



SLOVENSKI STANDARD
SIST ETS 300 072 E1:2003

01-december-2003

**Terminalska oprema (TE) – Protokol za predstavitevno plast sistema Videotex –
Podatkovna skladnja za predstavitevno plast sistema Videotex**

Terminal Equipment (TE); Videotex presentation layer protocol; Videotex presentation layer data syntax

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35.100.60	Predstavitevni sloj	Presentation layer
35.180	Terminalska in druga periferna oprema IT	IT Terminal and other peripheral equipment

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Videotex presentation layer protocol
Videotex presentation layer data syntax

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0 Foreword

This European Telecommunication Standard (ETS) was produced by the Terminal Equipment (TE) Technical Committee of the European Telecommunications Standards Institute (ETSI) and adopted in September 1990. This ETS is one of an integrated package of 5 ETSs covering various aspects of videotex which comprises:

- ETS 300 073 Videotex presentation layer data syntax
Geometric Display
(CEPT Recommendation T/TE 06-02, Edinburgh 1988)
- ETS 300 074 Videotex presentation layer data syntax transparent data
(CEPT Recommendation T/TE 06-03, Edinburgh 1988)
- ETS 300 075 Terminal Equipment (TE);
Videotex processable data
- ETS 300 076 Terminal Equipment;
Videotex
Terminal Facility Identifier (TFI)

This standard and its companion ETSs are based on previous CEPT Recommendations and two of them (ETSs 300 073 to 300 074) are CEPT Recommendations now endorsed as ETSs without modification.

For the purposes of this standard, all references within the text to the following T/TE or T/CD numbers should read as follows:

T/TE or T/CD 06-01 = ETS 300 072,

T/TE 06-02 = ETS 300 073,

T/TE 06-03 = ETS 300 074,

T/TE or T/CD 06-04 = ETS 300 075,

T/TE or T/CD 06-05 = ETS 300 076.

Recommendation T/TE 06-01
(formerly Recommendation T/CD 06-01)

(Innsbruck May 1981)
(Revised, Cannes, September 1983)
(Revised, Montpellier, June 1984)
(Revised, Nice, June 1985)
(Revised, Edinburgh, May 1988)
(Revised, October 1988)

CONCERNING THE VIDEOTEX SERVICE

The European Telecommunications Standards Institute

Considering:

- the work undertaken within CEPT with a view to harmonising international telecommunication services as well as equipment
- studies carried out within the framework of question CD7
- the possible benefit to the expansion of the Videotex service in providing a stable environment for the full commercial exploitation of existing services already implemented
- the possibility that some administrations require a lower cost basic service and others an enhanced service with extra facilities
- the need for a common standard which will enable administrations who wish to do so to confidently adopt the "harmonised enhanced" service or up grade a basic service to the "harmonised enhanced" service
- the need to leave the way open to add new facilities as technology progresses in a way which preserves investments in basic services or enhanced services.

Adopts the present standard, which implies that:

1 In order to facilitate international access between Videotex services in Europe:

1.1 International access to national Videotex services should be via PTT provided international gateways. (See Note 1 below.)

1.2 International gateways should intercommunicate using the communication protocols to be adopted by CEPT, the information being coded according to data syntax described in Annex A, with the range of information transmitted restricted to conform to the service reference model as described in Annex B.

1.3 Administrations should ensure that the coded information is transcoded as necessary in order to provide the best possible display on the terminals in use in that country. In addition, Administrations may provide identification of user and billing.

Note 1: Non PTT provided gateways may be used according to decisions made by national regulatory bodies for the provision of international videotex services.

2 In order to recognise existing systems and to harmonise further development of Videotex Services:

2.1 Systems offering a basic service shall be based on one of the four profiles described in Annex C (see Fig 1a)

2.2 An enhanced service of foreseen facilities is optional but where they are provided they shall conform to the standards referred to in Fig 1b.

2.3 New enhanced services which are either as yet unforeseen or not yet defined in sufficient detail in Annex B to make a recommendation at this stage shall be formulated such that they are:

I based on one of the four basic building blocks and the "harmonised enhanced" service

or

based on one of the four basic building blocks and be able to display information generated by systems using the "harmonised enhanced" service standard;

II able to be adopted without modifications to any parameters defined in the references given in Fig 1b.

2.4 a. Either new optional enhanced services which are either as yet unforeseen or not yet defined in sufficient detail in Annex B shall not be added to a system providing the basic service without also including the "harmonised enhanced" service referred to in Fig 1b.

b. Or new optional enhanced services which are either as yet unforeseen or not yet defined in sufficient detail in Annex B (Fig 1c) may be adopted without also adopting the facilities of the "harmonised enhanced" service standard referred to in Fig 1b. In this case at least full compatibility with CEPT Recommendation T/CD 06-01 version Innsbruck (May 1981) shall be assumed.

However it is preferable for both 1b and 1c in Figure 1 to be adopted if maximum inter-working between services is to be achieved at the earliest possible time.

3 Studies should continue on:

- New enhanced services which are not yet defined in sufficient detail in Annex B (photographic modes) so as to arrive at a common standard for them.
- International communication protocol.

4 In order to harmonise the interface to "external computers" for communication between external computers and Videotex centres, administrations should adopt the data syntax described in Annex A for the coding of information and common protocols for the other layers (possibly those referred to in 1.2 above).

FUTURE HORIZON

Fig 1c

STANDARD FOR NEW ENHANCED SERVICES AS YET UNFORESEEN OR NOT YET DEFINED IN SERVICES (OPTIONAL)

- must be based on one of the four basic building blocks and "harmonised enhanced" service

or

must be based on one of the four basic building blocks and be able to display information generated by systems using the harmonised enhanced service standard.

- must be able to be adopted without modifications to any parameters defined in the references given in Fig 1b

1ST HORIZON

Fig 1b

STANDARD FOR THE "HARMONISED ENHANCED" SERVICE (OPTIONAL)

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	4	
	5	

Fig 1a

FLEXIBLE INITIAL BUILDING BLOCKS
(alternatives)

Profile 1	Profile 2	Profile 3	Profile 4
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See Rec 2.4 (Optional)

FIG 1 - CEPT RECOMMENDATION ON ENHANCED VIDEOTEX SERVICE AND ITS RELATIONSHIP WITH EXISTING BASIC VIDEOTEX SERVICE SYSTEMS AND NEW AS YET UNDEFINED FACILITIES

Annex A to Recommendation T/TE 06-01 (formerly T/CD 06-01)

Note 1: This annex is an integral part of the recommendation.
Note 2: All references to T/CD should be interpreted as T/TE.

CEPT

VIDEOTEX PRESENTATION LAYER DATA SYNTAX

Issue 6, October 1988
(A Revision of Issue 5, Edinburgh, May 1988)

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VIDEOTEX PRESENTATION LAYER DATA SYNTAX

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1 INTRODUCTION

VIDEOTEK systems are text communication systems with the capability of a given level of pictorial representation and a repertoire of display attributes. The text and the pictures obtained are intended to be displayed using the current television (TV) raster standards of the different countries.

Videotex services will be provided in different ways in different countries. The Videotex services may be a distributed network of independent computers or a hierarchy of computers with external databases or a mixture of both. It is probable that in all countries Videotex terminals will primarily access the Videotex services via the switched telephone network, over which data is transmitted to a terminal which generates displays. Three types of display have been identified and are described and defined in this recommendation:

1. Alpha-mosaic
2. Geometric
3. Photographic

Other types of display may be defined in the future. Each type of display may be used simultaneously, though data for each type of display is separated during transmission. The way in which data is used to generate a display may be modified by 'management data'. Management data may affect more than one type of display.

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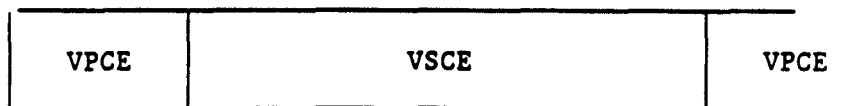
1.1 Coding Principles

1.1.1 Identification Of Data Types

Different types of display data and management data are separated into different 'Videotex Presentation Data Elements' (VPDEs) during transmission.

'Videotex Presentation Data Elements' (VPDEs) are made up of two parts: 'Videotex Presentation Control Element' (VPCE) which identifies the type of data and 'Videotex Service Control Element' (VSCEs) which contain the data.

<----- VPDE ----->



VPCEs are coded in the form US X where X is a character from:

columns 4-7 for alphamosaic data
column 2 for management data
column 3 for other data

The following VPCEs have been provisionally assigned:

TERMINAL FACILITY IDENTIFIER	US 2/0 and US 2/1
Define DRCS:	US 2/3
Define COLOUR:	US 2/6
Define FORMAT:	US 2/13
TIMING CONTROL	US 2/14
RESET	US 2/15
ALPHAMOSAIC display data:	US <any character from column 4-7>
Reserved (see note 1)	US 3/0
GEOMETRIC display data (3D)	US 3/1
GEOMETRIC display data (2D)	US 3/2
PHOTOGRAPHIC pixel data	US 3/4
PHOTOGRAPHIC table data	US 3/5
SOUND	US 3/11
Reserved (see note 2)	US 3/12
TELESOFTWARE data	US 3/14
TRANSPARENT data	US 3/15

Note 1: US 3/0 is reserved for Geometric display data according to the Montpellier version of this recommendation.

Note 2: US 3/12 is reserved for private use.

US is the UNIT SEPARATOR control and is coded 1/15

1.1.2 Use of default values

Where data fields are used to describe parameters of the following data (eg. the DRCS header) default values for these fields have been assigned. If the data field is not transmitted then the terminal will apply the default value.

It is anticipated that some terminals will only be able to process data which conforms to these default values, to simplify their operation these terminals may ignore such data, unless the parameters describing that data are omitted (implying that the data conforms to the default).

It is therefore recommended that when a parameter is equal to the default value that field is not transmitted, if it is transmitted then the response of the terminal is not guaranteed.

1.2 Display Principles

1.2.1 Defined Display Area

The defined display area is a rectangular area of the screen within which the text and pictorial information is displayed.

The ratio of the width to the height (aspect ratio) of this area should be 4:3.

For the alphamosaic display this area is composed of a defined number of rows each with a defined number of character positions. The default is 24 rows of 40 character positions.

For the geometric display the bottom lefthand corner of the defined display area is addressed as (0,0) and the upper righthand corner is defined as (1,0.75).

The photographic display area also maps to the same area. The top lefthand pixel of the photographic display area is addressed as (1,1).

The possibility of defining different aspect ratios is for further study.