SLOVENSKI STANDARD

SIST ENV 41504:2007

januar 2007

Medsebojno povezovanje informacijskih sistemov - Repertoar znakov in kodiranje za medsebojno delovanje s teleks storitvami

(istoveten ENV 41504:1990)

Information systems interconnection - Character repertoire and coding for interworking with telex services

ICS 35.040

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English Version

Information systems Interconnection - Character Repertoire and coding for Interworking with Telex Services

Interconnexion des systèmes informatiques - Répertoire des caractères et codage pour l'interaction avec les services télex

Zwischenverbindung von Informationssystemen - Zeichenrepertoire und Kodierung für Telex

This European Prestandard (ENV) was accepted by a technical body of CEN/CENELEC on 1990-06-13 as a prospective standard for provisional application. The period of validity of this ENV is limited initially to three years. After two years the members of CEN/CENELEC will be requested to submit their comments, particularly om the question whether the ENV can be converted into an EN.

CEN/CENELEC members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

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CEN/CENELEC

The joint European Standards Institution
Organisation Commune Européenne de Normalisation
Die Gemeinsame Europäische Normeninstitution

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FOREWORD

The European Prestandard, ENV 41504 was drawn up by the working group CEN/CLC/IT/WG CSC. It was submitted to the CEN/CENELEC members for comments in April 1990.

In accordance with the CEN/CLC Common Rules the working group, having noted that no comments were received, established the final version and put the draft to a formal vote during their meeting on 13-15 June 1990. The result of the formal vote was positive and the draft consequently accepted as a European Prestandard (ENV).

Contents

0 INTRODUCTION

The concept and structure of Functional Standards for Information Systems Interconnection are laid down in the CEN/CENELEC/CEPT Memorandum M-IT-02. The purpose of a Functional Standard is to recommend when and how certain information technology standards should be used. This Functional Standard specifies the character repertoire and control functions, together with their coding, as identified as S/13 and Q/211 in the CEN/CENELEC/CEPT Memorandum M-IT-02.

1 SCOPE AND FIELD OF APPLICATION

This Functional Standard is intended to be used with and identified within other European functional standards that specify strings of coded characters for interchange of coded information between Information Processing Systems. It describes the graphic character repertoire and control functions relevant for information interchange via Telex network equipment.

This Functional Standard specifies two alternative options of graphic character repertoires:
- Option A for Latin characters, and
- Option B for Latin and Greek characters.

2. REFERENCES

2.1 Base References

CCITT Recommendation S.1, International Telegraph Alphabet No. 2 (1984)

ISO 6429 Information processing - Control functions for 7-bit and 8-bit coded character sets (1988)

ISO 8859-1 Information processing - 8-bit single-byte coded character sets - Part 1: Latin alphabet No. 1 (1987)

ISO 8859-7 -,-, Part 7: Latin/Greek alphabet (1987)

ELOT Standard 1095 Character set intended to be used in the Hellenic Telex and telegraphic service (in Greek, 1989).

2.2 Additional References

M-IT-01 CEN/CENELEC/CEPT Memorandum on the Concept and Structure of Functional Standards for Information Technology (March 1986)

M-IT-02 CEN/CENELEC/CEPT Memorandum on Directory of Functional Standards (fourth issue, August 1989)

ENV 41503 CEN/CENELEC/CEPT European prestandard, Information Systems interconnection; European graphic character repertoires and their coding (January 1987, under revision).

3 DEFINITIONS

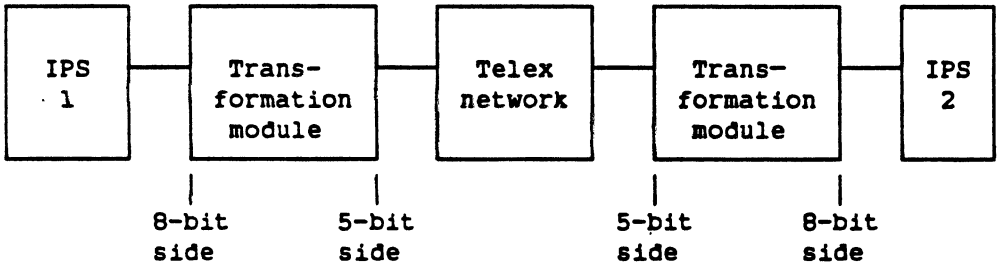
The terms used in this Functional Standard are defined in the references.

4 ABBREVIATIONS

The abbreviations used in this Functional Standard are defined in the references.

5 SCENARIO DESCRIPTION

With the field of application as stated in section 1, the scenario for this Functional Standard is as follows:



Given information processing systems (IPS) working with character sets and coding in an ISO 8-bit environment, and that these systems need to communicate via the international Telex service, with the restriction on coding and characters that this implies,

- this Functional Standard defines a Transformation Module that will transform 8-bit CC-data-elements (IPS side) according to an option of ENV 41503 into 5-bit CC-data-elements according to CCITT Recommendation S.1 (Telex side) and vice versa, while retaining as much as possible of the character repertoire's functionality.

This Transformation Module deals only with the repertoire of clause 7 of this Functional Standard, while the transformation of CC-data-elements other than those conforming to clause 7 is outside the scope of this ENV.

In addition, clause 7.2.2 specifies a Greek repertoire, which will be transformed according to ELOT Standard 1095.

It follows that the device to which conformance clause 6.2 below applies is the Transformation Module, and the user is the IPS.

One Transformation Module may be replaced by a sending or receiving Telex terminal.

Note 1 : This Functional Standard does not describe the international Telex service. In the preparation of this Functional Standard the specification of the international Telex service was assumed to be as in CCITT Recommendation S.1 for Option A, and in CCITT Recommendation S.1 and ELOT Standard 1095 for option B, respectively.

The use of the three code combinations in Figure Shift in the Telex code, which have been reserved for national or private use, is outside the scope of this Functional Standard.

The use of the Telex service for the Latin repertoire in combination with various non-Latin repertoires is under study in CCITT during the study period 1989-1992, and it is intended to modify option B of this Functional Standard to comply with the 1992 CCITT Recommendation for the Telex service.

6 CONFORMANCE

6.1 Conformance of information interchange

A CC-data-element within coded information for interchange is in conformance with this Functional Standard if all the coded representations of characters within that CC-data-element conform to the requirements of clause 8 of this Functional Standard. A claim of conformance shall identify the option adopted as specified in clause 9.

6.2 Conformance of devices

A device is in conformance with this Standard if it conforms to the requirements of 6.2.1, and either or both of clauses 6.2.2 and 6.2.3 below. A claim of conformance shall identify the documents which contains the description specified in clause 6.2.1 and shall identify the option adopted.

6.2.1 Device description

A device that conforms to this Functional Standard shall be the subject of a description that identifies the means by which the user may supply characters to the device, or may recognize them when they are made available to him, as specified respectively in clauses 6.2.2 and 6.2.3 below.

6.2.2 Originating devices

An originating device shall allow its user to supply any sequence of characters conforming to the adopted option of this Functional Standard, and shall be capable of transmitting their coded representations within a CC-data-element.

6.2.3 Receiving devices

A receiving device shall be capable of receiving and interpreting any coded representations of characters that are within a CC-data-element, and that conforms to clause 6.1 of this Functional Standard, and shall make the corresponding characters available to its user in such a way that its user can identify them from among those of the adopted option, and can distinguish them from each other.

The conformance clauses rely on the following generalized definitions.

CC-data-element

An element of interchanged information that is specified to consist of sequences of coded representations of characters, in accordance with one or more identified standards of coded character sets.

Device

A component of information processing equipment which can transmit, and/or can receive, coded information within CC-data-elements. (It may be an input/output device in the conventional sense, or a process such as an application program or gateway function.)

User

A person or other entity that invokes the services provided by a device. (This entity may be a process such as an application program if the "device" is a code convertor or a gateway function, for example.)

7 REPERTOIRE DESCRIPTION

7.1 Repertoire Options

This Functional Standard specifies the following two graphic repertoires:

- Option A: Latin repertoire (clause 7.2.1) or
- Option B: Latin and Greek repertoire (clauses 7.2.1 and 7.2.2).

7.2 Graphic Characters

7.2.1 Latin Graphic Repertoire

The Latin graphic repertoire consists of:

- The character SPACE
- The 26 Latin letters A (a) through Z (z)
- The ten digits ZERO through NINE
- The following punctuation and miscellaneous characters:

  . FULL STOP
  , COMMA
  : COLON
  ? QUESTION MARK
  ' APOSTROPHE
  + PLUS SIGN
  - HYPHEN - MINUS
  / SOLIDUS
  = EQUALS SIGN
  (LEFT PARENTHESIS
) RIGHT PARENTHESIS.

- Three unidentified characters, see Note 2 and Annex A.1.

In this repertoire, no distinction is made between the capital and small forms of the same letter. However, a transmitting product shall allow its user to supply any letter in either its capital or its small form.