



SLOVENSKI STANDARD
SIST I-ETS 300 400 E1:2003

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Digitalno omrežje z integriranimi storitvami (ISDN) – Telefonski terminali – Javne govornice

Integrated Services Digital Network (ISDN); Telephony terminals; Payphones

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ICS:

33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
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Foreword

This Interim European Telecommunication Standard (I-ETS) was produced by the Terminal Equipment Technical Committee (TC-TE) of the European Telecommunications Standards Institute (ETSI).

An ETSI standard may be given I-ETS status as it is regarded either as a provisional solution ahead of a more advanced standard, or because it is immature and requires a "trial period". The life of an I-ETS is limited, at first, to three years after which it can be converted into an European Telecommunication Standard (ETS), have its life extended for a further two years, be replaced by a new version of the I-ETS or be withdrawn.

This I-ETS describes the required technical characteristics of Integrated Services Digital Network (ISDN) 3,1 kHz payphone terminals as described in clause 1 (Scope).

Terminal equipment may be subject to mandatory standards such as NET 3 (CTR3 in preparation) and CTR 8.

Proposed announcement date	
Date of latest announcement of this I-ETS (doa):	30 June 1995

Introduction

A payphone service may be provided in a number of ways ranging from a simple self-contained terminal to a complex arrangement of terminal and central processing equipment which interact with one another. A number of methods of payment are possible, ranging from coins or tokens, through to various types of prepayment cards, credit cards and "smart" cards.

In general, the complexity of the apparatus required is determined by the facilities offered, the reliability required and the level of assurance that the service provider requires in the validation of the payment.

This I-ETS is intended to specify the requirements of that set of functions of a payphone terminal that are necessary to support the range of facilities that may be required in such a variety of terminal apparatus.

Some types of payphones may be subject to National or European legislation requiring the mandatory provision of certain facilities. Examples are the provision of inductive coupling or the provision of a printer.

This I-ETS does not specify requirements for operation in any particular environments.

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1 Scope

This I-ETS specifies technical characteristics (electrical, mechanical, logical and acoustic) for a payphone terminal using the 3,1 kHz telephony service which can be connected to an ISDN basic access at the coincident S and T reference point at an interface to a public telecommunications network presented as an ISDN basic access point.

The requirements of this I-ETS are additional to those of the standards for connection to the ISDN basic access and of any other standards to which the terminal equipment is subject.

This I-ETS is applicable to terminal equipment of the functional group defined as Terminal Equipment Type 1 (TE1) in CCITT Recommendation I.411 which supports the 3,1 kHz telephony teleservice.

This I-ETS specifies all the functions necessary to provide real-time two-way speech conversation. Where a function is indicated as optional, it need not be provided, but where such a function is provided, the terminal needs to conform to the requirements and tests specified in this I-ETS.

Annex B (informative) contains details of facilities that may be provided on a payphone, whilst the provision of none of these facilities is mandatory, some levels of payphone service cannot be implemented unless certain facilities are present.

2 Normative references

This I-ETS incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this I-ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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- SIST I-ETS 300 400 E1:2003
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- STANDARD PREVIEW
- [1] I-ETS 300-245-1: "Integrated Services Digital Network (ISDN) - Technical characteristics of telephony terminals - Part 1: General".
 - [2] I-ETS 300-245-2: "Integrated Services Digital Network (ISDN) - Technical characteristics of telephony terminals - Part 2: PCM A-law handset telephony".
 - [3] ETS 300 381: "Telephony for hearing impaired people - Inductive coupling of telephone earphones to hearing aids, performance requirements and testing methods".
 - [4] EN 726-4: "Requirements for IC cards and terminals for telecommunication use - Part 4: Application independent card related terminal requirements".
 - [5] ISO 4909 (1987): "Bank cards - Magnetic stripe data content for track 3".
 - [6] ISO 7810 (1985): "Identification cards - Physical characteristics".
 - [7] ISO 7811, Parts 1 to 5 (1985): "Identification cards - Recording technique".
 - [8] ISO 7813 (1990): "Identification cards - Financial transaction cards".
 - [9] prEN 1038: "IC card applications for telecommunications - Part 1 - IC Card Payphone".
 - [10] ETS 300 153: "Integrated Services Digital Network (ISDN) - Attachment requirements for terminal equipment to connect to an ISDN using ISDN basic access (Candidate NET 3, Part 1)".
 - [11] ITU-T Recommendation P.57 (1993): "Artificial ears".
 - [12] IEC Publication 651: "Sound level meters".

[13] CCITT Recommendation P.56 (1988): "Objective measurement of active speech level".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this I-ETS, the following definitions apply, together with the relevant definitions given in I-ETS 300 245-1 [1], I-ETS 300 245-2 [2] and in CCITT Recommendations P.10 and G.701.

application: A set of security mechanisms, files, data, protocols (excluding transmission protocols) which are located and used in the Integrated Circuit (IC) card (card application) and outside of the IC card (external application).

cardphone: A payphone that accepts cards as a means of payment.

charge card: A form of credit card issued by a telecommunications service provider.

credit card: A card which permits payment to be made at a date after receiving a service.

designated terminal: A terminal that is permitted to draw power from power source 1 under restricted power conditions as specified in CCITT Recommendation I.430.

follow-on call: A facility whereby a call may be cleared whilst retaining any payment as credit for a following call.

Integrated Circuit Card (IC Card): A card containing a microprocessor, that can be considered as a set of files that can, e.g. be read, written, or executed (sometimes known as a "smart" card).

payphone: Terminal apparatus permitting access to the telephony teleservice after the validation of suitable payment. Outgoing calls to certain services may be permitted without payment. Calls to certain services may be barred.

payphone service: A service offered by means of special equipment, which permits access to telecommunications services after the validation of suitable payment. The service may be offered by a self-contained terminal or by interaction between a terminal and other apparatus accessed over the network.

prepayment card: A card providing payment for a service by means of a stored value paid for in advance.

3.2 Abbreviations

For the purposes of this I-ETS, the following abbreviations apply, together with relevant abbreviations given in I-ETS 300 245-1 [1], I-ETS 300 245-2 [2] and CCITT Recommendations P.10 and G.701.

CHV	Card Holder Verification
CTR	Common Technical Regulation
IC	Integrated Circuit
ISDN	Integrated Services Digital Network
LRGP	Loudness Rating Guard-ring Position
NET	Norme Européene de Télécommunications
PCM	Pulse Code Modulation
RLR	Receive Loudness Rating
TE1	Terminal Equipment Type 1
TEUT	Terminal Equipment Under Test

4 Network access

4.1 General

The terminal shall comply with I-ETS 300 245-1 [1].

4.2 Designation

A payphone shall be capable of being a designated terminal. As an option, a switching function may be provided to remove the designation.

Compliance shall be checked by inspection.

4.3 Emergency calls

The terminal shall permit calls to the public emergency services without the necessity for payment to be proffered.

Compliance shall be checked by attempting a call to the appropriate number(s) without proffering payment.

5 Telephony functions

5.1 General

The telephony functions of the terminal shall comply with I-ETS 300 245-1 [1] and I-ETS 300 245-2 [2].

5.2 Suppression of transmission

When it is intended to suppress speech transmission (e.g. before validation of payment or after expiry of credit), the sending sensitivity/frequency response should be attenuated by at least 60 dB.

Compliance may be checked by a selective measurement of the sending sensitivity/frequency response using the test method specified for sending sensitivity/frequency response specified in I-ETS 300 245-2 [2].

5.3 Inductive coupling

As an option, a facility may be provided to couple inductively the speech signal to a hearing aid. Such coupling, if provided, shall comply with ETS 300 381 [3].

NOTE: The provision of such a facility may be mandatory in some countries.

6 Message functions

6.1 General

Messages of various kinds are generally necessary in a payphone to give guidance and feedback to the user. Such messages may be internally generated in response to a number of possible stimuli. Examples include some internal logical condition or a signal derived from a key or other control device. Messages may also be generated in response to a message received from an IC card, a message from the network received over the D-channel, or a message from the payphone service provider received over a B- or D-channel.

Messages may be presented to the user as an audible signal in the form of a tone or a spoken message, as a visual display in the form of a symbol or as an alpha numeric message, or even in a tactile manner in the form of braille or other language for the visually handicapped.

6.2 Provision of messages

The provision of messages is optional. Where a message is provided, it shall be consistent with its stimulus.

Compliance shall be checked by inspection.