## TECHNICAL REPORT

### ISO/IEC TR 15440

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# Information technology — Future keyboards and other associated input devices and related entry methods

Technologies de l'Information — Claviers futurs, autres dispositifs d'entrée associés et méthodes d'entrée liées





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#### **Foreword**

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International Standards are drafted in accordance with the rules given in the SO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. 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.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
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  future but not immediate possibility of an agreement on an International Standard;
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Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

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.

ISO/IEC TR 15440, which is a Technical Report of type 2, was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 35, User interfaces.

#### Introduction

This Technical Report, supported by the history of information technology keyboards during the last two decades, lists current and anticipated problem areas as seen by users, and tries to pave the way to foreseen work items in JTC1 for solving keyboard-related issues of the user interface.



## Information technology — Future keyboards and other associated input devices and related entry methods

#### 1 Scope

This Technical Report covers

- the different input requirements catering for national and international practices and support of cultural and linguistic diversity;
- the recognition of requirements regarding comfort of use (for any user, including children, elderly and disabled people), and improved user productivity related to inputting data;
- enhancements of keyboards and related input devices and methods required for new emerging phenomena such as Internet, multimedia, and virtual reality;
- virtual input requirements;
- labelling issues (soft [LCD] and hard, permanent and temporary labels), function symbols and icons.

This Technical Report does not cover implications of biometric input (e.g. fingerprint-, iris-pattern-, or face-shape-based) devices for access and security.

This Technical Report is aimed at both the users and manufacturers, and intends to present the user requirements regarding keyboards and associated devices and methods at the time of publication of this Technical Report.

#### 2 Normative references

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

ISO/IEC 9995 (all parts), Information technology — Keyboard layouts for text and office systems