

<b>STN</b>	<b>Požiadavky na prístupnosť vhodné vo verejnom obstarávaní produktov a služieb IKT v Európe.</b>	<b>STN EN 301 549 V1.1.2</b>  87 1549
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Accessibility requirements suitable for public procurement of ICT products and services in Europe

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/15

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## Accessibility requirements suitable for public procurement of ICT products and services in Europe



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# Contents

Contents .....	3
Intellectual Property Rights .....	15
Foreword.....	15
Modal verbs terminology .....	15
Introduction .....	15
1 Scope .....	16
2 References .....	16
2.1 Normative references .....	16
2.2 Informative references .....	17
3 Definitions and abbreviations.....	18
3.1 Definitions .....	18
3.2 Abbreviations.....	21
4 Functional performance.....	21
4.1 Meeting functional performance statements .....	21
4.2 Functional performance statements .....	22
4.2.1 Usage without vision .....	22
4.2.2 Usage with limited vision.....	22
4.2.3 Usage without perception of colour .....	22
4.2.4 Usage without hearing.....	22
4.2.5 Usage with limited hearing .....	22
4.2.6 Usage without vocal capability .....	22
4.2.7 Usage with limited manipulation or strength .....	23
4.2.8 Usage with limited reach.....	23
4.2.9 Minimize photosensitive seizure triggers.....	23
4.2.10 Usage with limited cognition .....	23
4.2.11 Privacy .....	23
5 Generic requirements .....	23
5.1 Closed functionality.....	23
5.1.1 Introduction (Informative).....	23
5.1.2 General .....	24
5.1.2.1 Closed functionality.....	24
5.1.2.2 Assistive technology.....	24
5.1.3 Non-visual access .....	24
5.1.3.1 General .....	24
5.1.3.2 Auditory output delivery including speech.....	24
5.1.3.3 Auditory output correlation .....	24
5.1.3.4 Speech output user control .....	25
5.1.3.5 Speech output automatic interruption .....	25
5.1.3.6 Speech output for non-text content.....	25
5.1.3.7 Speech output for video information .....	25
5.1.3.8 Masked entry .....	25
5.1.3.9 Private access to personal data .....	25
5.1.3.10 Non-interfering audio output .....	26
5.1.3.11 Private listening volume .....	26
5.1.3.12 Speaker volume .....	26
5.1.3.13 Volume reset.....	26
5.1.3.14 Spoken languages .....	26
5.1.3.15 Non-visual error identification .....	26
5.1.3.16 Receipts, tickets, and transactional outputs .....	26
5.1.4 Functionality closed to text enlargement.....	26
5.1.5 Visual output for auditory information.....	27
5.1.6 Operation without keyboard interface .....	27
5.1.6.1 Closed functionality.....	27

5.1.6.2	Input focus .....	27
5.2	Activation of accessibility features .....	27
5.3	Biometrics .....	27
5.4	Preservation of accessibility information during conversion .....	27
5.5	Operable parts .....	27
5.5.1	Means of operation .....	27
5.5.2	Operable parts discernibility .....	28
5.6	Locking or toggle controls .....	28
5.6.1	Tactile or auditory status .....	28
5.6.2	Visual status .....	28
5.7	Key repeat .....	28
5.8	Double-strike key acceptance .....	28
5.9	Simultaneous user actions .....	28
6	ICT with two-way voice communication .....	28
6.1	Audio bandwidth for speech (informative recommendation) .....	28
6.2	Real-time text (RTT) functionality .....	29
6.2.1	RTT provision .....	29
6.2.1.1	RTT communication .....	29
6.2.1.2	Concurrent voice and text .....	29
6.2.2	Display of Real-time Text .....	29
6.2.2.1	Visually distinguishable display .....	29
6.2.2.2	Programmatically determinable send and receive direction .....	29
6.2.3	Interoperability .....	29
6.2.4	Real-time text responsiveness .....	30
6.3	Caller ID .....	30
6.4	Alternatives to voice-based services .....	30
6.5	Video communication .....	30
6.5.1	General (informative) .....	30
6.5.2	Resolution .....	30
6.5.3	Frame rate .....	30
6.5.4	Synchronization between audio and video .....	31
6.6	Alternatives to video-based services .....	31
7	ICT with video capabilities .....	31
7.1	Caption processing technology .....	31
7.1.1	Captioning playback .....	31
7.1.2	Captioning synchronization .....	31
7.1.3	Preservation of captioning .....	31
7.2	Audio description technology .....	31
7.2.1	Audio description playback .....	31
7.2.2	Audio description synchronization .....	32
7.2.3	Preservation of audio description .....	32
7.3	User controls for captions and audio description .....	32
8	Hardware .....	32
8.1	General .....	32
8.1.1	Generic requirements .....	32
8.1.2	Standard connections .....	32
8.1.3	Colour .....	32
8.2	Hardware products with speech output .....	33
8.2.1	Speech volume gain .....	33
8.2.1.1	Speech volume range .....	33
8.2.1.2	Incremental volume control .....	33
8.2.2	Magnetic coupling .....	33
8.2.2.1	Fixed-line devices .....	33
8.2.2.2	Wireless communication devices .....	33
8.3	Physical access to ICT .....	33
8.3.1	General (informative) .....	33
8.3.2	Clear floor or ground space .....	34
8.3.2.1	Change in level .....	34
8.3.2.2	Clear floor or ground space .....	34
8.3.2.3	Approach .....	34

8.3.2.3.1	General.....	34
8.3.2.3.2	Forward approach .....	34
8.3.2.3.3	Parallel approach.....	35
8.3.2.4	Knee and toe clearance width .....	35
8.3.2.5	Toe clearance.....	35
8.3.2.6	Knee clearance.....	36
8.3.3	Reach range for ICT.....	36
8.3.3.1	Forward reach.....	36
8.3.3.1.1	Unobstructed high forward reach.....	36
8.3.3.1.2	Unobstructed low forward reach.....	36
8.3.3.1.3	Obstructed reach .....	37
8.3.3.2	Side reach .....	37
8.3.3.2.1	Unobstructed high side reach.....	37
8.3.3.2.2	Unobstructed low side reach .....	37
8.3.3.2.3	Obstructed side reach.....	38
8.3.4	Visibility.....	38
8.3.5	Installation instructions .....	38
8.4	Mechanically operable parts .....	38
8.4.1	Numeric keys .....	38
8.4.2	Operation of mechanical parts.....	38
8.4.2.1	Means of operation of mechanical parts .....	38
8.4.2.2	Force of operation of mechanical parts.....	39
8.4.3	Keys, tickets and fare cards.....	39
8.5	Tactile indication of speech mode .....	39
9	Web .....	39
9.1	General (informative) .....	39
9.2	Web content requirements .....	40
9.2.1	Non-text content.....	40
9.2.2	Audio-only and video-only (pre-recorded) .....	40
9.2.3	Captions (pre-recorded).....	40
9.2.4	Audio description or media alternative (pre-recorded) .....	40
9.2.5	Captions (live).....	40
9.2.6	Audio description (pre-recorded).....	40
9.2.7	Info and relationships .....	40
9.2.8	Meaningful sequence.....	40
9.2.9	Sensory characteristics .....	40
9.2.10	Use of colour .....	40
9.2.11	Audio control .....	40
9.2.12	Contrast (minimum) .....	40
9.2.13	Resize text.....	40
9.2.14	Images of text.....	40
9.2.15	Keyboard.....	41
9.2.16	No keyboard trap.....	41
9.2.17	Timing adjustable.....	41
9.2.18	Pause, stop, hide.....	41
9.2.19	Three flashes or below threshold.....	41
9.2.20	Bypass blocks.....	41
9.2.21	Page titled.....	41
9.2.22	Focus Order.....	41
9.2.23	Link purpose (in context) .....	41
9.2.24	Multiple ways.....	41
9.2.25	Headings and labels.....	41
9.2.26	Focus visible.....	41
9.2.27	Language of page .....	41
9.2.28	Language of parts .....	41
9.2.29	On focus .....	41
9.2.30	On input.....	42
9.2.31	Consistent navigation .....	42
9.2.32	Consistent identification.....	42
9.2.33	Error identification .....	42
9.2.34	Labels or instructions .....	42

9.2.35	Error suggestion .....	42
9.2.36	Error prevention (legal, financial, data) .....	42
9.2.37	Parsing.....	42
9.2.38	Name, role, value .....	42
9.3	WCAG 2.0 conformance requirements.....	42
10	Non-web documents.....	43
10.1	General (informative) .....	43
10.2	Document success criteria .....	43
10.2.1	Non-text content.....	43
10.2.2	Audio-only and video-only (pre-recorded) .....	44
10.2.3	Captions (pre-recorded).....	44
10.2.4	Audio description or media alternative (pre-recorded) .....	44
10.2.5	Captions (live).....	45
10.2.6	Audio description (pre-recorded) .....	45
10.2.7	Info and relationships .....	45
10.2.8	Meaningful sequence.....	45
10.2.9	Sensory characteristics .....	45
10.2.10	Use of colour .....	46
10.2.11	Audio control .....	46
10.2.12	Contrast (minimum) .....	46
10.2.13	Resize text .....	46
10.2.14	Images of text.....	47
10.2.15	Keyboard.....	47
10.2.16	No keyboard trap.....	47
10.2.17	Timing adjustable.....	48
10.2.18	Pause, stop, hide .....	48
10.2.19	Three flashes or below threshold.....	49
10.2.20	Empty clause .....	49
10.2.21	Document titled.....	49
10.2.22	Focus order.....	49
10.2.23	Link purpose (in context) .....	49
10.2.24	Empty clause .....	49
10.2.25	Headings and labels.....	50
10.2.26	Focus visible.....	50
10.2.27	Language of document .....	50
10.2.28	Language of parts .....	50
10.2.29	On focus .....	51
10.2.30	On input.....	51
10.2.31	Empty clause .....	51
10.2.32	Empty clause .....	51
10.2.33	Error identification .....	51
10.2.34	Labels or instructions .....	51
10.2.35	Error suggestion .....	52
10.2.36	Error prevention (legal, financial, data) .....	52
10.2.37	Parsing.....	52
10.2.38	Name, role, value .....	53
10.2.39	Caption positioning .....	53
10.2.40	Audio description timing.....	53
11	Software .....	53
11.1	General (informative) .....	53
11.2	Non-Web software success criteria.....	53
11.2.1	Non-Web software success criteria (excluding closed functionality) .....	54
11.2.1.1	Non-text content (screen reading supported).....	54
11.2.1.2	Audio-only and video-only (pre-recorded).....	55
11.2.1.3	Captions (pre-recorded).....	55
11.2.1.4	Audio description or media alternative (pre-recorded).....	55
11.2.1.5	Captions (live) .....	56
11.2.1.6	Audio description (pre-recorded) .....	56
11.2.1.7	Info and relationships .....	56
11.2.1.8	Meaningful sequence.....	56



11.2.1.9	Sensory characteristics .....	57
11.2.1.10	Use of colour .....	57
11.2.1.11	Audio control .....	57
11.2.1.12	Contrast (minimum) .....	57
11.2.1.13	Resize text .....	58
11.2.1.14	Images of text .....	58
11.2.1.15	Keyboard .....	58
11.2.1.16	No keyboard trap .....	59
11.2.1.17	Timing adjustable .....	59
11.2.1.18	Pause, stop, hide .....	60
11.2.1.19	Three flashes or below threshold .....	60
11.2.1.20	Empty clause .....	60
11.2.1.21	Empty clause .....	60
11.2.1.22	Focus order .....	61
11.2.1.23	Link purpose (in context) .....	61
11.2.1.24	Empty clause .....	61
11.2.1.25	Headings and labels .....	61
11.2.1.26	Focus visible .....	61
11.2.1.27	Language of software .....	62
11.2.1.28	Empty clause .....	62
11.2.1.29	On focus .....	62
11.2.1.30	On input .....	62
11.2.1.31	Empty clause .....	62
11.2.1.32	Empty clause .....	62
11.2.1.33	Error identification .....	63
11.2.1.34	Labels or instructions .....	63
11.2.1.35	Error suggestion .....	63
11.2.1.36	Error prevention (legal, financial, data) .....	63
11.2.1.37	Parsing .....	64
11.2.1.38	Name, role, value .....	64
11.2.2	Non-Web software requirements (closed functionality) .....	65
11.2.2.1	Non-text content .....	65
11.2.2.2	Audio-only and video-only (pre-recorded) .....	65
11.2.2.2.1	Pre-recorded audio-only .....	65
11.2.2.2.2	Pre-recorded video-only .....	65
11.2.2.3	Empty clause .....	65
11.2.2.4	Audio description or media alternative (pre-recorded) .....	65
11.2.2.5	Empty clause .....	65
11.2.2.6	Empty clause .....	65
11.2.2.7	Info and relationships .....	66
11.2.2.8	Meaningful sequence .....	66
11.2.2.9	Empty clause .....	66
11.2.2.10	Empty clause .....	66
11.2.2.11	Empty clause .....	66
11.2.2.12	Empty clause .....	66
11.2.2.13	Resize text .....	66
11.2.2.14	Images of text .....	67
11.2.2.15	Keyboard .....	67
11.2.2.16	Empty clause .....	67
11.2.2.17	Empty clause .....	67
11.2.2.18	Empty clause .....	67
11.2.2.19	Empty clause .....	67
11.2.2.20	Empty clause .....	67
11.2.2.21	Empty clause .....	67
11.2.2.22	Empty clause .....	67
11.2.2.23	Empty clause .....	67
11.2.2.24	Empty clause .....	67
11.2.2.25	Empty clause .....	67
11.2.2.26	Empty clause .....	68
11.2.2.27	Language of software .....	68
11.2.2.28	Empty clause .....	68
11.2.2.29	Empty clause .....	68

11.2.2.30	Empty clause .....	68
11.2.2.31	Empty clause .....	68
11.2.2.32	Empty clause .....	68
11.2.2.33	Error Identification .....	68
11.2.2.34	Empty clause .....	68
11.2.2.35	Empty clause .....	68
11.2.2.36	Empty clause .....	68
11.2.2.37	Parsing .....	69
11.2.2.38	Name, role, value .....	69
11.3	Interoperability with assistive technology .....	69
11.3.1	Closed functionality .....	69
11.3.2	Accessibility services .....	69
11.3.2.1	Platform accessibility service support for software that provides a user .....	69
11.3.2.2	Platform accessibility service support for assistive technologies .....	69
11.3.2.3	Use of accessibility services .....	70
11.3.2.4	Assistive technology .....	70
11.3.2.5	Object information .....	70
11.3.2.6	Row, column, and headers .....	70
11.3.2.7	Values .....	70
11.3.2.8	Label relationships .....	70
11.3.2.9	Parent-child relationships .....	70
11.3.2.10	Text .....	71
11.3.2.11	List of available actions .....	71
11.3.2.12	Execution of available actions .....	71
11.3.2.13	Tracking of focus and selection attributes .....	71
11.3.2.14	Modification of focus and selection attributes .....	71
11.3.2.15	Change notification .....	71
11.3.2.16	Modifications of states and properties .....	71
11.3.2.17	Modifications of values and text .....	72
11.4	Documented accessibility usage .....	72
11.4.1	User control of accessibility features .....	72
11.4.2	No disruption of accessibility features .....	72
11.5	User preferences .....	72
11.6	Authoring tools .....	72
11.6.1	Content technology .....	72
11.6.2	Accessible content creation .....	72
11.6.3	Preservation of accessibility information in transformations .....	72
11.6.4	Repair assistance .....	73
11.6.5	Templates .....	73
12	Documentation and support services .....	73
12.1	Product documentation .....	73
12.1.1	Accessibility and compatibility features .....	73
12.1.2	Accessible documentation .....	73
12.2	Support services .....	73
12.2.1	General (informative) .....	73
12.2.2	Information on accessibility and compatibility features .....	74
12.2.3	Effective communication .....	74
12.2.4	Accessible documentation .....	74
13	ICT providing relay or emergency service access .....	74
13.1	Relay services requirements .....	74
13.1.1	General (informative) .....	74
13.1.2	Text relay services .....	74
13.1.3	Sign relay services .....	74
13.1.4	Lip-reading relay services .....	74
13.1.5	Captioned telephony services .....	75
13.1.6	Speech to speech relay services .....	75
13.2	Access to relay services .....	75
13.3	Access to emergency services .....	75
Annex A (informative): WCAG 2.0 .....		76
A.1	Electronic attachment .....	76

Annex B (informative): Relationship between requirements and functional performance statements .....	77
B.1 Relationships between clauses 5 to 13 and the functional performance statements .....	77
Annex C (normative): Determination of compliance .....	84
C.1 Introduction .....	84
C.2 Blank clause .....	84
C.3 Blank clause .....	84
C.4 Functional performance .....	84
C.5 Generic requirements .....	85
C.5.1 Closed functionality .....	85
C.5.1.1 Introduction .....	85
C.5.1.2 General .....	85
C.5.1.2.1 Closed functionality .....	85
C.5.1.2.2 Assistive technology .....	85
C.5.1.3 Non-visual access .....	85
C.5.1.3.1 General .....	85
C.5.1.3.2 Auditory output delivery including speech .....	85
C.5.1.3.3 Auditory output correlation .....	85
C.5.1.3.4 Speech output user control .....	86
C.5.1.3.5 Speech output automatic interruption .....	86
C.5.1.3.6 Speech output for non-text content .....	86
C.5.1.3.7 Speech output for video information .....	86
C.5.1.3.8 Masked entry .....	86
C.5.1.3.9 Private access to personal data .....	87
C.5.1.3.10 Non-interfering audio output .....	87
C.5.1.3.11 Private listening volume .....	87
C.5.1.3.12 Speaker volume .....	87
C.5.1.3.13 Volume reset .....	87
C.5.1.3.14 Spoken languages .....	88
C.5.1.3.15 Non-visual error identification .....	88
C.5.1.3.16 Receipts, tickets, and transactional outputs .....	88
C.5.1.4 Functionality closed to text enlargement .....	88
C.5.1.5 Visual output for auditory information .....	88
C.5.1.6 Operation without keyboard interface .....	89
C.5.1.6.1 Closed functionality .....	89
C.5.1.6.2 Input focus .....	89
C.5.2 Activation of accessibility features .....	89
C.5.3 Biometrics .....	89
C.5.4 Preservation of accessibility information during conversion .....	89
C.5.5 Operable parts .....	90
C.5.5.1 Means of operation .....	90
C.5.5.2 Operable part discernibility .....	90
C.5.6 Locking or toggle controls .....	90
C.5.6.1 Tactile or auditory status .....	90
C.5.6.2 Visual status .....	90
C.5.7 Key repeat .....	90
C.5.8 Double-strike key acceptance .....	91
C.5.9 Simultaneous user actions .....	91
C.6 ICT with two-way voice communication .....	91
C.6.1 Audio bandwidth for speech .....	91
C.6.2 Real-Time Text (RTT) functionality .....	91
C.6.2.1 RTT provision .....	91
C.6.2.1.1 RTT communication .....	91
C.6.2.1.2 Concurrent voice and text .....	92
C.6.2.2 Display of Real-Time Text .....	92
C.6.2.2.1 Visually distinguishable display .....	92
C.6.2.2.2 Programmatically determinable send and receive direction .....	92
C.6.2.3 Interoperability .....	93
C.6.2.4 Real-Time Text responsiveness .....	93
C.6.3 Caller ID .....	93
C.6.4 Alternatives to voice-based services .....	93
C.6.5 Video communication .....	94

C.6.5.1	General .....	94
C.6.5.2	Resolution.....	94
C.6.5.3	Frame rate.....	94
C.6.5.4	Synchronization between audio and video .....	94
C.6.6	Alternatives to video-based services .....	94
C.7	ICT with video capabilities .....	94
C.7.1	Caption processing technology .....	94
C.7.1.1	Captioning playback.....	94
C.7.1.2	Captioning synchronization.....	95
C.7.1.3	Preservation of captioning.....	95
C.7.2	Audio description technology .....	95
C.7.2.1	Audio description playback.....	95
C.7.2.2	Audio description synchronization.....	95
C.7.2.3	Preservation of audio description .....	95
C.7.3	User controls for captions and audio description .....	95
C.8	Hardware .....	96
C.8.1	General.....	96
C.8.1.1	Generic requirements.....	96
C.8.1.2	Standard connections.....	96
C.8.1.3	Colour.....	96
C.8.2	Hardware products with speech output .....	96
C.8.2.1	Speech volume gain.....	96
C.8.2.1.1	Speech volume range .....	96
C.8.2.1.2	Incremental volume control .....	96
C.8.2.2	Magnetic coupling .....	97
C.8.2.2.1	Fixed-line devices .....	97
C.8.2.2.2	Wireless communication devices.....	97
C.8.3	Physical access to ICT.....	97
C.8.3.1	General .....	97
C.8.3.2	Clear floor or ground space .....	97
C.8.3.2.1	Change in level .....	97
C.8.3.2.2	Clear floor or ground space.....	98
C.8.3.2.3	Approach.....	98
C.8.3.2.3.1	General .....	98
C.8.3.2.3.2	Forward Approach.....	98
C.8.3.2.3.3	Parallel Approach.....	98
C.8.3.2.4	Knee and toe clearance width .....	98
C.8.3.2.5	Toe clearance .....	98
C.8.3.2.6	Knee clearance .....	99
C.8.3.3	Reach range for ICT .....	100
C.8.3.3.1	Forward reach .....	100
C.8.3.3.1.1	Unobstructed high forward reach .....	100
C.8.3.3.1.2	Unobstructed low forward reach .....	100
C.8.3.3.1.3	Obstructed reach.....	100
C.8.3.3.2	Side reach.....	101
C.8.3.3.2.1	Unobstructed high side reach .....	101
C.8.3.3.2.2	Unobstructed low side reach .....	101
C.8.3.3.2.3	Obstructed side reach .....	101
C.8.3.4	Visibility .....	101
C.8.3.5	Installation instructions.....	102
C.8.4	Mechanically operable parts.....	102
C.8.4.1	Numeric keys.....	102
C.8.4.2	Operation of mechanical parts .....	102
C.8.4.2.1	Means of operation of mechanical parts .....	102
C.8.4.2.2	Force of operation of mechanical parts .....	102
C.8.4.3	Keys, tickets and fare cards .....	102
C.8.5	Tactile indication of speech mode.....	102
C.9	Web.....	103
C.9.1	General (informative).....	103
C.9.2	Web content requirements.....	103
C.9.2.1	Non-text content .....	103
C.9.2.2	Audio-only and video-only (pre-recorded).....	103

C.9.2.3	Captions (pre-recorded).....	103
C.9.2.4	Audio description or media alternative (pre-recorded).....	103
C.9.2.5	Captions (live).....	103
C.9.2.6	Audio description (pre-recorded).....	104
C.9.2.7	Info and relationships.....	104
C.9.2.8	Meaningful sequence.....	104
C.9.2.9	Sensory characteristics.....	104
C.9.2.10	Use of colour.....	104
C.9.2.11	Audio control.....	104
C.9.2.12	Contrast (minimum).....	105
C.9.2.13	Resize text.....	105
C.9.2.14	Images of text.....	105
C.9.2.15	Keyboard.....	105
C.9.2.16	No keyboard trap.....	105
C.9.2.17	Timing adjustable.....	105
C.9.2.18	Pause, stop, hide.....	106
C.9.2.19	Three flashes or below threshold.....	106
C.9.2.20	Bypass blocks.....	106
C.9.2.21	Page titled.....	106
C.9.2.22	Focus Order.....	106
C.9.2.23	Link purpose (in context).....	106
C.9.2.24	Multiple ways.....	107
C.9.2.25	Headings and labels.....	107
C.9.2.26	Focus visible.....	107
C.9.2.27	Language of page.....	107
C.9.2.28	Language of parts.....	107
C.9.2.29	On focus.....	107
C.9.2.30	On input.....	108
C.9.2.31	Consistent navigation.....	108
C.9.2.32	Consistent identification.....	108
C.9.2.33	Error identification.....	108
C.9.2.34	Labels or instructions.....	108
C.9.2.35	Error suggestion.....	108
C.9.2.36	Error prevention (legal, financial, data).....	109
C.9.2.37	Parsing.....	109
C.9.2.38	Name, role, value.....	109
C.9.3	WCAG 2.0 conformance requirements.....	109
C.10	Non-web documents.....	109
C.10.1	General.....	109
C.10.2	Document success criteria.....	109
C.10.2.1	Non-text content.....	109
C.10.2.2	Audio-only and video-only (pre-recorded).....	110
C.10.2.3	Captions (pre-recorded).....	110
C.10.2.4	Audio description or media alternative (pre-recorded).....	110
C.10.2.5	Captions (live).....	110
C.10.2.6	Audio description (pre-recorded).....	110
C.10.2.7	Info and relationships.....	110
C.10.2.8	Meaningful sequence.....	110
C.10.2.9	Sensory characteristics.....	111
C.10.2.10	Use of colour.....	111
C.10.2.11	Audio control.....	111
C.10.2.12	Contrast (minimum).....	111
C.10.2.13	Resize text.....	111
C.10.2.14	Images of text.....	111
C.10.2.15	Keyboard.....	111
C.10.2.16	No keyboard trap.....	112
C.10.2.17	Timing adjustable.....	112
C.10.2.18	Pause, stop, hide.....	112
C.10.2.19	Three flashes or below threshold.....	112
C.10.2.20	Empty clause.....	112
C.10.2.21	Document titled.....	112
C.10.2.22	Focus order.....	112

C.10.2.23	Link purpose (in context) .....	113
C.10.2.24	Empty clause .....	113
C.10.2.25	Headings and labels .....	113
C.10.2.26	Focus visible .....	113
C.10.2.27	Language of document .....	113
C.10.2.28	Language of parts .....	113
C.10.2.29	On focus .....	113
C.10.2.30	On input .....	114
C.10.2.31	Empty clause .....	114
C.10.2.32	Empty clause .....	114
C.10.2.33	Error identification .....	114
C.10.2.34	Labels or instructions .....	114
C.10.2.35	Error suggestion .....	114
C.10.2.36	Error prevention (legal, financial, data) .....	114
C.10.2.37	Parsing .....	114
C.10.2.38	Name, role, value .....	115
C.10.2.39	Caption positioning .....	115
C.10.2.40	Audio description timing .....	115
C.11	Software .....	115
C.11.1	General .....	115
C.11.2	Non-Web software success criteria .....	115
C.11.2.1	Non-Web software success criteria (excluding closed functionality) .....	115
C.11.2.1.1	Non-text content (screen reading supported) .....	115
C.11.2.1.2	Audio-only and video-only (pre-recorded) .....	115
C.11.2.1.3	Captions (pre-recorded) .....	115
C.11.2.1.4	Audio description or media alternative (pre-recorded) .....	116
C.11.2.1.5	Captions (live) .....	116
C.11.2.1.6	Audio description (pre-recorded) .....	116
C.11.2.1.7	Info and relationships .....	116
C.11.2.1.8	Meaningful sequence .....	116
C.11.2.1.9	Sensory characteristics .....	116
C.11.2.1.10	Use of colour .....	116
C.11.2.1.11	Audio control .....	117
C.11.2.1.12	Contrast (minimum) .....	117
C.11.2.1.13	Resize text .....	117
C.11.2.1.14	Images of text .....	117
C.11.2.1.15	Keyboard .....	117
C.11.2.1.16	No keyboard trap .....	117
C.11.2.1.17	Timing adjustable .....	117
C.11.2.1.18	Pause, stop, hide .....	118
C.11.2.1.19	Three flashes or below threshold .....	118
C.11.2.1.20	Empty clause .....	118
C.11.2.1.21	Empty clause .....	118
C.11.2.1.22	Focus order .....	118
C.11.2.1.23	Link purpose (in context) .....	118
C.11.2.1.24	Empty clause .....	118
C.11.2.1.25	Headings and labels .....	118
C.11.2.1.26	Focus visible .....	118
C.11.2.1.27	Language of software .....	119
C.11.2.1.28	Empty clause .....	119
C.11.2.1.29	On focus .....	119
C.11.2.1.30	On input .....	119
C.11.2.1.31	Empty clause .....	119
C.11.2.1.32	Empty clause .....	119
C.11.2.1.33	Error identification .....	119
C.11.2.1.34	Labels or instructions .....	119
C.11.2.1.35	Error suggestion .....	120
C.11.2.1.36	Error prevention (legal, financial, data) .....	120
C.11.2.1.37	Parsing .....	120
C.11.2.1.38	Name, role, value .....	120
C.11.2.2	Non-Web software requirements (closed functionality) .....	120
C.11.2.2.1	Non-text content .....	120

C.11.2.2.2	Audio-only and video-only (pre-recorded) .....	121
C.11.2.2.2.1	Pre-recorded audio-only .....	121
C.11.2.2.2.2	Pre-recorded video-only .....	121
C.11.2.2.3	Empty clause .....	121
C.11.2.2.4	Audio description or media alternative (pre-recorded) .....	121
C.11.2.2.5	Empty clause .....	121
C.11.2.2.6	Empty clause .....	121
C.11.2.2.7	Info and relationships .....	121
C.11.2.2.8	Meaningful sequence .....	121
C.11.2.2.9	Empty clause .....	121
C.11.2.2.10	Empty clause .....	122
C.11.2.2.11	Empty clause .....	122
C.11.2.2.12	Empty clause .....	122
C.11.2.2.13	Resize text .....	122
C.11.2.2.14	Images of text .....	122
C.11.2.2.15	Keyboard .....	122
C.11.2.2.16	Empty clause .....	122
C.11.2.2.17	Empty clause .....	122
C.11.2.2.18	Empty clause .....	122
C.11.2.2.19	Empty clause .....	122
C.11.2.2.20	Empty clause .....	122
C.11.2.2.21	Empty clause .....	122
C.11.2.2.22	Empty clause .....	122
C.11.2.2.23	Empty clause .....	123
C.11.2.2.24	Empty clause .....	123
C.11.2.2.25	Empty clause .....	123
C.11.2.2.26	Empty clause .....	123
C.11.2.2.27	Language of software .....	123
C.11.2.2.28	Empty clause .....	123
C.11.2.2.29	Empty clause .....	123
C.11.2.2.30	Empty clause .....	123
C.11.2.2.31	Empty clause .....	123
C.11.2.2.32	Empty clause .....	123
C.11.2.2.33	Error Identification .....	123
C.11.2.2.34	Empty clause .....	124
C.11.2.2.35	Empty clause .....	124
C.11.2.2.36	Empty clause .....	124
C.11.2.2.37	Parsing .....	124
C.11.2.2.38	Name, role, value .....	124
C.11.3	Interoperability with assistive technology .....	124
C.11.3.1	Closed functionality .....	124
C.11.3.2	Accessibility services .....	124
C.11.3.2.1	Platform accessibility service support for software that provides a user interface .....	124
C.11.3.2.2	Platform accessibility service support for assistive technologies .....	124
C.11.3.2.3	Use of accessibility services .....	125
C.11.3.2.4	Assistive technology .....	125
C.11.3.2.5	Object information .....	125
C.11.3.2.6	Row, column, and headers .....	125
C.11.3.2.7	Values .....	126
C.11.3.2.8	Label relationships .....	126
C.11.3.2.9	Parent-child relationships .....	126
C.11.3.2.10	Text .....	127
C.11.3.2.11	List of available actions .....	127
C.11.3.2.12	Execution of available actions .....	127
C.11.3.2.13	Tracking of focus and selection attributes .....	127
C.11.3.2.14	Modification of focus and selection attributes .....	128
C.11.3.2.15	Change notification .....	128
C.11.3.2.16	Modifications of states and properties .....	128
C.11.3.2.17	Modifications of values and text .....	129
C.11.4	Documented accessibility usage .....	129
C.11.4.1	User control of accessibility features .....	129
C.11.4.2	No disruption of accessibility features .....	129

C.11.5	User preferences .....	129
C.11.6	Authoring tools.....	130
C.11.6.1	Content technology.....	130
C.11.6.2	Accessible content creation .....	130
C.11.6.3	Preservation of accessibility information in transformations .....	130
C.11.6.4	Repair assistance .....	130
C.11.6.5	Templates .....	131
C.12	Documentation and support services .....	131
C.12.1	Product documentation.....	131
C.12.1.1	Accessibility and compatibility features.....	131
C.12.1.2	Accessible documentation .....	131
C.12.2	Support services .....	131
C.12.2.1	General .....	131
C.12.2.2	Information on accessibility and compatibility features .....	131
C.12.2.3	Effective communication.....	132
C.12.2.4	Accessible documentation .....	132
C.13	ICT providing relay or emergency service access .....	132
C.13.1	Relay service requirements .....	132
C.13.1.1	General .....	132
C.13.1.2	Text relay services .....	132
C.13.1.3	Sign relay services .....	132
C.13.1.4	Lip-reading relay services .....	132
C.13.1.5	Captioned telephony services .....	133
C.13.1.6	Speech to speech relay services.....	133
C.13.2	Access to relay services.....	133
C.13.3	Access to emergency services .....	133
History .....		134



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## Foreword

This European Standard (EN) has been produced by ETSI Technical Committee Human Factors (HF), and the eAccessibility Joint Working Group (JWG) of CEN/CENELEC/ETSI.

National transposition dates	
Date of latest announcement of this EN (doa):	31 May 2015
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 November 2015
Date of withdrawal of any conflicting National Standard (dow):	30 November 2015

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## Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**may not**", "**need**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

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## Introduction

The present document is one of several deliverables that were prepared in response to Phase 2 of Mandate M 376 [i.3] from the European Commission to CEN, CENELEC and ETSI.

The primary objective of this proposal was to produce a European Standard (EN) (the present document) that sets out in a single source, detailed, practical and quantifiable functional accessibility requirements that take note of global initiatives in that field and which are applicable to all Information and Communication Technology (ICT) products and services identified in Phase I of the Mandate (ETSI TR 102 612 [i.9]) and usable in public procurement.

As the present document is intended to be used for conformity assessment it follows the principles of ISO/IEC 17007 [i.14]. As required by that Guide, it clearly sets out the functional accessibility requirements in a manner that is free from subjective elements and identifies objective, concise and accurate test methods that are intended to produce unambiguous, repeatable and reproducible results.

The present document is supported by two Technical Reports. The first (ETSI TR 101 550 [i.7]) lists the standards and technical specifications used in the creation of the compliance requirements for accessibility set out in the present document. It also provides a source reference for other documents needed to implement the test procedures required by the present document.

The second Technical Report (ETSI TR 101 551 [i.8]) gives guidance to procurers on the award criteria relevant to each of the accessibility-related needs of ICT users in the products and services under consideration.

---

# 1 Scope

The present document specifies the functional accessibility requirements applicable to ICT products and services, together with a description of the test procedures and evaluation methodology for each accessibility requirement in a form that is suitable for use in public procurement within Europe. The present document might be useful for other purposes such as procurement in the private sector.

The present document is intended to be used as the basis for an accessible ICT procurement toolkit. The present document will primarily be useful for public procurers to identify the requirements for their purchases, and also for manufacturers to employ it within their design, build and quality control procedures.

The present document contains the necessary functional requirements and provides a reference document such that if procedures are followed by different actors, the results of testing are similar and the interpretation of those results is clear.

The test descriptions and evaluation methodology included in the present document are elaborated to a level of detail compliant with ISO/IEC 17007:2009 [i.14], so that conformance testing can give conclusive results.

The inherent nature of certain situations makes it impossible to make reliable and definitive statements that accessibility requirements have been met. In those situations therefore, the requirements in the present document are not applicable:

- when the product is in a failure, repair or maintenance state where the ordinary set of input or output functions are not available;
- during those parts of start-up, shutdown, and other state transitions that can be completed without user interaction.

NOTE 1: Even in the above situations, it is best practice to apply requirements in the present document wherever it is feasible and safe to do so.

NOTE 2: Compliance issues are covered in normative clause C.1.

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## 2 References

### 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] ETSI ETS 300 381: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids".
- [2] ETSI ES 200 381-1: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids Part 1: Fixed-line speech terminals".
- [3] ETSI ES 200 381-2: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids; Part 2: Cellular speech terminals".
- [4] W3C Recommendation (11 December 2008)/ISO/IEC 40500:2012: "Web Content Accessibility Guidelines (WCAG) 2.0".

NOTE: Available at <http://www.w3.org/TR/WCAG20/>.

## 2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ANSI/IEEE C63.19 (2011): "American National Standard Method of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids".
- [i.2] ANSI/TIA-4965: "Receive volume control requirements for digital and analogue wireline terminals".
- [i.3] European Commission: "Standardization Mandate to CEN, CENELEC and ETSI in support of European accessibility requirements for public procurement of products and services in the ICT domain".
- [i.4] ETSI EG 201 013: "Human Factors (HF); Definitions, abbreviations and symbols".
- [i.5] ETSI ES 202 975: "Human Factors (HF); Harmonized relay services".
- [i.6] ETSI ETS 300 767: "Human Factors (HF); Telephone Prepayment Cards; Tactile Identifier".
- [i.7] CEN/CENELEC/ETSI TR 101 550: "Documents relevant to EN 301 549 "Accessibility requirements suitable for public procurement of ICT products and services in Europe".
- [i.8] CEN/CENELEC/ETSI TR 101 551: "Guidelines on the use of accessibility award criteria suitable for publicly procured ICT products and services in Europe".
- [i.9] ETSI TR 102 612: "Human Factors (HF); European accessibility requirements for public procurement of products and services in the ICT domain (European Commission Mandate M 376, Phase 1)".
- [i.10] ETSI TS 126 114: "Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Multimedia telephony; Media handling and interaction (3GPP TS 26.114)".
- [i.11] ETSI TS 122 173: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1 (3GPP TS 22.173)".
- [i.12] ETSI TS 134 229: "Universal Mobile Telecommunications System (UMTS); LTE; Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification (3GPP TS 34.229)".
- [i.13] IETF RFC 4103 (2005): "RTP Payload for Text Conversation".
- [i.14] ISO/IEC 17007:2009: "Conformity assessment - Guidance for drafting normative documents suitable for use for conformity assessment".
- [i.15] ISO 9241-11:1998: "Ergonomic requirements for office work with visual display terminals (VDTs) -- Part 11: Guidance on usability".
- [i.16] ISO 9241-110:2006: "Ergonomics of human-system interaction -- Part 110: Dialogue principles".
- [i.17] ISO 9241-171:2008: "Ergonomics of human-system interaction-Part 171: Guidance on software accessibility".
- [i.18] ISO 26800:2011: "Ergonomics - General approach, principles and concepts".

- [i.19] ISO/IEC 13066-1:2011: "Information technology - Interoperability with assistive technology (AT) - Part 1: Requirements and recommendations for interoperability".
- [i.20] Recommendation ITU-T E.161 (2001): "Arrangement of digits, letters and symbols on telephones and other devices that can be used for gaining access to a telephone network".
- [i.21] Recommendation ITU-T G.722 (1988): "7 kHz audio-coding within 64 kbit/s".
- [i.22] Recommendation ITU-T G.722.2 (2003): "Wideband coding of speech at around 16 kbit/s using Adaptive Multi-Rate Wideband (AMR-WB)".
- [i.23] Recommendation ITU-T V.18 (2000): "Operational and interworking requirements for DCEs operating in the text telephone mode".
- [i.24] TIA-1083-A (2010): "Telecommunications; Telephone Terminal equipment; Handset magnetic measurement procedures and performance requirements".
- [i.25] US Department of Justice: "2010 ADA Standards for Accessible Design".
- [i.26] W3C Working Group Note 5 September 2013: "Guidance on Applying WCAG 2.0 to Non-Web Information and Communications Technologies (WCAG2ICT)".

NOTE: Available at <http://www.w3.org/TR/wcag2ict/>.

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**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**