

ISO/IEC 22121-2:2023-03 (E)

Information technology - Virtual keyboards user interfaces - Part 2: On-screen keyboards with direct touch interface

Contents	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Conformance	4
4.1 Conformance with this document	4
4.2 Claims of conformance	4
5 General requirements for on-screen keyboards with direct touch interface	5
5.1 Character availability	5
5.2 Single finger/stylus and multiple finger text input	5
5.3 Adjustment	6
5.3.1 Long tap duration	6
5.3.2 Double tap duration	6
5.3.3 Touchpad pressure	6
6 Mapping of keyboard layout standards	6
6.1 General	6
6.2 Alphabetic characters	7
6.2.1 Key and row position numbering system	7
6.2.2 Set of characters to be mapped to on-screen keyboards layouts	8
6.2.3 Mapping of physical keyboard layout	9
6.3 Numeric characters	9
6.4 Space key and other non-graphic keys	10
6.4.1 Space bar/key	10
6.4.2 Backspace/backward erase key	10
6.4.3 Return/enter key	10
6.4.4 Tabulation key	11
7 Specific toggle keys and commands	11
7.1 Toggle key layout and operations	11
7.1.1 General	11
7.1.2 Location on the on-screen keyboard	13
7.1.3 Locking/unlocking toggle keys	13
7.2 Toggle key functionality	13
7.2.1 Level 2 selection toggle key	13
7.2.2 Group selection toggle key	14
7.2.3 Layout selection key	15
7.2.4 Speech dictation toggle key	15
7.2.5 Keyboard deactivation toggle key	15
7.3 Toggle key status indication	15
8 Associated characters	16
8.1 General	16
8.2 Access to associated characters	16

8.2.1	Access to associated characters with a selection box	16
8.2.2	Access to associated characters with a long tap	16
8.3	Selection of associated characters	16
8.3.1	Selection of associated characters with accessible input mode enabled	16
8.3.2	Selection of associated characters with accessible input mode disabled	17
8.4	Insertion of associated characters	18
9	Keyboard mode context dependency	18
9.1	General	18
9.2	Numeric input fields	19
9.3	Email address input fields	20
9.4	URL/URI input fields	20
9.5	Input fields with preselected values	20
10	User customization and creation of new keyboards	20
10.1	Customization of the keyboard	20
10.2	Switching between keyboards	21
10.3	Loading, saving and sharing the keyboard layout	21
10.3.1	Modifying a keyboard layout	21
10.3.2	Loading a stored keyboard layout	21
10.3.3	Adding a new keyboard layout	21
11	Activation/deactivation of on-screen keyboard	21
11.1	Manual activation/deactivation of on-screen keyboard	21
11.2	Automatic activation/deactivation of on-screen keyboard	21
11.2.1	Automatic activation	21
11.2.2	Automatic deactivation	21
11.2.3	Input fields with pre-selected values	22
11.3	Location of toggle key	22
12	Positioning and sizing	22
12.1	Positioning	22
12.2	Sizing	22
12.2.1	Relative size of on-screen keyboards	22
12.2.2	Resizing	23
12.3	Display space constraints	23
12.3.1	Key size	23
12.3.2	Number of displayed keys	24
12.4	Resizing rules	24
12.5	Field overlapping	24
12.5.1	General	24
12.5.2	Context of use	24
12.5.3	Typing text messages	24
12.5.4	Typing text on forms	25
12.6	Rotation rules (landscape/portrait)	25
12.6.1	General	25
12.6.2	Rotation within applications	25
12.6.3	Optional resizing	25
13	Shading and styling of on-screen keyboard keys	25
13.1	Contrast ratio	25
13.2	Highlighting	25
13.3	Colours and shades	25
13.4	Key label size	26
	Bibliography	27