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Information technology — Keyboard layouts for text and office systems —

Part 9: Multi-lingual, multiscript keyboard layouts

Technologies de l'information — Disposition des claviers conçus pour la bureautique —

Partie 9: Dispositions de claviers multilingues et multi-écritures

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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*, SC 35, *User interferences*.

ISO/IEC 9995 consists of the following parts, under the general title *Information technology — Keyboard layouts for text and office systems*:

— *Part 1: General principles governing keyboard layouts*

— *Part 2: Alphanumeric section*

— *Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section*

— *Part 4: Numeric section*

— *Part 5: Editing and function section*

— *Part 7: Symbols used to represent functions*

— *Part 8: Allocation of letters to the keys of a numeric keypad*

— *Part 9: Multilingual, multiscript keyboard layouts*

— *Part 10: Conventional symbols and methods to represent graphic characters not uniquely recognizable by their glyph on a keyboard and in documentation*

— Part 11: *Functionality of dead keys and repertoires of characters entered by dead keys*

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Information technology — Keyboard layouts for office systems — Part 9: Multi-lingual, multiscript keyboard layouts

1 Scope

Within the general scope described in ISO/IEC 9995-1, this part of ISO 9995 defines the allocation on a keyboard of a set of graphic characters which, when used in combination with an existing national version keyboard layout, allows the input of a minimum character repertoire as defined herein.

This repertoire is intended to address all characters needed to write all contemporary languages using the Latin script, together with standardized Latin transliterations of some major languages using other scripts. It also contains all symbols and punctuation marks contained in ISO 8859-1, together with some selected other ones commonly used in typography and office use.

It also addresses characters of some other scripts (Greek, Cyrillic, Armenian, Georgian, Hebrew) to the same extent (in the case of Cyrillic, leaving out some minority languages of the Russian Federation which have only a few hundred speakers left). It provides means to include other scripts (e.g. Arabic, Devanagari) in future versions of this part of ISO 9995 (e.g. by amendments).

Furthermore, it addresses the International Phonetic Alphabet (IPA).

This part of ISO 9995 is primarily intended for word-processing and text-processing applications, to be used with full-sized keyboards as well as with miniature keyboards found on mobile devices ("smartphones" or handheld computers), especially ones which have only keys for the 26 basic Latin letters but no dedicated keys for digits.

2 Conformance

The layout of a keyboard conforms to this part of ISO 9995 if it meets all of the following conditions:

— It is either a Latin keyboard, or a Latin-conformant keyboard, as defined in Clause 3.

— It is either a compact keyboard, or a full keyboard, as defined in Clause 3.

— There is a special function called "Superselect", which, when (according to the layout) either operated (i.e. pressed if it is a key) together with any A to Z key, or followed by the actuation of any A to Z key, performs the function according to Tables 1 and 2 in Clause 5.

NOTE 1 The "Superselect" can be a single dedicated key, or a special sequence of other keys to be input.

EXAMPLE The "Superselect" can be a "symbol key" to be pressed together with a "shift key".

Furthermore, the software driving the keyboard shall fulfil the following requirements to make the keyboard conform to this part of ISO 9995:

— The keyboard is intended to output valid ISO/IEC 10646 characters and valid sequences thereof.

— Any of the groups contained in Tables 1 and 2 in Clause 5 and specified in the subsequent text are contained in the layout, unless they are marked as optional in these tables. The groups may contain

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additional characters associated with other keys than in the tables as long as any listed pairing of D-Groups and L-Groups is unaffected.

NOTE 2 It is not specified in this part of 9995 which characters or symbols are in fact to be engraved on the keyboard.

Any statement of conformance to this part of ISO 9995 shall be taken to imply that the complete character repertoire of the IPA table in Annex C and of all groups listed in Clause 5 has been implemented, with the exception that group YY (compatibility characters and symbols), which may be implemented only partially or not at all.

Such statements of conformance may be made for fonts. If such a statement of conformance for a font is made in connection with one or more of the terms: "Latin", "Greek", "Cyrillic", "Armenian", "Georgian", "Hebrew", "Arabic", "Korean", "IPA", this shall be taken to imply that the character repertoire(s) listed in Annex D under the correspondingly named headers D.2.2 to D.2.10 has/have to be supplied by the font, and, as long as any of the listed terms except "IPA" is applied, this shall be taken to imply that also the character repertoire listed there under D.2.1 "Digits, punctuation and symbols" has to be supplied by the font. In no case is there an implication whether the character repertoire listed under D.2.1 "Compatibility characters and symbols" is supplied completely, partially or not at all by the font.

3 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 646:1991, *Information technology — ISO 7-bit coded character set for information interchange*

ISO/IEC 9995-1:2009, *Information technology — Keyboard layouts for text and office systems — Part 1: General principles governing keyboard layouts*

ISO/IEC 9995-3:2010, *Information technology — Keyboard layouts for text and office systems — Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section*

ISO/IEC 10646: 2014, *Information technology — Universal Coded Character Set (UCS)*

IPA: Handbook of the International Phonetic Association. Cambridge 1999 (reprinted 2003). ISBN 0 521 63751 1: Appendix 2: Computer coding of IPA symbols (pp. 161-185)

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