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lc_]`G!`; YbYf] bU`Ughbcgh_`f bY[Ui dfUj`Uj bY[Udfcfc_c`UnU_fa]`Yb`Y`
Xcdc`b]b]`ghcf]hj

Private Telecommunication Network (PTN); Signalling at the S-reference point; Generic feature key management protocol for the control of supplementary services

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Signalling at the S-reference point
Generic feature key management protocol for the control of
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ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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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 defines the feature key management stimulus protocol for use at the S reference point in support of the basic circuit mode services.

The feature key management protocol for Private Telecommunication Networks selects options from and complements the CCITT Recommendation Q.932. The differences between this ETS and the relevant section of Q.932 and the impact of these differences on terminal interchangeability can be found in annex E.

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

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1 Scope

This ETS defines the Feature Key Management signalling protocol for the purpose of supplementary service control at an interface at the S reference point between a Terminal Equipment (TE) and a Private Telecommunication Network (PTN).

The Feature Key Management protocol operates in conjunction with the signalling protocol specified in Standard ETS 300 192 for circuit-switched call control. It is based on the use of the two information elements, Feature activation and Feature indication. While the procedures associated with feature key invocation and indication are specified in this ETS, the allocation of actual codes used to designate individual supplementary services is outside the scope of this ETS.

This ETS is applicable to the user accesses of PTNs and to TEs which are intended for connection to PTNs.

2 Conformance

In order to conform to this ETS, a PTNX shall satisfy the requirements identified in the Protocol Implementation Conformance Statement (PICS) Proforma in sub-clause D.3 of Annex D.

In order to conform to this ETS, a TE shall satisfy the requirements identified in the Protocol Implementation Conformance Statement (PICS) Proforma in sub-clause D.4 of Annex D.

3 References

- | | |
|-------------------------|---|
| ETS 300 102-1 (1990) | ISDN User-Network Interface Layer 3 Specification for Basic Call Control |
| I-ETS 300 169 (1992) | Private Telecommunication Networks (PTN) - Signalling at the S Reference Point - Data Link Layer Protocol |
| ETS 300 189 (1992) | Private Telecommunication Networks (PTN) - Addressing |
| ETS 300 192 (1992) | Private Telecommunication Networks (PTN) - Signalling Protocol at the S Reference Point - Circuit Mode Basic Services |
| CCITT Rec. I.112 (1988) | Vocabulary of terms for ISDNs |
| CCITT Rec. Q.932 (1988) | Generic procedures for the control of ISDN supplementary services |
| ENV 41007 (1989) | Definition of Terms in Private Telecommunication Networks |

4 Definitions

For the purpose of this ETS the following definitions apply.

4.1 Access

The definition of CCITT Rec. I.112 for "user-network access" shall apply, with "telecommunication network" being interpreted as "PTN".

4.2 Endpoint Identifier (EID)

Information used for terminal identification. The endpoint identifier parameters contain a USID and TID and additional information used to interpret them.

4.3 Feature

A supplementary service or a user-initiated PTN action which constitutes one specific part of a supplementary service.

4.4 Feature indication

An indication of the status of a feature from the PTN to the user.

4.5 Feature request

The initiation of a feature by the user.

4.6 Private Telecommunication Network (PTN)

The definition in ENV 41007 shall apply.

4.7 Private Telecommunication Network Exchange (PTNX)

The definition in ENV 41007 shall apply.

4.8 Service profile

The information that the PTN maintains for a given user to characterize the service offered by the PTN to that user. As an example, this may contain the association of feature identifiers with specific supplementary services. A service profile may for example be allocated to a PTN access interface or to a particular TE or a group of TEs.

4.9 Service Profile Identifier (SPID)

Identifies a specific service profile in the case that a TE asks for automatic assignment of a USID and TID by the PTN. The SPID allows the PTN to distinguish between different terminals that would otherwise be indistinguishable (e.g. same PTN number). The SPID value is provided to the user when installing a service profile and should uniquely identify that service profile.

4.10 Supplementary Service

A capability provided by a PTN to a PTN user over and above that of a basic call.

4.11 Terminal Equipment (TE)

The definition in ENV 41007 shall apply.

4.12 Terminal Identifier (TID)

Identifies a terminal uniquely within a given USID. If two TEs on an interface have the same service profile the two TEs will be assigned the same USID. However, two different TIDs are required to uniquely identify each of the two TEs.

4.13 User

The definition in ENV 41007 shall apply.

4.14 User Service Identifier (USID)

Uniquely identifies a service profile on a PTN access interface.

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5 Acronyms and Abbreviations (standards.iteh.ai)

CEI	Connection Endpoint Identifier
CES	Connection Endpoint Suffix
EID	Endpoint Identifier
ISDN	Integrated Services Digital Network
PICS	Protocol Implementation Conformance Statement
PTN	Private Telecommunication Network
PTNX	Private Telecommunication Network Exchange
SAPI	Service Access Point Identifier
SPID	Service Profile Identifier
TE	Terminal Equipment
TEI	Terminal Endpoint Identifier
TID	Terminal Identifier
USID	User Service Identifier

6 Feature Key Management Protocol

Note 1:

*The text in this clause is based on section 5 of CCITT Rec. Q.932. Differences are indicated by **emboldening**.*

The Feature Key management protocol is a mechanism allowing users to invoke supplementary services. As these are stimulus procedures, the protocol elements do not directly identify the service invoked. To determine the service invoked requires knowledge of the user's service profile maintained in the **PTN**. No call state changes occur directly as a result of these procedures.