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**Information technology — Segmented  
keyboard layouts**

*Technologies de l'information — Disposition des claviers segmentés*

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Printed in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 15411 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

Annex A of this International Standard is for information only.

## Introduction

This International Standard provides guidance on the technical requirements which are important in the three-dimensional layout of segmented keyboards.

Segmentation of the alphanumeric section of the keyboard allows the two segments to be placed in non-coplanar and non-linear alignment. Segmented keyboards are intended to allow altered spatial layout of the keyboard segments relative to the user. The altered orientation may allow the user to attain greater comfort, to decrease the rate of onset of fatigue and to reduce the possibility of pain.

Major contributing influences on the effectiveness and productivity provided by a segmented keyboard are the typing skills of the user. Touch typists can take full advantage of the differing angles provided, whereas, unskilled users may find some alternative keyboard layouts unusable.

It should be noted that, for a significant portion of the population, the standard keyboard may provide the correct spatial configuration. Enforcing unwanted keyboard angles upon these individuals could have negative effects.

# Information technology — Segmented keyboard layouts

## 1 Scope

This International Standard defines the differing requirements necessary when considering the various types of segmented keyboards. The scope of this International Standard encompasses the three-dimensional layout of segmented, traditional style keyboards classified as having:

- a. Adjustable alphanumeric segments;
- b. Fixed angle alphanumeric segments.

This International Standard covers the following keyboard areas:

- Alphanumeric area
- Function area
- Text editing area
- Numeric area
- Cursor control area

## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 7000:1989, *Graphical symbols for use on equipment — Index and synopsis*.

ISO 9241-4:1998, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 4: Keyboard requirements*.

ISO 9241-9, *Ergonomic requirements for office work with visual display terminals (VDTs) — Part 9: Requirements for non-keyboard input devices*.

ISO/IEC 9995-1:1994, *Information technology — Keyboard layouts for text and office systems — Part 1: General principles governing keyboard layouts*.

ISO/IEC 9995-2:1994, *Information technology — Keyboard layouts for text and office systems — Part 2: Alphanumeric section*.

ISO/IEC 9995-3:1994, *Information technology — Keyboard layouts for text and office systems — Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section*.

ISO/IEC 9995-4:1994, *Information technology — Keyboard layouts for text and office systems — Part 4: Numeric section*.

ISO/IEC 9995-5:1994, *Information technology — Keyboard layouts for text and office systems — Part 6: Editing section*.

ISO/IEC 9995-6:1994, *Information technology — Keyboard layouts for text and office systems — Part 6: Function section*.