

# EN 300 182-3 V1.2.4 (1998-06)

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*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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Reference

REN/SPS-05145-K-3 (1oor0iqo.PDF)

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Keywords

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

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## Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS).

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.

<b>National transposition dates</b>	
Date of adoption of this EN:	19 June 1998
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# 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].

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# 2 Normative references

References may be made to:

- 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.

- [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".
- [9] ITU-T Recommendation I.112: "Vocabulary and terms for ISDNs".
- [10] 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".

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## 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).

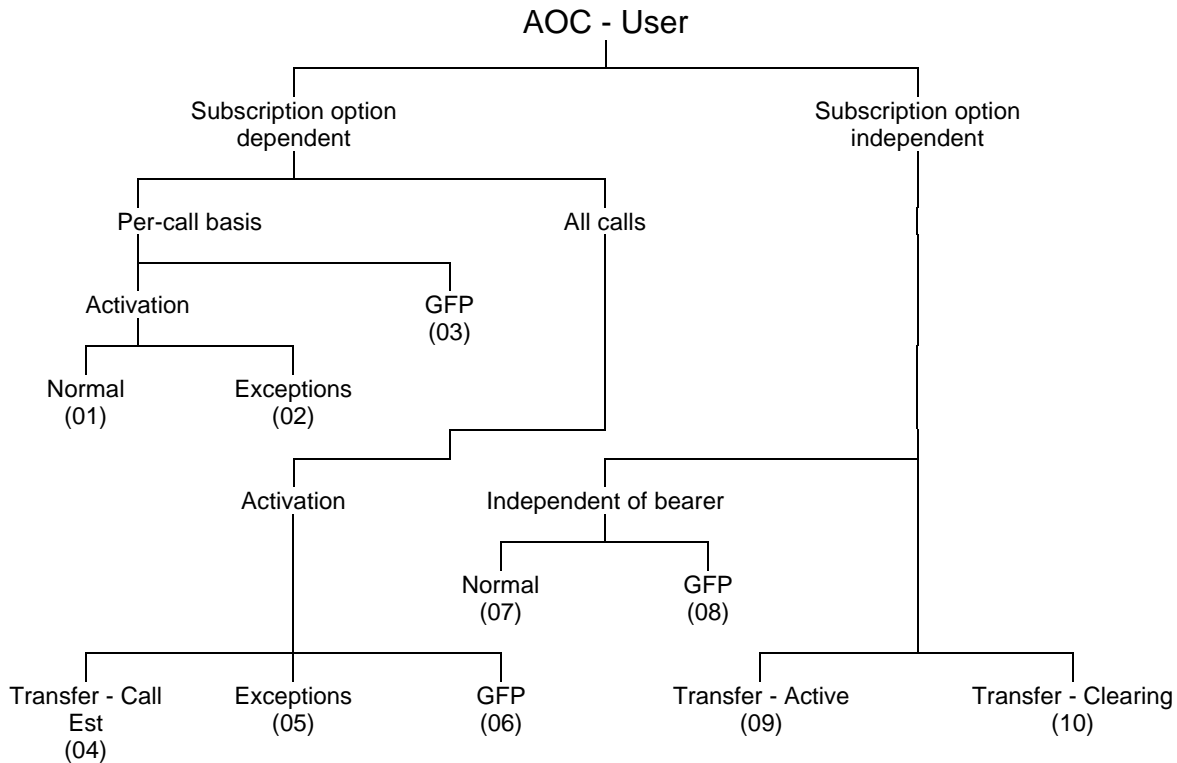
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## 4 Abbreviations

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

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)



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

## 6.1.4 Test strategy

As the base standard 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 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 "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.

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







**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 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 subclause 9.1.2 h)****inopportune****optional**

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 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****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 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.

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



**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 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 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 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.

**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 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 "AOCSCurrencyInfoList",  
accepts the provided information, sends no message and enters U02/AOC Idle state.

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





**AOC\_U04\_011 subclause 9.2.1.1****valid****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 "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**

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.

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



### 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 AOCSurrency 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 AOCSpecialArr 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 AOCDurrency 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 AOCEurrency invoke component indicating "AOCEurrencyInfo",  
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**      **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 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 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 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 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 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**    **invalid**    **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**    **invalid**    **optional**

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:  
EN 300 196-2 [12] MCu 2.6.

**AOC\_U08\_004**    **[6] subclauses 8.3.2.2.2 & 8.3.2.4.2**    **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.

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









**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****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 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.

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



**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.

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## 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.

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## 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].

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## 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

<b>Document history</b>		
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
V1.2.4	June 1998	Publication