|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Organisation | Line number/ Clause/Sub Clause/  Annex  (e.g. 3.1) | Paragraph/ Figure/ Table/ Note (e.g. Table 1) | Type  of comment[[1]](#footnote-1) | Comment | Commenter’s Proposed Change  (with justification, if not included  with the comment) | Observations Of The Secretariat |
| **000** | **Schedule. Proposals for new areas for requirements** | | | | | | |
| 021 | DIN 1 | Introduction |  | ed | The four TRs mentioned in the introduction seem to be outdated and do not apply any longer to Mandate 554. | Please remove the reference to the four TRs. | Partially accepted  The introductory text will be changed to:  “The other deliverables prepared in response to the original Mandate M 376” then the bullets will be removed and the words ”These have not been updated to reflect any changes to the content or scope of the present document as a part of the M554 revision effort.” added. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **100** | **GENERAL comments. Foreword. Introduction. Scope. References.** | | | | | | |
| 111 | SIS | Foreword |  | T | The foreword for harmonized standards follow ETSI drafting rules. The problem here is that it seems as if the whole standard is harmonised in relation to the web accessibility directive only. | Clarify the foreword as the scope of the EN is wider than the web accessibility directive. | Accepted  The second paragraph of the foreword will be replaced by:  EN 301 549 was originally produced under Mandate M/376 and intended for procurement of ICT.  This revision to EN 301 549 has been prepared under the Commission's standardisation request C(2017) 2585 final [i.27] to provide one voluntary means of conforming to the essential requirements of Directive 2016/2102 [i.28] on the accessibility of the websites and mobile applications of public sector bodies.The minimum requirements of the European Web Accessibility Directive (Directive 2016/2102) are explicitly detailed in Annex A.  The present document contains a wide range of requirements to cover a wide variety of ICT solutions. There are for example requirements on function, physical characteristics and software. It is suitable for procuring, testing, planning, maintaining or reporting on accessibility. |
| 112 | ITS, PTS and vonniman consulting 1 | Foreword |  | T | The foreword for harmonized standards follow ETSI drafting rules. The problem here is that it seems as if the whole standard is harmonised in relation to the web accessibility directive only. | Clarify the foreword as the scope of the EN is wider than the web accessibility directive. | Accepted  See 111 |
| 113 | ITS, PTS and vonniman consulting 2 | Introduction |  | T, E | The introduction does not provide enough information to readers unfamiliar with the mandates and the directives.  Given that suppliers to public sectors are intended users of the standard, it would benefit the usability of the standard if it would provide a decent introduction to the intended use of the standard and guide readers to how it can be used. | Re-write the Introduction to provide a proper introduction for intended users of the standard.  One possible way would be to include parts of Annex E in the Introduction. | Accepted  See 111 |
| 114 | ITS, PTS and vonniman consulting 3 | Scope |  | T, E | Section 4 in the Scope does **not** belong to the Scope:  “All clauses except those in clause 12, related to documentation and support services, are self-scoping. This means they are introduced with the phrase 'Where ICT <pre-condition>'. Conformance is achieved either when the pre-condition is true and the corresponding test (in Annex C) is passed, or when the pre-condition is false (i.e. the pre-condition is not met or not valid).  NOTE 1: Conformance issues are covered in normative clause C.1.” | Please place this content elsewhere – in Informative Annex E.4.1, clause 4, or elsewhere – but **NOT** in the Scope. | Accepted  This will be added in to the introduction (except that the reference to “clause C.1” will be changed to “clause 14).  The paragraphs following that will be moved to Clause 14 dealing with conformance. |
| 115 | Clas Thorén | Foreword | 5th para, first line | Ed | In the first line of the sentence “Once the present document” the words “that directive” refers back two paragraphs, which is a bit too long.  In the last line, “that Directive” works well: | Replace “that Directive” with “Directive 2016/2102” | Accepted |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 200 | **Clause 2** | | | | | | |
| 212 |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 300 | **Clause 3** | | | | | | | |
| 325 | ITS, PTS and vonniman consulting 4 | 3 |  | T, E | Use the definition of spoken subtitles from ISO 20071-25 | Change the definition of spoken subtitles to the definition used in ISO 20071-25:  “**spoken captions/subtitles**  **audio captions/subtitles:**  captions/subtitles that are voiced over the audiovisual content” | Accepted |
| 326 | Mike Pluke | 3.1 |  | e | The second sentence of the “Assistive Listening Devices (ALDs)” definition should be a Note. |  | Accepted |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 400 | **Clause 4** | | | | | | |
| 421 | DIN 2 | 4.2.5 |  | te | Respective considerations on binaural hearing, noise cancellation and connectivity are missing. | Add to NOTE 1: Enhancement of the audio clarity, reduction of background noise, providing a joint monaural option, adjustment of balance of both audio channels, increased range of volume and greater volume in the higher frequency range can contribute towards meeting this clause.  NOTE 2: The use of personal headsets, including headsets with noise cancellation connected by cable, bluetooth or WLAN, can contribute towards meeting this clause.  Note 2b: The use of induction loops, IR or FM receivers, can contribute towards meeting this clause. | Partially Accepted  Removed note 2b since these are things done at the site and not changes to a product design.  Note 2 changed to  “**Allowing** the use of Assistive Listening Devices such as, headsets with noise cancellation connected by cable, bluetooth or WLAN, can contribute towards meeting this clause.  ” |
| 422 | ITS, PTS and vonniman consulting 5 | 4.2.X | New subclause |  | Reading and writing limitations are not mentioned in functional performance statements despite the fact that around 20% of the population experience reading limitations and only between 5-10 % of these have dyslexia. For some people reading difficulties are related to “limited cognition”, but for the vast majority of persons with dyslexia, persons with lack of training or education or persons learning a new language there is no connection to “limited cognition”. | Add a new subclause under 4.2 (and update Annex B and table B1 to reflect the new subclause)  **Usage with limited reading and writing capability**  Where ICT requires reading capability some users will need the ICT to provide an audio output of the text. Where ICT requires writing capability some users will need the ICT to provide spelling aid and word prediction. | Partially Accepted  Changed the title of 4.2.10 to “Usage with limited cognition, language, or learning”  Deleted Note 1  and added the following 2 Notes  Note 2: Providing an audio output of the text is an example of providing support for people with limited reading abilities .  Note 3: Providing spelling aid and word prediction of the text is an example of providing support for people with limited writing abilities. |
| 423 | ANEC 1 | 4.2.10, Usage with limited cognition |  |  | The text of this section currently includes the word `use’ whilst similar previous sections for other disabilities use the word `operate’ in addition or instead. The section currently reads as follows: “Some users will need the ICT to provide features and/or presentation that makes it simpler and easier to understand and use.”  This distinction suggests that users with limited cognition can be expected to have a different level of operation to other users. To remedy this it is suggested that word use is replaced with the word operate. | The replacement text is as follows:  `Some users will need the ICT to provide features and/or presentation that makes it simpler and easier to understand, **operate** and use.’ | Accepted |
| 424 | ANEC 2 | 4.2.11, Privacy |  |  | The text of this section currently uses the word `some’ in a way that suggest that privacy is not required in the same way for users of accessibility features as for users who are operating the systems without making use of accessibility features. The text currently reads:  “Where ICT provides features that are provided for accessibility, **some** users will need their privacy to be maintained when using those ICT features that are provided for accessibility.” | The replacement text is as follows:  “Where ICT provides features that are provided for accessibility, **the** users of these features will need their privacy to be maintained to the same level as other users.” | Accepted  (except removed the word “the” from in front of users) |

|  |  |
| --- | --- |
| 500 | **Clause 5** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 512 | Dave | 5.1.2.1 (note2, first sentence) |  |  | Use of the word “provisions” – clarify and be consistent. |  | Accepted  The following  For 5.1.2.1 (note2, first sentence) I have proposed replacing  "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. " with  "The requirements within this clause replace those in clauses 5.2 to 13 that specifically state that they do not apply to closed functionality. " |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 600 | **Clause 6** | | | | | | |
| 680 | Microsoft 1 | 6.2.1.2 | NOTE 2 | T | The NOTE appears to be related to many-party communications. For consistency, it should be called out as it is in NOTE 1 and NOTE 3. | NOTE 2: **With many-party communication,** best practice is for hand-raising for voice users and RTT users to be handled in the same way, so that voice and RTT users are in the same queue. | Accepted |
| 681 | Microsoft 2 | 6.2.1.2 | NOTE 4 | E | The word “users” should be possessive. | Change “users” to either user’s or users’ as appropriate. | Accepted |
| 682 | Microsoft 3 | 6.2.2.1 | NOTE | T | The second sentence (“For Braille users…”) seems to be end-user guidance, not something the ICT provider controls. If the sentence is included, it should be separated from the previous sentence which is guidance to the ICT provider. | **NOTE 1:** The ability of the user to choose between having the send and receive text be displayed in one field or two allows users to display RTT in a form that works best for them.  **NOTE 2:** For Braille users, taking turns would allow the text to appear in the sequential way that they need. | Partially accepted Rewrote second paragraph, as a second sentence in the first note, to also pertain to product developers.  **NOTE 1:** The ability of the user to choose between having the send and receive text be displayed in one field or two allows users to display RTT in a form that works best for them. This would allow Braille users to use a single field and take turns and have text appear in the sequential way that they may need or prefer. |
| 683 | Microsoft 4 | 6.2.2.2 |  | T | Needs to include “received” for completeness and accuracy. | Where ICT has RTT send and receive capabilities, the send/receive direction of transmitted**/received** text shall be programmatically determinable, unless the RTT is implemented as closed functionality. | Accepted |
| 684 | Microsoft 5 | 6.2.2.3 |  | T | Please clarify that this requirement flows both ways. The NOTE suggests that the only concern is that voice participants should be notified who is communicating in RTT. It is equally important that the RTT stream include an indicator of who is communicating by voice. |  | Accepted  Changed note to:  NOTE: This is important so that both voice and RTT participants know who is currently communicating whether it be in RTT or voice. |
| 685 | Microsoft 6 | 6.2.2.4 |  | T | This requirement should be moved under 6.5.5. | Move the requirement under 6.5.5.  If it remains as 6.2.2.4, it needs an additional prerequisite in order to be technically valid in all cases.  If ICT is voice only (no video), with RTT support via Braille, a visual indicator is not possible or meaningful.  There are two options to correct this gap: 1) Add “and a visual display” prerequisite, or 2) change “real time visual indicator” to “real-time visual or programmatic indicator”. | Good Catch  Partially Accepted  We discussed moving it to 6.5.5. earlier and decided it was better here.  HOWEVER, we are adding “on the display” to the provision to make sure the information is conveyed to braille users as well.  “Where ICT provides two-way voice communication, and has RTT capabilities, the ICT shall provide a real time visual indicator of audio activity on the display.”  and change note 1 to read  “NOTE 1: The visual indicator may be a simple character position on the display that flickers on and off to reflect audio activity, or presentation of the information in another way that can be both visible to sighted users and passed on to deaf-blind users who are using a braille display.” |
| 686 | Microsoft 7 | 6.2.3 |  | E | The various interoperability mechanisms are not stated consistently. | Reword the mechanisms a) through d) so they are stated consistently. | Accepted  Option a) will be reworded to read:  a) ICT interoperating with other ICT directly connected to the Public Switched Telephone Network (PSTN), using Recommendation ITU-T V.18 [i.23] or any of its annexes for text telephony signals at the PSTN interface;  Also replace the words “conform to” with “using” in option c. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 700 | **Clause 7** | | | | | | |
| 718 | ITS, PTS and vonniman consulting 6 | 7.1.4 |  | E | The title of 7.1.4 is misleading, as it reads “Caption characteristics and **personalization**”. ”Personalization” is misleading and should be replaced by “customization”, used in the clause in question. | Please change the title of 7.1.4 to “Caption characteristics and **customization**”. | Partially Accepted.  As a result of your comment we have harmonized the title and the provision in another way. We have changed the term “customise “ to “personalise” in the requirement.  We did this because customization is usually used in connection with after-market changes. Personalization is generally the current term for adding features to a product that allows each person to adjust it to their needs and preferences. |
| 719 | ITS, PTS and vonniman consulting 7 | 7.1.5 | notes | T | Solutions for both audio description and spoken subtitles could be provided as separate audio tracks that the user can access via a mobile app or other device, thus allowing the user to adjust the volume of the audio description and/or spoken subtitles. The notes should reflect existing practice and standards. | Proposed new text:  Note 1**:** Being able to manage speech output range for spoken subtitles independently from general ICT speech is preferable for most users. That is possible when the audio file with spoken subtitle is delivered in a separate audio track and mixed in the end users device.  Source ISO/IEC TS 20071-25, 4.4.2 Volume  Note 2**:** Separate audio track with spoken subtitle should generally be presented in synchronization with the displayed subtitle/caption  Source ISO/IEC TS 20071-25, 4.5 Synchronization  Note 3**:** Subtitles/captions should be included as separate text-files, as this is the best option for converting text into audio.  Source ISO/IEC TS 20071-25, 4.6 Text-files | Partially Accepted  adding Note 1  Notes 2 and 3 had a SHOULD in them - so we changed them to  Note 2: Presenting the separate audio track with spoken subtitles in synchronization with the displayed subtitles/captions improves understandability of the subtitles.  Note 3**:** Providing subtitles/captions as separate text-streams, facilitates converting the respective texts into audio. |
| 720 | ITS, PTS and vonniman consulting 8 | 7.1.5 |  | T | We don’t understand why there is a recommendation to mix spoken subtitles with other sound so that there is a 20 dB difference. | Please provide a reference to a standard, guideline or other research promoting this recommendation – else remove  . | Noted  The reference to 20db will no longer appear (see comment 719) |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 800 | **Clause 8** | | | | | | |
| 846 | DIN 3 | 8.3.0 |  | ge/te | Please clarify the purpose of the clauses 8.3 ff. | Add a sentence in the beginning of 8.3.0:  This document defines the dimensions for assessing stationary ICT that can be placed in a built environment, but does not define the dimensions of the built environment in general.  The scope includes stationary ICT of which floors and circulation spaces are “an integral part” (typically kiosks and cabins) and where there are external reach ranges relevant for operating the stationary ICT. | Accepted  NOTE: We will use “The present document …” |
| 847 | UNE | 8.3 |  | T | ISO 21542 and prEN 17210 provide requirements on the accessibility of the built environment relevant to ICT. Due to this, the previous editions of EN 301 549 Clause 8.3 contained no requirements. However, this draft v5.0 of prEN 301 549 v.3.1.1 has turned the recommendations given in 8.3 into requirements. 8.3 should be kept informative, to avoid inconsistencies with ISO 21542 and with prEN 17210. | Keep 8.3 informative.  All the requirements given in 8.3 in this new draft of prEN 301 549 v.3.1.1 should be turned again into recommendations. | See comment 846.  we removed all parts pertaining to the built environment - but those applying to the ICT themselves remain as requirements since they are not covered by built environment regulations or anywhere else. |
| 848 | ITI 1 | 8.3.0 |  | E | Incorrect figure reference  Not referencing the correct figure. | Change to Figure "5.3" to "53" | Accepted |
| 849 | ITI 2 | 8.3.1 | Note 2 | E | Incorrect reference to RS508  Not correct reference in RS508 407.8 is "Reach Height and Depth" and 408.2 is "Visibility" | Change to '407.8' to '407.8.3' and '408.2' to '407.8.2' | Accepted |
| 850 | ITI 3 | 8.3.6 | Paragraph | G | This is out of scope of ICT manufacture. | Remove or change shall to should. | Not Accepted  This is not outside of the scope since it applies to instructions included with the product as sales time. |
| 851 | ITS, PTS and vonniman consulting 9 | 8.3 |  | T | ICT and accessibility in the built environment are covered in new requirements under development, such as: The upcoming EN 17210 from mandate 420 and as part of an ongoing revision on ISO 21542, in addition to the Accessibility directive that includes stationary ICT.  There is a risk for conflicting requirements between the EN 301549 and upcoming requirements. There is also existing national legislation that could cause conflicts.  Furthermore the manufacturer of ICT is not in control over accessibility in the built environment nor the positioning of the device. | Replace 8.3 with a single clause: “Where ICT is stationary it shall provide means to reach, understand and operate the device.  Note Legislation and accessibility standards for built environment shall be considered when applicable.”  If there is a decision to keep references to section 508 it cannot be mandatory requirements. The text must then be moved to a new informative Annex as an example from the US. | Not Accepted  See response 847 |
| 852 | Clas Thorén | 8.3.0 | First line | Te | “assessing” should be “accessing”? |  | Accepted |
| 853 | Clas Thorén | 8.3.6 | Third line | Ed | Improved readability | Replace “ Where there are no applicable requirements ... the installation of the ICT” by  “Where there are no such requirements” | Accepted |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 900 | **Clause 9** | | | | | | |
| 920 | DIN 4 | 9,10 and 11 |  | ge | The level A and AA success criteria of WCAG 2.1 fulfil the essential requirements set out in EU Directive 2016/2102.  In its revised legislation, Germany requires the AAA success criteria under certain conditions (e.g., for portal pages). Therefore, including Level AAA criteria in clause 9 as "conditional" is important for German law to reference ONE consistent European harmonized framework rather than multiple standards.  Note that we accept that the WCAG AAA requirements cannot be applied to Clauses 10 and 11.  Note that Annex D is not sufficient because it does not provide the full text of the AAA provisions.  We do not accept the objection that readers should not have to carefully check the modal verb since there are already many instances of recommendations contained in the standard. The document already contains instructions for the reader how to interpret the modal verbs (see section on modal verbs terminology before introduction). | Add level AAA criteria with full text in clause 9, replacing Annex D. | **Not Accepted**.  We have carefully considered this approach and determined that including AAAs within clauses 9.1 to 9.4 cannot work and that having the AAAs in Annex D is the correct approach.  **The main advantage of the Annex D approach:**  It presents the A and AA requirements in the most straightforward and uncluttered way to support the most common task of determining whether all the A and AA Success Criteria have been satisfied.  In W3C's “How to Meet WCAG 2”, it is possible to create a filtered view that only shows the A and AA SCs. Such a view makes evaluating whether web pages conform to WCAG 2.1 at Level AA a straightforward task.  The current clause 9 gives this same useful filtered subset of Success Criteria to support the Level AA conformance required to meet the Essential Requirements of the Directive and also when EN 301 549 is used in other contexts. When using "How to Meet WCAG 2" a list of the AAA requirements that have been omitted is presented after the A and AA requirements. This is exactly the same list as appears in Annex D and, unlike the list provided at the end of the filtered list, links are provided in Table D.1 to the WCAG 2.1 “official” language for the each of the AAA Success Criteria.  **Disadvantages of the DIN proposal**:   1. You imply that it will be necessary to have the full text of the AAA Success Criteria provided, but this would make AAA Success Criteria more prominent in the EN than the A and AA SCs, which does not make sense. The full text of the AAA SCs is available in exactly the same way as it is for the A and AA SCs - via a hyperlink to the full text in WCAG 2.1. This method avoids creating unintentional divergences between what is in WCAG 2.1 and what is in EN 301 549 - it also overcomes any potential copyright considerations. 2. You seem to imply that Germany cannot require AAA SCs because they appear in an Annex and not in clause 9. The location of the AAAs should not matter as content in an Annex has an equivalent status to content in the main body of a standard and can be directly referenced from other documents in exactly the same way as the As and AAs can be. Everything necessary to allow AAAs to be referred to from other documents is available in the same way that it is for As and AAs and is unaffected by whether the SCs are listed in clause 9 or in Annex D. Annexes can be normative or informative just like in the body of the document and they are used purely for structural purposes. 3. All A and AA requirements in clause 9 are required for every web page and this is indicated by the "Where ICT is a web page, it shall satisfy ..." scoping text in the requirement. If Germany wishes to require AAA Success Criteria for portal pages then it will need to create its own scoping e.g. "Where ICT is a web portal page, it shall satisfy ...". With the AAAs in Annex D, the "..." could be either "all the WCAG 2.1 Success Criteria in Table D.1" or "the WCAG 2.1 Success Criterion "No Timing" in Row 11 of Table D.1". 4. DIN have proposed the use of the modal verb "may" for AAAs in clause 9 to say for example "Where ICT is a web page, it may satisfy WCAG 2.1 Success Criterion 2.2.3 No Timing". But if Germany wishes to require the use of SC 2.2.3 for portal pages it would need to refer to clause 9.2.2.3 in its own requirement scoping as follows:  "Where ICT is a web portal page, it shall meet clause 9.2.2.3"   However, such a statement would make no sense as it would be saying that you shall meet a "may" statement, which means absolutely nothing and this additional requirement would automatically be met without the web site designers having to do **anything**.   There is a clear statement in clause 9.0 that says:  “Conformance with W3C Web Content Accessibility Guidelines (WCAG 2.1) [ ] Level AA is equivalent to conforming with all of clauses 9.1 to 9.4 and the conformance requirements of clause 9.5 of the present document.”  Currently this statement requires no interpretation as all of the content of clauses 9.1 to 9.4 are requirements that can be conformed to. If the AAAs were introduced this simple bullet would either need to be interpreted extremely carefully as some of the content of clauses 9.1 to 9.4  are no longer requirements that can be conformed to, but nevertheless people might easily not realise this and try to meet all of the SCs including the AAAs.  Alternatively, this simple statement would have to be re-written to be vastly more complex as it would have to refer to multiple blocks of lower level clauses that were applicable in order that the AAAs were not included in this equivalence statement. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1000 | **Clause 10** | | | | | | |
| 1016 | DIN 5 | 10 |  | te | The accessibility requirements for PDF documents (as specified in ISO 14289-1) have been recently discussed for German legislation. Therefore we propose to extend Clause 10 by those technology neutral requirements from ISO 14289-1 that are not fully covered by WCAG 2.1 AA, e.g. reading order, scalable fonts embedded in documents. | DIN will submit a concrete proposal by May 3rd. | Noted (see individual responses to “DE Late Comment”s).  Completely new requirements submitted at this stage cannot be adopted without another complete review of the EN after this “final” review.  Other Notes:  Reading order is already required, requiring Tags and embedding scalable fonts would means that document formats that do not support these capabilities would not be allowed. Finally we would not include requirements for specific technologies (e.g.PDF) |
| 1017 | DE Late Comment 1 |  | 10.0 | te | In compliance with ISO 14289-1 clause 7.11 add a note on embedded documents. | Add a Note to 10.0:  NOTE 7: A (parent) document may have embedded documents. Requirements in clause 10 apply to the parent document as well as to all embedded documents. | Not Accepted  Clause 10 applies to all documents (as defined) so this note would be superfluous (also, it’s partly covered by note 2) . Introducing the term “sub-documents” would only create ambiguity. |
| 1018 | DE Late Comment 2 |  | 10.0 | te | The following explanation should be added to support readers. | Add a Note to 10.0:  NOTE 8: Requirements in clause 10 also apply to documents that are digitally signed, crypted, password protected, protected by water signs,  copy protected etc. | Accepted  This note has been edited to read:  NOTE 7: Requirements in clause 10 also apply to documents that are protected using mechanisms such as digital signatures, encryption, password protection, watermarks when they are presented to the user. |
| 1019 | DE Late Comment 3 |  | 10.0 | te | Accessibility Meta data should be provided for non-web documents.  see:  <https://www.w3.org/wiki/WebSchemas/Accessibility>  <https://schema.org/> | Add a note to 10.0  NOTE 9: "In accordance to clause 12.1 meta data on the accessibility of the document should be provided inside or external of the document.  see https://schema.org/ " | Not accepted  There does not appear to be an appropriate standardised set of accessibility meta data to refer to.  The wiki that says “This page outlines the version 2.0 properties that are now part of schema.org. Work on the project is ongoing, and additional properties are being considered post 1.0.” and the link to schema.org does not clearly identify a set of accessibility metadata that should be included. |
| 1020 | DE Late Comment 4 |  | 10.1.1.1 | te | In compliance with ISO 14289-1 clause 7.13 add a note on digital signatures. | Add a note to 10.1.1.1  NOTE 2: Digital signatures presented as graphic shall satisfy the WCAG 2.1 success criterion 1.1.1. | Not accepted  The note only gives one example of non-text content and does not add anything to the understanding of the underlying requirement. |
| 1021 | DE Late Comment 5 |  | 10.1.3.1 | te | In compliance with ISO 14289-1 clause 7.1 add a note on non-standard structure types. | Add a Note to 10.1.3.1:  NOTE: Where documents contain non-standard structure types (roles), these need to be mapped to a standard structure type as a fall-back solution for the reader. | Not accepted  This note is written like a completely new requirement. It is too late to consider the addition of new requirements. |
| 1022 | DE Late Comment 6 |  | 10.1.4.4 | te | Highly scalable font sizes are essential for people with low vision when using build-in or separate magnification tools. This issue is not sufficiently addressed in ISO 14289-1 and WCAG 2.1 yet. | Add a Note to 10.1.4.4:  NOTE 3: It is strongly recommended to use only fonts that allow for scaling without loss of quality (e.g. pixelized presentation). This applies in particular to embedded fonts. | Not accepted  This proposed note is written in the form of a recommendation. It does not add anything to the understanding of the requirement. |
| 1023 | DE Late Comment 1 |  | 10.0 | te | In compliance with ISO 14289-1 clause 7.11 add a note on embedded documents. | Add a Note to 10.0:  NOTE 7: A (parent) document may have embedded documents. Requirements in clause 10 apply to the parent document as well as to all embedded documents. | Not Accepted  Clause 10 applies to all documents (as defined) so this note would be superfluous (also, it’s partly covered by note 2). Introducing the term “sub-documents” would only create ambiguity. |
| 1024 | Dave Sawdon | Tables 10.14 and 11.12 | 2nd line of Note 2 |  | Use of the word “provisions” – clarify and be consistent. |  | Accepted  The word “provision” has been replaced with “[requirement]” |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1100 | **Clause 11** | | | | | | |
| 1135 | DIN 6 | 11.2.4.1 |  | te | We urge to include WCAG requirement 2.4.1, as worded by the WCAG2ICT document. The notes to this provision in WCAG2ICT make it clear that it is an important requirement for accessibility and can be fulfilled by software in various ways. | Adopt wording of WCAG2ICT, section 2.4.1, including notes. | Not accepted  The WCAG2ICT interpretation refers to “software programs in a set of software programs” which is a very narrowly defined and almost non-existent entity.  We will include the following notes in the final document.  NOTE 1: The related web page requirement “Bypass blocks” does not apply to single software programs, but to a specific definition of “sets of software programs” that are extremely rare.  NOTE 2: Although not a requirement, it is generally considered best practice, and to address user needs, to be able to bypass blocks of content that are repeated within software. |
| 1136 | DIN 7 | 11.2.4.2 |  | te | We urge to include WCAG requirement 2.4.2, as worded by the WCAG2ICT document. Note 1 to this provision in WCAG2ICT makes it clear that it is an important requirement for accessibility and can be fulfilled by software in various ways. | Adopt wording of WCAG2ICT, section 2.4.2, including Note 1. | Not accepted  2.4.2 has not been included because the WCAG2ICT interpretation suggests that the name of a program should be its function (which would be identical in all programs of that type). Such a solution would be highly confusing for all users.  We will include the following notes in the final document.  NOTE 1: The related web page requirement “Page titled” does not apply to single software programs, but to a specific definition of “sets of software programs” that are extremely rare.  NOTE 2: Although the name of a software product could be a sufficient title if it describes the topic or purpose, software names are trademarked and trademark names cannot by law be descriptive names. It is not practical to make software names both unique and descriptive. |
| 1137 | Mike Pluke | 11.2.4.5.  11.3.2.3,  11.3.2.4 |  | e | 11.2.4.5 should have the following Note added:  NOTE: The web page related requirement “Multiple ways” does not apply to single software programs, but to a specific definition of “sets of software programs” that are very rare.  The same note should be added to 3.2.3 and 3.2.4 with “Consistent navigation” and “Consistent identification” respectively being used instead of “Multiple ways”. |  | Partially Accepted  The following notes will be added:  11.2.4.5  NOTE: The related web page requirement for “Multiple ways” applies to “Sets” of web pages. In software, the equivalent to “sets of web pages” would be “sets of software”, but these are extremely rare and an equivalent is not included in this clause on software requirements.”  11.3.2.3  NOTE: The related web page requirement for “Consistent navigation” applies to “Sets” of web pages. While consistency within software is desirable, “sets of software” in the same sense as “sets of web pages”, are extremely rare and an equivalent is not included in this clause on software requirements.  11.3.2.4  NOTE: The related web page requirement for “Consistent identification” applies to “Sets” of web pages. In software, the equivalent to “sets of web pages” would be “sets of software”, but these are extremely rare and an equivalent is not included in this clause on software requirements. |
| 1138 | Mike Pluke | 11.3.1.2 |  | Observation – no action | This is now the only A or AA in clauses 10 and 11 that does not have a note explaining why it was omitted. Although WCAG2ICT did interpret this for software, one of the notes suggested that several (most) software technologies don’t let this SC be met. It is also unlikely that they will do so in the future as there are very few cases where this requirement would ever be likely to be needed for software. |  | Accepted  The following note was added  NOTE: To apply the related web page requirement for “Language of parts” to software would require the marking-up of all text in all locations within the software. This would be impossible so an equivalent is not included in this clause on software requirements. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1200 | **Clause 12** | | | | | | |
| 1208 | ITS, PTS and vonniman consulting 10 | 12.1.2, 12.2.4,  13.1.6. C, 13.1.6  D2, E6.2 | Note 2 | E | The same language should be used as in clause 4.2.10 where “limited cognition” is used. It is also important that easy-to-read documents is of benefit both for persons with cognitive impairments as well as for persons without cognitive impairments but with situational or temporary limited cognitive abilities.  In 13.1.6 “Cognitively impaired telephone users” is used. In annexes D and E cognitive disabilities is used. | Search the document for “cognitive impairments and disabilities” Replace with appropriate term for instance in 12.1.2 note 2 “persons with limited cognitive, language and learning abilities” seems more appropriate.  In 13.1.6 maybe telephone users with limited cognitive ability. | Agreed  The editor will be go through the document and replace “...cognitive…” with “people with limited cognitive, language, and learning abilities” as appropriate. |
| 1209 | DE Late Comment 7 |  | 12.1.1 | te | This clause should not be restricted to ICT products only but should also cover web sites, non-web documents and software.  For example: the WAD explicitly recommends accessibility information on public web sites. The term "feature" seems to exclude the use of Meta Data e.g.  <meta name="dcterms:conformsTo">.  (see schema.org or ONIX-Metadata) | Product documentation provided with the ICT whether provided separately or integrated within the ICT shall describe the accessibility and compatibility with Assistive Technology of the ICT.  It shall list and explain how to use the accessibility and compatibility features of the ICT. | Not accepted  The requirement already applies to “ICT” which includes web sites, non-web documents and software. |

|  |  |
| --- | --- |
| 1300 | **Clause 13** |
|  | No comments received |

|  |  |
| --- | --- |
| 1400 | **Clause 14** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1406 | Clas Thorén | 14 | First line | Te | Some thinking about “shall” requirements: anyone will understand clearly what is meant, but lawyers may cause problems. In the context of public procurement, doubts whether a product conforms to the EN or not may be raised in court.  Therefore, the first sentence of clause 14 must be absolutely unambiguous, even for a lawyer. My feeling for nuances of English words is not sufficiently good, but would the use of “provision” be better than “requirement”? Gregg said something about that in one of the meetings. | Maybe replace “ “shall” requirements” by “requirements, i.e. provisions containing the word “shall””? | Partially accepted  This now reads:  “Conformance to the present document is achieved by meeting all of the requirements, these are clauses containing the word "shall. Those clauses containing the word "should" are recommendations and are not required for conformance" |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A00 | **Annex A** | | | | | | |
| A43 | DIN 8 | Annex A | Table A.1, after row 120 | te | Clause 10.5 (Caption positioning) is a recommendation (marked with "should") and should be deleted from table A1 (see also 10.6). | Delete clause 10.5 from table A1. | Agreed. |
| A44 | DIN 9 | Annex A | Table A 1 and A 2 | ed/te | Please make both tables more accessible. Especially the joint column for essential requirements with many empty entries should be tagged in word (for an automatic later pdf export) for screen reader compliance. This can be done in word by non-visible placeholders and should be applied even in all versions of the draft document. Tagging in the final pdf document is a waste of time. Moreover, we suggest marking those requirements in EN which are relevant for WAD and listed in table A1 and A2 by a graphic and textual mark in the main body of the document. | Provide an accessible Word document of the draft for the reviewers. | Agreed.  A (non-visible) “ - “ (dash) will be placed in all blank cells in the tables. |
| A45 | DIN 10 | Annex A | Table A.2, row 4 | te | We don’t understand how web content can have operable parts. | Please clarify. | Noted  You are confusing “operable parts” which would include buttons and other controls on screen with the separately defined “mechanically operable parts” as stated in Note 1 of the definition of “operable part” . |
| A46 | DIN 11 | Annex A | Note below Table A.2 | ed | This note should be moved before Table A.1 because it applies to both tables. | Please move note before Table A.1 and reword as follows:  “Because the Web Accessibility Directive (EU) 2016/2102 “does not apply to live time-based media”, the following requirements are not listed in Tables A.1 and A.2. They are, however, important requirements for making live streaming media accessible.” | Agreed |
| A47 | Clas Thorén | Annex A | Note 4 |  | "Shall" is also used in the list in note 4 because we pasted the text of the entire requirement into the bullets. |  | Accepted  There is no need to include the entire requirement so we can replace the existing text with:  "They are, however, necessary requirements for making live streaming media accessible.  · 9.1.2.4 Captions (live),  · 10.1.2.4 Captions (live),  · 11.1.2.4 Captions (live). " |

|  |  |
| --- | --- |
| B00 | **Annex B** |
|  | No comments received |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| C00 | **Annex C** | | | | | | |
| C20 | ITS, PTS and vonniman consulting 11 | Annex C.6.2 | Reference terminal concept | G, T, E | An “RTT reference terminal” concept is suddenly introduced for RTT interoperability testing purposes.  This can be accepted, if the RTT reference terminal is well defined and specified - or referenced.  If VATPR (US) is intended to become the main option and reference, it will need to be validated against and possibly localized for European requirements, as those do not transfer automatically and there may be additional, specific ones. A European version may have to be developed by ETSI. | Pleaserefer to a specific reference terminal or specification for a reference terminal. If no such terminal or specification exists, there is a need to clarify what the outcome of the test procedure will be while such a terminal/specification is under development. | Noted  An RTT reference terminal has been in EN 301 549 since the first version was published.    It is accepted that a reference terminal must exist for the tests to be performed. The development of such a reference terminal(s) is not within the scope of the current activity.  Others will need to act to ensure that such terminals exist. |
| C21 | ITS, PTS and vonniman consulting 12 | Annex C.6.2 |  | E | The terminology used for the “RTT reference terminal” concept is inconsistent – see e.g. C.6.2.1.1 | Please align the terminology used for the “RTT reference terminal” concept, as it is inconsistently used all across the clauses where it appears. | Accepted  The term “RTT reference terminal” will be used in a consistent manner throughout the tables. |
| C22 | Clas Thorén |  |  |  | wording of C.5.1.2.1 needs correcting as it includes a shall. |  | Accepted  The text in C.5.1.2.1 has been replaced by: "See clauses C.5.2 to C.13, as applicable." |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| D00 | **Annex D** | | | | | | |
| D04 | ANEC 3 | Annex D.2, Further resources for cognitive accessibility |  |  | The title of this section is further resources but only one resource is listed or referred to. This section should refer to the fact that the WAI work in this area is one of the many pieces of work in this area, not the only work.  In addition, he current layout of the document with annex D2 containing little text positioned at the end of the page means that it is easy to miss or ignore.  The text currently states:  The diverse accessibility needs and preferences of people with cognitive and learning disabilities are evident and there is a need for further guidelines and standards. The W3C Web Accessibility Initiative (WAI) is undertaking many efforts to improve the requirements and technical guidance for developers, to better address accessibility for people with cognitive and learning disabilities on the Web. Current W3C activity in this area can be found at <https://www.w3.org/WAI/cognitive/>. | It is recommended that the text is spilt into two paragraphs and expanded as follows:  The diverse accessibility needs and preferences of people with cognitive and learning disabilities are evident and there is a need for further guidelines and standards. Research in this area is ongoing.  Relevant standardisation works is currently being undertook by The W3C Web Accessibility Initiative (WAI). WAI are undertaking work to improve the requirements and technical guidance for developers, to better address accessibility for people with cognitive and learning disabilities on the Web. Current W3C activity in this area can be found at <https://www.w3.org/WAI/cognitive/>. | Partially accepted  Your proposal is accepted with minor changes as follows:  **It is evident that** **people with limited cognitive, language, and learning abilities** **have** diverse accessibility needs and preferences and there is a need for further guidelines and standards. Research in this area is ongoing.  Relevant standardisation works is currently being **undertaken** by The W3C Web Accessibility Initiative (WAI). WAI are undertaking work to improve the requirements and technical guidance for developers, to better address accessibility for people **with limited cognitive, language, and learning abilities** on the Web. Current W3C activity in this area can be found at <https://www.w3.org/WAI/cognitive/>. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| E00 | **Annex E** | | | | | | |
| E19 | Clas Thorén | Annex E, clause E.2 | Description of Annex B |  | In the context of procurement, the default approach of the procurer should be that any intended user group may include people with disabilities of any kind, currently and in the future. Hence, all of the functional performance statements should be considered as relevant.  Clause B.2 in Annex B may give the impression that the task of the procurer is to select performance statements and corresponding requirements based on the needs of specific individuals or groups of individuals. This may be the case only in rare situations. In addition, such purchases will be of low value, typically below the threshold value, where the national procurement legislations vary a lot between the Member States. In these cases, EN 301549 will probably be used as a checklist rather than be referred to in a call-for-tender. | In the sentence “This is a useful tool..”, replace ”in procurement” by ”in procurement situations where the intended users are specific individuals or a specific group of individuals with disabilities”. | Partially accepted  This is a useful tool that will, for example, help you to use the standard in procurement to identify the impact that specific requirements have on users when comparing proposals. |
| E20 | ITS, PTS and vonniman consulting 13 | Annex E |  | E | The term “user” sometimes refers to users of the standard, sometimes to end-users of the ICT. | Please replace the term “user” with “end user” for every applicable instance, in order for the Annex to be more comprehensible for “users” (intended readers of the EN). | Accepted |
| E21 | ITS, PTS and vonniman consulting 14 | Annex E, E.1 | 2nd para | E, T | The section after “but” is not logical:  “The standard was originally intended for procurement purposes, but the current version also contains the minimum requirements of the European Web Accessibility Directive (Directive 2016/2102).”  A new piece of text should be inserted in-between, to maintain the logic sequence. | Please use the following instead:  “The standard was originally intended for procurement purposes. **Its applicability is now widened**, **and** the current version also contains the minimum requirements of the European Web Accessibility Directive (Directive 2016/2102).” | Accepted  With the following minor change.  “The standard was originally intended for procurement purposes. **Its scope is now changed**, **and** the current version also contains the minimum requirements of the European Web Accessibility Directive (Directive 2016/2102).” |
| E22 | ITS, PTS and vonniman consulting 15 | Annex E, E.1 | 3rd para | E, T | The list of possible roles does not include manufacturer, producer or products or services. | Add “manufacturing” in the list of responsibilities:  “No matter if you are responsible for procuring, testing, planning, **manufacturing**, maintaining or reporting on accessibility, it is important to understand which requirements are relevant for a specific product or service in a specific situation, or context.” | Accepted |
| E23 | ITS, PTS and vonniman consulting 16 | Annex E, E.2 | 8th para | E | The paragraph describing annex A mentions that there is one table in annex A which is incorrect. | Change to:  The **tables** in Annex A **show** which of the requirements are important to look at.” | Accepted |
| E24 | ITS, PTS and vonniman consulting 17 | Annex E, E.2 | 9th para | E, T | Annex B is described as a “useful tool”, but are there actually any referenceable user studies done, or empirical follow-up on whether the Annex is useful? | Change to either “may be a useful tool” or completely remove “useful”:  “This is a **tool to** help you use the present standard in procurement.“ | Partially accepted  (see E19) |
| E25 | ITS, PTS and vonniman consulting 18 | Annex E, E.2 | 10th para | E, T | The paragraph describing Annex D refers to both the Web Accessibility Directive and the Public Procurement Directive.  This standard is not harmonized for the Public Procurement Directive, meaning that it is not mandatory to use the normative parts of the standard, nor forbidden to use the success criteria in Annex D as requirements.  Furthermore, Directive 2014/25/EU (Procurement by entities operating in the water, energy, transport and postal services sectors) carries the same requirement as the Procurement Directive: for all procurement intended for use by natural persons, the technical specifications shall be drawn up so as to take into account accessibility criteria for persons with disabilities, or design for all users (article 60.1). | Change the wording of the paragraph to  (proposed changes in bold):  “Annex D lists the success criteria for web content from W3C that go beyond the minimum requirements of the Web Accessibility Directive and the **recommended requirements for technical specifications according to the Public** Procurement Directive (Directive 2014/24/EU**), and the Directive for procurement in the water, energy, transport and postal services** **sectors (Directive 2014/25/EU). These success criteria are** called “level AAA”. **They** can be seen as further recommendations.” | Partially accepted  The problem you identify will be addressed by changing it to read ““Annex D lists the success criteria for web content from W3C that go beyond the minimum requirements of the Web Accessibility Directive and **provide more complete coverage in procurement**”.  This will also be done in E.6.1. |
| E26 | ITS, PTS and vonniman consulting 19 | Annex E. E.4.1 | 2nd bullet point | E, T | The first sentence of this bullet point is not completed. Please complete it. | Please complete the sentence.  Proposed wording of the whole bullet point:  “If your product or service does not provide speech, you don’t need to think about the second part of the requirement. The requirement is automatically met.” | Accepted |
| E27 | ITS, PTS and vonniman consulting 20 | Annex E, E.4.1 | Last para, last sentence. | E | Online tools for filtering out requirements that are automatically met are mentioned. It would be helpful to users of the standard if one or more of these tools would be mentioned/referred to. | Please refer to at least one of the online tools to help with filtering out requirements, if this is possible without promoting certain companies or market players rather than others.  If the toolbox developed in earlier mandates is one of these online tools, it could be referenced. | Not accepted  There is no way to cite a non-normative tool in the standard. It would show preference and can go out of date at any point. |
| E28 | ITS, PTS and vonniman consulting 21 | Annex E,  E.4.2 | 2nd para | E | Starting a paragraph with “But” is not recommendable. “But” can be removed without any effect on the meaning of the sentence. | Please remove “But”. | Accepted |
| E29 | ITS, PTS and vonniman consulting 22 | E.5 | 2nd para and/or note | E | The second paragraph describes which organizations are covered by the WAD, but it does not use the term “public sector body”, defined in the Note following the paragraph. Thus, the Note does not make sense. | Use the term “public sector body” in the paragraph, or rephrase the first sentence in the Note.  Proposed wording of 2nd para (added text in bold):  “The web accessibility directive covers as a minimum, “accessibility of the websites and mobile applications of public sector bodies.”” | Partially Accepted  The word “agencies” will be changed to “bodies” in the second paragraph. |
| E30 | ITS, PTS and vonniman consulting 23 | E.5 | Note | E | The first sentence of this Note does not make sense:  The definition of Public sector body is not used in the paragraph before the Note, which means that the definition of public sector body does not make any sense here. | Please change the wording of the Note in order for it to make sense.  Proposed wording:  “The definition of public sector body is referring to the Procurement Directive (Directive 2014/24/EU) article 2(1) point 4, **defining** “bodies governed by public law” **as** ~~means~~ bodies that have all of the following characteristics:” | Accepted |
| E31 | ITS, PTS and vonniman consulting 24 | E.5 | 4th para (just after the bullet list) | E | It is easy to interpret this paragraph as if requirements in chapters 9, 10 and 11 are more important than other requirements listed in Tables A.1 - which is **not** the case. | Please consider rewording this paragraph. | Accepted  We are changing it to  Most of the requirements that related to the European Web Accessibility Directive are found in Chapters 9, 10 and 11 which cover websites, documents and software. The complete list of requirements are listed in the tables in annex A.The directive also covers intranets and extranets, which are to meet the requirements of chapter 9 for web content and chapter 10 for documents. |
| E32 | ITS, PTS and vonniman consulting 25 | E.6.1 |  | E | English spelling typo | Change “best practise” to “best practice” in the last sentence of the paragraph. | Accepted |
| E33 | ANEC 4 | Annex E (informative): Guidance for users of the present document,E.1 Introduction (informative) |  |  | The first part of the text of this section currently makes assumptions of the reader which are unnecessary, any reader (however experienced) may require reminders of how to use the standard. It is also unclear why the history of the standard is mentioned, if this standard is still required for The text of this part of this section currently reads:  “This explanatory annex is meant to support users of the EN 301 549 standard who are new to accessibility, or new to understanding a technical standard. It aims to give you as a reader a helping hand in how to make most use of it.  The standard was originally intended for procurement purposes, but the current version also contains the minimum requirements of the European Web Accessibility Directive (Directive 2016/2102).” | The replacement text is as follows:  This explanatory annex is designed to enable users of this standard to how to make most use of it.  The standard was originally intended for procurement purposes. The current version contains the minimum requirements of the European Web Accessibility Directive (Directive 2016/2102) and can be used both for procurement and for providing wider accessibility information. | Partially accepted.    The last part of the sentence will read:    This explanatory annex is designed to enable users of this standard to make best use of it.  The standard was originally intended for procurement purposes. The current version also contains the minimum requirements of the European Web Accessibility Directive (Directive 2016/2102). ” |
| E34 | **ANEC 5** | Annex E (informative) E.3, Chapter 4 |  |  | The first two paragraphs of this section currently make assumptions of the reader which may not be correct. It would be more useful if it just described chapter 4 and how to use it rather than suggesting that a reader may not be important. The text of this part of this section currently reads:  “Chapter 4 is in a sense the heart of the standard. The users, with their different needs, are the reason accessibility matters. The user needs are also the reason for each of the requirements in this standard.  Chapter 4 does not include any requirements in itself, just descriptions. This is why some readers do not consider it important. But in reality, it is the other way around: The aim of the whole standard is to ensure that users with the varying abilities described in this chapter can use products and services.” | The replacement text is as follows:  “Chapter 4 is the heart of the text of this standard. This chapter describes the performance of the different users whose needs can be meet by this standard.  The aim of this standard is to ensure that users with the varying abilities described in this chapter can use products and services.” | Partially accepted  Change  This is why some readers do not consider it important.  TO  This may make it seem less important, but in reality…. |
| E35 | Clas Thorén | E.1 | Title | Ed | Since Annex E is informative, there is no need to repeat that for clause E.1 | Remove “(informative) from the title of E.1. | Accepted |
| E36 | Clas Thorén | E.5 | whole | Ed | “directive” should be “Directive”? |  | Accepted  (and elsewhere) |

1. **G** for General, **T** for technical, **E** for Editorial [↑](#footnote-ref-1)