# Comments on new WCAG 2.1 SCs

<https://www.w3.org/TR/2017/WD-WCAG21-20170912/>

## 1.3.4 Purpose of Controls AA

In content implemented using markup languages, the conventional name of conventional form fields, conventional buttons or controls, or conventional links can be programmatically determined.

*Comments:*

* What’s a “conventional name”? I’m assuming they are the bold items listed in the definitions for conventional links, etc. (“compose”, “next”, “delete”). But, how are these to be communicated (e.g. will ARIA include this vocabulary?)
* Also, what’s the significance of “content implemented using markup languages”? It’s on 3 SCs in the list. If it’s significant, should it be on more?
* Unless ARIA includes the mechanism I don’t see this being ready for WCAG.

## 1.3.5 Contextual Information AAA

In content implemented using markup languages, contextual information for controls, symbols, and regions can be programmatically determined using a publicly available vocabulary.

*Comments:*

* Again, is this vocabulary planned for a future ARIA iteration?
* This would be difficult to reliably test, but as it is AAA I wouldn’t object to it.

## 1.4.10 Zoom Content AA

Content can be zoomed to an equivalent width of 320 CSS pixels without loss of content or functionality, and without requiring scrolling on more than one axis, except for parts of the content which require two-dimensional layout for usage or meaning.

*Comments:*

* Getting there…
* The key concept here is the reflow, not the zoom. Perhaps the handle could be something like “Reflow content on zoom”
* Why not say 400% to align with the existing re-size SC (320 CSS sounds odd)?
* re: "except for parts of the content which require two-dimensional layout for usage or meaning." I'm concerned about things like dashboards, which may not strictly require 2D layout but still have them for design reasons. What about restricting this SC to blocks of text content, since the big problem is the back and forth scrolling required for reading non-reflowed text?

## 1.4.11 Graphics Contrast AA

The visual presentation of graphical objects that are essential for understanding the content or functionality have a contrast ratio of at least 4.5:1 against the adjacent color(s), except for the following:

Thicker: For graphical objects with a minimum width and height of at least 3 CSS pixels, the graphic has a contrast ratio of at least 3:1;

Sensory: Non-text content that is primarily intended to create a visual sensory experience has no contrast requirement;

Logotypes: Graphics that are part of a logo or brand name have no minimum contrast requirement;

Essential: A particular presentation of the graphical is essential to the information being conveyed.

*Comments:*

* I like the SC for symbols, diagrams and graphs, but I think there should be an exception for photos. For example, take the example of a colour photo of a historical event in a Wikipedia article (e.g. JFK assassination). Is that essential for understanding? It’s pretty important, unless we allow an exception for graphics with text equivalents? Is it intended to create a visual experience? Not exactly. It’s intended to show what the situation looked like.

## 1.4.12 User Interface Component Contrast (Minimum) AA

Essential visual identifiers of user interface components have a contrast ratio of at least 4.5:1 against the immediate surrounding color(s), except for the following situations:

Thicker: A contrast ratio of at least 3:1 is required where the minimum width and height are at least 3 CSS pixels, for the essential visual identifier;

Inactive: Disabled or otherwise inactive user interface components;

User Agent Control: The color(s) of the user interface component and any adjacent color(s) are determined by the user agent and are not modified by the author.

*Comments:*

* OK, but “visual identifiers of UI components” probably needs a definition. e.g. Does it mean every single part of a slider bar or just some key parts?

## 1.4.13 Adapting Text AA

If the technologies being used allow the user agent to adapt style properties of text, then no loss of essential content or functionality occurs by adapting all of the following:

Line height (line spacing) to at least 1.5 times the font size;

Spacing underneath paragraphs to at least 2 times the font size;

Letter spacing (tracking) to at least 0.12 times the font size;

Word spacing to at least 0.16 times the font size.

*Comments:*

* Could this be restricted to blocks of text as opposed to text in UI (e.g. menus, etc.)?

## 1.4.14 Content on Hover or Focus AA

When a user interface component which receives keyboard focus or pointer hover causes content to become visible, the following are true:

Visible Trigger: Either the additional content does not obscure any essential content within the triggering user interface component, or the additional content can be closed or repositioned by the user;

Hover: If the additional content is triggered via pointer hover, then that content remains visible when the pointer is moved over it;

Focus: The additional content remains visible while the triggering user interface component has keyboard focus, unless the user dismisses the additional content.

Exception: The visual presentation of the content is controlled by the user agent and is not modified by the author.

*Comments:*

* Not sure what the “Hover” condition means. The concern seems to be content is triggered by hover but then is dismissed by more hover. Is this right?
* I don’t think this is ready.

## 2.2.6 Accessible Authentication A

Essential steps of an authentication process, which rely upon recalling or transcribing information, have one of the following:

Alternative essential steps, which do not rely upon recalling and transcribing information;

An authentication-credentials reset process, which does not rely upon recalling and transcribing information.

Exceptions:

The authentication process involves basic identifying information to which the user has easy access, such as name, address, email address and identification or social security number;

This is not achievable due to legal requirements.

*Comments:*

* This is strange. It doesn’t prohibit usernames because they can be reset, so what is it meant to restrict? It does seem to prohibit 2-factor identification since it involves transcribing codes.
* I don’t think this is ready.

## 2.2.7 Interruptions (Minimum) AA

A mechanism is easily available to postpone and suppress interruptions and changes in content, unless they are initiated by the user or involve an emergency.

*Comments:*

* What if the whole point of the app is content changes? e.g. an email app, a stock trading app, an airport departure board?
* I don’t think this is ready.

## 2.2.8 Timeouts AAA

Where data can be lost due to user inactivity, users are warned at the start of a process about the length of inactivity that generates the timeout, unless the data is preserved for a minimum of 24 hours of user inactivity.

*Comments:*

* Does this include un-submitted data (e.g. in text fields)?

## 2.2.9 Animation from Interactions AAA

For non-essential animations triggered by a user action, there is a mechanism to disable the animations yet still perform the action.

*Comments:*

* OK at AAA

## 2.4.11 Character Key Shortcuts A

If a keyboard shortcut consisting entirely of one or more character keys is implemented by the content, then a mechanism is available to turn it off or to remap it to a shortcut that uses at least one non-character key.

*Comments:*

* Does this rule out the simple use of “accesskey” or is the idea that the content is doing something itself with Javascript?
* If simple use of “accesskey” is ruled out, I’d disagree.

## 2.4.12 Accessible Name A

Where an active control has a visible label, the accessible name for the control includes the text string used for its visible label.

*Comments:*

* Don’t agree. The visible label might be an abbreviation “MM”, but I should be able to set the accessible name to “2 digit month”.

## 2.5.1 Pointer Gestures A

All functionality can be operated with a single untimed pointer gesture unless a multipoint or timed gesture is essential.

*Comments:*

* OK

## 2.5.2 Concurrent Input Mechanisms AA

Web content does not restrict use of input modalities available on a platform except where the restriction is essential, required to ensure the security of the content, or respect user settings.

*Comments:*

* OK

## 2.5.3 Target Size AA

The size of the target for pointer inputs is at least 44 by 44 CSS pixels except when:

Customizable: A mechanism is available to change the size of the target independent of the level of page magnification;

Equivalent: The target is available through an equivalent link or control on the same page that is at least 44 by 44 CSS pixels;

Essential: A particular presentation of target is essential to the information being conveyed;

In-Page: The target is a text link where the destination is on the same page;

Inline: The target is in a block of text;

Grouped: Targets in groups of more than five have at least one dimension that is 44 pixels and the other is at least 22 pixels;

User Agent Control: The appearance of the target is determined by the user agent and is not modified by the author.

*Comments:*

* The “In-page” exception seems to be a special case of the “in-line” exception.
* Maybe plain linked text should always be allowed.

## Success Criterion 2.5.4 Target Size (No Exception) AAA

The size of the target for pointer inputs is at least 44 by 44 CSS pixels.

*Comments:*

* So use of plain text links (<a>) is prohibited? If so, I’d disagree.

## 2.6.1 Device Sensors A

All functionality of the content can be operated without requiring specific device sensor information, unless the device sensor is essential for the function and not using it would invalidate the activity.

*Comments:*

* OK, but this wording “essential for the function and not using it would invalidate the activity” seems like overkill. Why not just say “essential for the function”?

## 2.6.2 Orientation AA

Content is not locked to a specific display orientation, and functionality of the content is operable in all display orientations, except where display orientation is essential for use of the content.

*Comments:*

* OK

## 3.2.6 Accidental Activation A

For single-pointer activation, at least one of the following is true:

Activation is on the up-event, either explicitly or implicitly as a platform's generic activation/click event;

A mechanism is available that allows the user to choose the up-event as an option;

Confirmation is provided, which can dismiss activation;

Activation is reversible;

Down-event activation event is essential and waiting for the up-event would invalidate the activity.

*Comments:*

* Since reversibility condition would almost always be satisfied anyway, maybe just say “Irreversible actions may only be activated on the up-event”

## 3.2.7 Change of Content AA

Programmatic notification is provided for each change of content that indicates a user action was taken or that conveys information, unless one or more of the following is true:

There is a programmatically determined relationship between the new content and the control that triggers it;

The user has been advised of the change of content before, or as a result of using the control;

The change of content both is not a result of a user action and is not related to the primary purpose of the page.

*Comments:*

* I like the idea of ensuring user knows about a change of content, but I think setting focus to the top of the newly added or changed content might be enough at AA. e.g.