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# Information technology — User interface — Gesture-based interfaces across devices and methods —

## Part 1: **Framework**

*Technologies de l'information — Interface utilisateur — Interfaces fondés sur la gestuelle entre dispositifs et méthodes —*

*Partie 1: Cadre*

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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/TC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

ISO/IEC 30113 consists of the following parts, under the general title *Information technology — User interfaces — Gesture-based interfaces across devices and methods*:

— *Part 1: Framework*

— *Part 11: Single-point gestures for common system actions*


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# Introduction

Gestures are used for performing a variety of commands (such as scrolling a Web page up) as an alternative input method (to typing or using a mouse to select objects).

Given the limited number of basic gestures, the same gesture is often used for a variety of different commands in different situations. It is important that wherever possible, these different commands are similar to one another (i.e. by having a similar effect on different objects) so that users are not confused about what a gesture will do in a given situation.

Standardized gesture descriptions and commands minimize user confusion when interacting with various software systems and applications on various ICT devices. This International Standard is aimed at designers and developers of software applications.

This International Standard is intended to help users to more easily navigate and control application software on various ICT devices by standardizing gestures and gesture commands.

This part of ISO/IEC 30113 defines a framework of gesture-based interfaces to support interoperability among gesture-based interfaces with various input devices and methods.

Subclause A.1 gives informative description about the structure of ISO/IEC 30113 in detail.

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# Information technology — User interface — Gesture-based interfaces across devices and methods —

# Part 1: Framework

## 1 Scope

This part of ISO/IEC 30113 defines a framework and guidelines for gesture-based interfaces across devices and methods in supporting interoperability.

NOTE Some of these devices include mice, touch screens, touch pads, 3D mice, joysticks, game controllers, wired gloves, depth-aware cameras, stereo cameras, Web cameras.

This part of ISO/IEC 30113 does not define or require specific technology for recognizing gesture of users. It focuses on the description of a gesture and its functions for utilizing ICT systems.

NOTE Operation of a physical keyboard is not addressed in this part of ISO/IEC 30113.

## 2 Conformance

A gesture-based interface is conformant to this part of ISO/IEC 30113 if it meets all requirements of Clause 5.

## 3 Terms and definitions

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

**3.1**
**gesture**
movement or posture of the whole body or parts of the body

**3.2**
**gesture-based interface**
**gesture interface**
user interface that provides information and controls for a user to accomplish specific tasks with the interactive system by his/her gestures

[SOURCE: ISO 9241-171: 3.29]

**3.3**
**gesture command**
instruction to the system resulting from a gesture input by the user, e.g. select, move, delete

[SOURCE: ISO/IEC 14754:1999, 4.5]

**3.4**
**gesture software**
software for implementing gesture-based interface functionality including gesture recognition, command processing, and feedback generation

Note 1 to entry: Gesture recognition software is usually contained within the operating system and specific device drivers. Information on gestures that are recognized is made available to the operating system and/or the application software, so that the intended command(s) are performed in response to the gesture.

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