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Podatkovna skladnja za predstavitevno plast sistema Videotex – Geometrični prikaz (priporočilo CEPT T/TE 06-02, Edinburgh 1988)

Videotex presentation layer data syntax; Geometric Display (CEPT Recommendation T/TE 06-02, Edinburgh 1988)

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33.160.99	Druga avdio, video in avdiovizuelna oprema	Other audio, video and audiovisual equipment
35.100.60	Predstavitevni sloj	Presentation layer

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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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0 Foreword

The text of the CEPT Recommendation T/TE 06-02 (Edinburgh 1988) was approved by the European Telecommunications Standards Institute (ETSI) as a European Telecommunication Standard (ETS) without any modification.

This ETS was recommended for endorsement by the Terminal Equipment (TE) Technical Committee of ETSI in May 1990 as part of an integrated package of 5 ETSs covering various aspects of videotex which comprises:

Final draft prETS 300 072	Terminal Equipment; Videotex presentation layer protocol Videotex presentation data layer syntax
Final draft prETS 300 074	Videotex presentation layer data syntax transparent data (CEPT Recommendation T/TE 06-03, Edinburgh 1988)
Final draft prETS 300 075	Terminal Equipment (TE); Videotex processable data
Final draft prETS 300 076	Terminal Equipment (TE); Videotex Terminal Facility Identifier (TFI)

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PART 2. GEOMETRIC DISPLAY

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1. INTRODUCTION

ECMA-96 specifies a Graphics Data Syntax (GDS) for a multiple workstation interface.

It is based on ISO 7942 Information Processing — Graphical Kernel System (GKS) — Functional description, therefore taking advantage of the work already done in the international computer graphics community.

GDS' functionalities are based on the concept of a workstation as defined in GKS. Although the full GKS workstation concept can only be realized by GKS itself, this standard provides the capability to communicate groups of GKS functions to the graphics configuration. Following the GKS definition this allows advantage to be taken of the different capabilities of the various devices of which the graphics configuration is comprised.

In order to have one syntax for the functions used in the computer graphics community, the encoding structure of GDS is based on the encoding structure as defined in CCITT Recommendation T. 101 (Data syntax II).

This part (part 2 of T/TE 06-02, geometric display) is a proper subset of GDS. This subset is defined in terms of GDS. All references to inquire functions and input functions are not applicable to the Videotex geometric display and should be ignored.

NOTE

Wherever GDS is mentioned in this document it also reflects to this part 2 of T/TE 06-02.

2. SCOPE AND FIELD OF APPLICATION

This document specifies the set of functions to be used in a graphics configuration and their encoding in a 7-bit or 8-bit environment. In addition the code tables are structured in accordance with ISO 646.

The intention of this document is to facilitate data interchange, not to standardize equipment. The specification of the concepts is included only to delimit the field of application. The definitions of the primitives may not be applicable to a graphics configuration, which does not conform to the specified concepts.

The graphics primitives contained in this document are derived from GKS. The set of primitives necessary in a graphics configuration depends on the required GKS level.

Figure A2-1 (T/TE 06-02) shows the model describing the GKS environment and its interfaces. The Graphics application in the field of Computer Aided Engineering (CAE), Computer Aided Design (CAD), Business Graphics, Telematic Services, etc., can be written in high level languages for which specific bindings with GKS are in the process of standardization.

A graphics application program, using GKS functions, communicates with the graphics configuration through the multiple workstation interface. Above the multiple workstation interface are the GKS normalization transformations, which convert world coordinates to normalized device coordinates. Below the multiple workstation interface are the GKS workstations, which are connected to and driven by GKS. The workstations are mapped to the graphics configuration and the normalized device coordinates are transformed to device coordinates by the workstation transformation. Non-existent capabilities of the graphics configuration must be simulated by using emulation software.

The data syntax and encoding for the GKS multiple workstation interface is provided in this standard.

3. REFERENCES

- ISO 7942 INFORMATION PROCESSING—GRAPHICAL KERNEL SYSTEM (GKS) – *Functional description.*
- ISO 646 INFORMATION PROCESSING – *ISO 7-bit coded character set for information interchange.*
- ISO 2022 INFORMATION PROCESSING – *ISO 7-bit and 8-bit coded character sets. Code extension techniques.*
- ISO DP 8632 INFORMATION PROCESSING—COMPUTER GRAPHICS – *Metafile for the storage and transfer of picture description information.*
- CCITT-Recommendation T.101 – *International interworking for Videotex services.*
- ECMA-96 – *Syntax of graphical data for a multiple workstation interface.*