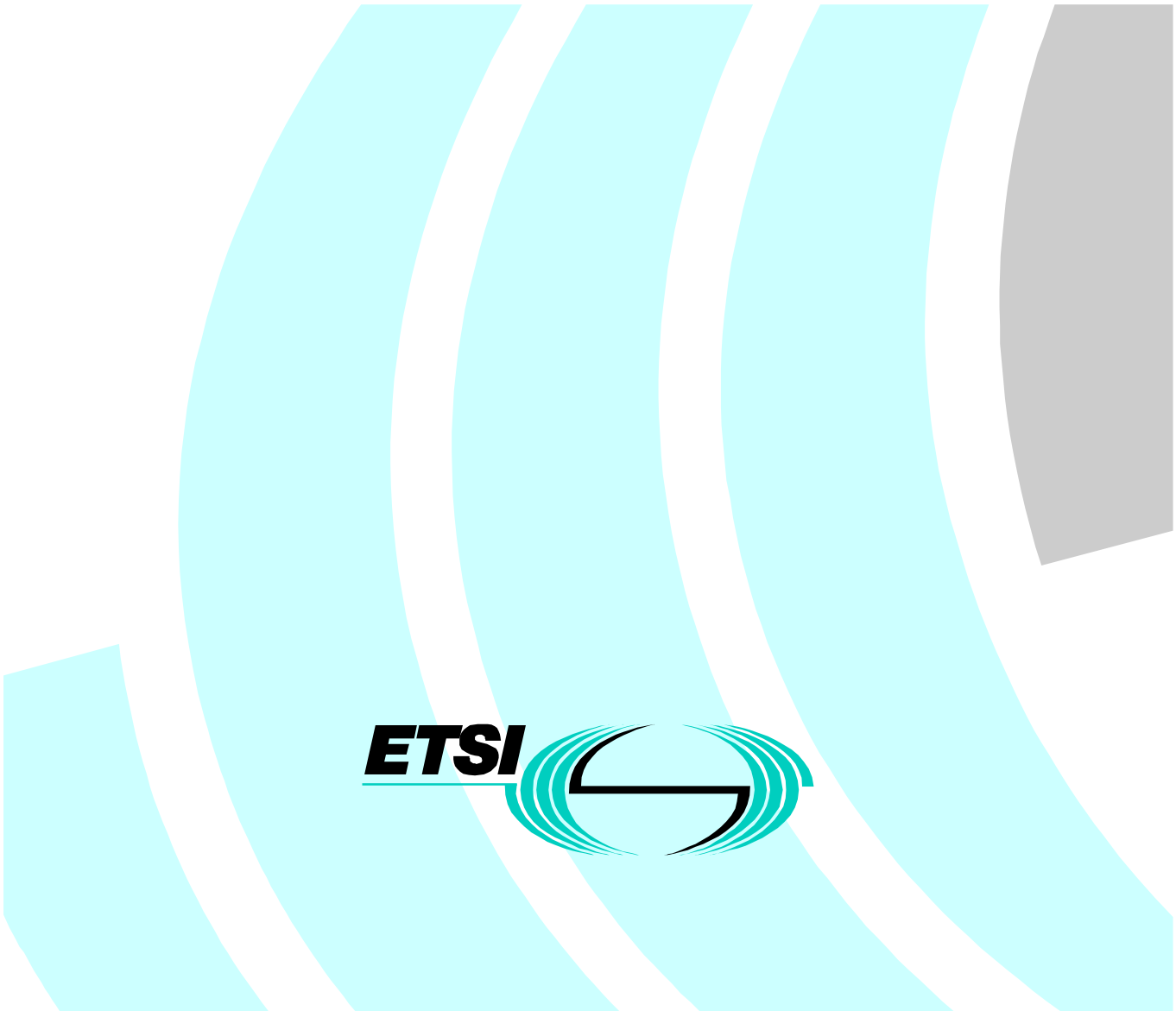
# ETSI EN 300 182-3 V1.4.1 (2001-06)

*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**



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# Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 3 of a multi-part deliverable 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 identified 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: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";

Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

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

| National transposition dates | |
|---|---|
| Date of adoption of this EN: | 1 June 2001 |
| Date of latest announcement of this EN (doa): | 30 September 2001 |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 31 March 2002 |
| Date of withdrawal of any conflicting National Standard (dow): | 31 March 2002 |

# 1 Scope

The present document 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 [6]) 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 the present document 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 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

[1] ETSI EN 300 182-1 (V1.3.6): "Integrated Services Digital Network (ISDN); Advice of Charge (AOC) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[2] ETSI EN 300 182-2 (V1.3.4): "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 (1994): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework - Part 1: General concepts".

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

[5] ETSI EN 300 196-1 (V1.2.2): "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".

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

[7] ETSI EN 300 403-1 (V1.3.2): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".

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

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

[10] ETSI ETS 300 196-2 (1996): "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".

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

# 3 Definitions and abbreviations

## 3.1 Definitions

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

### 3.1.1 Definitions related to conformance testing

**abstract test case:** refer to ISO/IEC 9646-1 [3]

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

**Implementation Under Test (IUT):** 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]

### 3.1.2 Definitions related to EN 300 182-1

**call reference:** see EN 300 403-1 [7], clause 4.3

**component:** see EN 300 196-1 [5], clause 11.2.2.1

**Integrated Services Digital Network (ISDN):** see ITU-T Recommendation I.112 [8] , definition 308

**invoke component:** see EN 300 196-1 [5], clause 11.2.2.1

**return error component:** see EN 300 196-1 [5], clause 11.2.2.1

**return result component:** see EN 300 196-1 [5], clause 11.2.2.1

**served user:** served user is the user who invokes the AOC supplementary service

**service; telecommunication service:** see ITU-T Recommendation I.112 [8], definition 201

**supplementary service:** see ITU-T Recommendation I.210 [9], clause 2.4

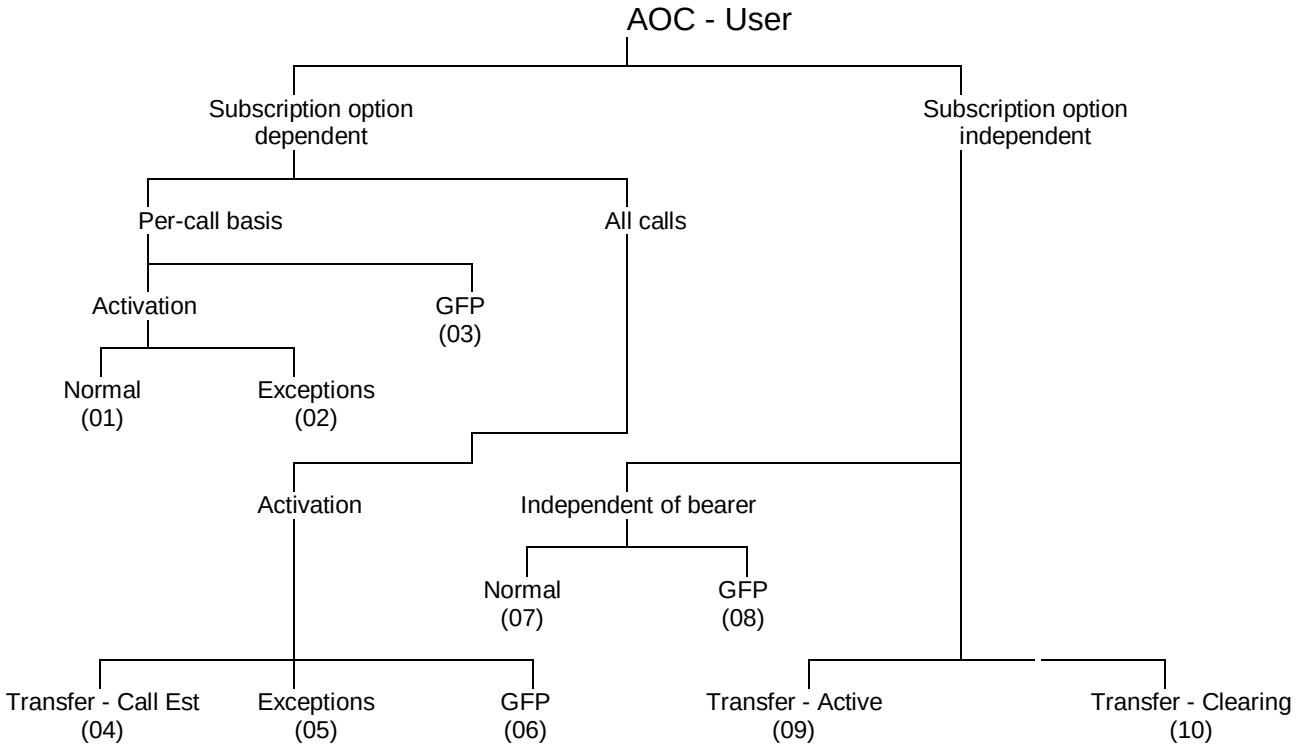
**user:** DSS1 protocol entity at the User side of the user-network interface where a T reference point or coincident S and T reference point applies

## 3.2 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 |
| U11 | Disconnect Request call state |
| U19 | Release Request call state |

# 4 Test Suite Structure (TSS)




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

**Figure 1: Test suite structure**

# 5 Test Purposes (TP)

## 5.1 Introduction

For each test requirement a TP is defined.

### 5.1.1 TP naming convention

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

**Table 1: TP identifier naming convention scheme**

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

### 5.1.2 Source of TP definition

The TPs are based on EN 300 182-1 [1].

### 5.1.3 TP structure

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

**Table 2: Structure of a single TP**

| TP part | Text | Example |
|---|---|---|
| Header | <Identifier> *tab*<br><paragraph number in base ETS> *tab* | see table 1<br>clause 0.0.0 |
| Stimulus | Ensure that the IUT in the<br><basic call state><br>/ <supplementary service state><br><trigger> *see below for message structure*<br>*or* <goal> | <br>U10 etc.<br>/AOC-S Idle, ...<br>receiving a XXXX message<br>to request a .... |
| Reaction | <action><br><conditions><br>*if the action is sending*<br>*see below for message structure*<br><next action>, *etc.*<br>and remains in the same state<br>*or* and enters state <state> | sends, saves, does, etc.<br>using en bloc sending, ... |
| Message structure | <message type><br>message containing a<br>*a)* <info element><br>information element with<br>*b)* a <field name><br>encoded as *or* including<br><coding of the field> and *back to a or b,* | SETUP, FACILITY, CONNECT, …<br><br>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. | | |

### 5.1.4 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 TPs are only based on conformance requirements related to the externally observable behaviour of the IUT, and are limited to conceivable situations to which a real implementation is likely to be faced (ETS 300 406 [11]).

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

## 5.2 User TPs for AOC

Unless specified:

- the messages indicated are valid and contain at least the mandatory information elements and possibly optional information elements;
- the information elements indicated are valid and contain at least the mandatory parameters and possibly optional parameters;
- all PICS items referred to in this clause are as specified in EN 300 182-2 [2] unless indicated otherwise by another numbered reference.

### 5.2.1 Subscription option dependent

#### 5.2.1.1 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.

##### 5.2.1.1.1 Activation

###### 5.2.1.1.1.1 Normal

**AOC_U01_001 clause 8.1.1**

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 clause 8.1.1**

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 clause 8.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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.

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

**AOC_U01_009 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 "AOCSSpecialArrInfo", enters the U01/AOC Active state.

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

**AOC_U01_016 clause 8.1.1**

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 clause 8.1.1**

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 clause 8.1.1**

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 clause 8.1.1**

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 "chargingInfoFollows", enters the U04/AOC Active state.

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

**AOC_U01_020 clause 8.1.1**

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 clause 8.1.1**

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 "chargingInfoFollows", enters the U01/AOC Active state.

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

#### 5.2.1.1.1.2 Exceptions

**AOC_U02_001 clause 8.1.2 c), d), e)**

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

**AOC_U02_002 clause 8.1.2 c), d), e)**

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

**AOC_U02_003 clause 8.1.2 c), d), e)**

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element coded as chargingRequest return error component, continues normal call handling and enters U03/AOC Idle state.

**AOC_U02_004 clause 8.1.2 c), d), e)**

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element coded as chargingRequest return error component, continues normal call handling and enters U04/AOC Idle state.

**AOC_U02_005 clause 8.1.2 c), d), e)**

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element coded as chargingRequest return error component, continues normal call handling and enters U10/AOC Idle state.

**AOC_U02_006 clause 8.1.2 c), d), e)**

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element coded as chargingRequest return error component, continues normal call handling and enters U01/AOC Idle state.

**AOC_U02_007 clause 8.1.2 f)**

Ensure that the IUT in U01/AOC Request state, on receipt of a SETUP ACKNOWLEDGE message including a Facility information element with a chargingRequest reject component, takes no protocol actions and enters U02/AOC Idle state.

**AOC_U02_008 clause 8.1.2 f)**

Ensure that the IUT in U01/AOC Request state, on receipt of a CALL PROCEEDING message including a Facility information element with a chargingRequest reject component, takes no protocol actions and enters U03/AOC Idle state.

**AOC_U02_009 clause 8.1.2 f)**

Ensure that the IUT in U03/AOC Request state, on receipt of a PROGRESS message including a Facility information element with a chargingRequest reject component, takes no protocol actions and enters U03/AOC Idle state.

**AOC_U02_010 clause 8.1.2 f)**

Ensure that the IUT in U03/AOC Request state, on receipt of an ALERTING message including a Facility information element with a chargingRequest reject component, takes no protocol actions and enters U04/AOC Idle state.

**AOC_U02_011 clause 8.1.2 f)**

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element with a chargingRequest reject component, takes no protocol actions and enters U10/AOC Idle state.

**AOC_U02_012 clause 8.1.2 f)**

Ensure that the IUT in U01/AOC Request state, on receipt of a FACILITY message including a Facility information element with a chargingRequest reject component, takes no protocol actions and enters U01/AOC Idle state.

**AOC_U02_013 clause 8.1.2 g)**

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 clause 8.1.2 g)**

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 clause 8.1.2 g)**

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 AOCDCurrency invoke component, continues normal call handling and enters U03/AOC Request state.

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

**AOC_U02_016 clause 8.1.2 g)**

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 clause 8.1.2 g)**

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 AOCECurrency invoke component, continues normal call handling and enters U03/AOC Request state.

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

**AOC_U02_018 clause 8.1.2 g)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

Ensure that the IUT in U03/AOC Idle state, having received a chargingRequest 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 clause 8.1.2 h)**

Ensure that the IUT in U03/AOC Idle state, having received a chargingRequest 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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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.

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

**AOC_U02_027 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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.

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

**AOC_U02_036 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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 clause 8.1.2 h)**

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.

#### 5.2.1.1.2 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 clause 8.2.1.1 & [5] clauses 8.2.2.4, 8.4.1**

Ensure that the IUT in U03/AOC Request state, on receipt of a CONNECT message including a Facility information element with an invalid chargingRequest 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 clause 8.2.1.1 & [5] clauses 8.2.2.4, 8.4.1**

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

#### 5.2.1.2 All calls

##### 5.2.1.2.1 Activation

###### 5.2.1.2.1.1 Transfer - call establishment phase

**AOC_U04_001 clause 8.2.1.1**

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.

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

**AOC_U04_002 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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 clause 8.2.1.1**

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.

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

**AOC_U04_011 clause 8.2.1.1**

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 clause 8.2.1.1**

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.

#### 5.2.1.2.1.2 Exceptions

**AOC_U05_001 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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.

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

**AOC_U05_008 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 a)**

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 clause 8.1.2 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 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.

**AOC_U05_014 clause 8.1.2 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 clause 8.1.2 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 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 clause 8.1.2 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 AOCEChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information, sends no message and remains in the same state.

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

#### 5.2.1.2.1.3 GFP

**AOC_U06_001 clause 8.1.2 & [5] clause 8.2.2.4, 8.4.1**

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 clause 8.1.2 & [5] clause 8.2.2.4, 8.4.1**

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 clause 8.1.2 & [5] clause 8.2.2.4, 8.4.1**

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 clause 8.1.2 & [5] clause 8.2.2.4, 8.4.1**

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.

## 5.2.2 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.

### 5.2.2.1 Independent of bearer

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

#### 5.2.2.1.1 Normal

**AOC_U07_001 clause 8.2.4.1**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U07_002 clause 8.2.4.1**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U07_003 clause 8.2.4.1**

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: ETS 300 196-2 [10] MCu 2.6.

**AOC_U07_004 clause 8.2.4.1**

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: ETS 300 196-2 [10] MCu 2.6.

**AOC_U07_005 clause 8.2.4.2**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U07_006 clause 8.2.4.2**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U07_007 clause 8.2.4.2**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U07_008 clause 8.2.4.2**

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: ETS 300 196-2 [10] MCu 2.6.

**AOC_U07_009 clause 8.2.4.2**

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: ETS 300 196-2 [10] MCu 2.6.

**AOC_U07_010 clause 8.2.4.2**

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: ETS 300 196-2 [10] MCu 2.6.

#### 5.2.2.1.2 GFP

**AOC_U08_001 [5] clause 8.3.2.4.2**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U08_002 [5] clause 8.3.2.4.2**

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: ETS 300 196-2 [10] MCu 2.7.

**AOC_U08_003 [5] clause 8.3.2.2.2**

Ensure that the IUT in AOC Idle state receiving a FACILITY message, using the dummy call reference via point-to-point 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: ETS 300 196-2 [10] MCu 2.6.

**AOC_U08_004 [5] clause 8.3.2.2.2**

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: ETS 300 196-2 [10] MCu 2.6.

**AOC_U08_005 [5] clauses 8.3.2.2.2 and 8.3.2.4.2**

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.

### 5.2.2.2 Transfer - active phase

NOTE: The TPs in this clause 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 clause 8.2.2.1**

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.

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

**AOC_U09_002 clause 8.2.2.1**

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 clause 8.2.2.1.**

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 clause 8.2.2.1.**

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.

### 5.2.2.3 Transfer - clearing phase

**AOC_U10_001 clause 8.2.3.1**

Ensure that the IUT in Call Delivered (U04) 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 clause 8.2.3.1**

Ensure that the IUT in Call Delivered (U04) 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 clause 8.2.3.1**

Ensure that the IUT in Disconnect Request (U11) state entered during premature call clearing, 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 clause 8.2.3.1**

Ensure that the IUT in Disconnect Request (U11) state entered during premature call clearing, 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 clause 8.2.3.1**

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 clause 8.2.3.1**

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.

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

**AOC_U10_007 clause 8.2.3.1**

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 clause 8.2.3.1**

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 clause 8.2.3.1**

Ensure that the IUT in DISCONNECT request (U11) 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 clause 8.2.3.1**

Ensure that the IUT in DISCONNECT request (U11) 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 clause 8.2.3.1**

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 clause 8.2.3.1**

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 clause 8.2.3.1**

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 clause 8.2.3.1**

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 clause 8.2.3.1**

Ensure that the IUT in DISCONNECT request (U11) 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.

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

**AOC_U10_016 clause 8.2.3.1**

Ensure that the IUT in DISCONNECT request (U11) 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 clause 8.2.3.1**

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 clause 8.2.3.1**

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 clause 8.2.3.2**

Ensure that the IUT in Call Delivered (U04) 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 clause 8.2.3.2**

Ensure that the IUT in Call Delivered (U04) 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect request (U11) state entered during premature call clearing, 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect request (U11) state entered during premature call clearing, 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 clause 8.2.3.2**

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 AOCSCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

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

**AOC_U10_024 clause 8.2.3.2**

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 AOCSSpecialArr invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

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

**AOC_U10_025 clause 8.2.3.2**

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 clause 8.2.3.2**

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 clause 8.2.3.2**

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 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect request (U11) 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect request (U11) 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect request (U11) State, 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 clause 8.2.3.2**

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 AOCDCurrency invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

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

**AOC_U10_032 clause 8.2.3.2**

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 AOCDChargingUnit invoke component indicating "chargeNotAvailable", accepts the provided information and enters state U00.

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

**AOC_U10_033 clause 8.2.3.2**

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 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 clause 8.2.3.2**

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 clause 8.2.3.2**

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 clause 8.2.3.2**

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 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect Request (U11) 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect Request (U11) 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 clause 8.2.3.2**

Ensure that the IUT in Disconnect Request (U11) State, 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 continues normal call handling.

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

**AOC_U10_040 clause 8.2.3.2**

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 "chargeNotAvailable", accepts the provided information and enters state U00.

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

**AOC_U10_041 clause 8.2.3.2**

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 "chargeNotAvailable", accepts the provided information and enters state U00.

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

**AOC_U10_042 clause 8.2.3.2**

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 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_043 clause 8.2.3.1**

Ensure that the IUT in Call Delivered (U04)/AOC request (for AOC-S) state, on receipt of a DISCONNECT message including a Facility information element coded as ChargingRequest return result component indicating "AOCSCurrencyInfoList", accepts the provided information and continues normal call handling.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_044 clause 8.2.3.1**

Ensure that the IUT in Call Delivered (U04)/AOC request (for AOC-S) state, on receipt of a DISCONNECT message including a Facility information element coded as ChargingRequest return result component indicating "AOCSSpecialArrInfo", accepts the provided information and continues normal call handling.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_045 clause 8.2.3.1**

Ensure that the IUT in Disconnect Request (U11)/AOC request (for AOC-S) state during premature call clearing, on receipt of a RELEASE message including a Facility information element coded as ChargingRequest return result component indicating "AOCSCurrencyInfoList", accepts the provided information and continues normal call handling.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_046 clause 8.2.3.1**

Ensure that the IUT in Disconnect Request (U11)/AOC request (for AOC-S) state during premature call clearing, on receipt of a RELEASE message including a Facility information element coded as ChargingRequest return result component indicating "AOCSSpecialArrInfo", accepts the provided information and continues normal call handling.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_047 clause 8.2.3.1**

Ensure that the IUT in Release Request (U19)/AOC request (for AOC-S) state during premature call clearing, on receipt of a RELEASE COMPLETE message including a Facility information element coded as ChargingRequest return result component indicating "AOCSCurrencyInfoList", accepts the provided information and enters state U00.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_048 clause 8.2.3.1**

Ensure that the IUT in Release Request (U19)/AOC request (for AOC-S) state during premature call clearing, on receipt of a RELEASE COMPLETE message including a Facility information element coded as ChargingRequest return result component indicating "AOCSSpecialArrInfo", accepts the provided information and enters state U00.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_049 clause 8.2.3.2**

Ensure that the IUT in Call Delivered (U04)/AOC request (for AOC-S) state, on receipt of a DISCONNECT message including a Facility information element coded as ChargingRequest return error component indicating "noChargingInfoAvailable", accepts the provided information and continues normal call handling.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_050 clause 8.2.3.2 inopportune**

Ensure that the IUT in Disconnect Request (U11)/AOC request (for AOC-S) state during premature call clearing, on receipt of a RELEASE message including a Facility information element coded as ChargingRequest return error component indicating "noChargingInfoAvailable ", accepts the provided information and continues normal call handling.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

**AOC_U10_051 clause 8.2.3.2 inopportune**

Ensure that the IUT in Release Request (U19)/AOC request (for AOC-S) state during premature call clearing, on receipt of a RELEASE COMPLETE message including a Facility information element coded as ChargingRequest return error component indicating "noChargingInfoAvailable ", accepts the provided information and enters state U00.

**Selection:** AOC-S supported. PICS: MC 1 AND AOC-S supported on a per-call basis PICS: SC1.

# 6 Compliance

An ATS, which complies with the present document, shall:

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

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

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

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

e) comply with ISO/IEC 9646-2 [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 5 shall be included in a compliant ATS.

# 7 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [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 EN 300 182-3 v.1.3.2

The following changes have been done:

- several TPs in clause 5.2.2.3 changed according to modifications to clause 8.2.3 in EN 300 182-1 [1] and new TPs added to cover new procedures for AOC-S per call;
- references to EN 300 182-1 [1] updated (clauses have been renumbered in that document).

# History

| Document history | | |
|---|---|---|
| Edition 1 | September 1996 | Publication as ETS 300 182-3 |
| V1.2.4 | June 1998 | Publication |
| V1.3.2 | May 2000 | Publication |
| V1.4.1 | January 2001 | One-step Approval Procedure OAP 20010601: 2001-01-31 to 2001-06-01 |
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