



# SLOVENSKI STANDARD SIST ETS 300 361 E1:2005

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**Zasebno telekomunikacijsko omrežje (PTN) – Specifikacija, funkcijski model in informacijski pretoki - Dopolnilna storitev: ponudba klica**

Private Telecommunication Network (PTN); Specification, functional models and information flows; Call offer supplementary service

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## Foreword

This European Telecommunication Standard (ETS) has been produced by the European Computer Manufacturers Association (ECMA) on behalf of its members and those of the European Telecommunications Standards Institute (ETSI).

This ETS is one of a series of standards defining services and signalling protocols applicable to Private Telecommunication Networks (PTNs). The series uses the ISDN concepts as developed by the ITU-TS and is also within the framework of standards for open systems interconnection as defined by ISO.

This ETS specifies the Call Offer supplementary service, which is applicable to various basic services supported by Private Telecommunication Networks (PTNs).

The ETS is based upon the practical experience of ECMA member companies and the results of their active and continuous participation in the work of ISO, ITU-TS, ETSI and other international and national standardisation bodies. It represents a pragmatic and widely based consensus.

This ETS was produced by ECMA using the ECMA guidelines for the production of standards and using the ECMA stylesheet. In order to avoid undue delays in the approval process for this ETS it has been agreed that this ETS will not be converted to the ETSI stylesheet.

Transposition dates	
Date of latest announcement of this ETS (doa):	28 February 1995
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## 1 Scope

This European Telecommunication Standard (ETS) specifies the Supplementary Service Call Offer (SS-CO), which is applicable to various basic services supported by Private Telecommunication Networks (PTNs). Basic services are specified in ETS 300 171.

SS-CO is a supplementary service which, on request from the calling user (or on that user's behalf), enables a call to be offered to a busy called user and to wait for that called user to accept this call.

Services specifications are produced in three stages, according to the method described in ETS 300 387. This ETS contains the stage 1 and stage 2 specifications of SS-CO. The stage 1 specification (clause 6) specifies the supplementary service as seen by users of PTNs. The stage 2 specification (clause 7) identifies the functional entities involved in the supplementary service and the information flows between them.

### NOTE 1

*For this ETS, stage 2 does not consider the split of functionality between a functional terminal and the local PTNX. Terminal functions and local PTNX functions are included in the same Functional Entity.*

## 2 Conformance

In order to conform to this ETS, a stage 3 standard shall specify signalling protocols and equipment behaviour that are capable of being used in a PTN which supports the supplementary service specified in this ETS. This means that to claim conformance a stage 3 standard is required to be adequate for the support of these aspects of clause 6 (stage 1) and clause 7 (stage 2) which are relevant to the interface or equipment to which the stage 3 standard applies.

## 3 References

- [SIST ETS 300 361 E1:2005](https://standards.iteh.ai/catalog/standards/sist/1ccha86a-ef17-44d2-8f36-ca163199ea0/sist-ets-300-361-e1-2005)
- <https://standards.iteh.ai/catalog/standards/sist/1ccha86a-ef17-44d2-8f36-ca163199ea0/sist-ets-300-361-e1-2005>
- ETS 300 171 Private Telecommunications Network (PTN); Specification, functional models and information flows Control aspects of circuit mode basic services (ECMA-BCSD)
- ETS 300 173 Private Telecommunications Network (PTN); Specification, functional models and information flows Identification supplementary services (ECMA-ISSD)
- ETS 300 237 Private Telecommunication Network (PTN); Specification, functional models and information flows Name identification supplementary service; ECMA-NISD
- ETS 300 256 Private Telecommunication Network (PTN); Specification, functional models and information flows Diversion supplementary services
- ETS 300 260 Private Telecommunication Network (PTN); Specification, functional models and information flows Call transfer supplementary service
- ETS 300 363 Private Telecommunication Network (PTN); Specification, functional model and information flows Do not disturb and do not disturb override supplementary services
- ETS 300 365 Private Telecommunication Network (PTN); Specification, functional models and information flows Call completion supplementary services
- ETS 300 387 Private Telecommunications Network (PTN); Method for the specification of basic and supplementary services
- ENV 41007-1 Definition of terms in private telecommunication networks (1989)
- CCITT Rec. I.112 Vocabulary of terms for ISDNs (1988)
- CCITT Rec. I.210 Principles of telecommunication services supported by an ISDN and the means to describe them (1988)

CCITT Rec. I.221 Common specific characteristics of services (1988)

CCITT Rec. Z.100 Specification and description language (1988)

## 4 Definitions

For the purpose of this ETS, the following definitions apply.

### 4.1 External definitions

This ETS uses the following terms defined in other documents:

- Basic Service (CCITT Rec. I.210)
- Connection (CCITT Rec. I.112)
- Network Determined User Busy (CCITT Rec. I.221)
- Private (ENV 41007-1)
- Private Telecommunication Network Exchange (PTNX) (ENV 41007-1)
- Public (ENV 41007-1)
- Public ISDN (ENV 41007-1)
- Service (CCITT Rec. I.112)
- Signalling (CCITT Rec. I.112)
- Supplementary Service (CCITT Rec. I.210)
- Telecommunication Network [SIST ETS 300 361 E1:2005](https://standards.iteh.ai/catalog/standards/sist/1c6399ea0/sist-ets-300-361-e1-2005) (ENV 41007-1)
- Terminal, Terminal equipment <https://standards.iteh.ai/catalog/standards/sist/1c6399ea0/sist-ets-300-361-e1-2005> (ENV 41007-1)
- User (ETS 300 171)
- User Determined User Busy (CCITT Rec. I.221)

This ETS refers to the following basic call Functional Entities (FEs) defined in ETS 300 171:

- Call Control (CC)
- Call Control Agent (CCA)

This ETS refers to the following basic call inter-FE relationships defined in ETS 300 171:

- r1
- r2
- r3

This ETS refers to the following basic call information flows defined in ETS 300 171:

- SETUP request/indication
- SETUP response/confirmation
- REPORT request/indication
- RELEASE request/indication
- RELEASE response/confirmation

**4.2 Additional network feature**

A capability, over and above that of a basic service, provided by a PTN, but not directly to a PTN user.

**4.3 Automatic Call Offer invocation timer**

A timer governing the time after which SS-CO is automatically invoked after the calling user has been informed that a call has failed because of busy at the destination. The duration of the timer is an implementation option.

**4.4 Busy**

A property of a user for whom either a Network Determined User Busy or User Determined User Busy condition exists.

**4.5 Call, Basic call**

An instance of the use of a basic service.

**4.6 Consultation timer**

A timer governing the time in which the calling user is allowed to request invocation of SS-CO after being informed that a call has failed because of busy at the destination. The duration of the timer is an implementation option.

**4.7 Offered call**

A call that is in a waiting condition as a result of invocation of SS-CO, against a busy called user.

**4.8 Path retention**

The retaining of the network connection between the Originating CC and the Destination CC so that a supplementary service (such as SS-CO) can be invoked without establishing a new connection.

**5 List of acronyms**

ANF	Additional Network Feature
CC	Call Control (functional entity)
CCA	Call Control Agent (functional entity)
FE	Functional Entity
PR	Path Replacement
PTN	Private Telecommunication Network
PTNX	Private Telecommunication Network Exchange
SDL	Specification and Description Language
SS-CCBS	Call Completion to Busy Subscriber Supplementary Service
SS-CCNR	Call Completion on No Reply Supplementary Service
SS-CFB	Call Forwarding Busy Supplementary Service
SS-CFNR	Call Forwarding No Reply Supplementary Service
SS-CFU	Call Forwarding Unconditional Supplementary Service
SS-CLIP	Calling Line Identification Presentation Supplementary Service
SS-CLIR	Calling/Connected Line Identification Restriction Supplementary Service
SS-CNIP	Calling Name Identification Presentation Supplementary Service
SS-CNIR	Calling/Connected Name Identification Restriction Supplementary Service
SS-CO	Call Offer Supplementary Service
SS-COLP	Connected Line Identification Presentation Supplementary Service
SS-CONP	Connected Name Identification Presentation Supplementary Service

SS-CT	Call Transfer Supplementary Service
SS-DND	Do Not Disturb Supplementary Service
SS-DNDO	Do Not Disturb Override Supplementary Service
TE	Terminal Equipment

## 6 SS-CO stage 1 specification

### 6.1 Description

#### 6.1.1 General description

SS-CO is a supplementary service which, on request from the calling user (or on that user's behalf), enables a call to be offered to a busy called user and to wait for that called user to accept the call, after the necessary resources have become available.

The busy called user is given an indication of the offered call. During the time that the call is offered, the called user may ignore the offered call or may attempt to make the necessary resources available (e.g. by releasing or placing on hold another call). When and if the necessary resources become available, the call shall be completed as a normal incoming call.

#### 6.1.2 Qualifications on applicability to telecommunication services

SS-CO is applicable to all circuit mode basic services defined in ETS 300 171.

### 6.2 Procedures

#### 6.2.1 Provision/withdrawal

SS-CO may be provided or withdrawn after pre-arrangement with the service provider (by means of service profile control), or may be available generally to all users. In a PTN that offers more than one way of invoking SS-CO (see 6.2.2.2), one or more of these ways shall be selected at provision time.

#### 6.2.2 Normal procedures

##### 6.2.2.1 Activation/deactivation/registration/interrogation

Not applicable.

##### 6.2.2.2 Invocation and operation

There are four different ways of invoking SS-CO. A PTN shall offer one or more of these ways. These ways are:

- 1 Network invocation (immediate): the PTN shall automatically invoke SS-CO whenever the calling user makes a call to a user that is busy, if required by the service profile of the calling user.
- 2 Consultation: the calling user, on being informed that a call has failed because of busy at the destination and that SS-CO may be possible, shall be able, within a defined time period (consultation timer) to request invocation of SS-CO.
- 3 Immediate invocation: the calling user shall be able to request invocation of SS-CO as part of the initial call set up.
- 4 Network invocation (delayed): the network, having informed the calling user that a call has failed because of busy at the destination, shall automatically invoke SS-CO unless the calling user initiates call clearing within a defined time period (automatic call offer invocation timer).

**NOTE 2**

*If method 1 is provided to a user, methods 2, 3 and 4 will not be available to that user.*

For consultation and network invocation (delayed), for those basic services for which ETS 300 171 requires an in-band tone or announcement to indicate progress or otherwise of the call, the information provided by the network that the call has failed because of busy at the destination shall include an in-band tone or announcement.

If the calling user is provided with both consultation and network invocation (delayed), the calling user shall be able to request SS-CO during the period of the automatic call offer invocation timer. If, at the time of expiry of the automatic call offer timer, the calling user has not requested SS-CO and has not initiated call clearing, the network shall automatically invoke SS-CO.

On successful invocation of SS-CO, the called user shall receive an indication of the offered call, and the calling user shall be advised that SS-CO has been invoked. Additional information that would normally accompany an incoming call indication (see ETS 300 171) may optionally be provided to the called user. During the waiting period, for those basic services for which ETS 300 171 requires an in-band tone or announcement to indicate progress or otherwise of the call, an in-band tone or announcement shall be given to the calling user.

If the PTN detects that the necessary resources have become available, it shall transfer an incoming call indication to the called user.

**NOTE 3****iTeh STANDARD PREVIEW**

*The waiting period for the offered call can be subject to time-out. At time-out, the offered call can be released. Any such procedure is outside the scope of this ETS.*

SS-CO shall be considered completed when any one of the following occurs:

- the called user starts alerting;
- the called user accepts the call;
- the calling user releases the offered call;
- the called user rejects the offered call.

If the called user starts alerting, the calling user shall receive an appropriate indication.

If the called user rejects the offered call, the call shall be released with an appropriate indication to the calling user.

**6.2.3 Exceptional procedures****6.2.3.1 Activation/deactivation/registration/interrogation**

Not applicable.