SLOVENSKI STANDARD
SIST I-ETS 300 654 E1:2003

01-december-2003

8][ ]HˇUˇbcˇca fYÿˇ^Yˇn˙]bhˇY[f]fUb]a]ˇghcf]hj Ua]ˇf!G8 BŁˇ˥ˇJ]XYchˇYˇYˤcbg_]ˇh˥Yfa]bU]ˇ˥
J]X]_]ˇg][bU]ˇnUˤˇ^YˇdcˇnU UgbYa ˇ8 !_bU]i

Integrated Services Digital Network (ISDN); Videotelephony terminals; Interim D-channel signalling aspects

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: I-ETS 300 654 Edition 1

ICS:

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

SIST I-ETS 300 654 E1:2003   **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)
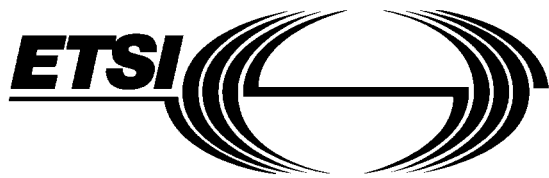
INTERIM
EUROPEAN
TELECOMMUNICATION
STANDARD

I-ETS 300 654

September 1996

Source: ETSI TC-TE

Reference: DI/TE-04111

ICS: 33.080

Key words: ISDN, videotelephony

iTeh STANDARD PREVIEW
Integrated Services Digital Network (ISDN);
(standards.iteh.ai)
Videotelephony terminals;
SIST I-ETS 300 654 E1:2003
https://standards.iteh.ai/catalog/standards/sist/35a9af3a-e5e0-43a8-a58d-
Interim D-channel signalling aspects
6446d6e0dc63/sist-i-ets-300-654-e1-2003

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

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Whilst every care has been taken in the preparation and publication of this document, errors in content, typographical or otherwise, may occur. If you have comments concerning its accuracy, please write to "ETSI Editing and Committee Support Dept." at the address shown on the title page.

Contents

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Foreword

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

Proposed announcement date	
Date of adoption of this I-ETS:	23 August 1996
Date of latest announcement of this I-ETS (doa):	31 December 1996

An ETSI standard may be given I-ETS status either because it is regarded 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 to three years after which it can be converted into an ETS, have it's life extended for a further two years, be replaced by a new version, or be withdrawn.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

1 Scope

This Interim European Telecommunication Standard (I-ETS) is applicable to Integrated Services Digital Network (ISDN) basic access video telephony terminal equipment for connection at the S-reference point or coincident S/T-reference point. It describes the D-channel signalling procedures which may be implemented by terminals connected to the pan-European ISDN for use in cases where either:

a)   the originating network has not implemented the procedures according to ETS 300 267-1 [1]; or

b)   when interworking with a terminal connected to a digital network which does not support fully compatible procedures.

The implementation of the procedures specified in ETS 300 267-1 [1] are likely to be introduced at different points in time by the various network providers at the access (D-channel signalling, DSS1) or in the network (Signalling system No. 7, ISDN User Part (ISUP)). Some networks (e.g. some non-European networks) may not even implement those procedures at all. The support of this I-ETS by the terminal will ensure an improved probability of success of videotelephony calls and avoid the occurrence of unexpected clearing of calls as long as networks have not fully implemented the procedures according to ETS 300 267-1 [1].

The requirements in this I-ETS are based on the procedures specified in ETS 300 267-1 [1] and ETS 300 403-1 [2] and the use of the Bearer Capability, Low Layer Compatibility and High Layer Compatibility information elements as specified in ETR 018 [3].

> NOTE: The characteristics of the ISDN user-network interface are specified in ETS 300 012, ETS 300 125 (see annex B), and ETS 300 403-1 [2].

2 Normative references

This I-ETS incorporates by dated and undated reference, 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.

[1]   ETS 300 267-1 (1994): "Integrated Services Digital Network (ISDN); Telephony 7 kHz and videotelephony teleservices; Digital Subscriber Signalling System No. one (DSS1); Part 1: Protocol specification".

[2]   ETS 300 403-1 (1995): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".

[3]   ETR 018 (Edition 3): "Integrated Services Digital Network (ISDN); Application of the Bearer Capability (BC); High Layer Compatibility (HLC) and Low Layer Compatibility (LLC) information elements by terminals supporting ISDN Services".

[4]   ETS 300 143: "Integrated Services Digital Network (ISDN); Audiovisual services; Inband signalling procedures for audiovisual terminals using digital channels up to 2 048 kbit/s".

[5]   ETS 300 145: "Integrated Services Digital Network (ISDN); Audiovisual services; videotelephone systems and terminal equipment operating on one or two 64 kbit/s channels".

[6]   I-ETS 300 245-5 (1995): "Integrated Services Digital Network (ISDN); Technical characteristics for telephony terminals; Part 5: Wideband (7 kHz) handset telephony".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this I-ETS, the relevant definitions used in ETS 300 143 [4], ETS 300 144 (see annex B) and CCITT Recommendations I.112, I.230 and I.240 (see annex B) apply.

I-channel: The initial (or only) B-channel allocated to a call where inband signalling according to the principles described in ETS 300 144 is applied.

modes of operation: For the videotelephony teleservice in the ISDN, the modes of operation are defined in table 1 of ETS 300 145 [5].

telephony 3,1 kHz teleservice: A teleservice providing speech transmission at an audio bandwidth of 3,1 kHz. The communication is bi-directional, with both directions active during the speech phase. User information is provided over a B-channel, signalling is provided over the D-channel (based on ETS 300 111, clause 5 (see annex B)).

telephony 7 kHz teleservice: A real-time 7 kHz teleservice in which speech (7 kHz or 3,1 kHz bandwith) can be interchanged using one circuit-mode 64 kbit/s connection. The audio bandwith conforms to CCITT Recommendations G.722 and G.711 (see annex B) (based on ETS 300 263, clause 5 (see annex B)).

terminal types: For the videotelephony teleservice in the ISDN, the terminal types are defined in table 2 of ETS 300 145 [5].

videotelephony teleservice: A real-time audiovisual teleservice in which speech and moving pictures are interchanged by means of one or two 64 kbit/s circuit-mode connections in the ISDN (based on ETS 300 264, clause 5 (see annex B)).

3.2 Abbreviations

For the purposes of this I-ETS, the following abbreviations, in addition to those used in CCITT Recommendations I.112, I.230 and I.240 (see annex B), apply.

CLI	Calling Line Identification
CLIR	Calling Line Identification Restriction
ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
MSN	Multiple Subscriber Number supplementary service
TE	Terminal Equipment
UDI	Unrestricted Digital Information
UDI-TA	Unrestricted Digital Information with Tones and Announcements

4 Short term D-channel signalling procedures

4.1 General

The procedures of ETS 300 267-1 [1], i.e. provision of the Bearer Capability with information transfer capability "Unrestricted Digital Information with Tones and Announcements (UDI-TA)" and the fallback procedure (use of two Bearer Capability and High Layer Compatibility information elements in the SETUP message), may not be implemented in all European and non-European ISDNs for an interim period of time or at all. As a short term solution, terminals supporting the videotelephony teleservice shall meet, along with the procedures specified in ETS 300 267-1 [1], the requirements described in the following subclauses.

In principle, 3 different types of networks can be distinguished for the transition period:

Network type 1: This type of network supports the procedures specified in ETS 300 267-1 [1], in particular the use of two Bearer Capability/High Layer Compatibility information elements, at the access for the D-channel signalling as well as in the network for the signalling system no. 7 (ISUP).

Network type 2: This type of network supports the procedures specified in ETS 300 267-1 [1] at the access for the D-channel signalling, but not in the network for the signalling system no. 7 (ISUP). In this case, the fallback procedures (use of two Bearer Capability/High Layer Compatibility information elements in the SETUP message), are not supported by the network.

Network type 3: This type of network does not support the procedures described in ETS 300 267-1 [1], neither at the access for the D-channel signalling, nor in the network for the signalling system no. 7 (ISUP).

NOTE 1: The networks type 2 and 3 may support of the Bearer Capability "UDI-TA" independent from the fallback procedures.

NOTE 2: Videotelephony terminals may be connected outside Europe to another type of network, providing only restricted transmission capabilities (e.g. 56 kbit/s).

For videotelephony terminals complying with this I-ETS, it shall be possible to pre-set the terminal to the type of network which it is intended to be connected to. Procedures for changing the preset-value for the network type shall be available for the user.

NOTE 3: The term "network type" is used only in the context of this I-ETS.

NOTE 4: Conformance test requirements for ETS 300 403-1 [2] are given in ETS 300 403 part 4 and part 5 .

NOTE 5: Conformance test requirements for the procedures in ETS 300 267-1 [1] are not yet published.

Conformance test requirements are not included in this I-ETS.

4.2 Outgoing call

4.2.1 Videotelephony teleservice, outgoing call for the initial connection

Dependent on the type of network the terminal is connected to, the information elements contained in the SETUP message for the initial connection shall be chosen according to tables A.1 and A.2 of annex A.1.

4.2.1.1 Outgoing call for network type 1

For network type 1, the procedures of ETS 300 267-1 [1] shall apply.

When the call setup for the initial connection is rejected by the network with a cause value that indicates that the requested Bearer Capability (UDI-TA) is not supported by the destination network or the called terminal, e.g. 31, 47, 65, 88, 127, then the terminal shall automatically repeat the call setup procedures by requesting the "circuit-mode 64 kbit/s unrestricted 8 kHz structured bearer service category". The coding of the Bearer Capability information element is described in ETR 018 [3].

NOTE 1: For further possible cause values, see ETS 300 485 (see annex B).

A High Layer Compatibility information element as described in ETR 018 [3], indicating "videotelephony, CCITT Recommendation F.721" and possibly "initial channel", may be inserted into the SETUP message.

NOTE 2: For an interim period of time it is not guaranteed that all networks will support the transport and/or delivery of the High Layer Compatibility information element to the called terminal. In addition, transport of octet 4 may, in some circumstances be supported, but the transport of octet 4a will not.