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INFORMATION TECHNOLOGY - ALPHANUMERIC GLYPH IMAGE SET FOR OPTICAL CHARACTER RECOGNITION OCR-B - SHAPES AND DIMENSIONS OF THE PRINTED IMAGE

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Foreword

This document (EN 14603:2004) has been prepared by Technical Committee CEN/TC 304, "Information and communication technologies – European localization requirements", the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2005, and conflicting national standards shall be withdrawn at the latest by June 2005.

The document is based on the International Standard ISO 1073/II, "*Alphanumeric character set for optical recognition – Part II: Character set OCR-B – Shapes and dimensions of the printed image".*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Contents

1 Scope 5

2 Conformance 5

3 Normative references 5

4 Terms and definitions 5

5 Coding in OCR applications 6

6 OCR-B styles 6

7 OCR-B sizes 6

8 Typical dimensions of the nominal printed image 7

9 OCR-B glyph image set 8
9.1 Subset 1: Minimal alphanumeric subset 8
9.2 Subset 2: Basic alphanumeric subset 8
9.3 Subset 3: Extended alphanumeric subset 9
9.4 Subset 4: Options subset 9

10 Index table 10
10.1 Availability of glyph images 10
10.2 Identification of drawings 10
10.3 Application considerations 10

11 Use of diacritical marks 18
11.1 Diacritical mark repertoire 18
11.2 Composite glyph images 18
11.3 Rules for glyph image combinations 18

12 Use of the LOW LINE glyph 19

13 SPACE 19

14 Glyph image shape definitions 19
14.1 Reference drawings 19
14.2 Availability of duplicates 19
14.3 Type dimensions 19
14.4 Constant-strokewidth font, size I 19
14.5 Constant-strokewidth font, size III 20
14.6 Constant-strokewidth font, size IV 20
14.7 Letterpress font, size I 20

15 Printing the letterpress and constant-strokewidth fonts 20

16 Illustration of OCR-B 20

Annex A (normative) **Definition of Euro sign glyph image (ISO/IEC 9541-3 syntax)** 22

Annex B (informative) **Main differences between ISO 1073/II-1976 and this European Standard** 23

Annex C (informative) **Notes on the implementation of OCR-B** 24

Annex D (informative) **Glyph-repertoire extension needs identified in JTC 1/SC 2 revision process** 25

Annex E (informative) **Illustrations of reference drawings** 29

Annex F (informative) **Availability of reference drawings** 32

Bibliography 33

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Introduction

Optical Character Recognition technology, OCR, came into use in the 1960s, and some specialized OCR fonts were designed at the time. In 1976 two such fonts were formally standardized by ISO, designated OCR-A and OCR-B, in the standard ISO 1073 parts I and II, respectively.

ISO 1073 was developed by the ISO Technical Committee ISO/TC97, *Computers and information processing.* At the creation of ISO/IEC JTC 1, responsibility for ISO 1073 was transferred to JTC 1/SC 2, *Coded character sets.*

In order to enlarge the set of characters covered by the standard, especially with special letters used in European-origin languages, a revision of the standard was initiated in 1994 by JTC 1/SC 2, and progressed through three consecutive Committee Drafts. Since however testing of the proposed character set extensions could not be accomplished, the JTC 1/SC 2 revision was discontinued in 1999.

With the introduction of the Euro sign a need – primarily European – to add that character to the OCR-B set was recognized. CEN/TC304 therefore decided to develop an OCR-B glyph image shape for the character, verify its recognition properties, and include it in a European version of the OCR-B standard; see CEN/TC304 reports referenced in the Bibliography. The decided-on glyph image shape is specified in Annex A.

For reasons of continuity, and also to facilitate possible future CEN – ISO/IEC cooperation on OCR-B, it was decided to use the current ISO text with only the necessary minimum of changes as a basis for the CEN standard, even though the ISO text was developed in an OCR-technology situation rather different from the one existing when this CEN standard is published. In particular, the ISO standard text's division into clauses was kept as far as possible, although some restructuring might have been desirable.

A description of the main differences between this European Standard and ISO 1073/II is given in Annex B. General information on the implementation of the OCR-B shapes, taken from ISO 1073/II, has been included in Annex C.

In connection with the verification of the recognition properties of the Euro sign, some limited verification was also done on special letters identified during the JTC 1/SC 2 revision work as needed in OCR-B. The extent of this verification is not sufficient for the inclusion of the letters in the OCR-B repertoire at present, but the issue is described in Annex D, as a basis for possible future inclusion work.

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