC 1.

AOC U01 016 subclause 9.1.1

valid

optiona

Ensure that the IUT in U01/AOC Request state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element coded as chargingRequest return result component indicating "chargingInfoFollows", enters the U02/AOC Active state.

Selection: AOC-D supported OR AOC-E supported. PICS: MC 2 or MC 3.

AOC_U01_017 subclause 9.1.1

valid

optional

Ensure that the IUT in U01/AOC Request state, on receipt of a CALL PROCEEDING message including a Facility information element coded as chargingRequest return result component indicating "chargingInfoFollows", enters the U03/AOC Active state.

Selection: AOC-D supported OR AOC-E supported. PICS: MC 2 or MC 3.

AOC U01 018 subclause 9.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element coded as chargingRequest return result component indicating "chargingInfoFollows", enters the U03/AOC Active state.

Selection: AOC-D supported OR AOC-E supported. PICS: MC 2 or MC 3.

AOC U01 019 subclause 9.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element coded as charging Request return result component indicating "charging InfoFollows",

enters the U04/AOC Active state.

Selection: AOC-D supported OR AOC-E supported. PICS: MC 2 or MC 3.

AOC U01 020 subclause 9.1.1

valid

optional

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element coded as chargingRequest return result component indicating "chargingInfoFollows",

sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters the U10/AOC Active state.

Selection: AOC-D supported OR AOC-E supported. PICS: MC 2 or MC 3.

AOC_U01_021 subclause 9.1.1

valid

optional

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element coded as charging Request return result component indicating "charging Info Follows", $\frac{1}{2}$

enters the U01/AOC Active state.

Selection: AOC-D supported OR AOC-E supported. PICS: MC 2 or MC 3.

6.2.1.1.1.2 Exceptions

AOC_U02_001 subclause 9.1.2 c), d), e)

inopportune

mandatory

Ensure that the IUT in U01/AOC Request state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element coded as charging Request return error component,

continues normal call handling and enters U02/AOC Idle state.

AOC_U02_002 subclause 9.1.2 c), d), e)

inopportune

mandatory

Ensure that the IUT in U01/AOC Request state, on receipt of a CALL PROCEEDING message including a Facility information element coded as charging Request return error component,

continues normal call handling and enters U03/AOC Idle state.

AOC_U02_003 subclause 9.1.2 c), d), e)

inopportune

mandatory

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element coded as charging Request return error component,

continues normal call handling and enters U03/AOC Idle state.

AOC_U02_004 subclause 9.1.2 c), d), e)

inopportune

mandatory

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element coded as charging Request return error component,

continues normal call handling and enters U04/AOC Idle state.

AOC_U02_005 subclause 9.1.2 c), d), e)

inopportune

mandatory

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element coded as charging Request return error component,

continues normal call handling and enters U10/AOC Idle state.

AOC_U02_006 subclause 9.1.2 c), d), e)

inopportune

mandatory

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element coded as charging Request return error component,

continues normal call handling and enters U01/AOC Idle state.

AOC U02 007 subclause 9.1.2 f)

inopportune mandatory

Ensure that the IUT in U01/AOC Request state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element with a charging Request reject component,

takes no protocol actions and enters U02/AOC Idle state.

AOC_U02_008 subclause 9.1.2 f)

inopportune mandatory

Ensure that the IUT in U01/AOC Request state, on receipt of a CALL PROCEEDING message including a Facility information element with a charging Request reject component,

takes no protocol actions and enters U03/AOC Idle state.

AOC U02 009 subclause 9.1.2 f)

inopportune mandatory

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element with a charging Request reject component,

takes no protocol actions and enters U03/AOC Idle state.

AOC U02 010 subclause 9.1.2 f)

inopportune mandatory

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element with a charging Request reject component,

takes no protocol actions and enters U04/AOC Idle state.

AOC U02 011 subclause 9.1.2 f)

inopportune mandatory

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element with a charging Request reject component,

takes no protocol actions and enters U10/AOC Idle state.

AOC U02 012 subclause 9.1.2 f)

inopportune mandatory

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element with a charging Request reject component,

takes no protocol actions and enters U01/AOC Idle state.

AOC U02 013 subclause 9.1.2 g)

inopportune

optional

Ensure that the IUT in U01/AOC Request state, after no response to a chargingRequest invoke component, on receipt of a CALL PROCEEDING with an AOCSCurrency invoke component,

continues normal call handling and enters U03/AOC Request state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U02_014 subclause 9.1.2 g)

inopportune

optional

Ensure that the IUT in U01/AOC Request state, after no response to a chargingRequest invoke component, on receipt of a CALL PROCEEDING with an AOCSSpecialArr invoke component,

continues normal call handling and enters U03/AOC Request state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U02_015 subclause 9.1.2 g)

inopportune

optional

Ensure that the IUT in U01/AOC Request state, after no response to a charging Request invoke component, on receipt of a CALL PROCEEDING with an AOCD Currency invoke component,

continues normal call handling and enters U03/AOC Request state.

Selection: AOC-D supported. PICS: MC 2.

AOC U02 016 subclause 9.1.2 g)

inopportune

optional

Ensure that the IUT in U01/AOC Request state, after no response to a chargingRequest invoke component, on receipt of a CALL PROCEEDING with an AOCDChargingUnit invoke component,

continues normal call handling and enters U03/AOC Request state.

Selection: AOC-D supported. PICS: MC 2.

AOC_U02_017 subclause 9.1.2 g)

inopportune

optional

Ensure that the IUT in U01/AOC Request state, after no response to a charging Request invoke component, on receipt of a CALL PROCEEDING with an AOCECurrency invoke component,

continues normal call handling and enters U03/AOC Request state.

AOC_U02_018 subclause 9.1.2 g)

inopportune optional

Ensure that the IUT in U01/AOC Request state, after no response to a chargingRequest invoke component, on receipt of a CALL PROCEEDING with AOCEChargingUnit invoke component,

continues normal call handling and enters U03/AOC Request state.

Selection: AOC-E supported. PICS: MC 3.

AOC_U02_019 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U03/AOC Idle state, having received a chargingRequest return error component, on receipt of an ALERTING with an AOCSCurrency invoke component,

accepts the information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U02 020 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U03/AOC Idle state, having received a chargingRequest return error component, on receipt of an ALERTING with an AOCSSpecialArr invoke component,

accepts the information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U02_021 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U03/AOC Idle state, having received a charging Request reject component, on receipt of an ALERTING with an AOCSCurrency invoke component,

accepts the information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U02_022 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U03/AOC Idle state, having received a charging Request reject component, on receipt of an ALERTING with an AOCSSpecialArr invoke component,

accepts the information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U02 023 subclause 9.1.2 h)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest return error component, on receipt of a FACILITY message containing a Facility information element with an AOCDCurrency invoke component, accepts the information, sends no message and remains in U10/AOC Idle state.

Selection: AOC-D supported. PICS: MC 2.

AOC U02 024 subclause 9.1.2 h)

inopportune

ption

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest return error component, on receipt of a FACILITY message containing a Facility information element with an AOCDChargingUnit invoke component, accepts the information, sends no message and remains in U10/AOC Idle state.

Selection: AOC-D supported. PICS: MC 2.

AOC_U02_025 subclause 9.1.2 h)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest reject component, on receipt of a FACILITY message containing a Facility information element with an AOCDCurrency invoke component, accepts the information, sends no message and remains in U10/AOC Idle state.

Selection: AOC-D supported. PICS: MC 2.

AOC_U02_026 subclause 9.1.2 h)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest reject component, on receipt of a FACILITY message containing a Facility information element with an AOCDChargingUnit invoke component, accepts the information, sends no message and remains in U10/AOC Idle state.

AOC_U02_027 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest return error component, on receipt of a DISCONNECT message containing a Facility information element with an AOCECurrency invoke component, accepts the information, returns a RELEASE message and enters U19/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC_U02_028 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest return error component, on receipt of a DISCONNECT message containing a Facility information element with an AOCEChargingUnit invoke component, accepts the information, returns a RELEASE message and enters U19/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC U02 029 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest reject component, on receipt of a DISCONNECT message containing a Facility information element with an AOCECurrency invoke component, accepts the information, returns a RELEASE message and enters U19/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC_U02_030 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest reject component, on receipt of a DISCONNECT message containing a Facility information element with an AOCEChargingUnit invoke component, accepts the information, returns a RELEASE message and enters U19/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC U02 031 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U11/AOC Idle state, having received a chargingRequest return error component, on receipt of a RELEASE message containing a Facility information element with an AOCECurrency invoke component, accepts the information, returns a RELEASE COMPLETE message and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC U02 032 subclause 9.1.2 h)

inopportune

optional

Ensure that the IUT in U11/AOC Idle state, having received a chargingRequest return error component, on receipt of a RELEASE message containing a Facility information element with an AOCEChargingUnit invoke component, accepts the information, returns a RELEASE COMPLETE message and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC U02 033 subclause 9.1.2 h)

inopportune

ontion

Ensure that the IUT in U11/AOC Idle state, having received a chargingRequest reject component, on receipt of a RELEASE message containing a Facility information element with an AOCECurrency invoke component, accepts the information, returns a RELEASE COMPLETE message and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC_U02_034 subclause 9.1.2 h)

inopportune

optional

Ensure that the IUT in U11/AOC Idle state, having received a chargingRequest reject component, on receipt of a RELEASE message containing a Facility information element with an AOCEChargingUnit invoke component, accepts the information, returns a RELEASE COMPLETE message and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC_U02_035 subclause 9.1.2 h)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest return error component, on receipt of a RELEASE COMPLETE message containing a Facility information element with an AOCECurrency invoke component, accepts the information and enters U00/AOC Idle state.

AOC U02 036 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest return error component, on receipt of a RELEASE COMPLETE message containing a Facility information element with an AOCEChargingUnit invoke component,

accepts the information and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC U02 037 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest reject component, on receipt of a RELEASE COMPLETE message containing a Facility information element with an AOCECurrency invoke component, accepts the information and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

AOC_U02_038 subclause 9.1.2 h)

inopportune optional

Ensure that the IUT in U10/AOC Idle state, having received a chargingRequest reject component, on receipt of a RELEASE COMPLETE message containing a Facility information element with an AOCEChargingUnit invoke component,

accepts the information and enters U00/AOC Idle state.

Selection: AOC-E supported. PICS: MC 3.

6.2.1.1.2 GFP

Selection: IUT supports procedures related to the subscription option "AOC requested on a per-call basis" (this applies to whole group). PICS: SC 1 or SC 2 or SC 3.

AOC_U03_001 subclause 9.2.1.1 & [6] subclauses 8.2.2.4, 8.4.1

invalid optional

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element with an invalid charging Request return result component,

sends a FACILITY message containing a Facility information element with a reject component, enters the U10 state and remains in the AOC Request state,

or

sends a CONNECT ACKNOWLEDGE message containing a Facility information element with a reject component, enters the U10 state and remains in the AOC Request state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U03_002 subclause 9.2.1.1 & [6] subclauses 8.2.2.4, 8.4.1

invalid optional

Ensure that the IUT in U10/AOC Request state, on receipt of a FACILITY message including a Facility information element with an invalid charging Request return result component,

sends a FACILITY message containing a Facility information element with a reject component and remains in the U10/AOC Request state.

Selection: AOC-S supported. PICS: MC 1.

6.2.1.2 All calls

6.2.1.2.1 Activation

6.2.1.2.1.1 Transfer - call establishment phase

AOC_U04_001 subclause 9.2.1.1

valid option

Ensure that the IUT in U01/AOC Idle state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "AOCSCurrencyInfoList", accepts the provided information, sends no message and enters U02/AOC Idle state.

AOC U04 002 subclause 9.2.1.1

valid optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo", accepts the provided information, sends no message and enters U02/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U04_003 subclause 9.2.1.1

valid optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a CALL PROCEEDING message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "AOCSCurrencyInfoList", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U04 004 subclause 9.2.1.1

valid optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a CALL PROCEEDING message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U04_005 subclause 9.2.1.1

valid optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a PROGRESS message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "AOCSCurrencyInfoList", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U04 006 subclause 9.2.1.1

valid optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a PROGRESS message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U04 007 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of an ALERTING message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "AOCSCurrencyInfoList", accepts the provided information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U04 008 subclause 9.2.1.1

valid

optiona

Ensure that the IUT in U03/AOC Idle state, on receipt of an ALERTING message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo", accepts the provided information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U04_009 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a CONNECT message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "AOCSCurrencyInfoList", accepts the provided information, sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters U10/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U04_010 subclause 9.2.1.1

valid

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a CONNECT message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo", accepts the provided information, sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters U10/AOC Idle state.

AOC U04 011 subclause 9.2.1.1

valid

Ensure that the IUT in U01/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "AOCSCurrencyInfoList",

accepts the provided information, sends no message and enters U01/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U04_012 subclause 9.2.1.1

valid

optional

optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo",

accepts the provided information, sends no message and enters U01/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

6.2.1.2.1.2 Exceptions

AOC U05 001 subclause 9.1.2 a)

inopportune optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U02/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U05 002 subclause 9.1.2 a)

inopportune optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U02/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U05_003 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a CALL PROCEEDING message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U05_004 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a CALL PROCEEDING message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U05_005 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a PROGRESS message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U05 006 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a PROGRESS message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U03/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U05_007 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of an ALERTING message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message and enters U04/AOC Idle state.

AOC U05 008 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of an ALERTING message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and enters U04/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U05 009 subclause 9.1.2 a)

inopportune

Ensure that the IUT in U03/AOC Idle state, on receipt of a CONNECT message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters U10/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U05 010 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U03/AOC Idle state, on receipt of a CONNECT message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message or sends a CONNECT ACKNOWLEDGE containing no component related to the received component and enters U10/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U05 011 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message and enters U01/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC U05 012 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U01/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message and enters U01/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U05_013 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCDCurrency invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and remains in the same state.

Selection: AOC-D supported. PICS: MC 2.

inopportune

optional

AOC U05 014 subclause 9.1.2 a) Ensure that the IUT in U10/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message and remains in the same state.

Selection: AOC-D supported. PICS: MC 2.

AOC U05 015 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message and remains in the same state.

Selection: AOC-E supported. PICS: MC 3.

AOC U05 016 subclause 9.1.2 a)

inopportune

optional

Ensure that the IUT in U10/AOC Idle state, on receipt of a FACILITY message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "chargeNotAvailable",

accepts the provided information, sends no message and remains in the same state.

6.2.1.2.1.3 GFP

AOC_U06_001 subclause 9.1.2 & [6] subclause 8.2.2.4, 8.4.1 valid

optional

Ensure that the IUT in U01/AOC Idle state, having received a FACILITY message including a Facility information element with a correctly coded AOCSCurrency invoke component, on receipt of a FACILITY message including a Facility information element with a reject component,

sends no message and remains in U01/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U06_002 subclause 9.1.2 & [6] subclause 8.2.2.4, 8.4.1 valid

optional

Ensure that the IUT in U01/AOC Idle state, having received a FACILITY message including a Facility information element with a correctly coded AOCSSpecialArr invoke component, on receipt of a FACILITY message including a Facility information element with a reject component,

sends no message and remains in U01/AOC Idle state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U06_003 subclause 9.1.2 & [6] subclause 8.2.2.4, 8.4.1 valid

optional

Ensure that the IUT in U10/AOC Idle state, having received a FACILITY message including a Facility information element with a correctly coded AOCDCurrency invoke component, on receipt of a FACILITY message including a Facility information element with a reject component,

sends no message and remains in U10/AOC Idle state.

Selection: AOC-D supported. PICS: MC 2.

AOC_U06_004 subclause 9.1.2 & [6] subclause 8.2.2.4, 8.4.1 valid

optional

Ensure that the IUT in U10/AOC Idle state, having received a FACILITY message including a Facility information element with a correctly coded AOCDChargingUnit invoke component, on receipt of a FACILITY message including a Facility information element with a reject component,

sends no message and remains in U10/AOC Idle state.

Selection: AOC-D supported. PICS: MC 2.

6.2.2 Subscription option independent

NOTE: In the remaining TPs it is assumed that the initial AOC state is: a) "Idle" if AOC subscribed for all calls; or, b) "Active" if AOC subscribed on a per-call basis.

6.2.2.1 Independent of bearer

Selection: "Transfer of AOC-E charging information independent of a bearer" supported. PICS: MC 7.

6.2.2.1.1 Normal

AOC_U07_001 subclause 9.2.4.1

valid

optional

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via broadcast datalink and including a Facility information element with a correctly coded AOCECurrency invoke component indicating "AOCECurrencyInfo",

accepts the provided information and sends no message.

Selection: Bearer independent broadcast connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.7.

AOC_U07_002 subclause 9.2.4.1

alid

optional

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via broadcast datalink and including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "AOCEChargingUnitInfo",

accepts the provided information and sends no message.

Selection: Bearer independent broadcast connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.7.

AOC U07 003 subclause 9.2.4.1

valid optional

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via point-to-point datalink and including a Facility information element with a correctly coded AOCECurrency invoke component indicating "AOCECurrencyInfo",

accepts the provided information and sends no message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

AOC U07 004 subclause 9.2.4.1

alid optiona

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via point-to-point datalink and including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "AOCEChargingUnitInfo",

accepts the provided information and sends no message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

AOC U07 005 subclause 9.2.4.2

inopportune optional

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via broadcast data link and including a Facility information element with a correctly encoded AOCECurrency invoke component indicating "chargeNotAvailable",

accepts the provided information and sends no message.

Selection: Bearer independent broadcast connectionless transport mechanism. PICS: EN 300 196-2 [12] MCu 2.7.

AOC_U07_006 subclause 9.2.4.2

inopportune optional

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via broadcast data link and including a Facility information element with a correctly encoded AOCEChargingUnit invoke component indicating "chargeNotAvailable",

accepts the provided information and sends no message.

Selection: Bearer independent broadcast connectionless transport mechanism. PICS: EN 300 196-2 [12] MCu 2.7.

AOC U07 007 subclause 9.2.4.2

inopportune

optional

Ensure that the IUT, if more than one charging unit is used and not all types are available, on receipt of a FACILITY message using the dummy call reference via broadcast data link and including a Facility information element with a correctly encoded AOCEChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types,

accepts the provided information and sends no message.

Selection: Bearer independent broadcast connectionless transport mechanism. PICS: EN 300 196-2 [12] MCu 2.7.

AOC_U07_008 subclause 9.2.4.2

inopportune

optiona

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via point-to-point data link and including a Facility information element with a correctly encoded AOCECurrency invoke component indicating "chargeNotAvailable",

accepts the provided information and sends no message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

AOC_U07_009 subclause 9.2.4.2

inopportune

optional

Ensure that the IUT on receipt of a FACILITY message using the dummy call reference via point-to-point data link and including a Facility information element with a correctly encoded AOCEChargingUnit invoke component indicating "chargeNotAvailable",

accepts the provided information and sends no message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

AOC U07 010 subclause 9.2.4.2

inopportune optional

Ensure that the IUT, if more than one charging unit is used and not all types are available, on receipt of a FACILITY message using the dummy call reference via point-to-point data link and including a Facility information element with a correctly encoded AOCEChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types,

accepts the provided information and sends no message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

6.2.2.1.2 GFP

AOC_U08_001 [6] subclauses 8.3.2.2.2 & 8.3.2.4.2 invalid

optional

Ensure that the IUT in AOC Idle state receiving a FACILITY message, using the dummy call reference via broadcast datalink, containing a Facility information element with an invalid protocol profile, ignores the message.

Selection: Bearer independent broadcast connectionless transport mechanism. PICS: EN 300 196-2 [12] MCu 2.7.

AOC_U08_002 [6] subclauses 8.3.2.2.2 & 8.3.2.4.2

optional

Ensure that the IUT in AOC Idle state receiving FACILITY message, using the dummy call reference via broadcast datalink, without a Facility information element,

ignores the message.

Selection: Bearer independent broadcast connectionless transport mechanism. PICS: EN 300 196-2 [12] MCu 2.7.

AOC U08 003 [6] subclauses 8.3.2.2.2 & 8.3.2.4.2

optional

Ensure that the IUT in AOC Idle state receiving a FACILITY message, using the dummy call reference via point-topoint datalink, containing a Facility information element with an invalid protocol profile, ignores the message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

AOC_U08_004 [6] subclauses 8.3.2.2.2 & 8.3.2.4.2

invalid

invalid

invalid

optional

Ensure that the IUT in AOC Idle state receiving FACILITY message, using the dummy call reference via point-to-point datalink, without a Facility information element,

ignores the message.

Selection: Bearer independent point to point connectionless transport mechanism supported. PICS: EN 300 196-2 [12] MCu 2.6.

AOC_U08_005 [6] subclauses 8.3.2.2.2 & 8.3.2.4.2

inopportune

mandatory

Ensure that the IUT in AOC Idle 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.

6.2.2.2 Transfer - active phase

NOTE: The TPs in this subclause represent the case when there is a change in the charging rate and this change is reported by the network to the user.

AOC U09 001 subclause 9.2.2.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a FACILITY message including a Facility information element coded as AOCSCurrency invoke component indicating "AOCSCurrencyInfoList",

accepts the provided information, sends no message and remains in the same state.

AOC U09 002 subclause 9.2.2.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a FACILITY message including a Facility information element coded as AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo",

accepts the provided information, sends no message and remains in the same state.

Selection: AOC-S supported. PICS: MC 1.

AOC_U09_003 subclause 9.2.2.1.

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a FACILITY message including a Facility information element coded as AOCDCurrency invoke component indicating "AOCDCurrencyInfo",

accepts the provided information, sends no message and remains in the same state.

Selection: AOC-D supported. PICS: MC 2.

AOC U09 004 subclause 9.2.2.1.

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a FACILITY message including a Facility information element coded as AOCDChargingUnit invoke component indicating "AOCDChargingUnitInfo",

accepts the provided information, sends no message and remains in the same state.

Selection: AOC-D supported. PICS: MC 2.

6.2.2.3 Transfer - clearing phase

AOC U10 001 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element coded as AOCSCurrency invoke component indicating "AOCSCurrencyInfoList",

accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC_U10_002 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element coded as AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC_U10_003 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element coded as AOCSCurrency invoke component indicating "AOCSCurrencyInfoList",

accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC U10 004 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element coded as AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC U10 005 subclause 9.2.3.1

valid

ontiona

Ensure that the IUT in Release Request (U19) state, on receipt of a RELEASE COMPLETE message including a Facility information element coded as AOCSCurrency invoke component indicating "AOCSCurrencyInfoList", accepts the provided information and enters state U00.

Selection: AOC-S supported. PICS: MC 1.

AOC_U10_006 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Release Request (U19) state, on receipt of a RELEASE COMPLETE message including a Facility information element coded as AOCSSpecialArr invoke component indicating "AOCSSpecialArrInfo", accepts the provided information and enters state U00.

AOC U10 007 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element coded as AOCDCurrency invoke component indicating "AOCDCurrencyInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC_U10_008 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element coded as AOCDChargingUnit invoke component indicating "AOCDChargingUnitInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 009 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element coded as AOCDCurrency invoke component indicating "AOCDCurrencyInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC_U10_010 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element coded as AOCDChargingUnit invoke component indicating "AOCDChargingUnitInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 011 subclause 9.2.3.1

valid

ntiona

Ensure that the IUT in Release Request (U19) state, on receipt of a RELEASE COMPLETE message including a Facility information element coded as AOCDCurrency invoke component indicating "AOCDCurrencyInfo", accepts the provided information and enters state U00.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 012 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Release Request (U19) state, on receipt of a RELEASE COMPLETE message including a Facility information element coded as AOCDChargingUnit invoke component indicating "AOCDChargingUnitInfo", accepts the provided information and enters state U00.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 013 subclause 9.2.3.1

valid

option

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "AOCECurrencyInfo",

accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_014 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "AOCEChargingUnitInfo", accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_015 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "AOCECurrencyInfo", accepts the provided information and continues normal call handling.

AOC_U10_016 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "AOCEChargingUnitInfo", accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_017 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Release Request (U19) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "AOCECurrencyInfo",

accepts the provided information and enters state U00.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_018 subclause 9.2.3.1

valid

optional

Ensure that the IUT in Release Request (U19) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "AOCEChargingUnitInfo",

accepts the provided information and enters state U00.

Selection: AOC-E supported. PICS: MC 3.

AOC U10 019 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable",

accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC_U10_020 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC_U10_021 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC U10 022 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-S supported. PICS: MC 1.

AOC_U10_023 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCSCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

Selection: AOC-S supported. PICS: MC 1.

AOC U10 024 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

AOC U10 025 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCDCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC_U10_026 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 027 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, if more than one charging unit is available, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types, accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC_U10_028 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCDCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 029 subclause 9.2.3.2

inopportune optiona

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 030 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) State, if more than one charging unit is available, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types, accepts the provided information and continues normal call handling.

Selection: AOC-D supported. PICS: MC 2.

AOC_U10_031 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCDCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

Selection: AOC-D supported. PICS: MC 2.

AOC_U10_032 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

AOC U10 033 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, if more than one charging unit is used and not all are available, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCDChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types,

accepts the provided information and enters state U00.

Selection: AOC-D supported. PICS: MC 2.

AOC U10 034 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_035 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC U10 036 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) State, if more than one charging unit is available, on receipt of a DISCONNECT message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types, accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_037 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_038 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and continues normal call handling.

Selection: AOC-E supported. PICS: MC 3.

AOC U10 039 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) State, if more than one charging unit is available, on receipt of a RELEASE message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types, accepts the provided information and enters state U00.

Selection: AOC-E supported. PICS: MC 3.

AOC U10 040 subclause 9.2.3.2

inopportune

optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCECurrency invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

AOC_U10_041 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) state, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

Selection: AOC-E supported. PICS: MC 3.

AOC_U10_042 subclause 9.2.3.2

inopportune optional

Ensure that the IUT in Active Call (U10) State, if more than one charging unit is used and not all types are available, on receipt of a RELEASE COMPLETE message including a Facility information element with a correctly coded AOCEChargingUnit invoke component indicating the available charging information and "notAvailable" for the remaining charging unit types,

accepts the provided information and enters state U00.

Selection: AOC-E supported. PICS: MC 3.

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 TSS which is an appropriate subset of the whole of the TSS 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 EN 300 182-1 [1].

Annex A (informative): Changes with respect to the previous ETS 300 182-3

The following changes have been done:

- conversion to EN layout;
- substitution of non-specific references to basic standards where the intention is to refer to the latest version.

History

Document history								
Edition 1	September 1996	Publication as ETS 300 182-3						
V1.2.3	February 1998	One-step Approval Procedure	OAP 9824:	1998-02-13 to 1998-06-12				