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(JBMIA/AIST/JSA)

**Guidelines for older persons and
persons with disabilities—
Information and communications
equipment, software and services—
Part 7: Accessibility settings**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Business Machine and Information System Industries Association (JBMIA)/National Institute of Advanced Industrial Science and Technology (AIST)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public or utility model right which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public or utility model right which have the said technical properties.

JIS X 8341 series consists of the following 7 parts under the general title “*Guidelines for older persons and persons with disabilities—Information and communications equipment, software and services*”:

Part 1: Common Guidelines

Part 2: Information processing equipment

Part 3: Web content

Part 4: Telecommunications equipment

Part 5: Office equipment

Part 6: Guidance on software accessibility (to be published)

Part 7: Accessibility settings

Guidelines for older persons and persons with disabilities— Information and communications equipment, software and services— Part 7: Accessibility settings

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO/IEC 24786** published in 2009 without modifying the technical contents.

The portions with dotted underlines are the matters not given in the corresponding International Standard.

1 Scope

This Standard specifies requirements and recommendations for making accessibility settings accessible. It provides guidance on specific accessibility settings. It specifies how to access and operate the accessibility setting mode, and how to directly activate specific accessibility features.

This Standard applies to all operating system user interfaces on computers, but can also be applied to other types of information/communication technology, where appropriate.

This Standard does not apply to the user interface before the operating system is loaded and active.

NOTE 1 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO/IEC 24786:2009 *Information technology—User interfaces—Accessible user interface for accessibility settings* (IDT)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

NOTE 2 In this Standard, requirements or recommendations for the user interface of computer is sometimes referred to simply as requirements or recommendations for the computer.

2 Conformance

The computer is conformant to **JIS X 8341-7** Level 2 if it meets all requirements and recommendations of clause 5.

The computer is conformant to **JIS X 8341-7** Level 1 if it meets all requirements of clause 5, but does not meet all recommendations of clause 5.

3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and any revisions (including amendments) made thereafter shall not be applied.

JIS X 0001:1994 *Glossary of terms used in information processing—Fundamental terms*

NOTE : Corresponding International Standard: ISO/IEC 2382-1:1993 *Information technology—Vocabulary—Part 1: Fundamental terms* (MOD)

ISO 9241-171:2008 *Ergonomics of human-system interaction—Part 171: Guidance on software accessibility*

4 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS X 0001:1994** and **ISO 9241-171:2008** together with the following apply.

NOTE : The terms StickyKeys™, SlowKeys™, BounceKeys™, FilterKeys™, MouseKeys™, RepeatKeys™, ToggleKeys™, SoundSentry™, and ShowSounds™ are all trademarks of the University of Wisconsin. However, use of the terms is permitted freely, without royalty or license, to describe user interface features that have the functionality and behaviour described in this Standard.

4.1 accessibility feature

feature (etc.) that is specifically designed to increase the usability of products for those experiencing disabilities (see **ISO 9241-171:2008**)

4.2 accessibility setting

setting to make the user interface more accessible for people with disabilities

Example : A setting is provided to turn large text or screen magnification ON for people with low vision.

4.3 accessibility setting mode

mode where the user adjusts accessibility settings

NOTE : A user can access almost all the accessibility settings and adjustments for the accessibility features through this mode.

4.4 auditory feedback

function that allows individuals to hear whether their operations (e.g. key input) have been accepted by the computer

NOTE : Auditory feedback includes beep sound with key input, alarm sound, etc.

4.5 BounceKeys™

function that only accepts a single keystroke at a time from a key

NOTE : BounceKeys™ is designed for users with tremor that causes them to inadvertently strike a key extra times when pressing or releasing the key. Once a key is released it will not accept another stroke of the same key until a (user-settable) period of time has passed. BounceKeys™ has no effect on how quickly a person can type a different key (see **ISO 9241-171:2008**, Annex E).

4.6 computer

functional unit that can perform substantial computations, including numerous arithmetic operations and logic operations, without human intervention (see **JIS X 0001:1994**, **01.03.03**)

4.7 FilterKeys™

BounceKeys™ and SlowKeys™ features combined as a package

NOTE : The term FilterKeys™ is sometimes used for the BounceKeys™ and SlowKeys™ features packaged together. It is acceptable to make these two features mutually exclusive. However, they can also both be active at the same time (though SlowKeys™ will dominate) (see **ISO 9241-171:2008**, Annex E).

4.8 MouseKeys™

function that allows the user to use the keys on the numeric keypad to control the mouse cursor on screen and to operate the mouse buttons

NOTE : MouseKeys™ is designed for users who are physically unable to use a mouse accurately (or at all) (see **ISO 9241-171:2008**, Annex E).

4.9 on-screen keyboard

software that presents a keyboard on the display screen that is operable by a pointing device and that generates input that is identical to that which comes from a physical keyboard

NOTE : In **ISO 9241-171:2008**, **3.19**, on-screen keyboard is given as an example of a keyboard emulator.

4.10 RepeatKeys™

facility to control auto-repeat, repeat onset and repeat rate of keys

NOTE 1 RepeatKeys™ is designed to allow use of computers by people who cannot move quickly enough when pressing keys to keep them from auto-repeating. The facilities to adjust repeat onset, repeat rate and to turn auto-repeat off are usually included as part of most keyboard system settings. If these functions are not included, RepeatKeys™ provides them. RepeatKeys™ also ensures that the repeat delay and repeat interval can be set long enough for users who do not have quick response (if the standard maximum value for either of the regular key repeat settings is not long enough) (see **ISO 9241-171:2008**, Annex E).

NOTE 2 The system settings are a panel or window where the user adjusts OS settings. The name of the system settings differs depending on the OS. Common names for this function include control panel and system preferences.

4.11 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

4.12 shortcut

operation which immediately invokes an action without displaying intermediate information (such as menus) or requiring pointer movement or any other user activity

4.13 ShowSounds™

user-configurable system flag that is readable by application software and is intended to inform ShowSounds™-aware applications that all information conveyed audibly should also be conveyed visually

NOTE : ShowSounds™ is a feature for users who cannot clearly hear speech or cannot distinguish between sounds from a computer due to hearing impairment, a noisy environment, or an environment where sound is not allowed, such as a library or classroom. For example, captions can be shown for recorded or synthesized speech, and a message or icon can be displayed when a sound is used to indicate that new mail has arrived. However, captions cannot be provided for speech output where the speech is reading information that is already visually presented on the screen (e.g. screen readers) (see **ISO 9241-171:2008**, Annex E).

4.14 SlowKeys™

function that causes the keyboard to ignore all keys that are bumped or pressed briefly

NOTE : SlowKeys™ is designed for users who have extra, uncontrolled movements that cause them to strike surrounding keys unintentionally when typing. Keystrokes are accepted only if keys are held down for a user-specifiable period of time (see **ISO 9241-171:2008**, Annex E).

4.15 SoundSentry™

feature providing a visual signal to indicate when the computer is generating a sound

Example : screen flash, caption bar flash.

NOTE : SoundSentry™ is a feature for individuals who cannot hear system sounds (due to hearing impairment, a noisy environment, or an environment where sound is not allowed, such as a library or classroom). SoundSentry™ works by monitoring the system sound hardware and providing a user-selectable indication whenever sound activity is detected. Note that this feature cannot usually discriminate between different sounds, identify the sources of sounds, or provide a useful alternative for speech output or information encoded in sounds. Applications can support the ShowSounds™ feature to provide the user with a useful alternative to information conveyed using sound.