



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



Reference

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Keywords

accessibility, HF, ICT, procurement

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Foreword

This draft European Standard (EN) has been produced by ETSI Technical Committee Human Factors (HF), and the eAccessibility Joint Working Group (JWG) of CEN/CENELEC/ETSI and is now submitted for the Public Enquiry phase of the ETSI standards Two-step Approval Procedure.

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Introduction

The present document was 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 ICT products and services identified in Phase I and usable in public procurement.

As the present document is intended to be used for conformity assessment it follows the principles of ISO/IEC 17007:2009 [i.13]. 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 (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 (TR 101 551 [i.8]) gives guidance to procurers on the award criteria relevant to each area of user needs 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 is intended to be used as the basis for an online procurement toolkit. It 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.

It reflects the needs of users of ICT and documents the accessibility features that are required in publicly procured ICT.

The present document contains all of 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.13], 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. For this reason, the requirements in the present document are not applicable:

- to the situation in which the party claiming accessibility exerts no control on the functionality or content;
- 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: 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.

2 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.

2.1 Normative references

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] ISO/IEC 40500 (2012): "Information technology - W3C Web Content Accessibility Guidelines (WCAG) 2.0".

- [5] W3C Recommendation (11 December 2008): "Web Content Accessibility Guidelines (WCAG) 2.0".

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

2.2 Informative references

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] ETSI TR 101 550: "Human Factors (HF); Documents relevant to European accessibility requirements for public procurement of products and services".
- [i.8] ETSI TR 101 551: "Human Factors (HF); Guidelines on accessibility award criteria for ICT products and services".
- [i.9] 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.10] 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.11] 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.12] IETF RFC 4103 (2005): "RTP Payload for Text Conversation".
- [i.13] ISO/IEC 17007 (2009): "Conformity assessment - Guidance for drafting normative documents suitable for use for conformity assessment".
- [i.14] ISO 9241-110 (2006): "Ergonomic requirements for office work with visual display terminals (VDTs)- Part 11: Guidance on usability".
- [i.15] ISO 9241-171 (2008): "Ergonomics of human-system interaction-Part 171: Guidance on software accessibility".
- [i.16] ISO 26800 (2011): "Ergonomics - General approach, principles and concepts".
- [i.17] ISO/IEC 13066-1 (2011): "Information technology - Interoperability with assistive technology (AT) - Part 1: Requirements and recommendations for interoperability".
- [i.18] 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.19] Recommendation ITU-T G.722 (1988): "7 kHz audio-coding within 64 kbit/s".

- [i.20] Recommendation ITU-T G 722.2 (2003): "Wideband coding of speech at around 16 kbit/s using Adaptive Multi-Rate Wideband (AMR-WB)".
- [i.21] Recommendation ITU-T V.18 (2000): "Operational and interworking requirements for DCEs operating in the text telephone mode".
- [i.22] TIA-1083-A (2010): "Telecommunications; Telephone Terminal equipment; Handset magnetic measurement procedures and performance requirements".
- [i.23] US Department of Justice: "2010 ADA Standards for Accessible Design".
- [i.24] W3C Working Draft (13 December 2012): "Guidance on Applying WCAG 2.0 to Non-Web Information and Communications Technologies".

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

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EG 201 013 [i.4] and the following apply:

accessibility: extent to which products, systems, services, environments and facilities can be used by people from a population with the widest range of characteristics and capabilities, to achieve a specified goal in a specified context of use (from ISO 26800 [i.16])

NOTE: Context of use includes direct use or use supported by assistive technologies.

assistive technology: hardware or software added to, connected to, or incorporated within, a system that increases accessibility for an individual (from ISO 9241-171 [i.15])

NOTE 1: Examples are Braille display, screen reader, screen magnification software, eye tracking devices.

NOTE 2: Where ICT does not support directly connected assistive technology, but which can be operated by a system connected over a network or other remote connection, such a separate system (with any included assistive technology) can also be considered assistive technology.

audio description: additional audible narrative, interleaved with the dialogue, which describes the significant aspects of the visual content of audio-visual media that cannot be understood from the main soundtrack alone

authoring tool: software that can be used to create or modify electronic content

NOTE 1: An authoring tool may be used by a single user or multiple users working collaboratively.

NOTE 2: An authoring tool may be a single stand-alone application or be comprised of collections of applications.

NOTE 3: An authoring tool may produce content that is intended for further modification or for use by end-users.

caption: synchronized visual and/or text alternative for both speech and non-speech audio information needed to understand the media content (after WCAG 2.0 [5])

NOTE: This is also variously described using terms such as "subtitles" or variants such as "subtitles for the deaf and hard-of-hearing".

closed functionality: functionality that is limited by characteristics that prevent a user from attaching, installing or using assistive technology

content: information and sensory experience to be communicated to the user by means of software, including the content's structure, presentation, and interactions (after WCAG 2.0 [5])

NOTE: Non-web content occurs in two places: documents and software. When content occurs in software, a separate user agent is not required in order to communicate the content's information and sensory experience to the user - the software itself does that.

context of use: users, tasks, equipment (hardware, software and materials), and the physical and social environments in which a product is used (from ISO 9241-110 [i.14])

document: logically distinct assembly of non-web content (a file, set of files, or streamed media) that is not part of software and that does not include its own user agent

NOTE 1: Letters, spreadsheets, books, pictures, presentations, and movies are examples of documents.

NOTE 2: A single document may be composed of multiple files such as the video content, closed caption text etc. This fact is not usually apparent to the end-user consuming the document/content.

ICT network: technology and resources supporting the connection and operation of interconnected ICT

non-text content: content that is not a sequence of characters that can be programmatically determined or where the sequence is not expressing something in human language (after WCAG 2.0 [5])

platform software: a collection of software components that runs on an underlying software or hardware layer, and that provides a set of software services to other software components that allows those applications to be isolated from the underlying software or hardware layer (after ISO/IEC 13066-1 [i.17])

NOTE: A particular software component might play the role of a platform in some situations and a client in others.

private listening: auditory output designed so that only the current user can receive the sound

NOTE: Personal headsets, directional speakers and audio hoods are examples of mechanisms for private listening.

programmatically determinable: able to be read by software from developer-supplied data in a way that other software, including assistive technologies, can extract and present this information to users in different modalities

NOTE: WCAG 2.0 uses "determined" where this definition uses "ability to be read" (to avoid ambiguity with the word "determined").

real-time text: form of text conversation in point to point situations or in multipoint conferencing where the text being entered is displayed in such a way that the communication is perceived by the user as being continuous

terminal: combination of hardware and/or software with which the end user directly interacts and that provides the user interface

NOTE 1: The hardware may consist of more than one device working together e.g. a mobile device and a computer.

NOTE 2: For some systems, the software that provides the user interface may reside on more than one device such as a telephone and a server.

user agent: software that retrieves and presents content for users (after WCAG 2.0 [5])

NOTE: Software that only displays the content contained within it is treated as software and not considered to be a user agent.

user interface: all components of an interactive system (software or hardware) that provide information and/or controls for the user to accomplish specific tasks with the interactive system (after ISO 9241-110 [i.14])

user interface element: entity of the user interface that is presented to the user by the software (after ISO 9241-171 [i.15])

NOTE 1: This term is also known as "user interface component".

NOTE 2: User-interface elements can be interactive or not.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

ADA	Americans with Disabilities Act
ANSI	American National Standards Institute
AT	Assistive Technology
CIF	Common Intermediate Format
DOM	Document Object Model
ERCIM	European Research Consortium for Informatics and Mathematics
FAQ	Frequently Asked Questions
FPS	Frames Per Second
HTML	Hyper Text Markup Language
ICT	Information and Communication Technologies
IETF	Internet Engineering Task Force
IMS	IP Multimedia System
IP	Internet Protocol
JWG	Joint Working Group (of CEN/CENELEC/ETSI)
MIT	Massachusetts Institute of Technology
PSTN	Public Switched Telephone Network
QCIF	Quarter Common Intermediate Format
RFC	Request For Comment
RTT	Real-Time Text
SIP	Session Initiation Protocol
UI	User Interface
USB	Universal Serial Bus
VoIP	Voice over IP
W3C	World Wide Web Consortium
WAI	Web Accessibility Initiative
WCAG	Web Content Accessibility Guidelines (of W3C)

4 Functional performance

4.1 General

The functional performance statements set out in clause 4.2 are intended to enable people to locate, identify, and operate ICT functions; and to access the information provided when a physical, cognitive or sensory ability is not available or cannot be used. These restrictions of abilities may be permanent, temporary or situational.

- NOTE 1: The intent of clause 4 is to describe the users' needs in accessing the full functionality and documentation of the product or the service with or without the use of assistive technologies.
- NOTE 2: Clause 4.3 explains how conformance with the user needs described in the functional performance statements could be demonstrated by meeting the detailed requirements set out in the present document.
- NOTE 3: The methods of meeting the needs of users with multiple impairments will depend on the specific combination of impairments. Meeting these user needs may be addressed by considering multiple clauses in 4.2.
- NOTE 4: Several users' needs rely on ICT providing specific modes of operation. If a user is to activate, engage or switch to the mode that complies with his or her user needs, the method for activating, engaging or switching to that mode is also expected to comply with the same user needs.
- NOTE 5: Where ICT is purchased for a specific individual, that ICT may only need to provide support for the particular needs of that individual.

4.2 Functional performance statements

4.2.1 Usage without vision

Some users need ICT to provide at least one mode of operation that does not require vision.

NOTE: Audio and tactile user interfaces may contribute towards meeting this clause.

4.2.2 Usage with limited vision

Where ICT provides visual modes of operation, some users will need the ICT to provide features that enable users to make better use of their limited vision.

NOTE 1: Magnification, reduction of required field of vision and control of contrast, brightness and intensity can contribute towards meeting this clause.

NOTE 2: Where significant features of the user interface are dependent on depth perception, the provision of additional methods of distinguishing between the features may contribute towards meeting this clause.

NOTE 3: Users with limited vision may also benefit from non-visual access (see clause 4.2.1).

4.2.3 Usage without perception of colour

Where ICT provides visual modes of operation, some users will need the ICT to provide a visual mode of operation that does not require user perception of colour.

NOTE: Where significant features of the user interface are colour-coded, the provision of additional methods of distinguishing between the features may contribute towards meeting this clause.

4.2.4 Usage without hearing

Some users need ICT to provide at least one mode of operation that does not require hearing.

NOTE: Visual and tactile user interfaces may contribute towards meeting this clause.

4.2.5 Usage with limited hearing

Where ICT provides auditory modes of operation, some users will need the ICT to provide features that enable users to make better use of their limited hearing.

NOTE 1: Enhancement of the audio clarity, reduction of background noise, increased range of volume and greater volume in the higher frequency range can contribute towards meeting this clause.

NOTE 2: Users with limited hearing may also benefit from non-hearing access (see clause 4.2.4).

4.2.6 Usage without vocal capability

Where ICT requires vocal input from users, some users will need the ICT to provide at least one mode of operation that does not require them to generate vocal output.

NOTE 1: This clause covers the lack of ability to produce orally-generated sounds, including speech, whistles, clicks, etc.

NOTE 2: Keyboard, pen or touch user interfaces may contribute towards meeting this clause.

4.2.7 Usage with limited manipulation or strength

Where ICT requires manual actions, some users will need the ICT to provide features that enable users to make use of the ICT with their limited manipulation abilities or hand strength.

NOTE 1: Examples of operations that users may not be able to perform include those that require fine motor control, path dependant gestures, pinching, twisting of the wrist, tight grasping, or simultaneous manual actions.

NOTE 2: One-handed operation, sequential key entry and speech user interfaces may contribute towards meeting this clause.

NOTE 3: Some users have limited hand strength and may not be able to achieve the level of strength to perform an operation. Alternative user interface solutions that do not require hand strength may contribute towards meeting this clause.

4.2.8 Usage with limited reach

Where ICT products are free-standing or installed, some users will need the ICT to be operable with limited user reach.

NOTE: Considering the needs of wheelchair users and the range of user statures in the placing of operational elements of the user interface may contribute towards meeting this clause.

4.2.9 Minimize photosensitive seizure triggers

Some users need ICT to provide at least one mode of operation that minimizes the potential for triggering photosensitive seizures.

NOTE: Limiting the area and number of flashes per second may contribute towards meeting this clause.

4.2.10 Usage with limited cognition

Some users will need the ICT to provide features that enable them to make better use of their limited cognitive capabilities.

NOTE 1: This clause is intended to include the needs of persons with limited cognitive, language and learning abilities.

NOTE 2: Adjustable timings, error indication and suggestion, and a logical focus order are examples of design features that may contribute towards meeting this clause.

4.2.11 Privacy

Some users will need their privacy to be maintained when using those ICT features that are provided for accessibility.

NOTE: Enabling the connection of personal headsets for private listening, not providing a spoken version of characters being masked and enabling user control of legal, financial and personal data are examples of design features that may contribute towards meeting this clause.

4.3 Meeting functional performance statements

ICT meeting the applicable requirements of clauses 5 to 13 is deemed to have met a level of accessibility conformant with the present document and consistent with the needs identified in clause 4.2 (Functional performance statements).

Table B.1 identifies how the WCAG 2.0 Success Criteria relate to the user needs represented by the functional performance statements.

Table B.2 identifies how the requirements from clauses 5 to 13 relate to the user needs represented by the functional performance statements.

5 Generic requirements

5.1 Closed functionality

5.1.1 Introduction

ICT has closed functionality for many reasons, including design or policy. Some of the functionality of products can be closed because the product is self-contained and users are precluded from adding peripherals or software in order to access that functionality.

ICT may have closed functionality in practice even though the manufacturer did not design, develop or supply the ICT to be closed. Where such closure results from policy actions that are outside the control of a supplier, and the ICT was not procured as a closed product, the supplier cannot be held responsible for compliance with the requirements of clause 5.1.

Computers that do not allow end-users to adjust settings or install software are functionally closed.

5.1.2 General

5.1.2.1 Closed functionality

ICT with closed functionality shall meet the requirements set out in clauses 5.2 to 13, as applicable.

NOTE 1: ICT may close some, but not all, of its functionalities. Only the closed functionalities have to conform to the requirements of clause 5.1.

NOTE 2: The provisions within this clause are requirements for the closed functionality of ICT that replace those requirements in clauses 5.2 to 13 that specifically state that they do not apply to closed functionality. This may be because they relate to compatibility with assistive technology or to the ability for the user to adjust system accessibility settings in products with closed functionality (e.g. products that prevent access to the system settings control panel).

5.1.2.2 Assistive technology

Closed functionality of ICT shall be operable without requiring the user to attach, connect or install assistive technology and shall conform to the generic requirements of clauses 5.1.3 to 5.1.8, as applicable. Personal headsets and induction loops shall not be classed as assistive technology for the purpose of this clause.

5.1.3 Non-visual access

5.1.3.1 General

Where visual information is needed to enable the use of those functions of ICT that are closed to assistive technologies for screen reading, ICT shall provide at least one mode of operation using non-visual access to enable the use of those functions.

NOTE 1: Non-visual access may be in an audio form, including speech, or a tactile form.

NOTE 2: The visual information needed to enable use of some functions may include operating instructions and orientation, visible transaction prompts, user input verification, error messages and non-text content.

NOTE 3: Visual information that is not normally needed to enable the use of functions of the ICT, such as advertisements and other supplemental information, is not needed in non-visual form.

5.1.3.2 Auditory output delivery including speech

Where auditory output is provided as non-visual access to closed functionality, the auditory output shall be delivered:

- a) either directly by a mechanism included in or provided with the ICT;
- b) or by a personal headset that can be connected through a 3,5 mm audio jack, or an industry standard connection, without requiring the use of vision.

NOTE 1: Mechanisms included in or provided with ICT may be, but are not limited to, a loudspeaker, a built-in handset/headset, or other industry standard coupled peripheral.

NOTE 2: An industry standard connection could be a wireless connection.

NOTE 3: Some users may benefit from the provision of an inductive loop.

5.1.3.3 Auditory output correlation

Where auditory output is provided as non-visual access to closed functionality, and where information is displayed on the screen, the ICT should provide auditory information that allows the user to correlate the audio with the information displayed on the screen.

NOTE 1: Many people who are legally blind still have visual ability, and use aspects of the visual display even if it cannot be fully comprehended. An audio alternative that is both complete and complementary includes all visual information such as focus or highlighting, so that the audio can be correlated with information that is visible on the screen at any point in time.

NOTE 2: Examples of auditory information that allows the user to correlate the audio with the information displayed on the screen include structure and relationships conveyed through presentation.

5.1.3.4 Speech output user control

Where speech output is provided as non-visual access to closed functionality, the speech output shall be capable of being interrupted and repeated when requested by the user.

NOTE 1: It is best practice to allow the user to pause speech output rather than just allowing them to interrupt it.

NOTE 2: It is best practice to allow the user to repeat only the most recent portion rather than requiring play to start from the beginning.

5.1.3.5 Speech output automatic interruption

Where speech output is provided as non-visual access to closed functionality, the ICT shall interrupt current speech output when a user action occurs and when new speech output begins.

NOTE: Where it is essential that the user hears the entire message, e.g. a safety instruction or warning, the ICT may need to block all user action so that speech is not interrupted.

5.1.3.6 Speech output for non-text content

Where speech output is provided as non-visual access to closed functionality, the alternative for non-text content shall be presented to users via speech output. The alternative for non-text content shall follow the guidance described in WCAG 2.0 Success Criterion 1.1.1.

5.1.3.7 Speech output for video information

Where pre-recorded video content is needed to enable the use of closed functions of ICT and where speech output is provided as non-visual access to closed functionality, the speech output shall present equivalent information for the pre-recorded video content.

NOTE: This speech output can take the form of an audio description or an auditory transcript of the video content.

5.1.3.8 Masked entry

Where auditory output is provided as non-visual access to closed functionality, and the characters displayed are masking characters, the auditory output shall not be a spoken version of the characters entered unless the auditory output is known to be delivered only to a mechanism for private listening or the user explicitly chooses to allow non-private auditory output.

NOTE 1: Masking characters are usually displayed for security purposes and include, but are not limited to asterisks representing personal identification numbers.

NOTE 2: Unmasked character output might be preferred when closed functionality is used, for example, in the privacy of the user's home. A warning highlighting privacy concerns might be appropriate to ensure that the user has made an informed choice.

5.1.3.9 Private access to personal data

Where auditory output is provided as non-visual access to closed functionality, and the output contains data that is considered to be private according to the applicable privacy policy, the corresponding auditory output shall only be delivered through a mechanism for private listening that can be connected without requiring the use of vision or through any other mechanism explicitly chosen by the user.

NOTE 1: This requirement does not apply in cases where data is not defined as being private according to the applicable privacy policy or where there is no applicable privacy policy.

NOTE 2: Non-private output might be preferred when closed functionality is used, for example, in the privacy of the user's home. A warning highlighting privacy concerns might be appropriate to ensure that the user has made an informed choice.

5.1.3.10 Non-interfering audio output

Where auditory output is provided as non-visual access to closed functionality, the ICT shall not automatically play, at the same time, any interfering audible output that lasts longer than three seconds.

5.1.3.11 Spoken languages

Where speech output is provided as non-visual access to closed functionality, speech output shall be in the same human language as the displayed content provided, except:

- a) for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text;
- b) where the content is generated externally and not under the control of the ICT vendor, clause 5.1.3.11 shall not be required to apply for languages not supported by the ICT's speech synthesizer;
- c) for displayed languages that cannot be selected using non-visual access;
- d) where the user explicitly selects a speech language that is different from the language of the displayed content.

5.1.3.12 Receipts, tickets, and transactional outputs

Where ICT is closed to visual access and provides receipts, tickets, or other outputs as a result of a self-service transaction, speech output shall be provided which shall include all information necessary to complete or verify the transaction except that:

- machine location, date and time of transaction, customer account number, and the machine identifier shall not be required to be audible;
- information that duplicates information available on-screen and already presented audibly shall not be required to be repeated;
- for ticketing machines, printed copies of itineraries and maps shall not be required to be audible.

NOTE: The speech output may be provided by any element of the total ICT system.

5.1.4 Volume control

5.1.4.1 Private listening

Where auditory output is provided as non-visual access to closed functionality and is delivered through a mechanism for private listening, ICT shall provide at least one non-visual mode of operation for controlling the volume.

5.1.4.2 Speaker volume

Where auditory output is provided as non-visual access to closed functionality and is delivered through speakers on ICT, a non-visual incremental volume control shall be provided with output amplification up to a level of at least 65 dBA (-29 dBPaA).

5.1.4.3 Volume reset

Where auditory output is provided as non-visual access to closed functionality, a function that sets the volume to be at a level of 65 dBA or less after every use shall be provided, unless the ICT is dedicated to a single user.

NOTE: A feature to disable the volume reset function may be provided in order to enable the single-user exception to be met.

5.1.5 Functionality closed to text enlargement

Where any functionality of ICT is closed to the text enlargement features of platform or assistive technology, the ICT shall provide a mode of operation where the text and images of text necessary for all functionality is displayed in such a way that a non-accented capital "H" subtends an angle of at least 0,7 degrees at a viewing distance specified by the supplier.

The subtended angle, in degrees, may be calculated from:

$$\Psi = (180 \times H) / (\pi \times D)$$

Where:

- ψ is the subtended angle in degrees
- H is the height of the text
- D is the viewing distance
- D and H are expressed in the same units

NOTE: The intent is to provide a mode of operation where text is large enough to be used by most users with low vision.

5.1.6 Visual output for auditory information

Where pre-recorded auditory information is needed to enable the use of closed functions of ICT, the ICT shall provide visual information that is equivalent to the pre-recorded auditory output.

NOTE: This visual information can take the form of captions or text transcripts.

5.1.7 Operation without keyboard interface

Where ICT functionality is closed to keyboards or keyboard interfaces, all functionality shall be operable without vision as required by clause 5.1.3.

Where input focus can be moved to a user interface element it shall be possible to move the input focus away from that element using the same mechanism, in order to avoid trapping the input focus.

5.2 Activation of accessibility features

It shall be possible to activate those documented accessibility features that are required to meet a specific need without relying on a method that does not support that need.

5.3 Biometrics

ICT shall not rely on the use of a particular biological characteristic as the only means for user identification or for control of ICT.

NOTE 1: Alternative means for user identification or for control of ICT could be non-biometric or biometric.

NOTE 2: Biometric methods based on dissimilar biological characteristics increase the likelihood that individuals with disabilities possess at least one of the specified biological characteristics. Examples of dissimilar biological characteristics are fingerprints, eye retinal patterns, voice, and face.

5.4 Preservation of accessibility information during conversion

Where ICT converts information or communication it shall preserve all documented non-proprietary information that is provided for accessibility, to the extent that such information can be contained in or supported by the destination format.

5.5 Locking or toggle controls

5.5.1 Tactile or auditory status

When ICT has a locking or toggle control and that control is visually presented to the user, the ICT shall provide at least one mode of operation where the status of the control can be determined either through touch or sound without operating the control.

NOTE 1: Locking or toggle controls are those controls that can only have two or three states and that keep their state while being used.

NOTE 2: An example of a locking or toggle control is the "Caps Lock" key found on most keyboards. Another example is the volume button on a pay telephone, which can be set at normal, loud, or extra loud volume.

5.5.2 Visual status

When ICT has a locking or toggle control and the control is non-visually presented to the user, the ICT shall provide at least one mode of operation where the status of the control can be visually determined when the control is presented.

NOTE 1: Locking or toggle controls are those controls that can only have two or three states and that keep their state while being used.

NOTE 2: An example of a locking or toggle control is the "Caps Lock" key found on most keyboards. An example of making the status of a control determinable is a visual status indicator on a keyboard.

5.6 Key repeat

Where a keyboard or keypad with key repeat is provided and the key repeat cannot be turned off:

- a) the delay before the key repeat shall be adjustable to at least 2 seconds; and
- b) the key repeat rate shall be adjustable down to one character per 2 seconds.

5.7 Simultaneous user actions

ICT shall provide at least one mode of operation that does not require simultaneous user actions to operate the ICT.

NOTE: Having to use both hands to open the lid of a laptop, having to press two or more keys at the same time or having to touch a surface with more than one finger are examples of simultaneous user actions.

6 ICT with two way voice communication

6.1 General

ICT that provides two-way voice communication shall conform to the requirements of clause 6 (ICT with two way voice communication).

6.2 Wide-band speech

In order to provide good audio quality, ICT should be able to transmit and receive wide-band speech.

NOTE 1: For the purposes of interoperability, support of Recommendation ITU-T G.722 [i.19] is preferable.

NOTE 2: Where codec negotiation is implemented, other standardized wideband codecs such as Recommendation ITU-T G.722.2 [i.20] may be used so as to avoid transcoding.

6.3 Real-time text (RTT) functionality

6.3.1 RTT provision

6.3.1.1 RTT communication

Where the ICT, or set of ICT, provided to a user, supports two-way voice communication, at least one element of that ICT shall enable a user to communicate with another user by RTT.

NOTE 1: The RTT capability can be provided as a factory default or added later.

NOTE 2: Provision of the RTT capability may require additional hardware and/or software.

6.3.1.2 Concurrent voice and text

Where the ICT, or set of ICT, provided to a user, supports two-way voice communication and enables a user to communicate with another user by RTT, it shall provide a mechanism to select a mode of operation allowing concurrent voice and text.

NOTE: The availability of voice and RTT running concurrently can allow the RTT to replace or support voice and transfer additional information such as numbers, currency amounts and spelling of names.

6.3.2 Display of Real Time Text

6.3.2.1 Visually distinguishable display

Where ICT has RTT send and receive capabilities, displayed sent text shall be visually differentiated from and separated from received text.

6.3.2.2 Programmatically determinable send and receive direction

Where ICT has RTT send and receive capabilities, the send/receive direction of transmitted text shall be programmatically determinable, unless the RTT has closed functionality.

NOTE: The intent of clause 6.3.2.2 is to enable screen readers to be able to distinguish between incoming text and outgoing text when used with RTT functionality.

6.3.3 Interoperability

Where ICT interoperates for two-way voice communication with ICT networks that provide RTT functionality, it shall follow one of the four RTT mechanisms described below:

- a) ICT interoperating over the Public Switched Telephone Network (PSTN), with other ICT that directly connects to the PSTN as described in Recommendation ITU-T V.18 [i.21] or any of its annexes for text telephony signals at the PSTN interface;
- b) ICT interoperating with other ICT using VOIP with Session Initiation Protocol (SIP) and using real time text that conforms to RFC 4103 [i.12];
- c) ICT interoperating with other ICT using RTT that conforms with the IP Multimedia System (IMS) set of protocols specified in TS 126 114 [i.9], TS 122 173 [i.10] and TS 134 229 [i.11];
- d) ICT interoperating with other ICT using a published and available common specification for RTT exchange. This common specification shall include a method for indicating loss or corruption of characters.

6.3.4 Real-time text responsiveness

RTT input shall be transmitted to the ICT network supporting RTT within 1 second of the input entry.

NOTE 1: Input entry is considered to have occurred when sufficient user input has occurred for the ICT to establish which character(s) to send.

NOTE 2: Input entry will differ between systems where text is entered on a word-by-word basis (e.g. speech-to-text and predictive-text based systems) and systems where each character is separately generated.

6.4 Caller ID

Where provided, caller identification and similar telecommunications functions shall be available as text and/or in an audio form.

6.5 Alternatives to voice-based services

Where ICT provides real-time voice-based communication and also provides voice mail, auto-attendant, or interactive voice response facilities, the ICT should offer users a means to access the information and carry out the tasks provided by their system without the use of hearing or speech.

NOTE: Solutions capable of handling audio, real-time text and video media could satisfy the above requirement.

6.6 Video communication

6.6.1 General

Clause 6.6 (Video communications) provides performance requirements that support users who communicate using sign language and lip-reading. For these users good usability is achieved with Common Intermediate Format (CIF) resolution, a frame rate of 20 frames per second and over, with time difference between speech audio and video that does not exceed 100 ms.

When the resolution is reduced to Quarter Common Intermediate Format (QCIF) and the frame rate drops to 12 frames per second the communication is still usable with some restrictions.

A lower resolution causes less disturbance to the perception of sign language and lip reading than that caused by a lower frame rate.

Delay can be a problem in video communication. Overall delay values below 0,4 s are preferred, with an increase in preference down to 0,1 s. Values over 0,8 s are felt to hinder a good sign conversation. Overall delay depends on multiple factors, including e.g. network delay and video processing. For this reason a testable requirement on minimum values for overall delay cannot be produced.

6.6.2 Resolution

Where ICT that provides two-way voice communication includes real time video functionality, the ICT:

- a) shall support at least QCIF resolution;
- b) should preferably support at least CIF resolution.

6.6.3 Frame rate

Where ICT that provides two-way voice communication includes real time video functionality, the ICT:

- a) shall support a frame rate of at least 12 frames per second (FPS);
- b) should preferably support a frame rate of at least 20 frames per second (FPS).

6.6.4 Synchronization between audio and video

Where ICT that provides two-way voice communication includes real time video functionality, the ICT should ensure a maximum time difference of 100 ms between the speech and video presented to the user.

6.7 Alternatives to video-based services

Where ICT provides real-time video-based communication and also provides answering machine, auto attendant or interactive response facilities, the ICT should offer users a means to access the information and carry out the tasks related to these facilities:

- a) for audible information, without the use of hearing;
- b) for spoken commands, without the use of speech;
- c) for visual information, without the use of vision.

NOTE: Solutions capable of generating real-time captions or handling real-time text could satisfy the above requirement.

7 ICT with video capabilities

7.1 Caption processing technology

7.1.1 Captioning playback

ICT that displays video with synchronized audio shall provide, in the default player for the media, a mechanism to display the available captions. Where closed captions are provided by the content, a mechanism to allow the user to choose to display the captions shall be provided.

Content providers should ensure that captions do not obscure or obstruct relevant information in the video.

Regulated products, (e.g. television receiver equipment) that meet regional subtitle or caption requirements are deemed to satisfy this requirement.

7.1.2 Captioning synchronization

The mechanism to display captions shall preserve synchronization between the audio and the corresponding captions.

7.1.3 Preservation of captioning

ICT that transmits converts or records video with synchronized audio shall preserve caption data such that it can be displayed in a manner consistent with clauses 7.1.1 and 7.1.2.

Additional presentational aspects of the text such as screen position, text colours, text style and text fonts may convey meaning, based on regional conventions, and this meaning should be preserved wherever possible.

7.2 Audio description technology

7.2.1 Audio description playback

ICT that displays video with synchronized audio shall provide, in the default player for the media, a mechanism to select and play available audio description to the default audio channel.

Content providers should ensure that audio descriptions do not interfere with other spoken information in the video.

Regulated products, (e.g. television receiver equipment), that meet regional audio description requirements are deemed to satisfy this requirement.

Where video technologies do not have explicit and separate mechanisms for audio description, an ICT is deemed to satisfy this requirement if the ICT enables the user to select and play several audio tracks.

NOTE: In such cases, the video content can include the audio description as one of the available audio tracks.

7.2.2 Audio description synchronization

The mechanism to play audio description shall preserve the synchronization between the audio/visual content and the corresponding audio description.

7.2.3 Preservation of audio description

ICT that transmits, converts, or records video with synchronized audio, shall preserve audio description data such that it can be played in a manner consistent with clauses 7.2.1 and 7.2.2.

7.3 User controls for captions and audio description

For products that primarily display materials containing video with associated audio content, user controls to activate subtitling and audio descriptions shall be provided to the user at the same level of interaction (i.e. the number of steps to complete the task) as the primary media controls.

NOTE 1: Primary media controls are the set of controls that the user most commonly uses to control media.

NOTE 2: Products that have a general hardware volume control, such as a telephone, or a laptop which can be configured to display video through software but which is not its primary purpose, would not need dedicated hardware controls for captions and descriptions; however software controls, or hardware controls mapped through software, would need to be at the same level of interaction.

NOTE 3: It is best practice for ICT to include additional controls enabling the user to select whether captions and audio description are turned on or off by default.

8 Hardware

8.1 General

8.1.1 Standard connections

When an ICT provides user input or output device connection points, the ICT shall provide at least one input and/or output connection that conforms to an industry standard non-proprietary format, directly or through the use of commercially available adapters.

NOTE 1: The intent of this requirement is to ensure compatibility with assistive technologies by requiring the use of standard connections on ICT.

NOTE 2: The word connection applies to both physical and wireless connections.

NOTE 3: Current examples of industry standard non-proprietary formats are USB and Bluetooth.

8.1.2 Colour

ICT shall not use colour coding as the only means of visually conveying information, indicating an action, prompting a response, or distinguishing a visual element.

8.2 Hardware products with speech output

8.2.1 Speech volume gain

8.2.1.1 Speech volume range

ICT shall provide a means to adjust the speech output volume level over a range of at least 18 dB.

NOTE: Fixed line handsets and headsets fulfilling the requirements of ANSI/TIA-4965 [i.2] are deemed to comply with this requirement.

8.2.1.2 Incremental volume control

Where the volume control is incremental, ICT shall provide at least one intermediate step of 12 dB gain above the lowest volume setting.

8.2.2 Magnetic coupling

8.2.2.1 Fixed-line devices

Fixed-line communication devices with an audio output that is normally held to the ear and which carries the "T" symbol specified in ETS 300 381 [1] shall provide a means of magnetic coupling which meets the requirements of ES 200 381-1 [2].

ICT fulfilling the requirements of TIA-1083-A [i.22] is deemed to comply with the requirements of this clause.

8.2.2.2 Wireless communication devices

Wireless communication devices that are normally held to the ear shall provide a means of magnetic coupling to hearing technologies which meets the requirements of ES 200 381-2 [3].

ICT fulfilling the requirements of ANSI/IEEE C63.19 [i.1] is deemed to comply with the requirements of this clause.

8.3 Physical access to ICT

8.3.1 General

Physical access to ICT is dependent on the dimensions of both the ICT and the environment in which it is installed. Clauses 8.3.2 to 8.3.4 describe requirements on those dimensions that are integral to the ICT (e.g. integral shelves, or integral cabins that may restrict access to the operable parts of the ICT).

When the ICT is installed, the dimensions of the surrounding space combined with the dimensions of the ICT affect the physical access to the ICT. To ensure the accessibility of the ICT is achieved it will be necessary to follow the installation instructions that are required to be supplied by clause 8.3.5.

It may not be possible to apply all requirements of clause 8.3 to all aspects of maintenance, repair, or occasional monitoring of equipment in all circumstances. Nevertheless, it is best practice to apply the requirements in clause 8.3, where feasible and safe to do so.

ICT that meets the requirements of the American ADA standards [i.23] is deemed to comply with the requirements in clauses 8.3.2 to 8.3.4.

8.3.2 Clear floor space

8.3.2.1 Change in level

Where there is a change in floor level that is integral to the ICT then it shall be ramped with a slope no steeper than 1:48.

Exceptions:

- If the change in floor level is less than or equal to 6,4 mm ($\frac{1}{4}$ inch) the change may be vertical as shown in figure 1.
- If the change in floor level is less than or equal to 13 mm ($\frac{1}{2}$ inch) the change may have a slope not steeper than 1:2 as shown in figure 2.

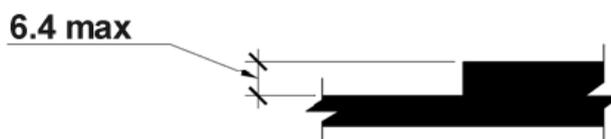


Figure 1: Vertical change in level

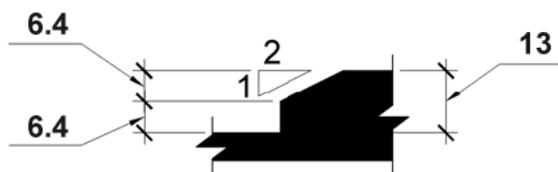


Figure 2: Bevelled change in level

8.3.2.2 Operating area

Where the operating area is integral to the ICT, the operating area shall be a rectangle with minimum dimensions of 760 mm (30 inches) by 1 220 mm (48 inches). Figure 3 refers.

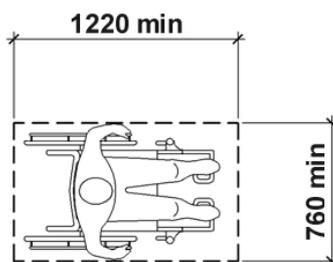


Figure 3: Clear floor or ground space

8.3.2.3 Approach

8.3.2.3.1 General

Where the access space is integral to the ICT, at least one full side of the space shall be unobstructed.

8.3.2.3.2 Forward approach

Where the operating area is inside an alcove integral to the ICT, the alcove is deeper than 610 mm (24 inches), and where a forward approach is necessary, the dimension of the access space shall be a minimum of 915 mm (36 inches) wide. Figure 4 refers.

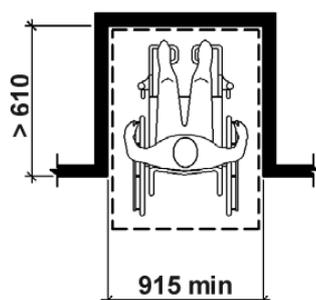


Figure 4: Manoeuvring Clearance in an Alcove, Forward Approach

8.3.2.3.3 Parallel approach

Where the operating area is inside an alcove integral to the ICT, the alcove is deeper than 380 mm (15 inches), and where a parallel approach is possible, the dimension of the access space shall be a minimum of 1 525 mm (60 inches) wide. Figure 5 refers.

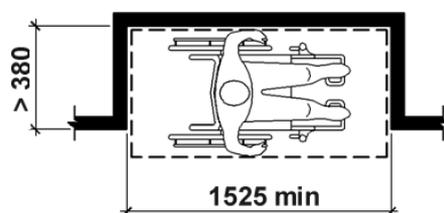


Figure 5: Manoeuvring Clearance in an Alcove, Parallel Approach

8.3.2.4 Knee and toe clearance width

Where the space under an obstacle that is integral to the ICT is part of access space, the clearance shall be at least 760 mm (30 inches) wide.

8.3.2.5 Toe clearance

Where an obstacle is integral to the ICT, a space under the obstacle that is less than 230 mm (9 inches) above the floor is considered toe clearance and shall:

- extend 635 mm (25 inches) maximum under the whole obstacle;
- provide a space at least 430 mm (17 inches) deep and 230 mm above the floor under the obstacle;
- extend no more than 150 mm (6 inches) beyond any obstruction at 230 mm (9 inches) above the floor.

Figure 6 refers.

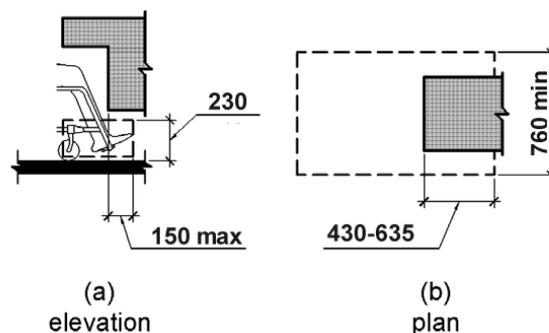


Figure 6: Toe clearance

8.3.2.6 Knee clearance

Where an obstacle is integral to the ICT, the space under the obstacle that is between 230 mm and 685 mm above the floor is considered knee clearance and shall:

- extend no more than 635 mm (25 inches) under the obstacle at a height of 230 mm (9 inches) above the floor;
- extend at least 280 mm (11 inches) under the obstacle at a height of 230 mm (9 inches) above the floor;
- extend at least 205 mm (8 inches) under the obstacle at a height of 685 mm (27 inches) above the floor;
- be between 230 mm (9 inches) and 685 mm (27 inches) above the floor be permitted to be reduced in depth at a rate of 25 mm (1 inch) for each 150 mm (6 inches) in height.

Figure 7 refers.

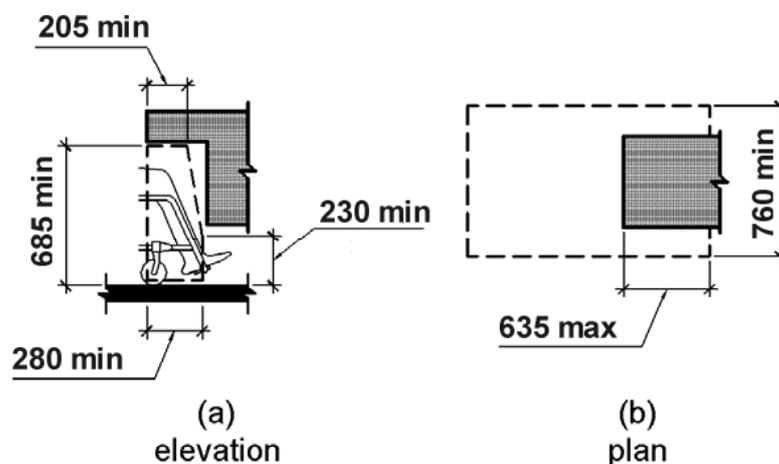


Figure 7: Knee clearance

8.3.3 Reach range for ICT

8.3.3.1 Forward reach

8.3.3.1.1 Unobstructed high forward reach

When the access space is integral to the ICT and the forward reach is unobstructed, the essential controls shall be located no higher than 1 220 mm (48 inches) above the floor of the access space. Figure 8 refers.

8.3.3.1.2 Unobstructed low forward reach

When the access space is integral to the ICT and the forward reach is unobstructed, the essential controls shall be located no lower than 380 mm (15 inches) above the floor of the access space. Figure 8 refers.

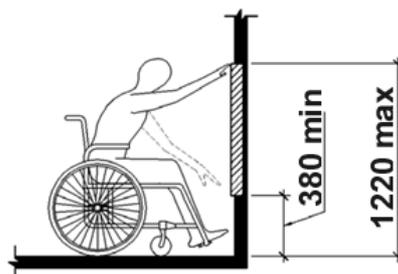


Figure 8: Unobstructed forward reach

8.3.3.1.3 Obstructed reach

8.3.3.1.3.1 Clear floor space

When the access space is integral to the ICT and has an obstruction which is integral to the ICT which hinders the access to any essential controls, the ICT shall provide a clear floor space which extends beneath the obstructing element for a distance not less than the required reach depth over the obstruction.

8.3.3.1.3.2 Obstructed (< 510 mm) forward reach

When the access space is integral to the ICT and has an obstruction which is integral to the ICT and which is less than 510 mm (20 inches), the forward reach to all essential controls shall be no higher than 1 220 mm (48 inches) above the floor contact of the ICT. Figure 9 (a) refers.

8.3.3.1.3.3 Obstructed (> 635 mm) forward reach

When the access space is integral to the ICT and has an obstruction which is integral to the ICT and which is greater than 510 mm (20 inches) and less than 635 mm (25 inches) maximum, the forward reach to all essential controls shall be no higher than 1 120 mm (44 inches) above the floor contact of the ICT. Figure 9 (b) refers.

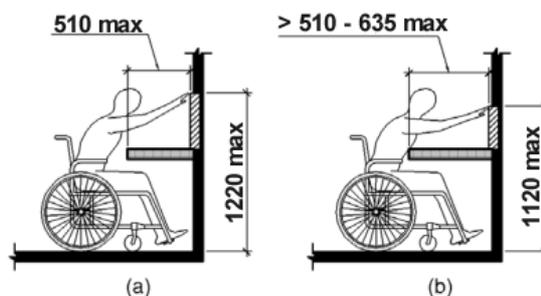


Figure 9: Obstructed high reach

8.3.3.2 Side reach

8.3.3.2.1 Unobstructed high side reach

Where the access space is integral to the ICT, allows a parallel approach, and the side reach is unobstructed or obstructed by an element integral to the ICT which is less than 255 mm (10 inches), all essential controls shall be within a high side reach which is less than or equal to 1 220 mm (48 inches) above the floor of the access space. Figure 10 refers.

8.3.3.2.2 Unobstructed low side reach

Where the access space is integral to the ICT, allows a parallel approach, and the side reach is unobstructed or obstructed by an element integral to the ICT which is less than 255 mm (10 inches), all essential controls shall be within a low side reach which is greater than or equal to 380 mm (15 inches) above the floor of the access space. Figure 10 refers.

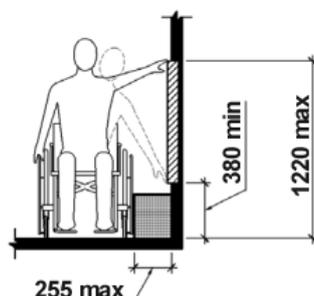


Figure 10: Unobstructed side reach

8.3.3.2.3 Obstructed side reach

8.3.3.2.3.1 Obstructed (≤ 255 mm) side reach

Where the access space is integral to the ICT, allows a parallel approach and has an obstruction which is integral to the ICT, the height of the obstruction shall be less than 865 mm (34 inches). Where the depth of the obstruction is less than or equal to 255 mm (10 inches), the high side reach to all essential controls shall be no higher than 1 220 mm (48 inches) above the floor of the access space. Figure 11 refers.

8.3.3.2.3.2 Obstructed (≤ 610 mm) side reach

Where the access space is integral to the ICT, allows a parallel approach and has an obstruction which is integral to the ICT, the height of the obstruction shall be less than 865 mm (34 inches). Where the depth of the obstruction is greater than 255 mm (10 inches) and 610 mm (24 inches) maximum, the high side reach to all essential controls shall be no higher than 1 170 mm (46 inches) above the floor of the access space. Figure 11 refers.

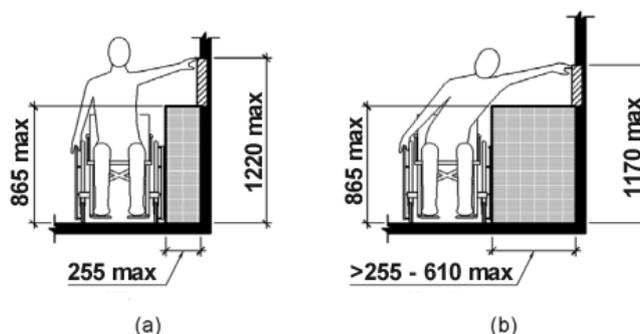


Figure 11: Obstructed high side reach

8.3.4 Visibility

Where the operating area is integral to the ICT, and a display screen is provided, information on the screen shall be legible from a point located 1 015 mm (40 inches) above the centre of the floor of the operating area (as defined in clause 8.3.2.2).

NOTE: The intent of this provision is that the information on the screen can be read by users with normal vision and appropriate language skills, when seated in a wheelchair.

8.3.5 Installation instructions

When an ICT is intended to be installed, instructions shall be made available which outline a method to install the ICT in a manner that ensures that the dimensions of the integral spaces of the ICT conform to clauses 8.3.2 to 8.3.4.

8.4 Operable parts

8.4.1 Operable part discernibility

ICT shall provide a means to discern each operable part without requiring vision and without performing the action associated with the operable part.

NOTE: One way of meeting this requirement is by making the operable parts tactilely discernible using the finger.

8.4.2 Numeric keys

Where provided, physical numeric keys arranged in a rectangular keypad layout shall have the number five key tactilely distinct from the other keys of the keypad.

NOTE: Recommendation ITU-T E.161 [i.18] describes the 12-key telephone keypad layout and provides further details of the form of tactile markers.

8.4.3 Operation

Mechanically operable parts shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be less than or equal to 22,2 N.

8.4.4 Keys, tickets and fare cards

Where ICT provides keys, tickets or fare cards, and their orientation is important for further use, they shall have an orientation that is tactilely discernible.

NOTE: ETS 300 767 [i.6] defines suitable tactile indications for plastic cards.

8.5 Tactile indication of speech mode

Where ICT intended for shared use and speech output is available, a tactile indication of the means to initiate the speech mode of operation shall be provided.

NOTE: The tactile indication could include Braille instructions.

9 Web content

Web content shall, as a minimum, conform to Level A and Level AA Success Criteria as defined by the Conformance Requirements specified in ISO/IEC 40500 [4].

NOTE: ISO/IEC 40500 [4] is exactly the same as, and functionally equivalent to, W3C Web Content Accessibility Guidelines (WCAG 2.0) [5] (set out in annex A). The complete Web Content Accessibility Guidelines (WCAG) 2.0, including the Introduction, Level AAA Success Criteria, Glossary, and other sections of WCAG 2.0 also continues to be freely available online at <http://www.w3.org/TR/WCAG20/>.

10 Documents

10.1 General

The requirements of clause 10 apply to non-web documents. In order to ensure consistency between web and non-web requirements the word "must" is used in this clause where it is used in ISO/IEC 40500 [4] and in WCAG 2.0 [5]. For the purpose of the present document the word "must" carries the same meaning as "shall".

NOTE 1: Some examples of documents are letters, spreadsheets, emails, books, pictures, presentations, and movies that have an associated user agent such as a document reader, editor or media player.

NOTE 2: A single document may be composed of multiple files such as the video content, closed caption text etc. This fact is not usually apparent to the end-user consuming the document/content.

NOTE 3: Documents require a user agent in order for the content to be presented to users. The requirements for user agents can be found in clause 11.

NOTE 4: The requirements for documents that contain only Web content, including software that is Web content, can be found in clause 9.

NOTE 5: The requirements for content that is part of non-web software, can be found in clause 11.

NOTE 6: In clause 10.2, the term "content" is restricted to that content that is not Web-content.

NOTE 7: Documents that are a dedicated resource for software are considered to be content within the software. The requirements in clause 11 apply to the software that includes those dedicated resources.

10.2 Document success criteria

The functionality of documents shall conform to the document success criteria in table 1. Table 1 incorporates WCAG 2.0 success criteria with the term substitutions and omissions described in table 2.

NOTE: The success criteria set out in this clause are intended to harmonize with the report [i.24] produced by the W3C's WCAG2ICT Task Force (<http://www.w3.org/WAI/GL/WCAG2ICT-TF/>).

Table 1: Document success criteria

Document success criterion	Applicability notes
<p>1.1.1 Non-text content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. (A)</p> <ul style="list-style-type: none"> • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to WCAG 2.0 Guideline 4.1 [5] for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to WCAG 2.0 Guideline 1.2 [5] for additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. • Decoration, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology. 	<p>CAPTCHAs do not currently appear outside of the Web. However, if they do appear, this guidance is accurate.</p>
<p>1.2.1 Audio-only and Video-only (Pre-recorded): For pre-recorded audio-only and pre-recorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labelled as such: (A)</p> <ul style="list-style-type: none"> • Pre-recorded Audio-only: An alternative for time-based media is provided that presents equivalent information for pre-recorded audio-only content. • Pre-recorded Video-only: Either an alternative for time-based media or an audio track is provided that presents equivalent information for pre-recorded video-only content. 	<p>The alternative can be provided directly in the document - or provided in a conforming alternate version.</p>
<p>1.2.2 Captions (Pre-recorded): Captions are provided for all pre-recorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labelled as such. (A)</p>	<p>The WCAG 2.0 definition of "captions" notes that "In some countries, captions are called subtitles". They are also sometimes referred to as "subtitles for the hearing impaired". Per the definition in WCAG 2.0 [5], to meet this success criterion, whether called captions or subtitles, they would have to provide "synchronized visual and/or text alternative for both speech and non-speech audio information needed to understand the media content" where non-speech information includes "sound effects, music, laughter, speaker identification and location".</p>
<p>1.2.3 Audio Description or Media Alternative (Pre-recorded): An alternative for time-based media or audio description of the pre-recorded video content is provided for synchronized media, except when the media is a media alternative for text and is clearly labelled as such. (A)</p>	<p>The WCAG 2.0 definition of "audio description" says that "audio description" is "also called 'video description' and 'descriptive narration'."</p> <p>Secondary or alternate audio tracks are commonly used for this purpose.</p>

Document success criterion	Applicability notes
<p>1.2.4 Captions (Live): Captions are provided for all live audio content in synchronized media. (AA)</p>	<p>The WCAG 2.0 definition of "captions" notes that "In some countries, captions are called subtitles". They are also sometimes referred to as "subtitles for the hearing impaired". Per the definition in WCAG 2.0 [5], to meet this success criterion, whether called captions or subtitles, they would have to provide "synchronized visual and/or text alternative for both speech and non-speech audio information needed to understand the media content" where non-speech information includes "sound effects, music, laughter, speaker identification and location".</p>
<p>1.2.5 Audio Description (Pre-recorded): Audio description is provided for all pre-recorded video content in synchronized media. (Level AA)</p>	<p>The WCAG 2.0 definition of "audio description" says that audio description is "also called 'video description' and 'descriptive narration'."</p> <p>Secondary or alternate audio tracks are commonly used for this purpose.</p>
<p>1.3.1 Info and Relationships: Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. (Level A)</p>	None.
<p>1.3.2 Meaningful Sequence: When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. (Level A)</p>	None.
<p>1.3.3 Sensory Characteristics: Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.</p> <p>NOTE: For requirements related to colour, refer to WCAG 2.0 Guideline 1.4 [5].</p>	None.
<p>1.4.1 Use of Colour: Colour is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A)</p> <p>NOTE: This success criterion addresses colour perception specifically. Other forms of perception are covered in WCAG 2.0 Guideline 1.3 [5] including programmatic access to colour and other visual presentation coding.</p>	None.
<p>1.4.2 Audio Control: If any audio in a document plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)</p> <p>Since any part of a document that does not meet this success criterion can interfere with a user's ability to use the whole document, all content in the document (whether or not it is used to meet other success criteria) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>	None.
<p>1.4.3 Contrast (Minimum): The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following: (Level AA)</p> <ul style="list-style-type: none"> • Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1. • Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement. • Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement. 	None.

Document success criterion	Applicability notes
<p>1.4.4 Resize text: Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. (Level AA)</p>	<p>Content that has software players, viewers or editors with a 200 percent zoom feature would automatically meet this success criterion unless the content will not work with zoom.</p> <p>The INTENT refers to the ability to allow users to enlarge the text on screen at least up to 200 % without needing to use assistive technologies. This means that the application provides some means for enlarging the text 200 % (zoom or otherwise) without loss of content or functionality or that the application works with the platform features that meet this requirement.</p>
<p>1.4.5 Images of Text: If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following: (Level AA)</p> <p>Customizable: The image of text can be visually customized to the user's requirements.</p> <p>Essential: A particular presentation of text is essential to the information being conveyed.</p> <p>NOTE: Logotypes (text that is part of a logo or brand name) are considered essential.</p>	<p>None.</p>
<p>2.1.1 Keyboard: All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. (Level A)</p> <p>NOTE 1: This exception relates to the underlying function, not the input technique. For example, if using handwriting to enter text, the input technique (handwriting) requires path-dependent input but the underlying function (text input) does not.</p> <p>NOTE 2: This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation.</p>	<p>None.</p>
<p>2.1.2 No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. (Level A)</p> <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>	<p>None.</p>

Document success criterion	Applicability notes
<p>2.2.1 Timing Adjustable: For each time limit that is set by the document, at least one of the following is true: (Level A)</p> <ul style="list-style-type: none"> • Turn off: The user is allowed to turn off the time limit before encountering it; or • Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or • Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or • Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or • Essential Exception: The time limit is essential and extending it would invalidate the activity; or • 20 Hour Exception: The time limit is longer than 20 hours. <p>NOTE: This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with WCAG 2.0 Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action.</p>	None.
<p>2.2.2 Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)</p> <ul style="list-style-type: none"> • Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and • Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the whole document, all content in the document (whether it is used to meet other success criteria or not) must meet this success criterion. (See WCAG 2.0 Conformance Requirement 5: Non-Interference).</p> <p>NOTE 1: For requirements related to flickering or flashing content, refer to WCAG 2.0 Guideline 2.3 [5].</p> <p>NOTE 2: Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.</p> <p>NOTE 3: An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.</p>	This is to be applied to all content. Any content, whether informative or decorative, that is updated automatically, blinks, or moves may create an accessibility barrier.
<p>2.3.1 Three Flashes or Below Threshold: Documents do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A)</p> <p>Since any document that does not meet this success criterion can interfere with a user's ability to use the document, all content in the document (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>	None.

Document success criterion	Applicability notes
2.4.2 Page Titled: Documents have titles that describe topic or purpose. (Level A)	The name of a document is a sufficient title if it describes the topic or purpose.
2.4.3 Focus Order: If a document can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)	None.
2.4.4 Link Purpose (In Context): The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. (Level A)	In a document, a "link" is any text string or image in the user interface outside a user interface control that behaves like a hypertext link. This does not include general user interface controls or buttons. (An OK button, for example, would not be a link.)
2.4.5 Multiple Ways: More than one way is available to locate a document within a set of documents except where the document is the result of, or a step in, a process. (Level AA)	Where set is defined as: set: group of documents that are 1) published together at the same time, 2) never distributed or installed separately, 3) all referenced from at least one parent item with back references from the children to the parent. NOTE 1: References do not need to be links, but if they are links that would be one of the means of locating the items, as browsing would be if the items have meaningful file or directory names. NOTE 2: For non-web content, this has a direct parallel with web content and would apply the same way as the content would if it were placed on line and viewable through a browser.
2.4.6 Headings and Labels: Headings and labels describe topic or purpose. (Level AA)	None.
2.4.7 Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)	None.
3.1.1 Language of Page: The default human language of each document can be programmatically determined. (Level A)	None.
3.1.2 Language of Parts: The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. (Level AA)	There are some document technologies where there is no assistive technology supported method for marking the language for the different passages or phrases in the document, and it would not be possible to meet this success criterion with those technologies. NOTE: Inheritance is one common method. For example a document provides the language that it is using and it can be assumed that all of the text or user interface elements within that document will be using the same language unless it is indicated.
3.2.1 On Focus: When any component receives focus, it does not initiate a change of context. (Level A)	None.
3.2.2 On Input: Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behaviour before using the component. (Level A)	None.
3.2.4 Consistent Identification: Components that have the same functionality within a document are identified consistently. (Level AA)	None.
3.3.1 Error Identification: If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text. (Level A)	None.
3.3.2 Labels or Instructions: Labels or instructions are provided when content requires user input. (Level A)	None.
3.3.3 Error Suggestion: If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content. (Level AA)	None.

Document success criterion	Applicability notes
<p>3.3.4 Error Prevention (Legal, Financial, Data): For documents that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true: (Level AA)</p> <ol style="list-style-type: none"> 1. Reversible: Submissions are reversible. 2. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. 3. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. 	None.
<p>4.1.1 Parsing: For document content that uses markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Level A)</p> <p>NOTE: Start and end tags that are missing a critical character in their formation, such as a closing angle bracket or a mismatched attribute value quotation mark are not complete.</p>	This applies to content that is separately exposed and available to assistive technology (AT). Where markup languages are used to describe user interface (UI) frameworks internally and are not available to AT, either directly or through a document object model (DOM), this criterion would automatically be met.
<p>4.1.2 Name, Role, Value: For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. (Level A)</p> <p>NOTE: This success criterion is primarily for authors who develop or script their own user interface components. For example, standard HTML controls already meet this success criterion when used according to specification.</p>	None.

Table 2 shows how document-related term substitutions have been made to the WCAG 2.0 success criteria to form the document success criteria listed in table 1. It also shows which WCAG 2.0 success criteria do not have satisfactory equivalents for documents and need not be applied.

Table 2: Application of WCAG 2.0 success criteria to documents

WCAG 2.0 success criteria	Document success criteria
1.1.1 Non-text content	<p>1.1.1 Non-text content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. (A)</p> <ul style="list-style-type: none"> • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to WCAG 2.0 Guideline 4.1 [5] for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to WCAG 2.0 Guideline 1.2 [5] for additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. <p>Decoration, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology.</p>
1.2.1 Audio-only and Video-only (Pre-recorded)	Applies without change
1.2.2 Captions (Pre-recorded)	Applies without change
1.2.3 Audio Description or Media Alternative (Pre-recorded)	Applies without change
1.2.4 Captions (Live)	Applies without change
1.2.5 Audio Description (Pre-recorded))	Applies without change
1.3.1 Info and Relationships	Applies without change
1.3.2 Meaningful Sequence	Applies without change
1.3.3 Sensory Characteristics	<p>1.3.3 Sensory Characteristics: Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.</p> <p>NOTE: For requirements related to colour, refer to WCAG 2.0 Guideline 1.4 [5].</p>
1.4.1 Use of Colour	<p>1.4.1 Use of Colour: Colour is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A)</p> <p>NOTE: This success criterion addresses colour perception specifically. Other forms of perception are covered in WCAG 2.0 Guideline 1.3 [5] including programmatic access to colour and other visual presentation coding.</p>

WCAG 2.0 success criteria	Document success criteria
1.4.2 Audio Control	<p>1.4.2 Audio Control: If any audio on-in a Web-page document plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)</p> <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page document, all content onin the Web-page document (whether or not it is used to meet other success criteria) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>
1.4.3 Contrast (Minimum)	Applies without change
1.4.4 Resize Text	Applies without change
1.4.5 Images of Text	Applies without change
2.1.1 Keyboard	Applies without change
2.1.2 No Keyboard Trap	<p>2.1.2 No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>
2.2.1 Timing Adjustable	<p>2.2.1 Timing Adjustable: For each time limit that is set by the content document, at least one of the following is true: (Level A)</p> <ul style="list-style-type: none"> • Turn off: The user is allowed to turn off the time limit before encountering it; or • Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or • Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or • Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or • Essential Exception: The time limit is essential and extending it would invalidate the activity; or • 20 Hour Exception: The time limit is longer than 20 hours. <p>NOTE: This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with WCAG 2.0 Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action.</p>

WCAG 2.0 success criteria	Document success criteria
2.2.2 Pause, Stop, Hide	<p>2.2.2 Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)</p> <ul style="list-style-type: none"> • Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and • Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. <p>NOTE 1: For requirements related to flickering or flashing content, refer to WCAG 2.0 Guideline 2.3 [5].</p> <p>Note 2: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole pagedocument, all content onin the Web pagedocument (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p> <p>NOTE 32: Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.</p> <p>NOTE 43: An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.</p>
2.3.1 Three Flashes or Below Threshold	<p>2.3.1 Three Flashes or Below Threshold: Web pagesDocuments do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole pagedocument, all content onin the Web pagedocument (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>
2.4.1 Bypass Blocks	Does not apply to documents
2.4.2 Page Titled	2.4.2 Page Titled: Web pages Documents have titles that describe topic or purpose. (Level A)
2.4.3 Focus Order	2.4.3 Focus Order: If a Web page document can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)
2.4.4 Link Purpose (In Context)	Applies without change

WCAG 2.0 success criteria	Document success criteria
2.4.5 Multiple Ways	2.4.5 Multiple Ways: More than one way is available to locate a Web page document within a set of Web pages documents except where the Web Page document is the result of, or a step in, a process. (Level AA)
2.4.6 Headings and Labels	Applies without change
2.4.7 Focus Visible	Applies without change
3.1.1 Language of Page	3.1.1 Language of Page: The default human language of each Web page document can be programmatically determined. (Level A)
3.1.2 Language of Parts	Applies without change
3.2.1 On Focus	Applies without change
3.2.2 On Input	Applies without change
3.2.3 Consistent Navigation	Does not apply to documents
3.2.4 Consistent Identification	3.2.4 Consistent Identification: Components that have the same functionality within a set of Web pages document user interface are identified consistently. (Level AA)
3.3.1 Error Identification	Applies without change
3.3.2 Labels or Instructions	Applies without change
3.3.3 Error Suggestion	Applies without change
3.3.4 Error Prevention (Legal, Financial, Data)	Applies without change
4.1.1 Parsing	4.1.1 Parsing: In For document content implemented using that uses markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Level A) NOTE: Start and end tags that are missing a critical character in their formation, such as a closing angle bracket or a mismatched attribute value quotation mark are not complete.
4.1.2 Name, Role, Value	Applies without change
NOTE: Text that has replaced words in the WCAG 2.0 Success Criterion is shown coloured red in the document success criteria column and immediately following the text that it has replaced. Text that has been replaced is highlighted using a strikethrough style.	

11 Non-Web software

11.1 General

The requirements of clause 11 apply to non-web documents. In order to ensure consistency between web and non-web requirements the word "must" is used in this clause where it is used in ISO/IEC 40500 [4] and in WCAG 2.0 [5]. For the purpose of the present document the word "must" carries the same meaning as "shall".

This clause provides requirements for:

- platform software;
- software that provides a user interface including content that is in the software;
- authoring tools;
- software that operates as assistive technology.

NOTE 1: User agents are examples of non-web software that provide a user interface.

NOTE 2: The requirements for Web content, including software that is Web content, can be found in clause 9.

NOTE 3: The requirements for documents, that may be presented by user agents, can be found in clause 10.

11.2 Software success criteria

Except for its closed functionality, the functionality of software that provides a user interface shall conform to the software success criteria in table 3. Table 3 incorporates WCAG 2.0 success criteria with the term substitutions and omissions described in table 5.

NOTE 1: The success criteria set out in this clause are intended to harmonize with the report [1.24] produced by the W3C's WCAG2ICT Task Force (<http://www.w3.org/WAI/GL/WCAG2ICT-TF/>).

The closed functionality of software that provides a user interface shall conform to the software success criteria listed in table 4, except under the applicability conditions described in the second column of table 4, where it shall instead conform to the closed functionality requirements listed in the third column of table 4.

NOTE 2: Software that provides a user interface includes its own content. Some examples of content in software include the controls and text displayed in a menu bar of a graphical user interface application, images that appear in a toolbar, prompts spoken in an auditory user interface, other user interaction controls, and other text, graphics or material that is not loaded from outside the software.

Table 3: Software success criteria

Software success criterion	Applicability notes
<p>1.1.1 Non-text content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. (A)</p> <ul style="list-style-type: none"> • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to WCAG 2.0 Guideline 4.1 [5] for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to WCAG 2.0 Guideline 1.2 [5] for additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. • Decoration, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology. 	<p>CAPTCHAs do not currently appear outside of the Web. However, if they do appear, this guidance is accurate.</p>
<p>1.2.1 Audio-only and Video-only (Pre-recorded): For pre-recorded audio-only and pre-recorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labelled as such: (A)</p> <ul style="list-style-type: none"> • Pre-recorded Audio-only: An alternative for time-based media is provided that presents equivalent information for pre-recorded audio-only content. • Pre-recorded Video-only: Either an alternative for time-based media or an audio track is provided that presents equivalent information for pre-recorded video-only content. 	<p>The alternative can be provided directly in the software - or provided in a conforming alternate version.</p>

Software success criterion	Applicability notes
<p>1.2.2 Captions (Pre-recorded): Captions are provided for all pre-recorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labelled as such. (A)</p>	<p>The WCAG 2.0 definition of "captions" notes that "In some countries, captions are called subtitles". They are also sometimes referred to as "subtitles for the hearing impaired". Per the definition in WCAG 2.0 [5], to meet this success criterion, whether called captions or subtitles, they would have to provide "synchronized visual and/or text alternative for both speech and non-speech audio information needed to understand the media content" where non-speech information includes "sound effects, music, laughter, speaker identification and location".</p>
<p>1.2.3 Audio Description or Media Alternative (Pre-recorded): An alternative for time-based media or audio description of the pre-recorded video content is provided for synchronized media, except when the media is a media alternative for text and is clearly labelled as such. (A)</p>	<p>The WCAG 2.0 definition of "audio description" says that "audio description" is "Also called 'video description' and 'descriptive narration'."</p> <p>Secondary or alternate audio tracks are commonly used for this purpose.</p>
<p>1.2.4 Captions (Live): Captions are provided for all live audio content in synchronized media. (AA)</p>	<p>The WCAG 2.0 definition of "captions" notes that "In some countries, captions are called subtitles". They are also sometimes referred to as "subtitles for the hearing impaired". Per the definition in WCAG 2.0 [5], to meet this success criterion, whether called captions or subtitles, they would have to provide "synchronized visual and/or text alternative for both speech and non-speech audio information needed to understand the media content" where non-speech information includes "sound effects, music, laughter, speaker identification and location".</p>
<p>1.2.5 Audio Description (Pre-recorded): Audio description is provided for all pre-recorded video content in synchronized media. (Level AA)</p>	<p>The WCAG 2.0 definition of "audio description" says that audio description is "Also called 'video description' and 'descriptive narration'."</p> <p>Secondary or alternate audio tracks are commonly used for this purpose</p>
<p>1.3.1 Info and Relationships: Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. (Level A)</p>	<p>In software, programmatic determinability is best achieved through the use of accessibility services provided by platform software to enable interoperability between software and assistive technologies.</p>
<p>1.3.2 Meaningful Sequence: When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. (Level A)</p>	<p>None.</p>
<p>1.3.3 Sensory Characteristics: Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound. NOTE: For requirements related to colour, refer to WCAG 2.0 Guideline 1.4 [5].</p>	<p>None.</p>
<p>1.4.1 Use of Colour: Colour is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A) NOTE: This success criterion addresses colour perception specifically. Other forms of perception are covered in WCAG 2.0 Guideline 1.3 [5] including programmatic access to colour and other visual presentation coding.</p>	<p>None.</p>

Software success criterion	Applicability notes
<p>1.4.2 Audio Control: If any audio in software plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)</p> <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the software application, all content in the software (whether or not it is used to meet other success criteria) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>	None.
<p>1.4.3 Contrast (Minimum): The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following: (Level AA)</p> <ul style="list-style-type: none"> • Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1; • Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement. • Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement. 	None.
<p>1.4.4 Resize text: Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. (Level AA)</p>	<p>Content that has software players, viewers or editors with a 200 % zoom feature would automatically meet this success criterion unless the content will not work with zoom.</p> <p>The INTENT refers to the ability to allow users to enlarge the text on screen at least up to 200 % without needing to use assistive technologies. This means that the application provides some means for enlarging the text 200 % (zoom or otherwise) without loss of content or functionality or that the application works with the platform features that meet this requirement.</p>
<p>1.4.5 Images of Text: If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following: (Level AA)</p> <ul style="list-style-type: none"> • Customizable: The image of text can be visually customized to the user's requirements; • Essential: A particular presentation of text is essential to the information being conveyed. <p>NOTE: Logotypes (text that is part of a logo or brand name) are considered essential.</p>	None.
<p>2.1.1 Keyboard: All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. (Level A)</p> <p>NOTE 1: This exception relates to the underlying function, not the input technique. For example, if using handwriting to enter text, the input technique (handwriting) requires path-dependent input but the underlying function (text input) does not.</p> <p>NOTE 2: This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation.</p>	This does not imply that software must directly support a keyboard or "keyboard interface". Nor does it imply that software must provide a soft keyboard. Underlying platform software may provide device independent input services to applications that enable operation via a keyboard. Software that supports operation via such platform device independent services would be operable by a keyboard and would comply.

Software success criterion	Applicability notes
<p>2.1.2 No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. (Level A)</p> <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>	<p>Standard exit methods may vary by platform. For example, on many desktop platforms, the Escape key is a standard method for exiting.</p>
<p>2.2.1 Timing Adjustable: For each time limit that is set by the software, at least one of the following is true: (Level A)</p> <ul style="list-style-type: none"> • Turn off: The user is allowed to turn off the time limit before encountering it; or • Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or • Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or • Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or • Essential Exception: The time limit is essential and extending it would invalidate the activity; or • 20 Hour Exception: The time limit is longer than 20 hours. <p>NOTE: This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with WCAG 2.0 Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action.</p>	<p>None.</p>

Software success criterion	Applicability notes
<p>2.2.2 Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)</p> <ul style="list-style-type: none"> • Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and • Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the software, all content in the software (whether it is used to meet other success criteria or not) must meet this success criterion. (See WCAG 2.0 Conformance Requirement 5: Non-Interference).</p> <p>NOTE 1: For requirements related to flickering or flashing content, refer to WCAG 2.0 Guideline 2.3 [5].</p> <p>NOTE 2: Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.</p> <p>NOTE 3: An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.</p>	<p>This is to be applied to all content. Any content, whether informative or decorative, that is updated automatically, blinks, or moves may create an accessibility barrier.</p>
<p>2.3.1 Three Flashes or Below Threshold: Software does not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A)</p> <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the software, all content in the software (whether it is used to meet other success criteria or not) must meet this success criterion. (See WCAG 2.0 Conformance Requirement 5: Non-Interference).</p>	<p>None.</p>
<p>2.4.3 Focus Order: If a software user interface can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)</p>	<p>None.</p>
<p>2.4.4 Link Purpose (In Context): The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. (Level A)</p>	<p>In software, a "link" is any text string or image in the user interface outside a user interface control that behaves like a hypertext link. This does not include general user interface controls or buttons. (An OK button, for example, would not be a link.)</p>
<p>2.4.6 Headings and Labels: Headings and labels describe topic or purpose. (Level AA)</p>	<p>Note that in software user interfaces, labels and headings are used to describe controls and sections of content respectively. In some cases it may be unclear whether a piece of static text is a heading or a label. But whether treated as a label or a heading, the requirement is the same: that if they are present they describe the topic or purpose of the item(s) they are associated with.</p>
<p>2.4.7 Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)</p>	<p>None.</p>

Software success criterion	Applicability notes
<p>3.1.1 Language of software: The default human language of each software user interface can be programmatically determined. (Level A)</p>	<p>Where software platforms provide a "locale/language" setting, applications that use that setting and render their interface in that "locale/language" would comply with this success criterion.</p> <p>Applications that do not use the platform "locale/language setting" but instead use an accessibility supported method for exposing the human language of the software user interface would also comply with this success criterion.</p> <p>Applications implemented in technologies where assistive technologies cannot determine the human language and that do not support the platform "locale/language" setting may not be able to meet this success criterion in that locale/language. In this case, this success criterion is not required.</p>
<p>3.2.1 On Focus: When any component receives focus, it does not initiate a change of context. (Level A)</p>	None.
<p>3.2.2 On Input: Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behaviour before using the component. (Level A)</p>	None.
<p>3.2.4 Consistent Identification: Components that have the same functionality within a software user interface are identified consistently. (Level AA)</p>	None.
<p>3.3.1 Error Identification: If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text. (Level A)</p>	None.
<p>3.3.2 Labels or Instructions: Labels or instructions are provided when content requires user input. (Level A)</p>	None.
<p>3.3.3 Error Suggestion: If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content. (Level AA)</p>	None.
<p>3.3.4 Error Prevention (Legal, Financial, Data): For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true: (Level AA)</p> <ol style="list-style-type: none"> 1. Reversible: Submissions are reversible. 2. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them. 3. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. 	None.
<p>4.1.1 Parsing: In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Level A)</p> <p>NOTE: Start and end tags that are missing a critical character in their formation, such as a closing angle bracket or a mismatched attribute value quotation mark are not complete.</p>	<p>This applies for content that is separately exposed and available to assistive technology (AT). Where markup languages are used to describe user interface (UI) frameworks internally and are not available to AT, either directly or through a document object model (DOM), this criterion would automatically be met.</p>

Software success criterion	Applicability notes
<p>4.1.2 Name, Role, Value: For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. (Level A)</p> <p>NOTE: This success criterion is primarily for Web authors who develop or script their own user interface components. For example, standard HTML controls already meet this success criterion when used according to specification.</p>	Conformance to this success criterion, requires software user interfaces to use the accessibility services as described in clause 11.3.

Table 4 lists requirements in clause 5.1 that, under the stated conditions, replace the software success criteria for closed functionality of software that has a user interface.

Table 4: Software success criteria exceptions for closed functionality

Software success criteria	Applicability conditions	Closed functionality requirements
1.1.1 Non-text Content	When closed to assistive technologies for screen reading	5.1.3.6 Speech output for non-text content
1.2.1 Audio-only and Video-only (Pre-recorded) - for video only	When closed to assistive technologies for screen reading	5.1.3.7 Speech output for video information
1.2.1 Audio-only and Video-only (Pre-recorded) - for audio only	Where pre-recorded auditory information is needed to enable the use of closed functions of ICT	5.1.6 Visual output for auditory information
1.2.3 Audio Description or Media Alternative (Pre-recorded):	When closed to assistive technologies for screen reading	5.1.3.7 Speech output for video information
1.3.1 Info and Relationships	When closed to assistive technologies for screen reading	5.1.3.3 Auditory output correlation
1.3.2 Meaningful Sequence	When closed to assistive technologies for screen reading	5.1.3.3 Auditory output correlation
1.4.2 Audio control	When closed to assistive technologies for screen reading	5.1.3.10 Non-interfering audio output
1.4.4 Resize text	When closed to enlargement features of platform or assistive technology	5.1.5 Functionality closed to text enlargement
2.1.1 Keyboard	When closed to keyboards or keyboard interface	5.1.7 Operation without keyboard interface
2.1.2 Keyboard trap	When closed to keyboards or keyboard interface	5.1.7 Operation without keyboard interface
3.1.1 Language of page	When closed to assistive technologies for screen reading	5.1.3.11 Spoken languages
4.1.1 Parsing	Where any functionality is closed	(not needed)
4.1.2 Name, role, value	Where any functionality is closed	(not needed)

Table 5 shows how software-related term substitutions have been made to the WCAG 2.0 success criteria to form the software success criteria listed in table 3. It also shows which WCAG 2.0 success criteria do not have satisfactory equivalents for non-web software and need not be applied.

Table 5: Application of WCAG 2.0 success criteria to software

WCAG 2.0 success criteria	Software success criteria
1.1.1 Non-text content	<p>1.1.1 Non-text content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. (A)</p> <ul style="list-style-type: none"> • Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to WCAG 2.0 Guideline 4.1 [5] for additional requirements for controls and content that accepts user input.) • Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to WCAG 2.0 Guideline 1.2 [5] for additional requirements for media.) • Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content. • Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content. • CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities. <p>Decoration, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology.</p>
1.2.1 Audio-only and Video-only (Pre-recorded)	Applies without change
1.2.2 Captions (Pre-recorded)	Applies without change
1.2.3 Audio Description or Media Alternative (Pre-recorded)	Applies without change
1.2.4 Captions (Live)	Applies without change
1.2.5 Audio Description (Pre-recorded)	Applies without change
1.3.1 Info and Relationships	Applies without change
1.3.2 Meaningful Sequence	Applies without change
1.3.3 Sensory Characteristics	<p>1.3.3 Sensory Characteristics: Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.</p> <p>NOTE: For requirements related to colour, refer to WCAG 2.0 Guideline 1.4 [5].</p>
1.4.1 Use of Colour	<p>1.4.1 Use of Colour: Colour is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A)</p> <p>NOTE: This success criterion addresses colour perception specifically. Other forms of perception are covered in WCAG 2.0 Guideline 1.3 [5] including programmatic access to colour and other visual presentation coding.</p>

WCAG 2.0 success criteria	Software success criteria
1.4.2 Audio Control	<p>1.4.2 Audio Control: If any audio on a Web page software plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Level A)</p> <p>Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page software, all content on the Web page software (whether or not it is used to meet other success criteria) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>
1.4.3 Contrast (Minimum)	Applies without change
1.4.4 Resize Text	Applies without change
1.4.5 Images of Text	Applies without change
2.1.1 Keyboard	Applies without change
2.1.2 No Keyboard Trap	<p>2.1.2 No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>
2.2.1 Timing Adjustable	<p>2.2.1 Timing Adjustable: For each time limit that is set by the content software, at least one of the following is true: (Level A)</p> <ul style="list-style-type: none"> • Turn off: The user is allowed to turn off the time limit before encountering it; or • Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or • Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or • Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or • Essential Exception: The time limit is essential and extending it would invalidate the activity; or • 20 Hour Exception: The time limit is longer than 20 hours. <p>NOTE: This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with WCAG 2.0 Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action.</p>

WCAG 2.0 success criteria	Software success criteria
<p>2.2.2 Pause, Stop, Hide</p>	<p>2.2.2 Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)</p> <ul style="list-style-type: none"> • Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and • Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. <p>NOTE 1: For requirements related to flickering or flashing content, refer to WCAG 2.0 Guideline 2.3 [5].</p> <p>Note 2: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page software, all content on in the Web page software (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p> <p>NOTE 32: Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.</p> <p>NOTE 43: An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.</p>
<p>2.3.1 Three Flashes or Below Threshold</p>	<p>2.3.1 Three Flashes or Below Threshold: Web pages do Software does not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page software, all content on in the Web page software (whether it is used to meet other success criteria or not) must meet this success criterion. See WCAG 2.0 Conformance Requirement 5: Non-Interference.</p>
<p>2.4.1 Bypass Blocks</p>	<p>Does not apply to software</p>
<p>2.4.2 Page Titled</p>	<p>Does not apply to software</p>
<p>2.4.3 Focus Order</p>	<p>2.4.3 Focus Order: If a Web page software user interface can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)</p>
<p>2.4.4 Link Purpose (In Context)</p>	<p>Applies without change</p>
<p>2.4.5 Multiple Ways</p>	<p>Does not apply to software</p>
<p>2.4.6 Headings and Labels</p>	<p>Applies without change</p>

WCAG 2.0 success criteria	Software success criteria
2.4.7 Focus Visible	Applies without change
3.1.1 Language of Page	3.1.1 Language of Page: The default human language of each Web page software user interface can be programmatically determined. (Level A)
3.1.2 Language of Parts	Does not apply to software
3.2.1 On Focus	Applies without change
3.2.2 On Input	Applies without change
3.2.3 Consistent Navigation	Does not apply to software
3.2.4 Consistent Identification	3.2.4 Consistent Identification: Components that have the same functionality within a set of Web pages software user interface are identified consistently. (Level AA)
3.3.1 Error Identification	Applies without change
3.3.2 Labels or Instructions	Applies without change
3.3.3 Error Suggestion	Applies without change
3.3.4 Error Prevention (Legal, Financial, Data)	Applies without change
4.1.1 Parsing	Applies without change
4.1.2 Name, Role, Value	Applies without change
NOTE:	Text that has replaced words in the WCAG 2.0 Success Criterion is shown coloured red in the software success criteria column and immediately following the text that it has replaced. Text that has been replaced is highlighted using a strikeout style.

11.3 Interoperability with assistive technology

11.3.1 Closed functionality

Software that has closed functionality and that conforms to clause 5.1 (Closed functionality) shall not be required to conform with clause 11.3.

11.3.2 Accessibility services

11.3.2.1 Platform accessibility service support for software that provides a user interface

Platform software shall provide a set of documented platform services that enable software that provides a user interface running on the platform software to interoperate with assistive technology.

Platform software should, as a minimum, support requirements 11.3.2.5 to 11.3.2.17.

NOTE 1: These define the minimum functionality of software providing user interfaces when using platform services.

NOTE 2: The definition of platform in 3.1 applies to software that provides services to other software, including but not limited to, operating systems, internet browsers, virtual machines.

NOTE 3: In some platforms these services may be called accessibility services, but in some other platforms these services may be provided as part of the user interface services.

NOTE 4: User interface services that provide accessibility support by default are considered to be part of the services provided to conform to this clause (i.e. the service for creating a new user interface element provides role, state, boundary, name and description).

NOTE 5: To comply with this requirement the platform software can provide its own set of services or expose the services provided by its underlying platform layers, if those services conform to this requirement.

11.3.2.2 Platform accessibility service support for assistive technologies

Platform software shall provide a set of documented platform accessibility services that enable assistive technology to interoperate with software that provides a user interface running on the platform software.

Platform software should, as a minimum, support the requirements of clauses 11.3.2.5 to 11.3.2.17.

NOTE 1: These define the minimum functionality available to assistive technologies when using platform services.

NOTE 2: The definition of platform in 3.1 applies to software that provides services to other software, including but not limited to, operating systems, internet browsers, virtual machines.

NOTE 3: In some platforms these services may be called accessibility services, but in some other platforms these services may be provided as part of the user interface services.

NOTE 4: Typically these services belong to the same set of services that are described in clause 11.3.2.1.

11.3.2.3 Use of accessibility services

Software that provides a user interface shall use the documented platform accessibility services. If the documented platform accessibility services do not allow the software to meet the requirements of clauses 11.3.2.5 to 11.3.2.17, then software that provides a user interface shall use other documented services to interoperate with assistive technology.

NOTE 1: The term "documented platform accessibility services" refers to the set of services provided by the platform according to clauses 11.3.2.1 and 11.3.2.2.

NOTE 2: Software developed using toolkits that automatically implement the underlying platform accessibility services are deemed to conform to this requirement.

11.3.2.4 Assistive technology

Assistive technology shall use the documented platform accessibility services.

NOTE 1: The term "documented platform accessibility services" refers to the set of services provided by the platform according to clauses 11.3.2.1 and 11.3.2.2.

NOTE 2: Assistive technology can also use other documented accessibility services.

11.3.2.5 Object information

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make the user interface elements' role, state(s), boundary, name, and description programmatically determinable by assistive technologies.

11.3.2.6 Row, column, and headers

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make the row and column of each cell in a data table, including headers of the row and column if present, programmatically determinable by assistive technologies.

11.3.2.7 Values

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make the current value of a user interface element and any minimum or maximum values of the range, if the user interface element conveys information about a range of values, programmatically determinable by assistive technologies.

11.3.2.8 Label relationships

Software that provides a user interface shall expose the relationship that a user interface element has as a label for another element, or of being labelled by another element, using the services as described in clause 11.3.2.3, so that this information is programmatically determinable by assistive technologies.

11.3.2.9 Parent-child relationships

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make the relationship between a user interface element and any parent or children elements programmatically determinable by assistive technologies.

11.3.2.10 Text

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make the text contents, text attributes, and the boundary of text rendered to the screen programmatically determinable by assistive technologies.

11.3.2.11 List of available actions

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make a list of available actions that can be executed on a user interface element, programmatically determinable by assistive technologies.

11.3.2.12 Execution of available actions

When permitted by security requirements, software that provides a user interface shall, by using the services as described in clause 11.3.2.3, allow the programmatic execution of the actions exposed according to clause 11.3.2.11 by assistive technologies.

NOTE 1: In some cases the security requirements imposed on a software product may forbid external software from interfering with the ICT product and so this requirement would not apply. Examples of systems under strict security requirements are systems dealing with intelligence activities, cryptologic activities related to national security, command and control of military forces.

NOTE 2: Assistive technologies may be required to maintain the same level of security as the standard input mechanisms supported by the platform.

11.3.2.13 Tracking of focus and selection attributes

Software that provides a user interface shall, by using the services as described in clause 11.3.2.3, make information and mechanisms necessary to track focus, text insertion point, and selection attributes of user interface elements programmatically determinable by assistive technologies.

11.3.2.14 Modification of focus and selection attributes

When permitted by security requirements, software that provides a user interface shall, by using the services as described in clause 11.3.2.3, allow assistive technologies to programmatically modify focus, text insertion point, and selection attributes of user interface elements where the user can modify these items.

NOTE 1: In some cases the security requirements imposed on a software product may forbid external software from interfering with the ICT product and so this requirement would not apply. Examples of systems under strict security requirements are systems dealing with intelligence activities, cryptologic activities related to national security, command and control of military forces.

NOTE 2: Assistive technologies may be required to maintain the same level of security as the standard input mechanisms supported by the platform.

11.3.2.15 Change notification

Software that provides a user interface shall, by using the services as described in 11.3.2.3, notify assistive technologies about changes in those programmatically determinable attributes of user interface elements that are referenced in requirements 11.3.2.5 to 11.3.2.11 and 11.3.2.13.

11.3.2.16 Modifications of states and properties

When permitted by security requirements, software that provides a user interface shall, by using the services as described in clause 11.3.2.3, allow assistive technologies to programmatically modify states and properties of user interface elements, where the user can modify these items.

NOTE 1: In some cases the security requirements imposed on a software product may forbid external software from interfering with the ICT product and so this requirement would not apply. Examples of systems under strict security requirements are systems dealing with intelligence activities, cryptologic activities related to national security, command and control of military forces.

NOTE 2: Assistive technologies may be required to maintain the same level of security as the standard input mechanisms supported by the platform.

11.3.2.17 Modifications of values and text

When permitted by security requirements, software that provides a user interface shall, by using the services as described in 11.3.2.3, allow assistive technologies to modify values and text of user interface elements using the input methods of the platform, where a user can modify these items without the use of assistive technology.

NOTE 1: In some cases the security requirements imposed on a software product may forbid external software from interfering with the ICT product and so this requirement would not apply. Examples of systems under strict security requirements are systems dealing with intelligence activities, cryptologic activities related to national security, command and control of military forces.

NOTE 2: Assistive technologies may be required to maintain the same level of security as the standard input mechanisms supported by the platform.

11.4 Documented accessibility usage

11.4.1 User control of accessibility features

Platforms shall provide at least one mode of operation for user control over those platform accessibility features documented as intended for users.

11.4.2 No disruption of accessibility features

Software that provides a user interface shall not disrupt those documented accessibility features that are defined in platform documentation except when requested to do so by the user during the operation of the software.

11.5 User preferences

Software that provides a user interface shall provide at least one mode of operation that uses user preferences for platform settings for colour, contrast, font type, font size, and focus cursor except for software that is designed to be isolated from its underlying platforms.

NOTE: Software that is isolated from its underlying platform has no access to user settings in the platform and thus cannot adhere to them.

11.6 Authoring tools

11.6.1 Content technology

Authoring tools shall conform to clauses 11.6.2 to 11.6.5 to the extent that information required for accessibility is supported by the format used for the output of the authoring tool.

11.6.2 Accessible content creation

Authoring tools shall enable and guide the production of content that conforms to clauses 9 (Web content) or 10 (Non-Web content) as applicable.

NOTE: Authoring tools may rely on additional tools where conformance with specific requirements is not achievable by a single tool. For example, a video editing tool may enable the creation of video files for distribution via broadcast television and the web, but authoring of caption files for multiple formats may be provided by a different tool.

11.6.3 Preservation of accessibility information in transformations

If the authoring tool provides restructuring transformations or re-coding transformations, then accessibility information shall be preserved in the output if equivalent mechanisms exist in the content technology of the output.

NOTE 1: Restructuring transformations are transformations in which the content technology stays the same, but the structural features of the content are changed (e.g. linearizing tables, splitting a document into pages).

NOTE 2: Re-coding transformations are transformations in which the technology used to encode the content is changed.

11.6.4 Repair assistance

If the accessibility checking functionality of an authoring tool can detect that content does not meet a requirement of clauses 9 (Web content) or 10 (Documents) as applicable, then the authoring tool shall provide repair suggestion(s).

NOTE: This does not preclude automated and semi-automated repair which is possible (and encouraged) for many types of content accessibility problems.

11.6.5 Templates

When an authoring tool provides templates, at least one template that supports the creation of content that conforms to clauses 9 (Web content) or 10 (Documents) as applicable shall be available and identified as such.

12 Documentation and support services

12.1 Product documentation

12.1.1 Accessibility and compatibility features

Product documentation provided with the ICT shall list and explain how to use the accessibility and compatibility features of the ICT.

NOTE: Accessibility and compatibility features include accessibility features that are built-in and accessibility features that provide compatibility with assistive technology.

12.1.2 Accessible documentation

Product documentation provided with the ICT shall be made available in at least one of the following electronic formats:

- a) a Web format that conforms to clause 9, or;
- b) a non-web format that conforms to clause 10.

NOTE: This does not preclude the possibility of providing the product documentation in other formats (electronic or printed) that are not accessible. It also does not preclude the possibility of providing alternate formats that meet the needs of some specific type of users (e.g. Braille documents for blind people or easy-to-read information for persons with cognitive impairments).

12.2 Support services

12.2.1 General

ICT support services include, but are not limited to: help desks, call centres, technical support, and training services.

12.2.2 Information on accessibility and compatibility features

ICT support services shall provide information on the accessibility and compatibility features that are included in the product documentation.

NOTE: Accessibility and compatibility features include accessibility features that are built-in and accessibility features that provide compatibility with assistive technology.

12.2.3 Effective communication

ICT support services shall accommodate the communication needs of individuals with disabilities either directly or through a referral point.

12.2.4 Accessible documentation

Documentation provided by support services shall be made available in at least one of the following electronic formats:

- a) a Web format that conforms to clause 9, or
- b) a non-web format that conforms to clause 10.

NOTE: This does not preclude the possibility of providing the documentation in other formats (electronic or printed) that are not accessible. It also does not preclude the possibility of providing alternate formats that meet the needs of some specific type of users (e.g. Braille documents for blind people or easy-to-read information for persons with cognitive impairments).

13 Relay and emergency services

13.1 Relay services requirements

13.1.1 Text relay services

Any text relay service shall enable text users and speech users to interact by providing conversion between the two modes of communication.

A service meeting the applicable text relay requirements of ES 202 975 [i.5] is deemed to comply with this requirement.

13.1.2 Sign relay services

Any sign relay service shall enable sign language users and speech users to interact by providing conversion between the two modes of communication.

A service meeting the sign relay requirements of ES 202 975 [i.5] is deemed to comply with this requirement.

NOTE: Sign relay services are also sometimes referred to as sign language relay services or video relay services.

13.1.3 Lip-reading relay services

Any lip-reading relay service shall enable lip-readers and voice telephone users to interact by providing conversion between the two modes of communication.

A service meeting the applicable lip-reading relay requirements of ES 202 975 [i.5] is deemed to comply with this requirement.

13.1.4 Captioned telephony services

Any captioned telephony service shall assist a deaf or hard of hearing user in a spoken dialogue by providing text captions translating the incoming part of the conversation.

A service meeting the applicable captioned telephony service requirements of ES 202 975 [i.5] is deemed to comply with this requirement.

13.1.5 Speech to speech relay services

Any speech to speech relay service shall enable speech or cognitively impaired telephone users and any other user to communicate by providing assistance between them.

A service meeting the applicable speech relay requirements of ES 202 975 [i.5] is deemed to comply with this requirement.

13.2 Access to relay services

Where a list of relay services to be supported is specified in the procurement process, communication systems that support two-way communication shall not prevent access to those relay services for outgoing and incoming calls.

NOTE: The purpose of this requirement is to achieve functionally equivalent communication access by persons with disabilities.

13.3 Access to emergency services

Where a list of emergency services that support voice, text or video communication is specified in the procurement process, communication systems shall support access to those emergency services for outgoing and incoming calls.

NOTE 1: The purpose of this requirement is to achieve functionally equivalent communication access to the emergency service by persons with disabilities.

NOTE 2: Emergency calls include both calls to public emergency services and to local emergency contact points that may be provided by some organizations for their employees.

Annex A (informative): WCAG 2.0

A.1 Electronic attachment

An Adobe Portable Document Format™ file setting out the requirements of WCAG 2.0 [5] is contained in archive en_301549v010000c0.zip as (wcag20-guidelines-20081211-a4.pdf), which accompanies the present document.

This .pdf file is subject to specific copyright provisions: It contains a copy of the W3C/WAI Web Content Accessibility Guidelines (WCAG) 2.0, located at: <http://www.w3.org/TR/WCAG20/>.

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Annex B (informative): Relationships between requirements and functional performance statements

B.1 Relationships with WCAG 2.0 Success Criteria

The following abbreviations have been used to represent the relationship between WCAG 2.0 Success Criteria and the functional performance statements:

- P = Primary. The requirement supports the functional performance statement.
- S = Secondary. The requirement provides partial support for the functional performance statement because some users may use the feature in specific situations.

Table B.1: WCAG 2.0 success criteria supporting the needs expressed in the functional performance statements

Success Criteria	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
9 - 1.1.1 Non text content 10.2 - 1.1.1 Non text content 11.2 - 1.1.1 Non text content	P	P	-	P	S	-	-	-	-	S	S
9 - 1.2.1 Audio-only and Video-only (Pre-recorded) 10.2 - 1.2.1 Audio-only and Video-only (Pre-recorded) 11.2 - 1.2.1 Audio-only and Video-only (Pre-recorded)	P	P	-	P	P	-	-	-	-	S	-
9 - 1.2.2 Captions (Pre-recorded) 10.2 - 1.2.2 Captions (Pre-recorded) 11.2 - 1.2.2 Captions (Pre-recorded)	-	-	-	P	P	-	-	-	-	S	-
9 - 1.2.3 Audio Description or Media Alternative (Pre-recorded) 10.2 - 1.2.3 Audio Description or Media Alternative (Pre-recorded) 11.2 - 1.2.3 Audio Description or Media Alternative (Pre-recorded)	P	S	-	-	-	-	-	-	-	S	-
9 - 1.2.4 Captions (Live) 10.2 - 1.2.4 Captions (Live) 11.2 - 1.2.4 Captions (Live)	-	-	-	P	P	-	-	-	-	S	-
9 - 1.2.5 Audio Description (Pre-recorded) 10.2 - 1.2.5 Audio Description (Pre-recorded) 11.2 - 1.2.5 Audio Description (Pre-recorded)	P	S	-	-	-	-	-	-	-	S	-
9 - 1.3.1 Info and Relationships 10.2 - 1.3.1 Info and Relationships 11.2 - 1.3.1 Info and Relationships	P	S	-	-	-	-	-	-	-	S	-

Success Criteria	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
9 - 1.3.2 Meaningful Sequence 10.2 - 1.3.2 Meaningful Sequence 11.2 - 1.3.2 Meaningful Sequence	P	S	-	-	-	-	-	-	-	S	-
9 - 1.3.3 Sensory Characteristics 10.2 - 1.3.3 Sensory Characteristics 11.2 - 1.3.3 Sensory Characteristics	P	P	P	P	P	-	-	-	-	S	-
9 - 1.4.1 Use of Colour 10.2 - 1.4.1 Use of Colour 11.2 - 1.4.1 Use of Colour	P	P	P	-	-	-	-	-	-	S	-
9 - 1.4.2 Audio Control 10.2 - 1.4.2 Audio Control 11.2 - 1.4.2 Audio Control	P	-	-	-	P	-	-	-	-	S	-
9 - 1.4.3 Contrast (Minimum) 10.2 - 1.4.3 Contrast (Minimum) 11.2 - 1.4.3 Contrast (Minimum)	-	P	P	-	-	-	-	-	-	S	-
9 - 1.4.4 Resize text 10.2 - 1.4.4 Resize text 11.2 - 1.4.4 Resize text	-	P	-	-	-	-	S	-	-	-	-
9 - 1.4.5 Images of Text 10.2 - 1.4.5 Images of Text 11.2 - 1.4.5 Images of Text	-	P	P	-	-	-	-	-	-	S	-
9 - 2.1.1 Keyboard 10.2 - 2.1.1 Keyboard 11.2 - 2.1.1 Keyboard	P	P	-	-	-	S	P	-	-	-	-
9 - 2.1.2 No Keyboard Trap 10.2 - 2.1.2 No Keyboard Trap 11.2 - 2.1.2 No Keyboard Trap	P	P	-	-	-	S	P	-	-	-	-
9 - 2.2.1 Timing Adjustable 10.2 - 2.2.1 Timing Adjustable 11.2 - 2.2.1 Timing Adjustable	P	P	-	P	P	-	P	-	-	P	-
9 - 2.2.2 Pause, Stop, Hide 10.2 - 2.2.2 Pause, Stop, Hide 11.2 - 2.2.2 Pause, Stop, Hide	P	P	-	P	P	-	P	-	-	P	-
9 - 2.3.1 Three Flashes or Below Threshold 10.2 - 2.3.1 Three Flashes or Below Threshold 11.2 - 2.3.1 Three Flashes or Below Threshold	-	-	-	-	-	-	-	-	P	-	-
9 - 2.4.1 Bypass Blocks 10.2 - 2.4.1 Bypass Blocks 11.2 - 2.4.1 Bypass Blocks	P	P	-	-	-	S	P	-	-	P	-
9 - 2.4.2 Page Titled 10.2 - 2.4.2 Page Titled 11.2 - 2.4.2 Page Titled	P	P	-	-	-	-	P	-	-	P	-
9 - 2.4.3 Focus Order 10.2 - 2.4.3 Focus Order 11.2 - 2.4.3 Focus Order	P	P	-	S	-	-	P	-	-	P	-
9 - 2.4.4 Link Purpose (In Context) 10.2 - 2.4.4 Link Purpose (In Context) 11.2 - 2.4.4 Link Purpose (In Context)	P	P	-	-	-	S	P	-	-	P	-
9 - 2.4.5 Multiple Ways 10.2 - 2.4.5 Multiple Ways 11.2 - 2.4.5 Multiple Ways	P	P	-	-	-	S	P	-	-	P	-

Success Criteria	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
9 - 2.4.6 Headings and Labels 10.2 - 2.4.6 Headings and Labels 11.2 - 2.4.6 Headings and Labels	P	P	-	S	-	S	P	-	-	P	-
9 - 2.4.7 Focus Visible 10.2 - 2.4.7 Focus Visible 11.2 - 2.4.7 Focus Visible	P	P	-	-	-	S	P	-	-	P	-
9 - 3.1.1 Language of Page 10.2 - 3.1.1 Language of Page 11.2 - 3.1.1 Language of Software	P	S	-	S	S	-	-	-	-	S	-
9 - 3.1.2 Language of Parts 10.2 - 3.1.2 Language of Parts	P	S	-	S	S	-	-	-	-	S	-
9 - 3.2.1 On Focus 10.2 - 3.2.1 On Focus 11.2 - 3.2.1 On Focus	P	P	-	-	-	-	P	-	-	P	-
9 - 3.2.2 On Input 10.2 - 3.2.2 On Input 11.2 - 3.2.2 On Input	P	P	-	-	-	-	P	-	-	P	-
9 - 3.2.3 Consistent Navigation	P	P	-	-	-	-	-	-	-	P	-
9 - 3.2.4 Consistent Identification 10.2 - 3.2.4 Consistent Identification 11.2 - 3.2.4 Consistent Identification	S	P	-	-	-	-	-	-	-	P	-
9 - 3.3.1 Error Identification 10.2 - 3.3.1 Error Identification 11.2 - 3.3.1 Error Identification	P	P	P	-	-	-	-	-	-	P	-
9 - 3.3.2 Labels or Instructions 10.2 - 3.3.2 Labels or Instructions 11.2 - 3.3.2 Labels or Instructions	P	P	-	-	-	S	S	-	-	P	-
9 - 3.3.3 Error Suggestion 10.2 - 3.3.3 Error Suggestion 11.2 - 3.3.3 Error Suggestion	P	P	-	-	-	S	S	-	-	P	-
9 - 3.3.4 Error Prevention (Legal, Financial, Data) 10.2 - 3.3.4 Error Prevention (Legal, Financial, Data) 11.2 - 3.3.4 Error Prevention (Legal, Financial, Data)	P	P	-	-	-	-	S	-	-	P	-
9 - 4.1.1 Parsing 10.2 - 4.1.1 Parsing 11.2 - 4.1.1 Parsing	P	S	-	-	-	-	-	-	-	-	-
9 - 4.1.2 Name, Role, Value 10.2 - 4.1.2 Name, Role, Value 11.2 - 4.1.2 Name, Role, Value	P	P	-	-	-	-	S	-	-	-	-

B.2 Relationships with the requirements in clauses 5 to 13

The following abbreviations have been used to represent the relationship between the requirements in clauses 5 to 13 and the functional performance statements:

- P = Primary. The requirement supports the functional performance statement.
- S = Secondary. The requirement provides partial support for the functional performance statement because some users may use the feature in specific situations.

Table B.2: Requirements in clauses 5 to 13 supporting the needs expressed the functional performance statements

Requirements	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
5.1.2.1 Closed functionality	-	-	-	-	-	-	-	-	-	-	-
5.1.2.2 Assistive technology	-	-	-	-	-	-	-	-	-	-	S
5.1.3.1 General (belongs to 5.1.3 Non-visual access)	P	S	-	-	-	-	-	-	-	S	-
5.1.3.2 Auditory output delivery including speech	P	S	-	-	-	-	-	-	-	S	-
5.1.3.3 Auditory output correlation	-	P	-	-	-	-	-	-	-	S	-
5.1.3.4 Speech output user control	P	S	-	-	-	-	-	-	-	S	-
5.1.3.5 Speech output automatic interruption	P	S	-	-	-	-	-	-	-	S	-
5.1.3.6 Speech output for non-text content	P	S	-	-	-	-	-	-	-	S	-
5.1.3.7 Speech output for video information	P	S	-	-	-	-	-	-	-	S	-
5.1.3.8 Masked entry	P	S	-	-	-	-	-	-	-	S	P
5.1.3.9 Private access to personal data	P	S	-	-	-	-	-	-	-	S	P
5.1.3.10 Non-interfering audio output	P	S	-	-	-	-	-	-	-	S	-
5.1.3.11 Spoken languages	P	S	-	-	-	-	-	-	-	S	-
5.1.4.1 Private listening	P	S	-	-	S	-	-	-	-	S	S
5.1.4.2 Speaker volume	P	S	-	-	S	-	-	-	-	S	-
5.1.4.3 Volume reset	P	S	-	-	S	-	-	-	-	S	-
5.1.5 Functionality closed to text enlargement		P	-	-		-	-	-	-	-	-
5.1.6 Visual output for auditory information	-	-	-	P	P	-	-	-	-	S	-
5.1.7 Operation without keyboard interface	P	P	-	-	-	S	P	-	-	-	-
5.2 Activation of accessibility features	P	P	P	P	P	-	P	-	-	-	-
5.3 Biometrics	P	P	-	P		P	P	P			P
5.4 Preservation of accessibility information during conversion	P	P	-	P	P	-	-	-	-	S	-
5.5.1 Tactile or auditory status (belongs to 5.5 Locking or toggle controls)	P	P	-	-	-	-	-	-	-	S	-
5.4.2 Visual status	-	-	-	P	P		P	P	-	S	-
5.5 Key repeat	-	-	-	-	-	-	P		-	S	-
5.6 Simultaneous user actions	-	-	-	-	-	-	P	P	-	S	-
6.1 General (6 ICT with two way voice communication)	-	-	-	-	-	-	-	-	-	-	-
6.2 Wide-band speech	-	-	-	-	P	-	-	-	-	-	-
6.3.1.1 RTT communication	-	-	-	P	S	S	-	-	-	-	-

Requirements	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
6.3.1.2 Concurrent voice and text	-	-	-	P	P	S	-	-	-	-	-
6.3.2.1 Visually distinguishable display	-	-	-	P	S	S	-	-	-	-	-
6.3.2.2 Programmatically determinable send and receive direction	-	-	-	P	S	S	-	-	-	-	-
6.3.3 Interoperability	-	-	-	P	S	S	-	-	-	-	-
6.3.4 Real-time text responsiveness	-	-	-	P	S	S	-	-	-	-	-
6.4 Caller ID	P	P	-	-	-	-	-	-	-	S	-
6.5 Alternatives to voice-based services	-	-	-	P	P	P	-	-	-	-	-
6.6.2 Resolution	-	-	-	P	P	S	-	-	-	-	-
6.6.3 Frame rate	-	-	-	P	P	S	-	-	-	-	-
6.6.4 Synchronization between audio and video	-	-	-	P	P	S	-	-	-	-	-
6.7 Alternatives to video-based services	P	S	-	P	P	P	-	-	-	-	-
7.1.1 Captioning playback	-	-	-	P	P	-	-	-	-	S	-
7.1.2 Captioning synchronization	-	-	-	P	P	-	-	-	-	S	-
7.1.3 Preservation of captioning	-	-	-	P	P	-	-	-	-	S	-
7.2.1 Audio description playback	P	P	-	-	-	-	-	-	-	S	-
7.2.2 Audio description synchronization	P	P	-	-	-	-	-	-	-	S	-
7.2.3 Preservation of audio description	P	P	-	-	-	-	-	-	-	S	-
7.3 User controls for captions and audio description	P	P	-	-	-	-	-	-	-	S	-
8.1.1 Standard connections	P	P	-	-	-	-	-	-	-	P	-
8.1.2 Colour	-	S	P	-	-	-	-	-	-	S	-
8.2.1.1 Speech volume range	-	-	-	-	P	-	-	-	-	-	-
8.2.1.2 Incremental volume control	-	-	-	-	P	-	-	-	-	-	-
8.2.2.1 Fixed-line devices (8.2.2 Magnetic coupling)	-	-	-	-	P	-	-	-	-	-	-
8.2.2.2 Wireless communication devices	-	-	-	-	P	-	-	-	-	-	-
8.3.2.1 Change in Level	-	-	-	-	-	-	-	P	-	-	-
8.3.2.2 Operating area	-	-	-	-	-	-	-	P	-	-	-
8.3.2.3.1 General (8.3.2.3 Approach)	-	-	-	-	-	-	-	P	-	-	-
8.3.2.3.1 Forward Approach	-	-	-	-	-	-	-	P	-	-	-
8.3.2.3.2 Parallel Approach	-	-	-	-	-	-	-	P	-	-	-
8.3.2.4 Knee and Toe clearance width	-	-	-	-	-	-	-	P	-	-	-
8.3.2.5 Toe Clearance	-	-	-	-	-	-	-	P	-	-	-
8.3.2.6 Knee Clearance	-	-	-	-	-	-	-	P	-	-	-
8.3.3.1.1 Unobstructed high forward reach	-	-	-	-	-	-	-	P	-	-	-
8.3.3.1.2 Unobstructed low forward reach	-	-	-	-	-	-	-	P	-	-	-
8.3.3.1.3.1 Clear floor space	-	-	-	-	-	-	-	P	-	-	-
8.3.3.1.3.2 Obstructed (< 510 mm) forward reach	-	-	-	-	-	-	-	P	-	-	-
8.3.3.1.3.3 Obstructed (< 635 mm) forward reach	-	-	-	-	-	-	-	P	-	-	-
8.3.3.2.1 Unobstructed high side reach	-	-	-	-	-	-	-	P	-	-	-
8.3.3.2.3.1 Obstructed (≤ 255 mm) side reach	-	-	-	-	-	-	-	P	-	-	-
8.3.3.2.3.2 Obstructed (≤ 610 mm) side reach	-	-	-	-	-	-	-	P	-	-	-

Requirements	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
8.3.4 Visibility	-	-	-	-	-	-	-	P	-	-	-
8.3.5 Installation instructions	-	-	-	-	-	-	-	P	-	-	-
8.4.1 Operable part discernibility	P	S	-	-	-	-	-	-	-	-	-
8.4.2 Numeric keys	P	S	-	-	-	-	-	-	-	-	-
8.4.3 Operation	-	-	-	-	-	-	P	-	-	-	-
8.4.4 Receipts, tickets, and transactional outputs	P	S	-	-	-	-	-	-	-	-	-
8.4.5 Keys, tickets and fare cards	P	S	-	-	-	-	-	-	-	-	-
8.5 Tactile indication of speech mode	P	-	-	-	-	-	-	-	-	-	-
9 Web content (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
10.2 Document success criteria (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
11.2 Software success criteria (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
11.3.1 Closed functionality	-	-	-	-	-	-	-	-	-	-	-
11.3.2.1 Platform accessibility service support for software that provides a user interface	P	P	-	-	-	-	P	-	-	S	-
11.3.2.2 Platform accessibility service support for assistive technologies	P	P	-	-	-	-	P	-	-	S	-
11.3.2.3 Use of accessibility services	P	P	-	-	-	-	P	-	-	S	-
11.3.2.4 Assistive technology	P	P	-	-	-	-	P	-	-	S	-
11.3.2.5 Object information	P	P	-	-	-	-	P	-	-	S	-
11.3.2.6 Row, column, and headers	P	P	-	-	-	-	P	-	-	S	-
11.3.2.7 Values	P	P	-	-	-	-	P	-	-	S	-
11.3.2.8 Label relationships	P	P	-	-	-	-	P	-	-	S	-
11.3.2.9 Parent child relationships	P	P	-	-	-	-	P	-	-	S	-
11.3.2.10 Text	P	P	-	-	-	-	P	-	-	S	-
11.3.2.11 List of available actions	P	P	-	-	-	-	P	-	-	S	-
11.3.2.12 Execution of available actions	P	P	-	-	-	-	P	-	-	S	-
11.3.2.12 Tracking of focus and selection attributes	P	P	-	-	-	-	P	-	-	S	-
11.3.2.14 Modification of focus and selection attributes	P	P	-	-	-	-	P	-	-	S	-
11.3.2.15 Change notification	P	P	-	-	-	-	P	-	-	S	-
11.3.2.16 Modifications of states and properties	P	P	-	-	-	-	P	-	-	S	-
11.3.2.17 Modifications of values and text	P	P	-	-	-	-	P	-	-	S	-
11.4.1 User control of accessibility features	P	P	P	P	P	-	P	-	-	-	-
11.4.2 No disruption of accessibility features	P	P	P	P	P	-	P	-	-	-	-
11.5 User preferences	-	P	P	-	-	-	-	-	-	S	-
11.6.1 Content technology (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
11.6.2 Accessible content creation (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
11.6.3 Preservation of accessibility information in transformations (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
11.6.4 Repair assistance (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
11.6.5 Templates (see table B.1)	-	-	-	-	-	-	-	-	-	-	-

Requirements	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11
12.1.1 Accessibility and compatibility features	P	P	P	P	P	-	P	-	-	S	-
12.1.2 Accessible documentation (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
12.2.2 Information on accessibility and compatibility features	P	P	P	P	P	-	P	-	-	S	-
12.2.3 Effective communication	-	-	-	P	P	P	-	-	-	S	-
12.2.4 Accessible documentation (see table B.1)	-	-	-	-	-	-	-	-	-	-	-
13.1.1 Text relay services	-	-	-	P	P	P	-	-	-	S	-
13.1.2 Sign relay services	-	-	-	P	P	P	-	-	-	-	-
13.1.3 Lip-reading relay services	-	-	-	P	P	P	-	-	-	-	-
13.1.4 Captioned telephony services	-	-	-	P	P	P	-	-	-	-	-
13.1.5 Speech to speech relay services	-	-	-	-	-	-	-	-	-	P	-
13.2 Access to relay services	-	-	-	P	P	P	-	-	-	S	-
13.3 Access to emergency services	-	-	-	P	P	P	-	-	-	-	-

Annex C (normative): Determination of compliance

C.1 Introduction

This normative annex sets out the means necessary to determine compliance with the individual requirements set out in the body of the present document.

To assist the reader, blank clauses are inserted in order to make the numbering of the annex reflect the clause numbers in the requirements.

C.2 Blank clause

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C.3 Blank clause

This clause is intentionally left blank.

C.4 Functional performance

This clause is informative only and contains no requirements requiring test.

C.5 Generic requirements

C.5.1 Closed functionality

C.5.1.1 Introduction

This clause is informative only and contains no requirements requiring test.

C.5.1.2 General

C.5.1.2.1 Closed functionality

ICT with closed functionality shall meet the requirements set out in clauses C.5.2 to C.13, as applicable.

C.5.1.2.2 Assistive technology

Type of compliance	Testing
Pre-conditions	1. The ICT is not a personal headset or inductive loop.
Procedure	1. Determine the closed functions of the ICT. 2. Check that they are all operable without the attachment or installation of assistive technology.
Result	Pass: Check 2 is true Fail: Check 2 is false

C.5.1.3 Non-visual access

C.5.1.3.1 General

Type of compliance	Testing
Pre-conditions	1. Visual information is needed to enable the use of those functions of the ICT that are closed to assistive technology for screen reading.
Procedure	1. Determine the functions of the ICT closed to screen reading. 2. Check that they are all operable using non-visual access.
Result	Pass: Check 2 is true Fail: Check 2 is false

C.5.1.3.2 Auditory output delivery including speech

Type of compliance	Inspection
Pre-conditions	1. Auditory output is provided as non-visual access to closed functionality.
Procedure	1. Check that the auditory output is delivered by a mechanism included in or provided with the ICT. 2. Check that the auditory output is delivered by a personal headset that can be connected through a 3,5 mm audio jack or an industry standard connection without requiring the use of vision.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.5.1.3.3 Auditory output correlation

This clause is informative only and contains no requirements requiring test.

C.5.1.3.4 Speech output user control

Type of compliance	Inspection
Pre-conditions	1. Speech output is provided as non-visual access to closed functionality.
Procedure	1. Check that the speech output is capable of being interrupted when requested by the user. 2. Check that the speech output is capable of being repeated when requested by the user.
Result	Pass: All checks are true Fail: Any check is false

C.5.1.3.5 Speech output automatic interruption

Type of compliance	Inspection
Pre-conditions	1. Speech output is provided as non-visual access to closed functionality.
Procedure	1. Determine the closed functions of the ICT. 2. Check that the speech output for each single function is interrupted on a user action. 3. Check that the speech output for each single function is interrupted when new speech output begins.
Result	Pass: Check 2 and 3 are true Fail: Check 2 or 3 are false

C.5.1.3.6 Speech output for non-text content

Type of compliance	Testing
Pre-conditions	1. Speech output is provided as non-visual access to closed functionality. 2. Non-text content is presented to users
Procedure	1. Check that the speech output follows the guidance described in WCAG 2.0 Success Criterion 1.1.1 is provided for non-text content that is presented to users.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.3.7 Speech output for video information

Type of compliance	Testing
Pre-conditions	1. Pre-recorded video content is needed to enable the use of closed functions of ICT 2. Speech output is provided as non-visual access to non-text content displayed on closed functionality.
Procedure	1. Check that the speech output presents equivalent information for the pre-recorded video content.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.3.8 Masked entry

Type of compliance	Testing
Pre-conditions	1. Auditory output is provided as non-visual access to closed functionality. 2. The characters displayed are masking characters. 3. The user does not explicitly choose to allow non-private auditory output.
Procedure	1. Check that the auditory output is not a spoken version of the characters entered. 2. Check that the auditory output is known to be delivered only to a mechanism for private listening.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.5.1.3.9 Private access to personal data

Type of compliance	Testing
Pre-conditions	1. Auditory output is provided as non-visual access to closed functionality. 2. The output contains data. 3. There is an applicable privacy policy which considers that data to be private.
Procedure	1. Check that the auditory output is only delivered through a mechanism for private listening. 2. Check that the mechanism for private listening can be connected without requiring the use of vision. 3. Check that the auditory output is delivered through any other mechanism that can be chosen by the user.
Result	Pass: Check 1 and 2 or 3 are true Fail: Check 1 or 2 and 3 are false

C.5.1.3.10 Non-interfering audio output

Type of compliance	Testing
Pre-conditions	1. Auditory output is provided as non-visual access to closed functionality. 2. The ICT automatically plays interfering audible output.
Procedure	1. Check that the interfering audible output lasts no longer than three seconds.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.3.11 Spoken languages

Type of compliance	Testing
Pre-conditions	<ol style="list-style-type: none"> 1. The speech output is provided as non-visual access to closed functionality. 2. The speech output is not proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. 3. The content is not generated externally and is under the control of the ICT vendor. 4. The displayed languages can be selected using non-visual access. 5. The user has not selected a speech language that is different from the language of the displayed content.
Procedure	<ol style="list-style-type: none"> 1. Check that the speech output is in the same human language of the displayed content provided.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.3.12 Receipts, tickets, and transactional outputs

Type of compliance	Testing
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT is closed to visual access. 2. The ICT provides receipts, tickets, or other outputs as a result of a self-service transaction. 3. The information being checked is not machine location, date and time of transaction, customer account number, and the machine identifier 4. The information being checked is not information that duplicates information available on-screen and is already presented audibly 5. The information being checked is not printed copies of itineraries and maps
Procedure	<ol style="list-style-type: none"> 1. Check that speech output is provided which includes all information necessary to complete or verify the transaction.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.4 Volume control

C.5.1.4.1 Private listening

Type of compliance	Inspection
Pre-conditions	<ol style="list-style-type: none"> 1. The auditory output is provided as non-visual access to closed functionality 2. The auditory output is delivered through a mechanism for private listening.
Procedure	<ol style="list-style-type: none"> 1. Check that there is at least one non-visual mode of operation for controlling the volume.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.4.2 Speaker volume

Type of compliance	Inspection and measurement
Pre-conditions	<ol style="list-style-type: none"> 1. The auditory output is provided as non-visual access to closed functionality. 2. The auditory output is delivered through speakers.
Procedure	<ol style="list-style-type: none"> 1. Check that a non-visual incremental volume control is provided. 2. Check that output amplification up to a level of at least 65 dBA (-29 dBPaA) is available.
Result	Pass: Check 1 and 2 are true Fail: Check 1 or 2 is false

C.5.1.4.3 Volume reset

Type of compliance	Inspection and measurement
Pre-conditions	1. The auditory output is provided as non-visual access to closed functionality. 2. The ICT is not dedicated to a single user.
Procedure	1. Check that a function that automatically resets the volume to be at a level of 65 dBA or less after every use is provided.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.5 Functionality closed to text enlargement

Type of compliance	Inspection and measurement
Pre-conditions	1. A functionality of the ICT is closed to enlargement features of platform or assistive technology. 2. A viewing distance is specified by the supplier.
Procedure	1. Measure the height of a capital letter H. 2. Check that it subtends an angle of at least 0,7 degrees at the specified viewing distance.
Result	Pass: Check 2 is true Fail: Check 2 is false

C.5.1.6 Visual output for auditory information

Type of compliance	Inspection
Pre-conditions	1. Pre-recorded auditory information is needed to enable the use of closed functions of ICT.
Procedure	1. Check that the visual information is equivalent to the pre-recorded auditory output.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.1.7 Operation without keyboard interface

Type of compliance	Inspection
Pre-conditions	1. ICT functionality is closed to keyboards or keyboard interfaces.
Procedure	1. Check that all functionality is operable without vision. 2. Check that where input focus can be moved to a user interface element it is possible to move the input focus away from that element using the same mechanism.
Result	Pass: Check 1 and 2 are true Fail: Check 1 or 2 is false

C.5.2 Activation of accessibility features

Type of compliance	Inspection
Pre-conditions	1. Documented accessibility features are required to meet a specific need
Procedure	1. Check that it is possible to activate those accessibility features without relying on a method that does not support that need.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.3 Biometrics

Type of compliance	Test 1
Pre-conditions	1. The ICT uses biological characteristic for user identification.
Procedure	1. Check that more than one means can be used for user identification.
Result	Pass: Check 1 is true Fail: Check 1 is false

Type of compliance	Test 2
Pre-conditions	1. The ICT uses biological characteristic for control of ICT.
Procedure	1. Check that more than one means can be used for control of ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.4 Preservation of accessibility information during conversion

Type of compliance	Inspection
Pre-conditions	1. The non-proprietary information provided for accessibility is documented 2. The ICT converts information or communication. 3. The non-proprietary information provided for accessibility can be contained in the destination format 4. The non-proprietary information provided for accessibility can be supported by the destination format.
Procedure	1. Check that the non-proprietary information provided for accessibility is preserved when the ICT converts information or communication.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.5.5 Locking or toggle controls

C.5.5.1 Tactile or auditory status

Type of compliance	Inspection 1
Pre-conditions	1. The ICT has a locking or toggle control. 2. The locking or toggle control is presented to the user.
Procedure	1. Check that there is at least one mode of operation where the status of all locking or toggle controls can be determined through touch without operating the control.
Result	Pass: Check 1 is true Fail: Check 1 is false

Type of compliance	Inspection 2
Pre-conditions	1. The ICT has a locking or toggle control. 2. The locking or toggle control is presented to the user.
Procedure	1. Check that there is at least one mode of operation where the status of all locking or toggle controls can be determined through sound without operating the control.
Result	Pass: Checks 1 is true and at least one of checks 2 and 3 is true Fail: Check 1 is false or check 1 is true and check 2 and 3 are false

C.5.5.2 Visual status

Type of compliance	Inspection
Pre-conditions	1. The ICT has a locking or toggle control. 2. The locking or toggle control is presented to the user.
Procedure	1. Check that there is at least one mode of operation where the status of all locking or toggle controls can be visually determined when the control is presented.
Result	Pass: Checks 1 is true Fail: Check 1 is false

C.5.6 Key repeat

Type of compliance	Testing
Pre-conditions	1. A keyboard or keypad with key repeat is provided. 2. The key repeat cannot be turned off
Procedure	1. Check that the delay before key repeat can be adjusted to at least 2 seconds. 2. Check that the key repeat rate can be adjusted to 2 seconds per character.
Result	Pass: Check 1 and 2 are true Fail: Check 1 or 2 is false

C.5.7 Simultaneous user actions

Type of compliance	Inspection
Pre-conditions	None
Procedure	1. If there are multiple modes of operation, select one mode of operation (see notes 1 and 2 of this table for guidance on the selection). 2. Determine all the user controllable functions of the ICT 3. Check that each user controllable function can be operated with a single point of contact. 4. If there are multiple modes of operation and the test is not passed, repeat the procedure until all modes of operation have been tested
Result	Pass: Check 3 is true Fail: Check 3 is false for all modes of operation
NOTE 1: If there are multiple modes of operation, these should be tested until the compliance test is passed.	
NOTE 2: Where it is claimed that a specific mode complies with clause 5.6, this mode should be tested first.	

C.6 ICT with two way voice communication

C.6.1 General

This clause contains scoping words only.

C.6.2 Wide-band speech

This clause only contains recommendations.

C.6.3 Real Time Text (RTT) functionality

C.6.3.1 RTT provision

C.6.3.1.1 RTT communication

Type of compliance	Inspection
Pre-conditions	1. The ICT element under test supports two-way voice conversation. 2. A "reference" RTT-capable device compatible with an ICT network is connected at the other end of the network.
Procedure	1. Check that the ICT is able to communicate with the "reference" ICT by RTT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.6.3.1.2 Concurrent voice and text

Type of compliance	Inspection
Pre-conditions	1. The ICT supports two-way voice communication. 2. The ICT enables a user to communicate with another user by RTT.
Procedure	1. Check that the ICT provides a mechanism to select a mode of operation allowing concurrent voice and text.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.6.3.2 Display of Real Time Text

C.6.3.2.1 Visually distinguishable display

Type of compliance	Inspection
Pre-conditions	1. The ICT under test has RTT send and receive capabilities. 2. The ICT supports RTT mechanism(s). 3. A "reference" RTT-capable terminal using mechanisms supported by the ICT network is connected at the other end of an ICT network to the ICT under test.
Procedure	1. The ICT under test is connected to the ICT network terminated by the "reference" terminal 2. The different elements of the ICT are in an operational status (the connection is active and the terminals are in the relevant RTT mode) and the two terminals are communicating to each other. 3. A Short text sequence is sent by the ICT terminal under test. 4. A Short text sequence is sent by the "reference" terminal. 5. Check, on the ICT terminal under test, that displayed sent text is visually differentiated from and separated from received text
Result	Pass: Check 5 is true Fail: Check 5 is false
NOTE:	A "reference" terminal is a terminal having RTT send and receive capabilities that uses the RTT mechanisms supported by the ICT network. This "reference" terminal is the responsibility of the test laboratory.

C.6.3.2.2 Programmatically determinable send and receive direction

Type of compliance	Inspection
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT under test has RTT send and receive capabilities. 2. The RTT is not a closed functionality 3. A "reference" RTT-capable terminal using mechanisms supported by the ICT network is connected at the other end of an ICT network to the ICT under test.
Procedure	<ol style="list-style-type: none"> 1. The ICT under test is connected to the ICT network terminated by the "reference" terminal 2. The different elements of the ICT are in an operational status (the connection is active and the terminals are in the relevant RTT mode) and the two terminals are communicating to each other 3. A Short text sequence is sent by the ICT terminal under test. 4. A Short text sequence is sent by the "reference" terminal. 5. Check that the send/receive direction of transmitted text is programmatically determinable
Result	Pass: Check 5 is true Fail: Check 5 is false
NOTE: A "reference" terminal is a terminal having RTT send and receive capabilities that uses the RTT mechanisms supported by the ICT network. This "reference" terminal is the responsibility of the test laboratory.	

C.6.3.3 Interoperability

Type of compliance	Test 1
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT under test interoperates for real-time voice conversation with an ICT network that provides RTT functionality. 2. The RTT interoperability specification in use is documented in the Official Journal. 3. A "reference" RTT-capable terminal using mechanisms supported by the ICT network is connected at the other end of an ICT network to the terminal under test.
Procedure	<ol style="list-style-type: none"> 1. Check that the ICT terminal under test meets the RTT interoperability specification documented in the Official Journal.
Result	Pass: Check 1 is true Fail: Check 1 is false
NOTE: A "reference" terminal is a terminal having RTT send and receive capabilities that uses the RTT mechanisms supported by the ICT network. This "reference" terminal is the responsibility of the test laboratory.	

Type of compliance	Test 2
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT under test interoperates for real-time voice conversation with an ICT network that provides RTT functionality. 2. No RTT interoperability specification is documented in the Official Journal. 3. A "reference" RTT-capable terminal using mechanisms supported by the ICT network is connected at the other end of the ICT network to the terminal under test.
Procedure	<ol style="list-style-type: none"> 1. Check that the ICT terminal under test interoperates using one of the mechanisms defined in a) to d) of 6.3.4.
Result	Pass: Check 1 is true Fail: Check 1 is false
NOTE: A "reference" terminal is a terminal having RTT send and receive capabilities that uses the RTT mechanisms supported by the ICT network. This "reference" terminal is the responsibility of the test laboratory.	

C.6.3.4 Real Time Text responsiveness

Type of compliance	Inspection of Measurement data or Test
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT under test has RTT send and receive capabilities. 2. A "reference" RTT-capable terminal using mechanisms supported by the ICT network is connected at the other end of an ICT network to the terminal under test. 3. The ICT under test is connected to the ICT network terminated by the "reference" terminal. 4. The different elements of the ICT are in a working status (the connection is active and the terminals are in the relevant RTT mode).
Procedure	<ol style="list-style-type: none"> 1. A short sequence is input to the terminal under test. 2. Check the time at which input entry has occurred. 3. Check the period between input entry to the ICT terminal under test and the time when the text is transmitted to the ICT network.
Result	Pass: Check 3 is less than or equal to 1 second Fail: Check 3 is greater than 1 second
NOTE:	As described in the notes to clause 6.3.4, the identification of when input entry has occurred may vary according to the type of RTT system under test.

C.6.4 Caller ID

Type of compliance	Inspection
Pre-conditions	1. Caller identification, or similar telecommunications functions, are provided.
Procedure	<ol style="list-style-type: none"> 1. Check that the information delivered by each function is available as text. 2. Check that the information delivered by each function is available in an audio form.
Result	Pass: Either or both of Checks 1 or 2 is true Fail: Both of Check 1 and 2 are false

C.6.5 Alternatives to voice-based services

Type of compliance	Inspection
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT provides real-time voice-based communication. 2. The ICT provides voice mail, auto-attendant, or interactive voice response facilities.
Procedure	<ol style="list-style-type: none"> 1. Check that the ICT offers users a means to access the information without the use of hearing or speech. 2. Check that a user can carry out the tasks provided by the system without the use of hearing or speech.
Result	Pass: Checks 1 and 2 are true Fail: Check 1 or 2 is false

C.6.6 Video communication

C.6.6.1 General

This clause is informative only and contains no requirements requiring test.

C.6.6.2 Minimum Resolution

Type of compliance	Inspection
Pre-conditions	<ol style="list-style-type: none"> 1. The ICT provides 2 way voice communication. 2. The ICT includes real-time video functionality.
Procedure	1. Check that the video communication resolution is QCIF resolution or better.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.6.6.3 Frame rate

Type of compliance	Inspection
Pre-conditions	1. The ICT provides 2 way voice communication. 2. The ICT includes real-time video functionality.
Procedure	1. Check that the video communication frame rate is equal to or higher than 12 frames per second.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.6.6.4 Synchronization between audio and video

Type of compliance	Measurement
Pre-conditions	1. The ICT provides 2 way voice communication. 2. The ICT includes real-time video functionality.
Procedure	1. Check that the time difference between the speech and video presented to the user is equal to or less than 100 ms.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.6.7 Alternatives to video-based services

This clause is advisory only and contains no requirements requiring test.

C.7 ICT with video capabilities

C.7.1 Caption processing technology

C.7.1.1 Captioning playback

Type of compliance	Test 1
Pre-conditions	1. The ICT displays or processes video with synchronized audio.
Procedure	1. Check that the ICT is a regulated product. 2. Check that there is a mechanism to display the available captions in the default player for the media.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

Type of compliance	Test 2
Pre-conditions	1. The ICT displays or processes video with synchronized audio. 2. Closed captions are provided by the content.
Procedure	1. Check that the ICT is a regulated product. 2. Check that there is a mechanism to choose to display the captions in the default player for the media.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.7.1.2 Captioning synchronization

Type of compliance	Inspection
Pre-conditions	1. The ICT has a mechanism to display captions.
Procedure	1. Check that the mechanism to display the captions preserves the synchronization between the audio and corresponding captions.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.7.1.3 Preservation of captioning

Type of compliance	Inspection
Pre-conditions	1. The ICT transmits converts or records video with synchronized audio.
Procedure	1. Check that the ICT preserves caption data such that it can be displayed in a manner consistent with 7.1.1 and 7.1.2.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.7.2 Audio description technology

C.7.2.1 Audio description playback

Type of compliance	Inspection
Pre-conditions	1. The ICT displays video with synchronized audio. 2. The ICT does not enable the user to select and play several audio tracks
Procedure	1. Check that the ICT is a regulated product. 2. Check that the ICT enables the user to select and play several audio tracks 3. Check that in the default player for the media, there is a mechanism to select and play the audio description through the default audio channel.
Result	Pass: Check 1 or 2 or 3 is true Fail: Check 1 and 2 and 3 are false

C.7.2.2 Audio description synchronization

Type of compliance	Inspection
Pre-conditions	1. The ICT displays video with synchronized audio.
Procedure	1. Check that the synchronization between the audio/visual content and the corresponding audio description is preserved.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.7.2.3 Preservation of audio description

Type of compliance	Inspection
Pre-conditions	1. The ICT transmits converts or records video with synchronized audio.
Procedure	1. Check that the ICT preserves audio description data such that it can be played in a manner consistent with 7.2.1 and 7.2.2.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.7.3 User controls for captions and audio description

Type of compliance	Inspection
Pre-conditions	1. The ICT primarily display materials containing video with associated audio content.
Procedure	1. Check that user controls to activate subtitles and audio descriptions are provided to the user at the same level of interaction as the primary media controls.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8 Hardware

C.8.1 General

C.8.1.1 Standard connections

Type of compliance	Inspection
Pre-conditions	1. The ICT provides user input or output device connection points.
Procedure	1. Check that one type of connection conforms to an industry standard non-proprietary format. 2. Check that one type of connection conforms to an industry standard non-proprietary format through the use of commercially available adapters.
Result	Pass: Checks 1 or 2 is true Fail: Check 1 and 2 are false
NOTE: The connections may be physical or wireless connections.	

C.8.1.2 Colour

Type of compliance	Inspection
Pre-conditions	1. The ICT has a visual element.
Procedure	1. Check that the ICT does not use colour coding as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.2 Hardware products with speech output

C.8.2.1 Speech volume gain

C.8.2.1.1 Speech volume range

Type of compliance	Inspection based on measurement data
Pre-conditions	1. The ICT is intended to provide speech output.
Procedure	1. Check that the ICT is certified to meet ANSI/TIA-4965 [i.2]. 2. Measure the level (in dB) of the speech output at the lowest volume setting. 3. Measure the level (in dB) of the speech output at the highest volume setting. 4. Check that the range between 1 and 2 is greater than or equal to 18 dB.
Result	Pass: Check 1 or 4 is true Fail: Check 1 and 4 are false

C.8.2.1.2 Incremental volume control

Type of compliance	Inspection based on measurement data
Pre-conditions	1. The ICT is intended to provide speech output. 2. The volume control is incremental.
Procedure	1. Measure the level (in dB) of the speech output at the lowest volume setting. 2. Check if one intermediate step provides a level 12 dB above the lowest volume level measured in step 1.
Result	Pass: Check 2 is true Fail: Check 2 is false

C.8.2.2 Magnetic coupling

C.8.2.2.1 Fixed -line devices

Type of compliance	Inspection based on measurement data
Pre-conditions	1. The ICT is a wired device with an audio output that is normally held to the ear. 2. The ICT carries the "T" symbol.
Procedure	1. Check that the ICT is certified to meet TIA-1083-A [i.22] 2. Measurements are made according to ES 200 381-1 [2] which prove that the requirements defined in that standard are fulfilled.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.8.2.2.2 Wireless communication devices

Type of compliance	Inspection based on measurement data
Pre-conditions	1. The ICT is a wireless communication device that is normally held to the ear. 2. The ICT is not certified to meet ANSI/IEEE C63.19 [i.1].
Procedure	1. Check that the ICT is certified to meet ANSI/IEEE C63.19 [i.1]. 2. Check that the ICT provide a means of magnetic coupling to hearing technologies which meets the requirements of ES 200 381-2 [3].
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.8.3 Physical access to ICT

C.8.3.1 General

This clause is advisory only and contains no requirements requiring test.

C.8.3.2 Clear Floor space

C.8.3.2.1 Change in Level

a)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is a change in level integral to the ICT.
Procedure	1. Check that the change in level is ramped with a slope less than 1:48.
Result	Pass: Check 1 is true Fail: Check 1 is false

b)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is a change in level integral to the ICT. 2. The change in level is less than or equal to 6,4 mm.
Procedure	1. Check that the step is vertical or ramped.
Result	Pass: Check 1 is true Fail: Check 1 is false

c)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is a change in level integral to the ICT. 3. The change in level is less than or equal to 13 mm.
Procedure	1. Check that the ramp has a slope less than 1:2.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.2.2 Operating area

Type of compliance	Inspection and measurement
Pre-conditions	1. The operating area is integral to the ICT.
Procedure	1. Check that the operating area is a rectangle with minimum dimension on one edge greater than 760 mm. 2. Check that the operating area is a rectangle with the minimum dimension on the other edge greater than 1 220 mm.
Result	Pass: Checks 1 and 2 are true Fail: Check 1 or 2 is false

C.8.3.2.3 Approach

C.8.3.2.3.1 General

Type of compliance	Inspection
Pre-conditions	1. Access space is integral to the ICT.
Procedure	1. Check that one full side of the space is unobstructed.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.2.3.2 Forward Approach

Type of compliance	Inspection and measurement
Pre-conditions	1. The operating area is inside an alcove integral to the ICT. 2. The depth of the alcove is greater than 610 mm. 3. A forward approach is necessary.
Procedure	1. Check that the width of the alcove is greater than 915 mm.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.2.3.3 Parallel Approach

Type of compliance	Inspection and measurement
Pre-conditions	1. The operating area is inside an alcove integral to the ICT. 2. The depth of the alcove is greater than 380 mm. 3. A parallel approach is possible.
Procedure	1. Check that the width of the access space is greater than 1 525 mm.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.2.4 Knee and Toe clearance width

Type of compliance	Inspection and measurement
Pre-conditions	1. The space under an obstacle integral to the ICT is part of an access space.
Procedure	1. Check that the width of the knee clearance is greater than 760 mm. 2. Check that the width of the toe clearance is greater than 760 mm.
Result	Pass: both checks are true Fail: either check is false

C.8.3.2.5 Toe Clearance

a)

Type of compliance	Inspection and measurement
Pre-conditions	1. The ICT is free-standing. 2. There is a space under any obstacle integral to the ICT that is less than 230 mm over the floor.
Procedure	1. Check that the toe clearance does not extend more than 635 mm under the obstacle.
Result	Pass: Check 1 is true Fail: Check 1 is false

b)

Type of compliance	Inspection and measurement
Pre-conditions	1. The ICT is free-standing. 2. There is a space under any obstacle integral to the ICT that is less than 230 mm over the floor.
Procedure	1. Check that the toe clearance extends more than 430 mm under the whole obstacle.
Result	Pass: Check 1 is true Fail: Check 1 is false

c)

Type of compliance	Inspection and measurement
Pre-conditions	1. The ICT is free-standing. 2. There is an obstacle integral to the ICT at less than 230 mm over the floor.
Procedure	1. Check that the toe clearance extends less than 150 mm under the obstacle.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.2.6 Knee Clearance

a)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is an obstacle that is integral to the ICT. 2. The obstacle is between 230 mm and 685 mm above the floor.
Procedure	1. Check that there is a clearance less than 635 mm at a height of 230 mm.
Result	Pass: Check 1 is true Fail: Check 1 is false

b)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is an obstacle that is integral to the ICT. 2. The obstacle is between 230 mm and 685 mm above the floor.
Procedure	1. Check that there is a clearance more than 280 mm at a height of 230 mm.
Result	Pass: Check 1 is true Fail: Check 1 is false

c)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is an obstacle that is integral to the ICT. 2. The obstacle is between 230 mm and 685 mm above the floor.
Procedure	1. Check that there is a clearance more than 205 mm at a height of 685 mm
Result	Pass: Check 1 is true Fail: Check 1 is false

d)

Type of compliance	Inspection and measurement
Pre-conditions	1. There is an obstacle that is integral to the ICT. 2. The obstacle is between 230 mm and 685 mm above the floor.
Procedure	1. Check that the reduction in depth of the clearance is no greater than 25 mm for each 150 mm in height.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3 Reach range for free-standing ICT

C.8.3.3.1 Forward reach

C.8.3.3.1.1 Unobstructed high forward reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. There is an unobstructed access to the controls.
Procedure	1. Check that the height of the topmost essential control is no higher than 1 220 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.1.2 Unobstructed low forward reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. There is an unobstructed access to the controls.
Procedure	1. Check that the height of the lowest essential control is no lower than 380 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.1.3 Obstructed reach

C.8.3.3.1.3.1 Clear floor space

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. There is an integral obstructed access to the controls. 3. The obstruction is less than 510 mm
Procedure	1. Check that the height of the topmost essential control is no higher than 1 220 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.1.3.2 Obstructed (< 510 mm) forward reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. There is an integral obstructed access to the controls.
Procedure	1. Check that there is clear floor space greater than the required reach depth over the obstruction.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.1.3.3 Obstructed (< 635 mm) forward reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. There is an integral obstructed access to the controls. 3. The obstruction is between 510 mm and 635 mm.
Procedure	1. Check that the height of the topmost essential control is no higher than 1 120 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.2 Side reach

C.8.3.3.2.1 Unobstructed high side reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. A parallel approach to the ICT is possible. 3. The side reach is unobstructed or obstructed by a part less than 255 mm wide.
Procedure	1. Check that the height of the topmost essential control is less than or equal to 1 220 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.2.2 Unobstructed low side reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. A parallel approach to the ICT is possible. 3. The side reach is unobstructed or obstructed by a part less than 255 mm wide.
Procedure	1. Check that the height of the lowest essential control is greater than or equal to 380 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.2.3 Obstructed side reach

C.8.3.3.2.3.1 Obstructed (< 255 mm) side reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. A parallel approach to the ICT is possible. 3. There is an obstacle integral to the ICT with a height less than 865 mm. 4. The side reach is obstructed by a part less than 255 mm wide.
Procedure	1. Check that the height of the topmost essential control no higher than 1 220 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.3.2.3.2 Obstructed (< 610 mm) side reach

Type of compliance	Inspection and measurement
Pre-conditions	1. The access space is integral to the ICT. 2. A parallel approach to the ICT is possible. 3. There is an obstacle integral to the ICT with a height less than 865 mm. 4. The side reach is obstructed by a part more than 255 mm and less than 610 mm wide.
Procedure	1. Check that the height of the topmost essential control is no higher than 1 170 mm above the floor contact of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.4 Visibility

Type of compliance	Inspection and measurement
Pre-conditions	1. The operating area is integral to the ICT. 2. A display screen is provided.
Procedure	1. Check that the screen is readable from a point located 40 inches (1 015 mm) above the centre of the clear floor space
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.3.5 Installation instructions

Type of compliance	Inspection and measurement
Pre-conditions	1. The ICT is intended to be installed.
Procedure	1. Check that instructions are made available which outline a method to install the ICT in a manner that ensures that the dimensions of the integral spaces of the ICT conform to clauses 8.3.2 to 8.3.4.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.4 Operable parts

C.8.4.1 Operable part discernibility

Type of compliance	Testing
Pre-conditions	An individual control is designed to be operable without requiring vision.
Procedure	1. Identify that there is a means to discern each operable part without vision. 2. Check that the action associated with the operable part has not been performed when using the means to discern each operable part of step 1.
Result	Pass: Checks 1 and 2 are true Fail: Checks 1 or 2 are false

C.8.4.2 Numeric keys

Type of compliance	Inspection
Pre-conditions	1. The ICT has physical numeric keys arranged in a 12-key telephone keypad layout.
Procedure	1. Check that the number five key is tactilely distinct from the other keys of the keypad.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.4.3 Operation

Type of compliance	Inspection and measurement
Pre-conditions	1. The ICT has mechanically operable parts.
Procedure	1. Check that the operable parts do not require tight grasping, pinching, or twisting of the wrist. 2. Check that the force required to activate operable parts is less than or equal to 22,2 N.
Result	Pass: Check 1 and 2 are true Fail: Check 1 or 2 is false

C.8.4.4 Keys, tickets and fare cards

Type of compliance	Inspection and measurement
Pre-conditions	1. ICT provides keys, tickets or fare cards, and their orientation is important for further use.
Procedure	1. Check that keys, tickets or fare cards have an orientation that is tactilely discernible.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.8.5 Tactile indication of speech mode

Where ICT intended for shared use and speech output is available, a tactile indication of the means to initiate the speech mode of operation shall be provided.

Type of compliance	Inspection and measurement
Pre-conditions	1. The ICT intended for shared use. 2. Speech output is available.
Procedure	1. Check that a tactile indication of the means to initiate the speech mode of operation is provided.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.9 Web content

Type of compliance	Inspection and measurement
Pre-conditions	1. Web content is provided to the user.
Procedure	<p>1. (Conformance Level). Check that each Web page satisfies all the Level A and Level AA Success Criteria, or a Level AA conforming alternate version is provided.</p> <p>2. (Conformance Level) Check that, for each conforming alternate version of a Web page, the requirements outlined in the definition for conforming alternate versions (http://www.w3.org/TR/WCAG20/#conforming-alternate-versiondef) are met</p> <p>3. (Full pages). Check, for each Web page, that no part of the page is excluded when applying check 1.</p> <p>4. (Complete processes). Check, for each Web page, that if it is one of a series of Web pages presenting a process (i.e. a sequence of steps that need to be completed in order to accomplish an activity), then all Web pages in the process meet checks 1 to 9.</p> <p>5. (Only Accessibility-Supported Ways of Using Technologies). Check, for each Web page, that only accessibility-supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef) ways of using technologies are relied upon to satisfy the success criteria.</p> <p>6. (Only Accessibility-Supported Ways of Using Technologies). Check, for each Web page, that where information or functionality is provided in a way that is not accessibility supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef), it is also available in a way that is accessibility supported.</p> <p>7. (Non-Interference). Check, for each Web page, that if technologies are used in a way that is not accessibility supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef), or if they are used in a non-conforming way, then they do not block the ability of users to access the rest of the page.</p> <p>8. (Non-Interference). Check, for each Web page, that the Web page as a whole continues to meet the conformance requirements under each of the following conditions:</p> <ul style="list-style-type: none"> a) when any technology that is not relied upon is turned on in a user agent, b) when any technology that is not relied upon is turned off in a user agent, and c) when any technology that is not relied upon is not supported by a user agent <p>9. (Non-Interference). Check, for each Web page, that the following success criteria apply to all content on the page, including content that is not otherwise relied upon to meet conformance, because failure to meet them could interfere with any use of the page:</p> <ul style="list-style-type: none"> 1.4.2 - Audio Control, 2.1.2 - No Keyboard Trap, 2.3.1 - Three Flashes or Below Threshold, and 2.2.2 - Pause, Stop, Hide.
Result	Pass: Checks 1 to 9 are true Fail: Any check is false
NOTE 1:	<p>Various techniques can be used to demonstrate that WCAG 2.0 Success Criteria are met. A set of techniques for WCAG 2.0 that can be used for this purpose provided is by W3C at: http://www.w3.org/TR/WCAG20-TECHS/.</p> <p>NOTE 2: Where it is not manageable to check every Web page that is provided to the user, then an appropriate methodology can be used to assess the overall conformance of the web content. A methodology for evaluating the conformance of websites to WCAG 2.0 is under development by W3C and is available at: http://www.w3.org/TR/WCAG-EM/.</p> <p>NOTE 3: The WCAG 2.0 name for the conformance requirement is placed, in brackets, immediately after the check number in the table above.</p> <p>NOTE 4: For check 1 it should be noted that although conformance can only be achieved at the stated levels, authors are encouraged to report (in their claim) any progress toward meeting success criteria from all levels beyond the achieved level of conformance.</p> <p>NOTE 5: For check 3, for the purpose of determining conformance, alternatives to part of a page's content are considered part of the page when the alternatives can be obtained directly from the page, e.g. a long description or an alternative presentation of a video.</p> <p>NOTE 6: For check 3, authors of Web pages that cannot conform due to content outside of the author's control may consider a Statement of Partial Conformance (http://www.w3.org/TR/WCAG20/#conformance-partial).</p> <p>NOTE 7: For check 4, an example is where an online store has a series of pages that are used to select and purchase products. All pages in the series from start to finish (checkout) conform in order for any page that is part of the process to conform.</p>

Type of compliance	Inspection and measurement
NOTE 8:	For checks 5 and 6, see the definition for accessibility support (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef) and "Understanding accessibility support" (http://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html#uc-accessibility-support-head) for further information.
NOTE 9:	For checks 7, 8 and 9, if a page cannot conform (for example, a conformance test page or an example page), it cannot be included in the scope of conformance or in a conformance claim.
NOTE 10:	For more information, including examples related to all checks, see "Understanding Conformance Requirements" (http://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html#uc-conformance-requirements-head).

C.10 Documents

C.10.1 General

This clause is advisory only and contains no requirements requiring test.

C.10.2 Document success criteria

Type of compliance	Inspection and measurement
Pre-conditions	1. Documents are provided to the user.
Procedure	<p>1. (Conformance Level). Check that each document satisfies all the document success criteria listed in table 1 of the present document, or a conforming alternate version is provided.</p> <p>2. (Conformance Level) Check that, for each conforming alternate version of a document, the requirements outlined in the definition for conforming alternate versions (http://www.w3.org/TR/WCAG20/#conforming-alternate-versiondef) are met.</p> <p>3. (Full pages). Check, for each document, that no part of the document is excluded when applying check 1.</p> <p>4. (Complete processes). Check, for each document, that if it is one of a series of documents presenting a process (i.e. a sequence of steps that need to be completed in order to accomplish an activity), then all documents in the process meet checks 1 to 9.</p> <p>5. (Only Accessibility-Supported Ways of Using Technologies). Check, for each document, that only accessibility-supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef) ways of using technologies are relied upon to satisfy the success criteria.</p> <p>6. (Only Accessibility-Supported Ways of Using Technologies). Check, for each document, that where information or functionality is provided in a way that is not accessibility supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef), it is also available in a way that is accessibility supported.</p> <p>7. (Non-Interference). Check, for each document, that if technologies are used in a way that is not accessibility supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef), or if they are used in a non-conforming way, then they do not block the ability of users to access the rest of the document.</p> <p>8. (Non-Interference). Check, for each document, that the document as a whole continues to meet the conformance requirements under each of the following conditions:</p> <ul style="list-style-type: none"> a) when any technology that is not relied upon is turned on in a user agent, b) when any technology that is not relied upon is turned off in a user agent, and c) when any technology that is not relied upon is not supported by a user agent <p>9. (Non-Interference). Check, for each document, that the following success criteria apply to all content in the document, including content that is not otherwise relied upon to meet conformance, because failure to meet them could interfere with any use of the document:</p> <ul style="list-style-type: none"> 1.4.2 - Audio Control, 2.1.2 - No Keyboard Trap, 2.3.1 - Three Flashes or Below Threshold, and 2.2.2 - Pause, Stop, Hide.
Result	Pass: Checks 1 to 9 are true Fail: Any check is false
<p>NOTE 1: Various techniques can be used to demonstrate that WCAG 2.0 Success Criteria are met. A set of techniques for WCAG 2.0 that can be used for this purpose provided is by W3C at: http://www.w3.org/TR/WCAG20-TECHS/.</p> <p>NOTE 2: Where it is not manageable to check every document that is provided to the user, then an appropriate methodology can be used to assess the overall conformance of the web content. A methodology for evaluating the conformance of websites to WCAG 2.0 is under development by W3C and is available at: http://www.w3.org/TR/WCAG-EM/.</p> <p>NOTE 3: The WCAG 2.0 name for the conformance requirement is placed, in brackets, immediately after the check number in the table above.</p> <p>NOTE 4: For check 1 it should be noted that although conformance can only be achieved at the stated levels, authors are encouraged to report (in their claim) any progress toward meeting success criteria from all levels beyond the achieved level of conformance.</p> <p>NOTE 5: For check 3, for the purpose of determining conformance, alternatives to part of a document's content are considered part of the document when the alternatives can be obtained directly from the document, e.g. a long description or an alternative presentation of a video.</p> <p>NOTE 6: For check 3, authors of documents that cannot conform due to content outside of the author's control may consider a Statement of Partial Conformance (http://www.w3.org/TR/WCAG20/#conformance-partial).</p> <p>NOTE 7: For check 4, an example is where an online store has a series of documents that are used to select and purchase products. All documents in the series from start to finish (checkout) conform in order for any document that is part of the process to conform.</p>	

Type of compliance	Inspection and measurement
NOTE 8:	For checks 5 and 6, see the definition for accessibility support (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef) and "Understanding accessibility support" (http://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html#uc-accessibility-support-head) for further information.
NOTE 9:	For checks 7, 8 and 9, if a document cannot conform (for example, a conformance test document or an example document), it cannot be included in the scope of conformance or in a conformance claim.
NOTE 10:	For more information, including examples related to all checks, see "Understanding Conformance Requirements" (http://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html#uc-conformance-requirements-head).

C.11 Software

C.11.1 General

This clause is advisory only and contains no requirements requiring test.

C.11.2 Software success criteria

Type of compliance	Inspection and measurement
Pre-conditions	1. Software that provides a user interface is provided to the user.
Procedure	<p>1. (Conformance Level). Check that the non-closed functionality of the software satisfies all the software success criteria listed in table 3 of the present document, or a Level AA conforming alternate version is provided.</p> <p>2. (Conformance Level). Check that, for each conforming alternate version of a software, the requirements outlined in the definition for conforming alternate versions (http://www.w3.org/TR/WCAG20/#conforming-alternate-versiondef) are met.</p> <p>3. (Full pages). Check that no part of the software is excluded when applying check 1.</p> <p>4. (Only Accessibility-Supported Ways of Using Technologies). Check that only accessibility-supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef) ways of using technologies are relied upon to satisfy the success criteria.</p> <p>5. (Only Accessibility-Supported Ways of Using Technologies). Check that where information or functionality is provided in a way that is not accessibility supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef), it is also available in a way that is accessibility supported.</p> <p>6. (Non-Interference). Check that if technologies are used in a way that is not accessibility supported (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef), or if they are used in a non-conforming way, then they do not block the ability of users to access the rest of the software.</p> <p>7. (Non-Interference). Check that the following success criteria apply to all content in the software, including content that is not otherwise relied upon to meet conformance, because failure to meet them could interfere with any use of the software:</p> <p>1.4.2 - Audio Control, 2.1.2 - No Keyboard Trap, 2.3.1 - Three Flashes or Below Threshold, and 2.2.2 - Pause, Stop, Hide.</p> <p>8. Check that, under the applicability conditions listed in column 2 of table 4 of the present document, the closed functionality of the software meets the closed functionality requirement listed in column 3 of table 4.</p>
Result	<p>Pass: Checks 1 to 8 are true</p> <p>Fail: Any check is false</p>

Type of compliance	Inspection and measurement
NOTE 1:	Various techniques can be used to demonstrate that WCAG 2.0 Success Criteria are met. A set of techniques for WCAG 2.0 that can be used for this purpose provided is by W3C at: http://www.w3.org/TR/WCAG20-TECHS/ .
NOTE 2:	Where it is not manageable to check every interaction context that is provided to the user, then an appropriate methodology can be used to assess the overall conformance of the web content. A methodology for evaluating the conformance of websites to WCAG 2.0 is under development by W3C and is available at: http://www.w3.org/TR/WCAG-EM/ .
NOTE 3:	The WCAG 2.0 name for the conformance requirement is placed, in brackets, immediately after the check number in the table above.
NOTE 4:	For check 1 it should be noted that although conformance can only be achieved at the stated levels, authors are encouraged to report (in their claim) any progress toward meeting success criteria from all levels beyond the achieved level of conformance.
NOTE 5:	For check 3, for the purpose of determining conformance, alternatives to part of an interaction context's content are considered part of the software when the alternatives can be obtained directly from the software, e.g. a long description or an alternative presentation of a video.
NOTE 6:	For check 3, authors of software that cannot conform due to content outside of the author's control may consider a Statement of Partial Conformance (http://www.w3.org/TR/WCAG20/#conformance-partial).
NOTE 7:	For checks 4 and 5, see the definition for accessibility support (http://www.w3.org/TR/WCAG20/#accessibility-supporteddef) and "Understanding accessibility support" (http://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html#uc-accessibility-support-head) for further information.
NOTE 8:	For checks 6 and 7, if software cannot conform (for example, a conformance test software or an example software), it cannot be included in the scope of conformance or in a conformance claim.
NOTE 9:	For more information, including examples related to all checks, see "Understanding Conformance Requirements" (http://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html#uc-conformance-requirements-head).

C.11.3 Interoperability with assistive technology

C.11.3.1 Closed functionality

This clause contains no requirements requiring test.

C.11.3.2 Accessibility services

C.11.3.2.1 Platform accessibility service support for software that provides a user interface

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is platform software.
Procedure	1. Check that the platform software documentation includes information about platform services that may be used by software that provides a user interface to interoperate with assistive technology.
Result	Pass: Check 1 is true. Fail: Check 1 is false.

C.11.3.2.2 Platform accessibility service support for assistive technologies

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is platform software.
Procedure	1. Check that the platform software documentation includes information about platform accessibility services that may be used by assistive technology to interoperate with software that provides a user interface.
Result	Pass: Check 1 is true. Fail: Check 1 is false.

C.11.3.2.3 Use of accessibility services

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface.
Procedure	1. Check that the software uses the documented platform accessibility services. 2. Check that the software can meet requirements 11.3.2.5 to 11.3.2.17 whilst using the documented platform accessibility services. 3. Check that the software can meet requirements 11.3.2.5 to 11.3.2.17 whilst using the documented platform accessibility services and other documented services.
Result	Pass: Check 1 is true and check 2 or check 3 is true Fail: Check 1 or check 3 is false

C.11.3.2.4 Assistive technology

Type of compliance	Inspection
Pre-conditions	1. The ICT is assistive technology.
Procedure	1. The assistive technology uses the documented platform accessibility services.
Result	Pass: Check 1 is true. Fail: Check 1 is false.

C.11.3.2.5 Object information

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface.
Procedure	1. Check that the user interface element's role is programmatically determinable by assistive technologies. 2. Check that the user interface element's state(s) is programmatically determinable by assistive technologies. 3. Check that the user interface element's boundary is programmatically determinable by assistive technologies. 4. Check that the user interface element's name is programmatically determinable by assistive technologies. 5. Check that the user interface element's description is programmatically determinable by assistive technologies.
Result	Pass: Checks 1, 2, 3, 4 and 5 are true. Fail: Check 1 or 2 or 3 or 4 or 5 is false.

C.11.3.2.6 Row, column, and headers

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are data tables in the user interface.
Procedure	1. Select a table. 2. Check that each cell's row is programmatically determinable by assistive technologies. 3. Check that each cell's column is programmatically determinable by assistive technologies. 4. Check that each cell's row header, if the row header exists, is programmatically determinable by assistive technologies. 5. Check that each cell's column header, if the column header exists, is programmatically determinable by assistive technologies.
Result	Pass: Checks 2, 3, 4 and 5 are true. Fail: Check 2 or 3 or 4 or 5 is false.

C.11.3.2.7 Values

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are user interface elements that can have values.
Procedure	1. Select a user interface element that can have a value. 2. Check that the current value is programmatically determinable by assistive technologies. 3. If the user interface element conveys information about a range of values, check that the minimum value is programmatically determinable by assistive technologies. 4. If the user interface element conveys information about a range of values, check that the maximum value is programmatically determinable by assistive technologies.
Result	Pass: Checks 2, 3 and 4 are true. Fail: Check 2 or 3 or 4 is false.

C.11.3.2.8 Label relationships

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are user interface elements that are labels of other user interface elements.
Procedure	1. Obtain the information of each user interface element. 2. Check that the user interface element's information includes the relationship with the user interface element that is its label, if the current user interface element has a label, and that this relationship is programmatically determinable by assistive technologies. 3. Check that the user interface element's information includes the relationship with the user interface element that is labelling, if the current user interface element is a label, and that this relationship is programmatically determinable by assistive technologies.
Result	Pass: Checks 2 or 3 are true. Fail: Check 2 and 3 are false.

C.11.3.2.9 Parent child relationships

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are user interface elements that are parents of other user interface elements in a hierarchical structure
Procedure	1. For user interface elements that have a parent, check that the user interface element's information includes the relationship with the user interface element that is its parent. 2. Check that the user interface elements that are parents of the user interface element selected in check 1, include the relationship with the user interface elements that are its children in their information, and that this relationship is programmatically determinable by assistive technologies. 3. For user interface elements that are a parent of other user interface elements, check that the user interface element's information includes the relationship with the user interface elements that are its children, and that this relationship is programmatically determinable by assistive technologies. 4. Check that the user interface elements that are a child of the user interface element selected in check 3, include the relationship with the user interface elements that are its parents in their information, and that this relationship is programmatically determinable by assistive technologies.
Result	Pass: Checks 1 or 2 is true and check 3 or 4 is true. Fail: Checks 1 and 2 are false or check 3 and 4 are false.
NOTE:	For this requirement it is enough that one of the two directions of a parent-child relationship is programmatically determinable. This is the reason why the requirement checks are in pairs and why the requirement is met if one member of each pair is true.

C.11.3.2.10 Text

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There is text rendered to the screen.
Procedure	1. For instances of text rendered to the screen, check that the text's information includes its text content, and that this information is programmatically determinable by assistive technologies. 2. For instances of text rendered to the screen, check that the text's information includes its attributes, and that this information is programmatically determinable by assistive technologies. 3. For instances of text rendered to the screen, check that the text's information includes its boundary, and that this information is programmatically determinable by assistive technologies.
Result	Pass: Checks 1, 2 and 3 are true. Fail: Check 1 or 2 or 3 is false.

C.11.3.2.11 List of available actions

Type of compliance	Inspection
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are user interface elements that have actions that can be executed by the user.
Procedure	1. For user interface elements that have actions that can be executed by a user, check that the user interface element's information includes the list of actions that can be executed, and that this list is programmatically determinable by assistive technologies.
Result	Pass: Check 1 is true. Fail: Check 1 is false.

C.11.3.2.12 Execution of available actions

Type of compliance	Inspection and testing
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are user interface elements that have actions that can be executed by the user. 3. The security requirements permit assistive technology to programmatically execute user actions.
Procedure	1. For user interface elements that have actions that can be executed, check that the user interface element's information includes the list of actions that can be executed by assistive technologies according to 11.3.2.11. 2. Check that all the actions in the list can successfully be executed by assistive technologies.
Result	Pass: Checks 1 and 2 are true. Fail: Check 1 or 2 is false.

C.11.3.2.13 Tracking of focus and selection attributes

Type of compliance	Inspection and testing
Pre-conditions	1. The software evaluated is software that provides a user interface. 2. There are user interface elements that enable text editing.
Procedure	1. For user interface elements that provide text editing, check that the user interface element's information includes a mechanism to track focus, text insertion point and selection attributes, and that this information is programmatically determinable by assistive technologies. 2. Activate those tracking mechanisms. 3. As a user, use the text editing functionality in the evaluated software product. 4. Check that the tracking of focus, text insertion point and selection attributes work.
Result	Pass: Checks 1 and 4 are true. Fail: Check 1 or 4 is false.

C.11.3.2.14 Modification of focus and selection attributes

Type of compliance	Testing
Pre-conditions	<ol style="list-style-type: none"> 1. The software evaluated is software that provides a user interface. 2. There are user interface elements that can receive focus or that enable text editing. 3. The security requirements permit platform software to programmatically modify focus, text insertion point and selection attributes of user interface elements.
Procedure	<ol style="list-style-type: none"> 1. For user interface elements that can receive focus and where the focus can be modified by a user without the use of assistive technology, check that the focus can be programmatically modified by assistive technologies. 2. For user interface elements that enable text editing by a user without the use of assistive technology, check that the position of the text insertion point can be programmatically modified by assistive technologies. 3. For user interface elements that enable text editing, check that the selection attributes can be programmatically modified by assistive technologies where they can be modified by user without the use of assistive technology.
Result	Pass: All checks are true. Fail: Any check is false.

C.11.3.2.15 Change notification

Type of compliance	Inspection and testing
Pre-conditions	<ol style="list-style-type: none"> 1. The software evaluated is software that provides a user interface.
Procedure	<ol style="list-style-type: none"> 1. Activate notifications of changes in the user interface elements. 2. Check that notifications about changes in object information (role, state, boundary, name and description) are sent to assistive technologies, if this information changes in the software user interface. 3. Check that notifications about changes in row, column and headers of data tables are sent to assistive technologies, if this information changes in the software. 4. Check that notifications about changes in values (current value, minimum value and maximum value) are sent, if this information changes in the software. 5. Check that notifications about changes in label relationships are sent to assistive technologies, if this information changes in the software. 6. Check that notifications about changes in parent child relationships are sent to assistive technologies, if this information changes in the software. 7. Check notifications about changes in text (text contents, text attributes and the boundary of text rendered to the screen) are sent to assistive technologies, if this information changes in the software. 8. Check that notifications about changes in the list of available actions are sent to assistive technologies, if this information changes in the software. 9. Check that notifications about changes in focus, text insertion point and selection attributes are sent to assistive technologies, if this information changes in the software.
Result	Pass: Checks 2, 3, 4, 5, 6, 7, 8 and 9 are true. Fail: Check 2, 3, 4, 5, 6, 7, 8 or 9 is false.

C.11.3.2.16 Modifications of states and properties

Type of compliance	Testing
Pre-conditions	<ol style="list-style-type: none"> 1. The software evaluated is software that provides a user interface. 2. There are user interface elements whose state or properties can be modified by a user without the use of assistive technology. 3. The security requirements permit assistive technology to programmatically modify states and properties of user interface elements.
Procedure	<ol style="list-style-type: none"> 1. Check that the state of user interface elements, whose state can be modified by a user without the use of assistive technology, can be programmatically modified by assistive technologies. 2. Check the properties of user interface elements, whose properties can be modified by a user without the use of assistive technologies, can be programmatically modified by assistive technologies.
Result	Pass: All checks are true. Fail: Any check is false.

C.11.3.2.17 Modifications of values and text

Type of compliance	Testing
Pre-conditions	<ol style="list-style-type: none"> 1. The software evaluated is software that provides a user interface. 2. There are user interface elements whose values or text can be modified by a user without the use of assistive technology. 3. The security requirements permit assistive technology to programmatically modify values and text of user interface elements.
Procedure	<ol style="list-style-type: none"> 1. Check that the values of user interface elements, whose values can be modified by a user without the use of assistive technology, can be modified by assistive technologies using the input methods of the platform. 2. Check that the text of user interface elements, whose text can be modified by a user without the use of assistive technology, can be modified by assistive technologies using the input methods of the platform.
Result	Pass: all checks are true. Fail: any check is false.

C.11.4 Documented accessibility usage

C.11.4.1 User control of accessibility features

Type of compliance	Testing
Pre-conditions	1. There are platform features that are defined in the platform documentation as accessibility features intended for users.
Procedure	1. Check that at least one mode of operation exists where user control over platform features, that are defined in the platform documentation as accessibility features intended for users, is possible.
Result	Pass: Check 1 is true. Fail: Check 1 is false.

C.11.4.2 No disruption of accessibility features

Type of compliance	Testing
Pre-conditions	1. There are platform features that are defined in the platform documentation as accessibility features.
Procedure	<ol style="list-style-type: none"> 1. Check if software that provides a user interface disrupts normal operation of platform accessibility features. 2. Check if the disruption was specifically requested or confirmed by the user.
Result	Pass: Check 1 is false or both checks are true Fail: Check 1 is true and check 2 is false

C.11.5 User preferences

Type of compliance	Inspection and Testing
Pre-conditions	1. The software is software that provides a user interface.
Procedure	<ol style="list-style-type: none"> 1. Check if the software provides at least one mode of operation that uses user preferences for platform settings for colour, contrast, font type, font size, and focus cursor. 2. Check if the software documentation indicates that it is designed to be isolated from its underlying platform.
Result	Pass: Check 1 is true or Check 1 is false and check 2 is true Fail: Check 1 is false and check 2 is false

C.11.6 Authoring tools

C.11.6.1 Content technology

Type of compliance	Inspection and Testing
Pre-conditions	1. The software is an authoring tool. 2. The output format of the authoring tool supports information required for accessibility.
Procedure	1. Check if the authoring tool conforms to 11.6.2 to 11.6.5 to the extent that information required for accessibility is supported by the format used for the output of the authoring tool.
Result	Pass: Check 1 is true Fail: Check 1 is false
NOTE: Where the output format of the authoring tool does not support certain types of information required for accessibility, compliance with requirements that relate to that type of information is not required.	

C.11.6.2 Accessible content creation

Type of compliance	Inspection and Testing
Pre-conditions	1. The software is an authoring tool.
Procedure	1. Check if the authoring tool has features that enable and guide the production of content that conforms to clauses 9 (Web content) and 10 (Documents).
Result	Pass: Check 1 is true Fail: Check 1 is false

C.11.6.3 Preservation of accessibility information in transformations

Type of compliance	Inspection and Testing
Pre-conditions	1. The software is an authoring tool. 2. The authoring tool provides restructuring transformations or re-coding transformations.
Procedure	1. For a restructuring transformation, check if the accessibility information is preserved in the output. 2. For a restructuring transformation, check if the content technology supports accessibility information for the restructured form of the information. 3. For a re-coding transformation, check if the accessibility information is preserved in the output. 4. For a restructuring transformation, check if the accessibility information is supported by the technology of the re-coded output.
Result	Pass: Check 1 is true or checks 1 and 2 are false or check 3 is true or checks 3 and 4 are false Fail: Check 1 is false and check 2 is true

C.11.6.4 Repair assistance

Type of compliance	Inspection
Pre-conditions	1. The software is an authoring tool. 2. The accessibility checking functionality of the authoring tool can detect that content does not meet a requirement of clauses 9 (Web content) or 10 (Documents) as applicable.
Procedure	1. The authoring tool provides repair suggestions when content does not meet a requirement of clauses 9 or 10 (as applicable).
Result	Pass: Check 1 is true Fail: Check 1 is false

C.11.6.5 Templates

Type of compliance	Inspection
Pre-conditions	1. The software is an authoring tool. 2. The authoring tool provides templates.
Procedure	1. Check that the authoring tool provides at least one template that supports the creation of content that conforms to clauses 9 (Web content) or 10 (Documents) as applicable. 2. Check that at least one template identified in step 1 is available and is identified as conforming to clauses 9 or 10 (as applicable).
Result	Pass: Checks 1 and 2 are true Fail: Check 1 or 2 is false
NOTE:	The identification as conforming to clauses 9 or 10 (as applicable) described in check 2 may be described in terms such as "Conformant to WCAG 2.0". Where the identification does not explicitly state that all of the requirements identified in clauses 9 or 10 (as appropriate) are covered, it may be necessary to use the template to create a web site or document and then test that web site or document according to the requirements of clauses 9 or 10 to provide full assurance that the template behaves as required.

C.12 Documentation and support services

C.12.1 Product documentation

C.12.1.1 Accessibility and compatibility features

Type of compliance	Inspection
Pre-conditions	1. Product documentation is supplied with the ICT.
Procedure	1. Check that product documentation provided with the ICT lists and explains how to use the accessibility and compatibility features of the ICT.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.12.1.2 Accessible documentation

Type of compliance	Inspection
Pre-conditions	1. Product documentation in electronic format is supplied with the ICT.
Procedure	1. Check that product documentation in electronic format provided with the ICT conforms to the requirements of clauses 9 or 10 as appropriate.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.12.2 Support services

C.12.2.1 General

This clause is informative only and contains no requirements requiring test.

C.12.2.2 Information on accessibility and compatibility features

Type of compliance	Inspection
Pre-conditions	1. ICT support services are provided.
Procedure	1. Check that the ICT support services provide information on the accessibility and compatibility features that are included in the product documentation.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.12.2.3 Effective communication

Type of compliance	Inspection
Pre-conditions	1. ICT support services are provided.
Procedure	1. Check that the ICT support services accommodate the communication needs of individuals with disabilities either directly or through a referral point.
Result	Pass: Check 1 is true Fail: Check 1 is false
NOTE:	The provision of any level of support for the communication needs of individuals with disabilities constitutes a pass of this requirement. Suppliers may wish to provide further information about the level of support that is provided to enable the adequacy and quality of the support to be judged.

C.12.2.4 Accessible documentation

Type of compliance	Inspection
Pre-conditions	1. Documentation in electronic format is provided by the ICT support services.
Procedure	1. Check that documentation in electronic format provided by the ICT support services conforms to the requirements of clauses 9 or 10 as appropriate.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.13 Relay services

C.13.1 Relay services requirements

C.13.1.1 Text relay services

Type of compliance	Inspection
Pre-conditions	1. The service is a text relay service.
Procedure	1. Check that the service has been certified to meet the applicable text relay requirements of ES 202 975 [i.5]. 2. Check that the service enables text users and speech users to interact by providing conversion between the two modes of communication.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.13.1.2 Sign relay services

Type of compliance	Inspection
Pre-conditions	1. The service is a sign relay service.
Procedure	1. Check that the service has been certified to meet the applicable sign relay requirements of ES 202 975 [i.5]. 2. Check that the service enables sign language users and speech users to interact by providing conversion between the two modes of communication.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.13.1.3 Lip-reading relay services

Type of compliance	Inspection
Pre-conditions	1. The service is a lip-reading relay service.
Procedure	1. Check that the service enables lip-readers and voice telephone users to interact by providing conversion between the two modes of communication.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.13.1.4 Captioned telephony services

Type of compliance	Inspection
Pre-conditions	1. The service is a captioned telephony service.
Procedure	1. Check that the service has been certified to meet the applicable captioned telephony requirements of ES 202 975 [i.5]. 2. Check that the service assists a deaf or hard of hearing user in a spoken dialogue by providing text captions translating the incoming part of the conversation.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.13.1.5 Speech to speech relay services

Type of compliance	Inspection
Pre-conditions	1. The service is a speech to speech relay service.
Procedure	1. Check that the service has been certified to meet the applicable speech to speech relay requirements of ES 202 975 [i.5]. 2. Check that the service enables enable speech or cognitively impaired telephone users and any other user to communicate by providing assistance between them.
Result	Pass: Check 1 or 2 is true Fail: Check 1 and 2 are false

C.13.2 Access to relay services

Type of compliance	Inspection
Pre-conditions	1. A list of relay services to be supported is specified in the procurement process. 2. The ICT is a communication system that supports two-way communication.
Procedure	1. Check that the system does not prevent access to any of those relay services for incoming and outgoing calls.
Result	Pass: Check 1 is true Fail: Check 1 is false

C.13.3 Access to emergency services

Type of compliance	Inspection
Pre-conditions	1. A list of emergency services that support voice, text or video communication is specified in the procurement process.
Procedure	1. Check that the system supports access to all of those emergency services for outgoing and incoming calls.
Result	Pass: Check 1 is true Fail: Check 1 is false

History

Document history			
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