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Zasebno telekomunikacijsko omrežje (PTN) – Specifikacija, funkcijski modeli in informacijski pretoki - Dopolnilna storitev: razpoznavanje

Private Telecommunication Network (PTN); Specification, functional models and information flows; Identification supplementary services

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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 (PTN) incorporating one or more interconnected nodes. The series uses the ISDN concepts as developed by CCITT and is also within the framework of standards ETSs open systems interconnection as defined by ISO.

This particular ETS specifies the Calling Line Identification Presentation, Connected Line Identification Presentation and Calling/Connected Line Identification Restriction supplementary services.

The services specified are compatible with the equivalent services specified for public ISDNs. CCITT specifications of these services are to be found in CCITT Recommendation I.251 (parts C, D, E and F) (Stage 1) and CCITT Recommendation Q.81 (Stage 2). ETSI specifications of these services are to be found in ETSs 300 089, 300 090, 300 091, 300 094, 300 095 and 300 096. Annex A describes the relationship between this ETS and the corresponding ETSs for the public ISDN.

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

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1 Scope and field of application

This European Telecommunication Standard (ETS) specifies the following Identification Supplementary Services: Calling Line Identification Presentation (SS-CLIP), Connected Line Identification Presentation (SS-COLP) and Calling/Connected Line Identification Restriction (SS-CLIR), which are applicable to various basic services supported by Private Telecommunication Network (PTN). Basic services are specified in ETS 300 171.

Service specifications are produced in three Stages, according to the method described in ENV 41005. This standard contains the Stage 1 and Stage 2 specifications of the Identification Supplementary Services. The Stage 1 specifications (clauses 5 to 13) specify the supplementary services as seen by users of PTNs. The Stage 2 specifications (clauses 14 to 28) identify the functional entities involved in the supplementary services and the information flows between them.

2 Conformance

Definition of signalling protocol at stage 3 is guided and constrained by the Stage 1 and Stage 2 specifications. A Stage 3 standard shall be in conformance with this standard if the signalling protocols and equipment behaviour specified in the Stage 3 standard are capable of being used in a PTN which supports the supplementary services specified in this standard.

A Stage 3 standard for SS-CLIP shall be in conformance with this standard if it is adequate for the support of those aspects of the normative clauses for Stage 1 and Stage 2 of SS-CLIP which are relevant to the interface or equipment to which the Stage 3 standard applies. The normative clauses for Stage 1 and Stage 2 of SS-CLIP are 5, 6, 14, 15, 16, 18.1 and 18.3. Clauses 7, 17, 18.2 and 19 are informative.

A Stage 3 standard for SS-COLP shall be in conformance with this standard if it is adequate for the support of those aspects of the normative clauses for Stage 1 and Stage 2 of SS-COLP which are relevant to the interface or equipment to which the Stage 3 standard applies. The normative clauses for Stage 1 and Stage 2 of SS-COLP are 8, 9, 20, 21, 22, 24.1 and 24.3. Clauses 10, 23, 24.2 and 25 are informative.

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A Stage 3 standard for SS-CLIR shall be in conformance with this standard if it is adequate for the support of those aspects of the normative clauses for Stage 1 and Stage 2 of SS-CLIR which are relevant to the interface or equipment to which the Stage 3 standard applies. The normative clauses for Stage 1 and Stage 2 of SS-CLIR are 11, 12, 26, 27, 28, 30.1 and 30.3. Clauses 13, 29, 30.2 and 31 are informative.

3 References

ENV 41005 (1990) Method for the	Specification of	t Basic and	Supplementary	Services	Ωt

Private Telecommunication Networks.

ETS 300 171 Private Telecommunication Network (PTN); Specification, functional Model

and information flows, Control aspects of circuit mode basic services.

ENV 41007-1 (1991) Definition of Terms in private telecommunication networks, Part 1:

Definition of general terms.

CCITT Recommendation I.112 Vocabulary of Terms for ISDNs.

ETS 300 189 Private Telecommunication Network (PTN); Addressing.

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4 Definitions

For the purpose of this standard, the following definitions shall apply:

4.1 External definitions

This standard uses the following terms defined in other documents:

Basic Service CCITT Recommendation 1.210

Connection ENV 41007-1

Private ENV 41007-1

Private Telecommunication Network Exchange ENV 41007-1

Public ENV 41007-1

Public ISDN ENV 41007-1

PTN Number ETS 300 189

Service CCITT Recommendation 1.112

Supplementary Service CCITT Recommendation 1.210

Signalling Telecommunications Network STANENV 41007-1 PREVIEW

Terminal, Terminal Equipment (stanceny 41007-1eh.ai)

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4.2 List of acronyms

CC Call Control (functional entity)
CCA Call Control Agent (functional entity)
CGLI Calling Line Identification (functional entity)

CN Connected Number

COLI Connected Line Identification (functional entity)

CS Connected Subaddress

FE Functional Entity

ISDN Integrated Services Digital Network

ON Originating Number
OS Originating Subaddress

PTN Private Telecommunication Network

PTNX Private Telecommunication Network Exchange

RI Restriction Indicator

SS-CLIP Supplementary Service Calling Line Identification Presentation

SS-CLIR Supplementary Service Calling/Connected Line Identification Restriction SS-COLP Supplementary Service Connected Line Identification Presentation

TE Terminal Equipment

5 SS-CLIP Stage 1 - Service within a PTN

A Stage 3 standard for SS-CLIP shall be capable of supporting the service specified in this clause, including the various interactions with other supplementary services.

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5.1 Definition

Calling Line Identification Presentation (SS-CLIP) is a supplementary service which is offered to the called party and which provides the calling party's PTN number, and possibly a subaddress, to the called party.

5.2 Description

5.2.1 General Description

The PTN provides the called party with the number of the calling party whenever an incoming call is presented. The number provided should be sufficient to enable the called party to return the call.

The calling party number may be accompanied by a subaddress.

5.2.2 Qualifications on Applicability to Telecommunication Services

This supplementary service is applicable to all basic telecommunication services.

5.3 Procedures

5.3.1 Provision/Withdrawal

SS-CLIP shall be generally available. There is no need for service profile control.

Some PTN users may have a service profile which permits the override of calling line identification restriction.

5.3.2 ITCH STANDARD PREVIEW Normal Procedures

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5.3.2.1 Activation/Deactivation/Registration/Interrogation

SS-CLIP shall be permanently activated. No information needs to be registered with the PTN for this supplementary service, and therefore interrogation is not applicable.

5.3.2.2 Invocation and Operation

The PTN provides the called party with the calling party number at the same time as indicating an incoming call.

The number presented is accompanied by indications of the numbering plan and type of number, and should be sufficient to unambiguously identify the calling party.

Where the number presented has been wholly or partially provided by the calling party, it is marked "user provided, verified and passed". Otherwise it is marked "network-provided".

If the calling party has also provided a calling party subaddress, it is delivered to the called party along with the calling party number.

5.3.3 Exceptional Procedures

5.3.3.1 Activation/Deactivation/Registration/Interrogation

Not applicable.