British Standards Institution (BSI) submission to the W3C on Web Content Accessibility Guidelines 2.0 (WCAG 2.0).

BSI as the National Standards Body of the United Kingdom proposes to raise the following issues in comments:

General Substantive Issues

1. Addressing Cognitive and Learning Disability

WCAG 2.0 claims to define and address the requirements for making Web content accessible to those with learning difficulties, cognitive limitations and others. We do not accept that claim.

Specifically, the success criteria requirements for making content understandable largely ignore the needs of people with learning difficulties and cognitive limitations. Please note that there are guidelines published by other groups that will make content much more accessible to these users. However, with the WCAG claim to address learning difficulties and cognitive limitations, people will not know that they need to look further.

We would like to see continued work in this field and a statement in the WCAG 2.0 abstract and introduction modifying the claim that they currently address accessibility for learning disabilities. Specifically, we recommend removing learning difficulties and cognitive limitations from the list of supported disabilities. A sentence may be added later in the abstract that "these guidelines may also provide some benefits for people with learning difficulties and cognitive limitations". We would then like to see a statement of intent such as: "the working group intends to build additional success criteria to address accessibility for learning disabilities and cognitive limitations."

2. Metadata

We recommend that WCAG 2.0 address the issue of locating good or useable resources by requiring that every resource carry or refer to a description of its accessibility characteristics. Without this the best resources may not be found and a resource that is not universally accessible may not be made available to a user that could use it even if it is not useable to others.

This comment has also been made in

http://lists.w3.org/Archives/Public/public-comments-wcag20/2006Jun/0091.html

with which we agree.

Technical Comments

3. WCAG defines a "web unit" as "one or more resources, intended to be rendered together, and identified by a single Uniform Resource Identifier ". Resources can in addition consist of moving images, or pages where part of the material is rendered through links into Web Services (such as with AJAX technology). The example given in the definition is static in nature - however in many situations in today's web the end result is not static, or defined solely by a single URI.

This appears to be clarified for a web unit in the section "Conformance claims" - where it states that it "can also take the form of a fully interactive and immersive environment"

However the situation becomes confused by later referring to "Aggregated content" and giving, as an example of this, "a web unit which is assembled from multiple sources that may or may not have their own levels of conformance". In a traditional web page, containing graphics, (as is given as an example in the definition of a "web unit"), this is conventionally exactly how images etc are rendered using the <IMG> tag.

Statements such as "The conformance level for a Web unit that contains authored units is equal to the lowest conformance level claimed for the Web unit content and any of the authored units it contains – including any claims pertaining to aggregated authored units" are extremely unclear, and indeed may be recursive following the unclear distinction apparently made between "web units" and "aggregated content". A "web page" on the other hand is fairly well understood. BSI recommend(s) a closer look at an accurately defined and understood syntax which is not open to misinterpretation and clearly conveys the ideas being communicated.

4. Typo, section "Choosing baseline technologies": "Both conditions are necessary since some users many have browsers that support them while others may not. " - should be ..may have browsers

5. Typo, section "Use of technologies outside of the baseline" - "All content and functionality are available .." should be ".. is available"

6. In the section "Optional components of a conformance claim consideration should be given to replacing the word “CANNOT” is not an appropriate use of language. The language here needs clarifying (“shall not” ?).

7. In the section "Examples of conformance claims", "jpeg" is specified as a requirement of one example (examples use "Real Video" and "png" in a similar manner). These are not testable specifications in the same sense as XHTML 1.0 (Strict) - for example progressive jpeg support was only added to many browsers long after the basic sub-baseline jpeg (actually

correctly JPEG) decoding was implemented. IS 10918-1 | T.81 (which presumably is what is intended by JPEG) defines a 'shopping list' of image compression techniques, including a baseline. Actual JPEG implementations excludes many items in the list, and add other items (typically JFIF/EXIF file support), and are, almost without exception, sub-baseline. A claim that an item "relies upon" jpeg (sic) is fairly meaningless, and is dependent on many things other than a correct interpretation of parts of IS 10918-1 (for example bit resolution and colour rendering of the display)

8 A number of the test criteria and suggested 'solutions' are far from clear. For example, Guideline 1.2 at level 3 success criteria suggests the use of sign language interpretation for multimedia. Following the references in the specification lead to the "Understanding WCAG 2.0" document suggests including a sign language interpreter in the corner of the video stream. There are many sign languages - for example English and US sign languages are different and believed to be mutually unintelligible. No suggestion is made as to how to resolve this for (for example) an english language documentary. Clearly in this instance one possible solutions would be to use overlay replaceable video technology (as offered for example in MPEG-4 technology) rather than conventional digitised video as offered by MPEG1 or MPEG2 technology.

9 Comments on Appendix A - Glossary (Normative). This section should be re-written (preferably by a standards editor). Almost every definition is inaccurate, inappropriate or unnecessary. Several are simply incorrect. Starting just with those beginning with
A...

Definition of acronym is incorrect (relates to definition of abbreviation and initialism). An acronym is "A word formed from the initial letters or parts of other words" (SOED). An initialism is a subset of this, being formed from initials. Missing out the words 'parts of other words' is both incorrect and makes initialism and acronym identical.

Definition of "activity where timing is essential". 'Timing' should be defined for clarification (or better described in the definition).

Definition of "analog, time-dependent input" - This is 'analog, time-dependent movement', presumably as opposed to "digital, time dependent movement". Whilst not being very clear, adding a definition which constrains this to a very specific meaning in the context of a pointing device may not be useful. The wording should stand on its own as English text, and is not proper to a definition section.

Definition of ASCII art. It is assumed that an image rendered from many small images would classify as ASCII art (examples exist). The spatial arrangement is therefore of glyphs (or similar small sized graphical objects), not characters - their rendition is what provides the pseudo-photographic output.

Definition of "authored unit" (and implicitly "authored component"). See comments above about confusion between authored unit, component and web unit)

Other errors include: Re-definition of text (SOED: the wording of something written or printed). Unicode is defined by the Unicode Consortium (www.unicode.org) and no longer aligns with ISOIEC 10646-1 (or 106464, whatever that is supposed to be!)

Some definitions (eg Luminosity contrast ratio) are in the vein of defining pi as 22/7 - input from the relevant standards body (eg CIE) could have avoided these basic errors. In several places, values are referred to as RGB without any reference to colour spaces. Many definition would be much improved by using the same word definitions as are used in other Standards, where similar terms are correctly defined, and then simply referred to the appropriate Standard in the definition (or worst case by repeating verbatim the wording used in the Standard)

10. For any reader who needs to get to grips with WCAG 2.0, the volume of associated written material is daunting to say the least, with the three core WCAG 2 documents coming in at 160,000 words. The fact that the 'understanding WCAG 2' document is more than double the length of the document it explains is worrying. Ultimately, (and ironically) the new web standard for accessibility is initially made inaccessible by the density and volume of associated material.

11. It is not desirable to still be able to use tables for layout, as in http://www.w3.org/TR/WCAG20-TECHS/#N11001

12. The role of blinking and flashing content is confused - http://www.w3.org/TR/WCAG20/complete.html#time-limits-blink and http://www.w3.org/TR/UNDERSTANDING-WCAG20/#seizure-does-not-violate-terms