

# DIN EN ISO 9241-161:2016-10 (E)

## Ergonomics of human-system interaction - Part 161: Guidance on visual user-interface elements (ISO 9241-161:2016)

---

<b>Contents</b>		Page
<b>European foreword</b> .....		8
<b>Foreword</b> .....		9
<b>Introduction</b> .....		11
<b>1</b>	<b>Scope</b> .....	12
<b>2</b>	<b>Normative references</b> .....	12
<b>3</b>	<b>Terms and definitions</b> .....	12
<b>4</b>	<b>Accessibility</b> .....	15
<b>5</b>	<b>Relationship of input methods and visual user-interface elements</b> .....	15
<b>6</b>	<b>States of visual user-interface elements</b> .....	16
<b>7</b>	<b>Describing visual user-interface elements</b> .....	16
<b>8</b>	<b>Visual user-interface elements</b> .....	17
8.1	Accordion .....	17
8.1.1	Description .....	17
8.1.2	Components .....	17
8.1.3	States .....	18
8.1.4	When to use an accordion .....	18
8.1.5	How to use an accordion .....	19
8.2	Analogue form element/slider .....	19
8.2.1	Description .....	19
8.2.2	Components .....	19
8.2.3	States .....	19
8.2.4	When to use an analogue form element .....	19
8.2.5	How to use an analogue form element .....	20
8.3	Carousel/Carrousel .....	20
8.3.1	Description .....	20
8.3.2	Components .....	20
8.3.3	States .....	21
8.3.4	When to use a carousel .....	21
8.3.5	How to use a carousel .....	21
8.4	Check box/check button .....	21
8.4.1	Description .....	21
8.4.2	Components .....	21
8.4.3	States .....	22
8.4.4	When to use a check box .....	22
8.4.5	How to use a check box .....	22
8.5	Collapsible container .....	23
8.5.1	Description .....	23
8.5.2	Components .....	23
8.5.3	States .....	24
8.5.4	When to use a collapsible container .....	24
8.5.5	How to use a collapsible container .....	24

8.6	Colour picker .....	24
	8.6.1 Description.....	24
	8.6.2 Components.....	24
	8.6.3 States.....	24
	8.6.4 When to use a colour picker .....	24
	8.6.5 How to use a colour picker.....	24
8.7	Combination box/combo box.....	25
	8.7.1 Description.....	25
	8.7.2 Components.....	25
	8.7.3 States.....	26
	8.7.4 When to use a combination box.....	26
	8.7.5 How to use a combination box.....	27
8.8	Cursor.....	27
	8.8.1 Description.....	27
	8.8.2 Components.....	27
	8.8.3 States.....	27
	8.8.4 When to use a cursor.....	27
	8.8.5 How to use a cursor.....	27
8.9	Date picker.....	28
	8.9.1 Description.....	28
	8.9.2 Components.....	28
	8.9.3 States.....	28
	8.9.4 When to use a date picker .....	29
	8.9.5 How to use a date picker .....	29
8.10	Dialogue box.....	29
	8.10.1 Description.....	29
	8.10.2 Components.....	29
	8.10.3 States.....	30
	8.10.4 When to use a dialogue box.....	30
	8.10.5 How to use a dialogue box.....	30
8.11	Dropdown list box.....	30
	8.11.1 Description.....	30
	8.11.2 Components.....	31
	8.11.3 When to use a dropdown list box.....	31
	8.11.4 How to use a dropdown list box.....	32
8.12	Entry field/input field.....	32
	8.12.1 Description.....	32
	8.12.2 Components.....	32
	8.12.3 States.....	32
	8.12.4 When to use an entry field .....	33
	8.12.5 How to use an entry field.....	33
8.13	Entry field with dialogue button.....	33
	8.13.1 Description.....	33
	8.13.2 Components.....	33
	8.13.3 States.....	33
	8.13.4 When to use an entry field with dialogue button.....	33
	8.13.5 How to use an entry field with dialogue button .....	34
8.14	Geographical map.....	34
	8.14.1 Description.....	34
	8.14.2 Components.....	34
	8.14.3 States.....	34
	8.14.4 When to use a geographical map.....	34
	8.14.5 How to use a geographical map.....	35
8.15	Group/group box .....	35
	8.15.1 Description.....	35
	8.15.2 Components.....	35
	8.15.3 States.....	35
	8.15.4 When to use a group.....	35
	8.15.5 How to use a group.....	36

8.16	Handle.....	36
	8.16.1 Description.....	36
	8.16.2 Components.....	36
	8.16.3 States.....	36
	8.16.4 When to use a handle.....	37
	8.16.5 How to use a handle.....	37
8.17	Hierarchical list/tree view/tree lists.....	37
	8.17.1 Description.....	37
	8.17.2 Components.....	37
	8.17.3 States.....	38
	8.17.4 When to use a hierarchical list.....	38
	8.17.5 How to use a hierarchical list.....	38
8.18	Implicit designator.....	38
	8.18.1 Description.....	38
	8.18.2 Components.....	38
	8.18.3 States.....	39
	8.18.4 When to use an implicit designator.....	39
	8.18.5 How to use an implicit designator.....	39
8.19	Instructive information.....	39
	8.19.1 Description.....	39
	8.19.2 Components.....	39
	8.19.3 States.....	40
	8.19.4 When to use instructive information.....	40
	8.19.5 How to use instructive information.....	40
8.20	Input tokenizer.....	40
	8.20.1 Description.....	40
	8.20.2 Components.....	41
	8.20.3 States.....	41
	8.20.4 When to use an input tokenizer.....	41
	8.20.5 How to use an input tokenizer.....	41
8.21	Label.....	42
	8.21.1 Description.....	42
	8.21.2 Components.....	42
	8.21.3 States.....	42
	8.21.4 When to use a label.....	42
	8.21.5 How to use a label.....	42
8.22	Legend/chart key.....	42
	8.22.1 Description.....	42
	8.22.2 Components.....	43
	8.22.3 States.....	43
	8.22.4 When to use a legend.....	43
	8.22.5 How to use a legend.....	43
8.23	Link/hyperlink.....	43
	8.23.1 Description.....	43
	8.23.2 Components.....	44
	8.23.3 States.....	44
	8.23.4 When to use a link.....	44
	8.23.5 How to use a link.....	44
8.24	List box.....	45
	8.24.1 Description.....	45
	8.24.2 Components.....	45
	8.24.3 States.....	45
	8.24.4 When to use a list box.....	46
	8.24.5 How to use a list box.....	46
8.25	List button/menu button.....	46
	8.25.1 Description.....	46
	8.25.2 Components.....	46
	8.25.3 States.....	47
	8.25.4 When to use a list button.....	47
	8.25.5 How to use a list button.....	47

8.26	Menu/menu bar.....	47
	8.26.1 Description.....	47
	8.26.2 Components.....	48
	8.26.3 States.....	48
	8.26.4 When to use a menu.....	48
	8.26.5 How to use a menu.....	49
8.27	Output pane.....	49
	8.27.1 Description.....	49
	8.27.2 Components.....	49
	8.27.3 States.....	49
	8.27.4 When to use an output pane.....	49
	8.27.5 How to use an output pane.....	49
8.28	Pointer.....	50
	8.28.1 Description.....	50
	8.28.2 Components.....	50
	8.28.3 States.....	50
	8.28.4 When to use a pointer.....	50
	8.28.5 How to use a pointer.....	50
8.29	Pop-up menu/contextual menu.....	51
	8.29.1 Description.....	51
	8.29.2 Components.....	51
	8.29.3 States.....	51
	8.29.4 When to use a pop-up menu.....	51
	8.29.5 How to use a pop-up menu.....	51
8.30	Progress indicator.....	52
	8.30.1 Description.....	52
	8.30.2 Components.....	52
	8.30.3 States.....	52
	8.30.4 When to use a progress indicator.....	52
	8.30.5 How to use a progress indicator.....	52
8.31	Prompt.....	52
	8.31.1 Description.....	52
	8.31.2 Components.....	52
	8.31.3 States.....	53
	8.31.4 When to use a prompt.....	53
	8.31.5 How to use a prompt.....	53
8.32	Push button/command button.....	53
	8.32.1 Description.....	53
	8.32.2 Components.....	53
	8.32.3 States.....	54
	8.32.4 When to use a push button.....	54
	8.32.5 How to use a push button.....	54
8.33	Radio button.....	54
	8.33.1 Description.....	54
	8.33.2 Components.....	55
	8.33.3 States.....	55
	8.33.4 When to use a radio button.....	55
	8.33.5 How to use a radio button.....	56
8.34	Read only field/protected field.....	56
	8.34.1 Description.....	56
	8.34.2 Components.....	56
	8.34.3 States.....	57
	8.34.4 When to use a read only field.....	57
	8.34.5 How to use a read only field.....	57

8.35	Scroll bar	57
8.35.1	Description	57
8.35.2	Components	57
8.35.3	States	58
8.35.4	When to use a scroll bar	58
8.35.5	How to use a scroll bar	58
8.36	Scroll handle/elevator/scroll box/thumb	58
8.36.1	Description	58
8.36.2	Components	59
8.36.3	States	59
8.36.4	When to use scroll handle	59
8.36.5	How to use scroll handle	59
8.37	Selection cursor	59
8.37.1	Description	59
8.37.2	Components	59
8.37.3	States	60
8.37.4	When to use a selection cursor	60
8.37.5	How to use a selection cursor	60
8.38	Selection indication	60
8.38.1	Description	60
8.38.2	Components	60
8.38.3	States	61
8.38.4	When to use a selection indication	61
8.38.5	How to use a selection indication	61
8.39	Selection list/choice list	61
8.39.1	Description	61
8.39.2	Components	62
8.39.3	States	62
8.39.4	When to use a selection list	62
8.39.5	How to use a selection list	62
8.40	Status information	63
8.40.1	Description	63
8.40.2	Components	63
8.40.3	States	63
8.40.4	When to use status information	63
8.40.5	How to use status information	63
8.41	Stepper/spin button	63
8.41.1	Description	63
8.41.2	Components	64
8.41.3	States	64
8.41.4	When to use a stepper	64
8.41.5	How to use a stepper	64
8.42	System message	64
8.42.1	Description	64
8.42.2	Components	65
8.42.3	States	65
8.42.4	When to use a system message	65
8.42.5	How to use system message	65
8.43	Tab set	66
8.43.1	Description	66
8.43.2	Components	66
8.43.3	States	66
8.43.4	When to use a tab set	66
8.43.5	How to use a tab set	67
8.44	Table	67
8.44.1	Description	67
8.44.2	Components	67
8.44.3	States	68
8.44.4	When to use a table	68
8.44.5	How to use a table	68

8.45	Text field	68
8.45.1	Description	68
8.45.2	Components	69
8.45.3	States	69
8.45.4	When to use a text field	69
8.45.5	How to use a text field	69
8.46	Time picker	69
8.46.1	Description	69
8.46.2	Components	69
8.46.3	States	70
8.46.4	When to use a time picker	70
8.46.5	How to use a time picker	71
8.47	Title	71
8.47.1	Description	71
8.47.2	Components	71
8.47.3	States	71
8.47.4	When to use a title	71
8.47.5	How to use title	72
8.48	Toggle button	72
8.48.1	Description	72
8.48.2	Components	72
8.48.3	States	72
8.48.4	When to use a toggle button	72
8.48.5	How to use a toggle button	72
8.49	Tool bar	73
8.49.1	Description	73
8.49.2	Components	73
8.49.3	States	73
8.49.4	When to use a tool bar	73
8.49.5	How to use a tool bar	73
8.50	Tool tip	73
8.50.1	Description	73
8.50.2	Components	74
8.50.3	States	74
8.50.4	When to use a tool tip	74
8.50.5	How to use a tool tip	74
8.51	Window	74
8.51.1	Description	74
8.51.2	Components	74
8.51.3	States	75
8.51.4	When to use a window	75
8.51.5	How to use window	75

<b>Annex A (informative) Choosing visual user interface elements</b>	<b>76</b>
--	-----------

<b>Bibliography</b>	<b>80</b>
---------------------	-----------