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Information technology — Gesturebased interfaces across devices and methods —

Part 60:

General guidance on gestures for screen readers

Technologies de l'information — Interfaces gestuelles entre dispositifs et méthodes —

Partie 60: Recommandations générales relatives aux gestes pour les lecteurs d'écran





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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.

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

For an explanation of 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 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.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Even if users with visual impairments utilize the same hardware as sighted users, it is possible that they will prefer to use different gestures, or to perform the same gestures differently from the sighted users. Sighted users can also perform gestures differently when they lack visual feedback.

Users with visual impairments experience problems in understanding shapes or outlines of gestures for ICT devices, even though they appear simple to sighted users. The critical problem is basically visual information and feedback from ICT devices. Therefore, it is necessary to provide special gestures for users with visual impairments.

Screen readers support their users in identifying and understanding content displayed on a screen of an ICT device. The information about the content is read back to the users out loud by the screen readers which might utilize text-to-speech or braille output devices. While sighted users visually scan and understand the content of the screen, the users with visual impairments utilize screen readers to understand the content. The screen is generally composed of page regions, headings, navigation elements, text links, images, etc. It is necessary for users of screen readers to identify the elements and navigate the pages. Therefore, specially designed gestures of screen readers are required. The gestures need to be standardized for the users of screen readers.

This document provides a general guidance on the standard gestures for screen readers running on rin. ides c. various ICT devices. The gestures are primarily utilized by the users of screen readers when they interact with ICT devices. Annex A provides descriptions about specific instances of the gestures for screen readers.

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

Part 60:

General guidance on gestures for screen readers

1 Scope

This document provides general guidance on gestures for screen readers running on various ICT devices. The document does not define or require specific technologies for recognizing the gestures. It focuses on descriptions of gestures and functions for screen readers running on ICT devices.

2 Normative references

There are no normative references in this document.

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

gesture command

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

[SOURCE: ISO/IEC 30113-1:2015, 3.3]

3.2

screen reader

function that reads the characters and other information on the screen aloud to the user to allow access to the information on screen without viewing the screen

[SOURCE: ISO/IEC 24786:2009, 4.11]

3.3

point of interest

POI

specific point location that a user utilizes to formulate a gesture

Note 1 to entry: A POI is used by a user to interact with an object on a screen and does not need to be a specific location on an object. It could be located anywhere on an object.

[SOURCE: ISO/IEC 30113-11:2017, 3.1, modified — Note 1 to entry added.]

3.4

closed gesture

gesture of which its starting point and its ending point coincides