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Part 11: Single-point gestures for common system actions

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Partie 11: Gestes à point unique pour actions courantes du système

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Contents

Page

Foreword ... **iv**
Introduction ... **v**
1 Scope ... **1**
2 Normative references ... **1**
3 Terms and definitions ... **1**
4 General ... **2**
5 Types of gestures ... **2**
5.1 Mediated gesture ... 2
5.2 Direct touch gesture ... 2
5.3 Non-contact gesture ... 3
5.4 Descriptions of gestures ... 3
6 Gesture adaptation ... **4**
7 Movement metaphor ... **4**
7.1 General ... 4
7.2 Consideration of the movement metaphor ... 6
8 Descriptions of the single-point gestures ... **6**
8.1 General ... 6
8.2 Directional gestures ... 7
8.2.1 General ... 7
8.2.2 "Left" gesture ... 8
8.2.3 "Right" gesture ... 10
8.2.4 "Up" gesture ... 11
8.2.5 "Down" gesture ... 13
8.2.6 "Forward" gesture ... 14
8.2.7 "Backward" gesture ... 16
8.2.8 "Clockwise rotation" gesture ... 17
8.2.9 "Counter-clockwise rotation" gesture ... 18
8.3 Command gestures ... 20
8.3.1 General ... 20
8.3.2 "Tap" gesture ... 21
8.3.3 "Displace" gesture ... 22
8.3.4 "Double-tap" gesture ... 23
8.3.5 "Tap and hold" gesture ... 24
8.3.6 "Horizontal wave" gesture ... 25
8.3.7 "Vertical wave" gesture ... 26
9 System level functions ... **28**
10 Common functions across applications ... **29**

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Foreword

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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 voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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

A list of all parts in the ISO/IEC 30113 series can be found on the ISO website.

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Introduction

A single-point gesture is generated by a user with a pointer [which includes an input device (e.g. a mouse, a stylus, etc.) or a body part (e.g. a fingertip, a hand, etc.)] providing gesture actions using a single point of interest (POI). The gesture can be recognized and interpreted as a command which is understood by platforms, systems or applications running information and communications technology (ICT) systems. If the user feels that the gesture is natural and it is convenient and comfortable to generate, he/she can easily utilize the gesture for the applications on the ICT systems without spending an excessive amount of time learning and practising how to use the gesture.

A single-point gesture is used in several commercially-available ICT systems including personal computers, smart televisions, smart phones and video game consoles. There is a need for an International Standard to define the single-point gesture so that a user does not get confused if a gesture is associated with a different command for another application. Potential variety and inconsistency among single-point gestures might cause a serious usability problem in using applications on ICT systems.

This document presents descriptions of single-point gestures and their corresponding gesture commands for system level functions and common functions across applications on ICT systems. The system level functions include functions for selecting, initiating, terminating, resuming and restarting applications which are handled by operating systems or platforms. The common functions across applications are also identified. These functions include navigating menus, opening and closing objects, “help”, “undo”, “redo”, and so on.

The single-point gestures will harmonize with other gestures of multiple POIs. It is expected that users can execute applications more easily and without confusion by utilizing the single-point gestures. The gestures are to be performed by the users regardless of a specific recognition technique, a certain interaction method or a device. The focus of this document is on the users and their cognitive aspects.

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Information technology — Gesture-based interfaces across devices and methods —

Part 11:
Single-point gestures for common system actions

1 Scope

This document defines single-point gestures for common system actions used in information and communication technology (ICT) systems. It specifies movements for clear and classified gestures recognized by the systems and applications. The single-point gestures are performed using an input device (e.g. a mouse, a stylus, etc.) or a body part (e.g. a fingertip, a hand, etc.). These single-point gestures are intended to operate in a consistent manner regardless of the system, platform, application or device.

NOTE ICT systems include, but are not limited to, digital televisions, set-top boxes, video game consoles, communication devices, Internet devices, entertainment devices and personal computers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 30113-1:2015, *Information technology — User interface — Gesture-based interfaces across devices and methods — Part 1: Framework*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
point of interest
POI
specific point location that a user utilizes to formulate a gesture

3.2
single-point gesture
sequence of actions of moving a *POI* (3.1) by a user which are clearly recognized by the system

3.3
multi-point gesture
sequence of actions of moving multiple *POIs* (3.1) by a user which are clearly recognized by the system

EXAMPLE A gesture with two hands or a gesture with multiple fingers.

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