



BSI Standards Publication

**Information technology
— Cultural and linguistic
interoperability — Definitions
and relationship between
symbols, icons, animated icons,
pictograms, characters and
glyphs**

National foreword

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**Information technology — Cultural
and linguistic interoperability —
Definitions and relationship between
symbols, icons, animated icons,
pictograms, characters and glyphs**

*Technologies de l'information — Interopérabilité culturelle et
linguistique — Définitions et relation entre symboles, icônes, icônes
animées, pictogrammes, caractères et glyphes*

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/IEC/JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

Introduction

It seems that many people misunderstand the limits of standardizing each of the concepts covered in this Technical Report. As a case in point, ISO 7000 standardizes graphical symbols with precise shapes, where, for example, the proportions are strictly established, while ISO/IEC 10646 sometimes defines a coded character that maps an existing ISO 7000 symbol (which is practical for searching in technical documentation, for example). However, any single coded character can be represented by a variety of different glyphs, thus open to a variety of shapes and proportions, as long as symbols remain recognizable (a glyph is not standardized for a given coded character in this case, the coding element is standardized unambiguously alongside its name only). Some do not recognize that this is possible; nevertheless, both usages are internationally standardized and used with apparently contradicting requirements.

This Technical Report tries to harmonize the apparent limitations of use of the different concepts involved in the ISO and IEC context.

Information technology — Cultural and linguistic interoperability — Definitions and relationship between symbols, icons, animated icons, pictograms, characters and glyphs

1 Scope

This Technical Report clearly defines each term related to ISO and IEC symbology in a single document and harmonizes difference of use and possible correspondence between different objects covering these concepts.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

character

member of a set of elements used for the organization, control, or representation of textual data

Note 1 to entry: A character may be represented by a sequence of one or several coded characters

[SOURCE: ISO/IEC 10646:—, 4.5]

2.2

code point

DEPRECATED: code position

value in the Universal Character Set codespace

[SOURCE: ISO/IEC 10646:—, 4.10]

Note 1 to entry: Values of the Universal Character Set (UCS) codespace are integers (numbers) ranging from 0 to 10FFFF (hexadecimal [base 16] numeric representation)

2.3

coded character

association between a character and a code point

[SOURCE: ISO/IEC 10646:—, 4.8]

2.4

font

collection of glyph images having the same basic design, e.g. Courier Bold Oblique

[SOURCE: ISO/IEC 9541-1:1991]

2.5

glyph

recognizable abstract graphic symbol which is independent of any specific design

[SOURCE: ISO/IEC 9541-1:1991]