

2011



Interpreting the New Zealand Government Web Standards

An Agency Self-Assessment Guide



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Introduction

This document is designed to provide agencies with a resource they can use to interpret the standards when performing self-assessments. Every effort has been made to provide descriptions using the simplest terminology as possible. However, due to the technical nature of the web standards, there are some standards that require users to have a good understanding of HTML and Cascading Style Sheets – this is unavoidable. Contact web.standards@dia.govt.nz should additional information about the standards be required.

Please note that this interpretation of web standards is not a definitive guide. We highly recommend assessors consult the W3C for an exact interpretation of the WCAG 2.0 specific web standards and <http://www.webstandards.govt.nz> for more detailed information concerning the New Zealand layer of the web standards.

29 April 2011

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NEW ZEALAND-SPECIFIC REQUIREMENTS

Strategy and Operations

NZ 1.1.1: AGENCIES MUST HAVE A FORMAL WEB STRATEGY

How to test – no specialist knowledge required

Does the agency responsible for the website have a web strategy? The strategy should at the least describe the purpose and audience of the agency's site(s).



NZ 1.2.1: WHEN OUTSOURCING WEB DEVELOPMENT, AGENCIES MUST INCLUDE A REQUIREMENT FOR COMPLIANCE WITH THE NEW ZEALAND GOVERNMENT WEB STANDARDS IN ALL RELEVANT RFPs, RFIs AND CONTRACTS

How to test – no specialist knowledge required

Do your agency's RFPs and development contracts state that sites developed for the agency must comply with the New Zealand Government Web Standards?



Content and Design

NZ 2.1.1: HOME PAGE REQUIRED CONTENT

Homepage content must include the following information, or link directly to it:

- Contact information
- About this site

The homepage must also contain the following:

- A link to the website newzealand.govt.nz
- The name and/or logo of the agency primarily responsible for the website

How to test – no specialist knowledge required

Visual inspection



NZ 2.1.2: ABOUT THIS SITE REQUIRED CONTENT

Agency sites must provide a page or section called "About this site", or similar, which acts as a convenient container of (or an index to) all site information.



The content of this section or page must contain as a minimum:

- Site owner. Clearly specify the site owner. Where the site is not the main agency site, link back to the main agency site
- Copyright. Provide copyright information here, or provide a link to copyright information. See the Copyright standard
- Copyright of third parties. Provide copyright of third parties information here if relevant, or provide a link to copyright of third parties information. See the Copyright of third parties standard
- Privacy. Provide privacy information here, or provide a link to privacy information. See the Privacy statement standard
- Contact details. Provide contact information here, or provide a link to contact information. See the Contact information standard below
- Disclaimer. If a disclaimer is required, provide information here, or provide a link to disclaimer information. See the Disclaiming content standard
- Terms of use. Provide terms of use (terms and conditions) information here if required, or provide a link to terms of use information. See the Terms of use standard

How to test – no specialist knowledge required

Visual inspection

NZ 2.1.3: CONTACT INFORMATION

How to test – no specialist knowledge required

Email addresses



Ask your agency webmaster if the email addresses below have been configured:

- info@<domain>
- postmaster@<domain>
- webmaster@<domain>
- privacy@<domain>
- either complaints@<domain> or abuse@<domain>
- either enquiries@<domain> or enquiry@<domain>

The agency must ensure email is monitored and, if requests for information are received, responded to in a timely way. It is at the discretion of the agency whether these email addresses are published on the site.

Check that the website provides the following contact details for all offices, except where there are strong security or business reasons not to do so:

- Telephone numbers
- Street locations

NZ 2.1.4: LEGAL AND POLICY INFORMATION

Agency websites must provide information on privacy, copyright, etc as required by the Legal and Policy standards. Note that this information may be provided on the "About this site" page, or on individual pages.



How to test – no specialist knowledge required

Visual inspection

NZ 2.1.5: PUBLICLY AVAILABLE REPORTS

At the minimum, agencies must publish their Statements of Intent and Annual Reports.

Note: only corporate (or "main" sites) are required to supply media releases and other public information.



How to test – no specialist knowledge required

Visual inspection

NZ 2.1.6: MEDIA RELEASES AND OTHER PUBLIC INFORMATION

Agency websites must provide all agency media releases, and other public information such as public notices, warnings and advice. These must be published online as soon as they are formally released.

Note: only corporate (or "main" sites) are required to supply media releases and other public information.



How to test – no specialist knowledge required

Visual inspection

NZ 2.1.7: SITE OWNER (CLEARLY IDENTIFIED)

Clearly specify the site owner. Where the site is not the main agency site, provide a link back to the main agency site.



How to test – no specialist knowledge required

Visual inspection

NZ 2.2.1 LINKING TO NON-HTML FILES

Provide format and size information for links to non-HTML file types, e.g.,

[Getting a ship into a bottle \(PDF, 1.3MB\)](#).

How to test – no specialist knowledge required

Visual inspection

NZ 2.3.1 PRINTING WEB PAGES

A webpage's core information (usually the main page text) must be able to be printed in whole on standard sheets of paper.



Note that the following non-core content should be **excluded** from printing:

- Primary content navigation
- Secondary content navigation
- Department/agency/programme or thematic banner
- Breadcrumbs
- Search box

Pages should also print as black text on a white background.

How to test – no specialist knowledge required

Use the browser's print preview functionality to see if the web page's core information fits on one or more standard sheets of A4 paper, in either portrait or landscape orientation.

Legal and Policy

NZ 3.1.1: COPYRIGHT

Refer to [standard NZ 3.1.1](#) for more information.

How to test – no specialist knowledge required

Visual inspection



NZ 3.1.2: COPYRIGHT OF THIRD PARTIES

Refer to [standard NZ 3.1.2](#) for more information.

How to test – no specialist knowledge required

Visual inspection

NZ 3.1.3: PRIVACY STATEMENT

Refer to [standard NZ 3.1.3](#) for more information.

How to test – no specialist knowledge required

Visual inspection

NZ 3.1.4: DISCLAIMING CONTENT

Refer to [standard NZ 3.1.4](#) for more information.

How to test – no specialist knowledge required

Visual inspection

NZ 3.1.5: TERMS OF USE

Refer to [standard NZ 3.1.5](#) for more information.

How to test – no specialist knowledge required

Visual inspection

Technologies and techniques which must be used

NZ 4.1.1: UTF-8 CHARACTER ENCODING MUST BE USED

UTF-8 character encoding helps to ensure consistency of data across government and best enables multilingual support.



How to test – minor HTML/browser knowledge required

View the page source code, and check that one of the following lines exists within the `<head>`:

- `<meta content="text/html; charset=utf-8" http-equiv="content-type" />`
- `<meta charset="utf-8">`

NZ 4.1.2: VALIDATION - ALL PAGES MUST VALIDATE TO A PUBLISHED GRAMMAR

How to test – good browser knowledge required

Validate the code of your site by entering the URL of selected pages at <http://validator.w3.org>. You should validate a site's home page and content pages representative of different templates used on the site. If the site only uses one design template for content, validate a small number of pages looking for any errors in content. If you get any errors from your validation test, check "No" in the self-assessment.

NZ 4.1.3: LANGUAGE CODES

How to test – minor HTML/browser knowledge required

Where English is the language of the page (WCAG 2.0 SC 3.1.1) or the language of part of the page (WCAG 2.0 SC 3.1.2), use the language code "en-NZ". Where the language is Māori, use "mi". For other languages, see the [updated list at the Internet Assigned Numbers Authority](#).

Technologies which may be used but not relied on

NZ 4.2.1: SCRIPTS, APPLETS AND OTHER PROGRAMMATIC OBJECTS

Information or services in web pages or applications must be available without scripts, applets and other programmatic objects. This includes Flash, Silverlight, Java and JavaScript. See the [Applications and accessible alternatives web guide](#).



How to test – strong browser knowledge required

Disable JavaScript in your browser. There are a few ways to do this.

In Internet Explorer 8 and above, you can use the Developer Tools that come with the browser. To open the Developer Tools, press the F12 key or select "Developer Tools" ("F12 developer tools" in Internet Explorer 9) from the browser's "Tools" menu. In the Developer Tools window, go to the "Disable" menu and select "Script". This will disable JavaScript in the browser and automatically refresh the page.

There is a second way to do this in Internet Explorer, but it is a little trickier. Open "Internet Options" from the "Tools" menu. On the "Security" tab, select "Custom level...". Quite a way down in the "Settings" dialog that opens up are options to enable and disable "Active Scripting". After disabling scripting, refresh the page.

In Firefox, uncheck "Enable JavaScript" in the "Content" tab of the "Options" window. Close the "Options" window and refresh the page. An even easier way is to install the [Web Developer toolbar add-on](#) and use its "Disable JavaScript" feature.

With scripting disabled, check that all core or important content and functionality of the site are still available. Check that search and any forms work properly.

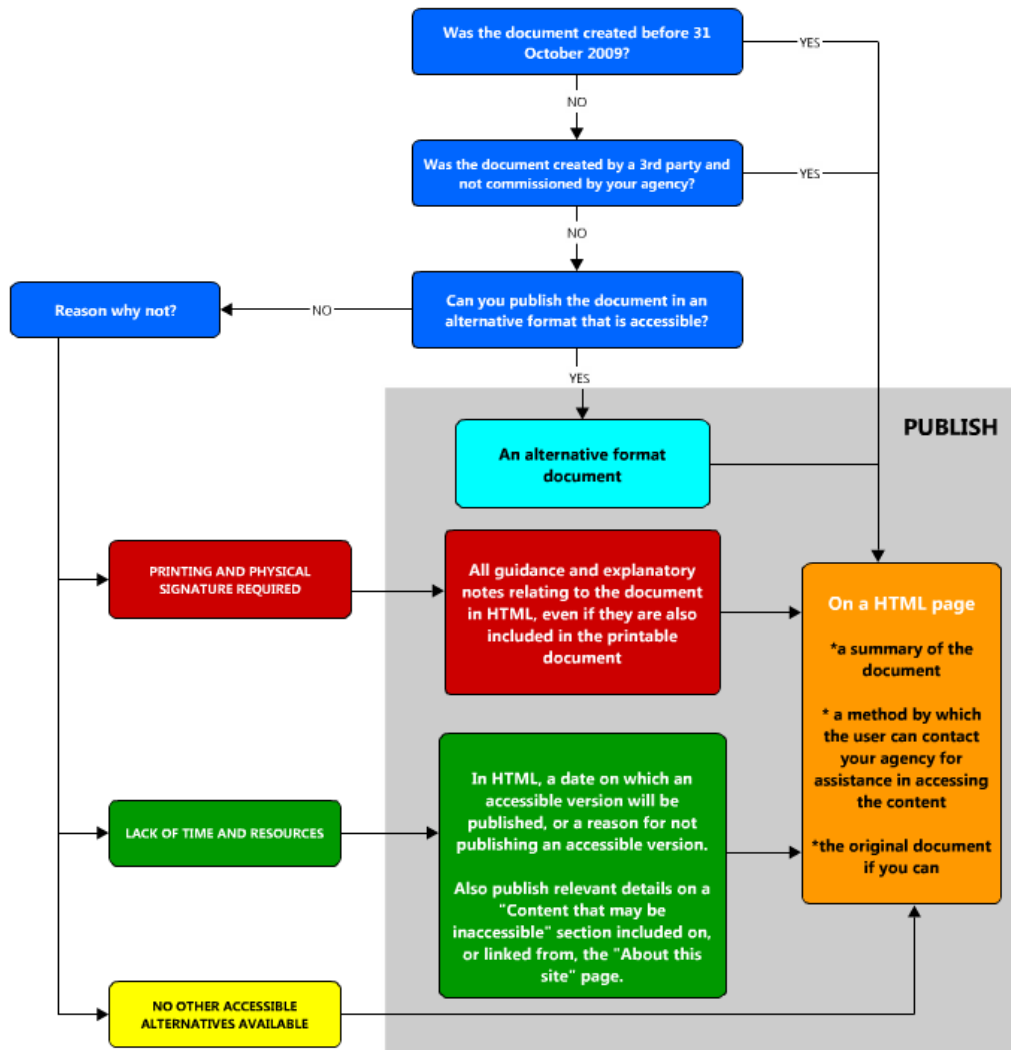
NZ 4.2.2: CONTENT IN DOCUMENT FORMATS OTHER THAN HTML

If you publish content in formats other than HTML, it must be published in at least two formats, ONE of which must be accessible. Well-constructed Word documents or RTF are examples of accessible formats.



The following flowchart may help in understanding the process of publishing of documents online.

New Zealand Government Web Standards Guide to Publishing Documents



Publication Date: 8 September 2010
 Author: New Zealand Government Web Standards Steering Group

The exceptions are:

- where no accessible format for the content exists;
- documents created before October 31 2009;
- forms needing to be printed and signed, in which case all explanatory notes and guidance need to be provided in HTML;
- documents created wholly by other parties
- where time pressures dictate that a document be published quickly in a format such as PDF, in which case you must have a plan to provide an accessible alternative in a timely manner, and it must be noted on the site.

In all of these cases, you must publish a summary of the contents and purpose of the document, and provide a means of contact to help people who may need access to the contents of the document.

How to test – no specialist knowledge required

Review each page to be assessed. If it contains linked non-HTML documents, ensure that all of the above conditions are met.

NZ 4.2.3: STYLESHEETS

Sites must work properly with stylesheets disabled.



How to test - good browser knowledge required

With CSS disabled in your browser, you should still be able to navigate and perceive the information on the website intelligently.

Technologies and techniques which must not be used

NZ 4.3.1: FRAMESET DOCTYPE

The Frameset doctype must not be used.



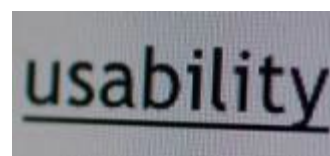
How to test – minor HTML/browser knowledge required

Check to ensure that pages don't use frames: confirm that the DOCTYPE element in the head of the page source doesn't specify a FRAMESET doctype.

Note that IFRAMES are an acceptable means of embedding content in web pages, but they must be treated with some care including proper labelling and titles. Contact the Web Standards team if you need guidance with the use of IFRAMES.

NZ 4.3.2: UNDERLINING

Underlining must not be used for headings or non-link text.



How to test – no specialist knowledge required

Scan the content of selected pages to ensure that underlining is ONLY used to denote links.

NZ 4.3.3: MARK-UP REDIRECTS

Mark-up redirects (code within HTML or JavaScript files) must not be used to automatically redirect pages. Instead, configure the server to perform redirects.



How to test – minor HTML/good browser knowledge required

Check the source code on the web page to ensure that `<meta http-equiv="refresh...">` elements are not present in the `<head>` element of the source.

NZ 4.3.4: SERVER-SIDE IMAGE MAPS MUST NOT BE USED

How to test – minor HTML/good browser knowledge required

If you are aware of any image maps used in the site, check the HTML source to make sure the map's regions are defined inside the `<map>` using `<area>` elements, for example:



```
<map name="mymap">
<area shape="circle" coords="70,84,51" href="http://www.december.com">
<area shape="rect" coords="25,180,125,280" href="http://www.december.com/html/">
...
</map>
```

The code example below, with the ISMAP attribute on the `` element, is for a server-side image map and should NOT be used:

```

```

NZ 4.4.1: BROWSER TESTING (YAHOO GRADED BROWSER SUPPORT)

All new or significantly redeveloped websites must be tested against all browser and operating system combinations identified as A grade by [Yahoo! Graded Browser Support](#).

Agencies must also test against at least one browser not graded A, on a platform of their choice. Agencies might choose a non-A grade browser by considering their website statistics.



How to test – good browser knowledge required

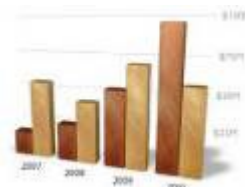
Free utilities on the web such as [Browsercam.com](#) and [browsershots.com](#) provide an effective means of checking that the visual layout of a site is properly rendered across different browsers and platforms. They may also offer virtualised environments which allows you to test the functionality of a site across browser/platform combinations.

The most reliable way to test browser/platform combinations is to check that a site functions normally on the physical platforms you're targeting, which means you need to have direct access to those platforms. If you don't have access to all the platforms you need to test, try putting out a call on the [Government Web Community for help](#).

WCAG 2.0 - Perceivable

1.1.1 NON-TEXT CONTENT

Non-text information (e.g., photos, illustrations, charts, graphs, Flash objects, some scanned PDFs) must be accompanied by an accessible text equivalent, whether that be an ALT attribute on an element, other HTML text on the page, or an accessible MS Word or other document.



Note: Not all MS Word or other documents are necessarily accessible, in which case they do not qualify as a text alternative. View an online presentation on how to make accessible MS Word and PDF files (<http://bit.ly/mA17As>).

How to test – minor HTML/good browser knowledge required

Review all non-text content on the page and check that accessible text alternatives are provided. If some non-text information does not have a text alternative, check “No,” describe the issue, and move on.

You can check “Yes” if there are accessible alternatives to all non-text content.

1.2 AUDIO AND VIDEO

If you publish an audio-only file, the information it communicates aurally (including important sounds) must be provided through a text transcript.

If you publish a video-only file, the information it communicates visually must be provided either through a voice-over track (i.e., audio description) or a comprehensive text transcript that describes what is being shown.



If you publish a synchronised audio-video file, the information it communicates aurally (including important sounds) must be displayed via captions in the video AND captured in a text transcript. The information communicated visually must also be captured in the text transcript, or alternatively, can be provided through a voice-over track (i.e., audio description).

Note: any agency publishing live video should contact the Web Standards team at web_standards@dia.govt.nz.

How to test – no specialist knowledge required

Review any audio and/or video content on the page and check that it has the appropriate alternatives (e.g., text transcript, captions, audio description).

If you don't publish video and/or audio, check the applicable “Yes” button because you're not in violation of the standard.

1.3.1 INFO AND RELATIONSHIPS

The visual presentation of content structure and relationships must equally be present in the HTML markup. For example, headings are normally presented visually using larger font sizes and bold text, but they must also be marked up as well-ordered <h1> to <h6> elements. Similarly, lists must be actually marked up as list elements, paragraphs as <p> elements, etc.



Note that this requirement also applies to content such as MS Word documents: structures such as headings, lists, tables, etc. should be applied using the facilities in Word rather than through the application of visual text effects.

How to test – medium HTML/good browser knowledge required

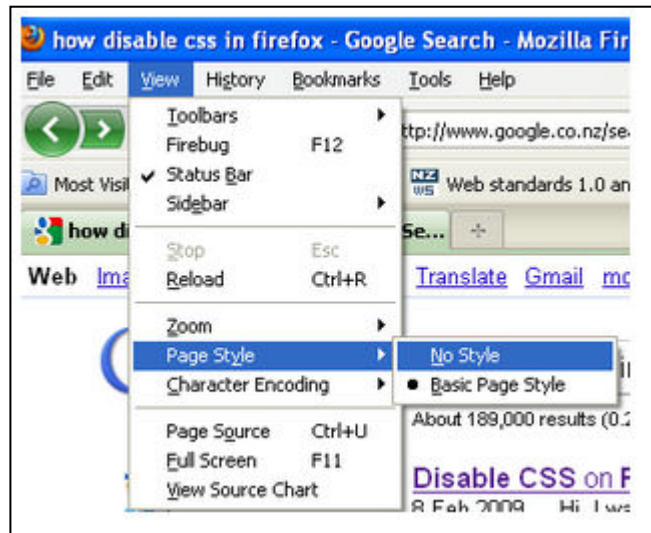
This test requires strong HTML knowledge.

Review all content structure and relationships, e.g., what's a heading, a list, a paragraph, a blockquote, a form control, a link, etc., and check that the same structure and relationships are present in the HTML markup.

1.3.2 MEANINGFUL SEQUENCE

The order of content must make sense, independent of the way it is styled visually with CSS. One way to do this is to make sure that the content's sequence is the same in the HTML source code as it is when presented visually on the screen using CSS. When the content's sequence in the HTML markup does not match its visual order on the screen, it can cause problems for some users, especially screen reader and keyboard-only users.

How to test – minor HTML/good browser knowledge required



A good way to check for this is to disable Cascading Style Sheets (CSS) in the browser to remove any visual styling. Check to see that the content on the page still makes sense. Even if sections of the page, e.g., the site menu, main content, sidebar, are in different relative positions, as long as their meaning, and the meaning of the page overall, are unaffected, then this Success Criterion is met. If the meaning of the page's content is changed or does not make sense, you need to check "No" and provide a description.

1.3.3 SENSORY CHARACTERISTICS

Don't rely on things like position, size or shape to provide information.



Note: The related concern with using colour to provide information is dealt with separately in requirement 1.4.1 Use of Color

How to test – no specialist knowledge required

Look and read through the page and note any directions or information whose meaning relies on its relative position, size or shape.

The most likely things to watch out for are instructions such as "See the link in the smaller box on the left side of this page." This would be a failure as users who are unable to see the page will not find meaning from that statement.

Certain improperly constructed tag or word clouds, where the relative importance of each word is indicated by its size only, are other examples of information being provided through sensory characteristics only. In this case, when CSS is disabled in the browser, if there is no indication of the words' relative importance, this constitutes a failure.

1.4.1 USE OF COLOR

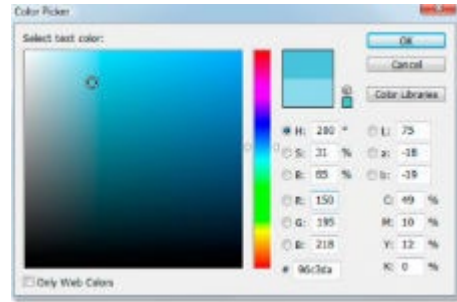
Don't rely solely on colour to convey information.

Any information whose meaning is available only through colour-coding is likely to be problematic. In the case of charts and graphs, consider using visual patterns, e.g., stripes or cheques, in addition to or instead of colour.

How to test – no specialist knowledge required

Check particularly for forms with error messages or mandatory field indicators, and make sure these would still work if you were seeing it in black and white.

Another area of concern is graphs and charts, where different series are differentiated through colour coding. Check that they are accompanied by a text description that sufficiently describes the information that is conveyed through the colour differences.



1.4.2 AUDIO CONTROL

How to test – no specialist knowledge required

If audio content on a page plays automatically for more than three seconds, there must be a facility for the user to turn the audio off. Best practice, however, is simply not to have audio that starts playing automatically.



Check all audio content on the page and verify that, if it starts automatically, it stops after three seconds, or a way to pause or stop the audio is provided.

1.4.3 CONTRAST (MINIMUM)

How to test - good browser knowledge required

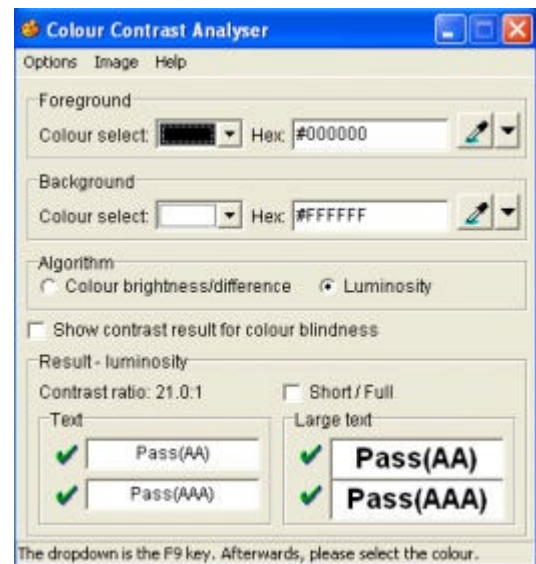
This is easy to test but requires a bit of care and time. You'll most likely want to use a tool like the Colour Contrast Analyser from the Paciello Group and Web Accessibility Tools Consortium; or the one that comes with the Juicy Studio Accessibility Toolbar add-on for Firefox.

There are also online contrast checkers, e.g.,

<http://webaim.org/resources/contrastchecker/>

<http://juicystudio.com/services/luminositycontrastratio.php>

Note: A number of tools exist for testing colour contrast. Use what suits you, but ensure that it is measuring colour contrast in accordance with WCAG 2.0.



1.4.4 RESIZE TEXT

How to test - good browser knowledge required

Please note that this requirement concerns text resizing or text zoom, as opposed to the full page zoom functionality offered by more recent browsers.



To test this, it is important to use both Internet Explorer and another browser such as Firefox.

Using Internet Explorer: Under the “View” menu, select “Text Size > Largest”. Make sure that all of the text on the page increases in size without obscuring any content or removing functionality on the page. Note, however, that the “Largest” setting in Internet Explorer is not a 200% increase in text size as required by this WCAG Success Criterion. Also, Internet Explorer does not resize text that is set in pixels (“px” units) in the CSS. Instead, “em” units or percentages should be used.

Using Firefox: Under the “View” menu, select “Zoom” and make sure that “Zoom Text Only” is checked. Then, press “Ctrl++” six times to increase the font size to 200% its default. Again, ensure that no content or functionality on the page is obscured or prevented.

Enlarging text may introduce a horizontal scroll. While this is less than ideal, as long as the page content is still readable and usable, that’s okay. It does suggest that the site could be better constructed for device independence though; if you get the chance, check it on an iPhone or Android.

1.4.5 IMAGES OF TEXT

How to test – no specialist knowledge required

In general, don’t use images to present text: Some users need to be able to adjust colour, size, etc.

Text in logos is permitted, as are advertising tiles or banners where text is presented as part of an image. These should have good, descriptive ALT attributes.



If you come across the use of text in images that appears to be largely for the purposes of preserving typographic style, the site may be in violation of this requirement. You should read and understand the previous web standards before entering your assessment.

WCAG 2.0 - Operable

2.1.1 KEYBOARD

This requirement is intended to ensure that all page functionality can be operated using the keyboard only.



How to test - good browser knowledge required

To overcome the possibility that the site's CSS hides any visual focus indicator (see requirement 2.4.7 Focus Visible), it is suggested that you disable CSS in your browser when testing this requirement.

When the page you want to test is loaded in your browser, click in the address bar of the browser. Then start hitting the Tab key. Depending on your browser, you'll see focus move through the browser controls and tabs (if you're using a tabbed browser), and onto the page as a whole (a dotted line may appear around the entire page). Then focus will cycle through the links and form elements in the page. Keep an eye on the status bar to watch focus moving from one link URL to the next. As links or form elements receive focus, you'll see (most likely) a dotted line appear around the control that has focus. Press Enter to activate the control and verify that it responds to keyboard input. You need to test that you can navigate through the site and use any forms (e.g., search) purely with a keyboard.

Note: Shift-Tab will move focus backwards up through the focusable elements.

2.1.2 NO KEYBOARD TRAP

Keyboard traps are fairly rare. They occur when you're using a keyboard and get trapped inside a form or other element: You can press Tab and cycle through all the focusable elements in the form or object, but you can't exit from it and move to the elements on the rest of the page.



How to test - good browser knowledge required

While you're doing the test above (for 2.1.1), make sure that you can use the Tab key to reach all focusable elements, from the top of the page through to the links in the footer.

On a standard content page or homepage, make sure you don't get into a situation where you end up tabbing from search input box to search button to search input to search button.... You have to be able to tab into, through, and out of a form.

2.2.1 TIMING ADJUSTABLE

How to test – no specialist knowledge required

If a time limit is set on any activity, make sure that it can be disabled or extended. This is not likely to be an issue for most sites.



2.2.2 PAUSE, STOP, HIDE

How to test – no specialist knowledge required

In essence, for any page that contains moving, blinking, scrolling, or automatically updating content alongside other static content, make sure there is a facility to pause or stop the



movement. An example is the moving slider on the home page of dia.govt.nz for which pause and play buttons are provided.

2.3.1 THREE FLASHES OR BELOW THRESHOLD

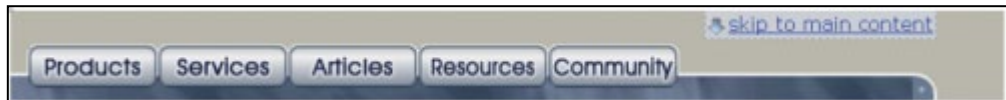
How to test – no specialist knowledge required

Unlikely to be relevant to most of gov.t.nz sites. In summary, make sure that content or item that flashes doesn't flash more than three times in one second.



2.4.1 BYPASS BLOCKS

You must provide a way for users,



particularly keyboard-only users, to bypass blocks of content that are repeated on every page, such as banners and navigation menus.

The most common way to do this is to place, at or near the top of the page, a "skip to main content" link that allows users to move directly to the main content on the page. For example, a page might have a link element, e.g., `Skip to main content`, shortly after the `<body>` tag, and an `<h1>` heading with corresponding ID attribute, e.g., `<h1 id="content">`, at the top of the page's main content area.

This "skip link" may be visible or hidden. If it is hidden, ensure that it remains available to assistive technologies like screen readers (i.e., does not use the CSS declarations `"display: none;"` or `"visibility: hidden;"`).

Another way to satisfy this Success Criterion is to provide heading elements at the beginning of each section of content, including sections like main and secondary navigation, main content, and the footer (see WCAG 2.0 Sufficient Technique H69).

How to test?

The easiest way to check that a "skip link" exists is to disable CSS in your browser and look near the top of the page. Clicking the link should move focus to the top of the main content on the page.

Then turn CSS back on, and check to see if the "skip link" is visible or hidden. If it is hidden, ensure that it is able to receive keyboard focus when using the Tab key. The "skip link" may become visible upon receiving focus, but it may not, in which case, keep an eye on the browser's status bar as it should indicate the URL for each link that gains focus.

If there is no "skip link" on the page, or if it does not work, e.g., it is set with `"display: none;"` in the CSS, check that all the major sections of content like navigation menus, sidebars, main content, and footer have introductory headings.

2.4.2 PAGE TITLED

Every page needs a unique title (using the `<title>` element) that



clearly identifies the content of the page and distinguishes it from every other page in the site. A good rule of thumb is to make the page's `<title>` element using, first, the page's main content heading, followed by the name of the site, e.g., "Strategic Direction | Ministry of Health".

Titles are shown in the title bar (at the very top of the browser window). They are also displayed for bookmarks and in a browser's history.

How to test – no specialist knowledge required

Check the title bar at the top of the browser window, or view the page's HTML markup and find the `<title>` element inside the `<head>` element near the top. Make sure that each page's title is unique and relevant to the content of each page.

2.4.3 FOCUS ORDER

How to test - good browser knowledge required

When you check that all functionality is available via the keyboard in accordance with requirement 2.1.1, make sure that the order in which elements receive focus (also known as the Tab order), corresponds closely with the visual layout of the content on the page, in a left-to-right and top-to-bottom fashion.



2.4.4 LINK PURPOSE (IN CONTEXT)

Whenever possible, provide link text that identifies the purpose of the link without needing additional context.



Read more



Read the survey results from 2010

If you have repeated links (e.g., multiple "read more" links pointing to different content), then W3C's Understanding 2.4.4

page contains useful guidance: Make sure that the link's purpose can be known from the heading element that immediately precedes the link, or the "text that is in the same paragraph, list, or table cell as the link or in a table header cell that is associated with the table cell that contains the link."

How to test - minor HTML/good browser knowledge required

Evaluating this standard requires some knowledge of HTML.

Check all links on the page and verify that the link text is meaningful.

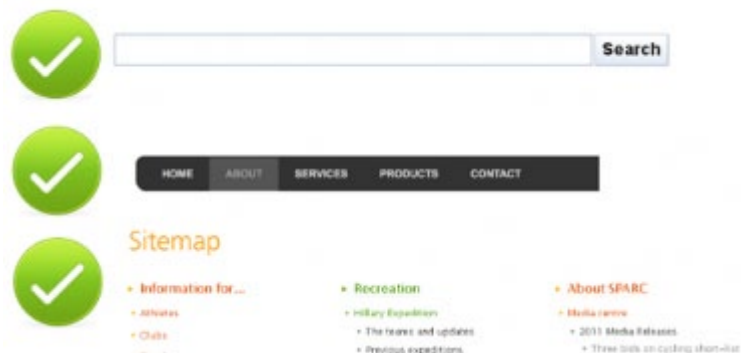
Where scenarios with repeated or vague link text (e.g., "Read more") exist, check that the link is immediately preceded by a meaningful heading, or is part of the same paragraph, or list as the text that indicates the link's purpose. Such a link can also be located in a table cell whose header cell contains text that provides context for the link.

Unless the page complies with this guidance, you should check "No."

2.4.5 MULTIPLE WAYS

How to test – no specialist knowledge required

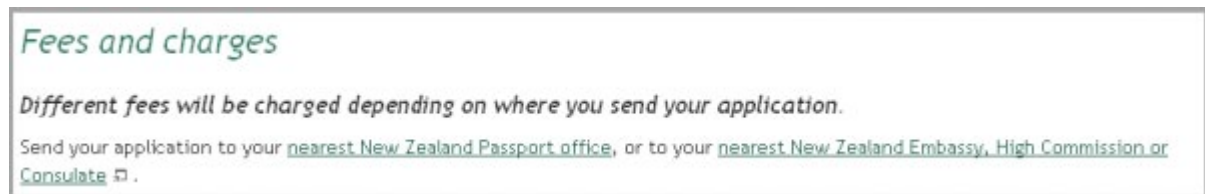
Websites are required to provide more than one way of locating content. Check that your site provides at least two of the following mechanisms for finding content:



- search function
- navigation menu
- site map

Of course, providing all three is better. For more options, see How to meet 2.4.5.

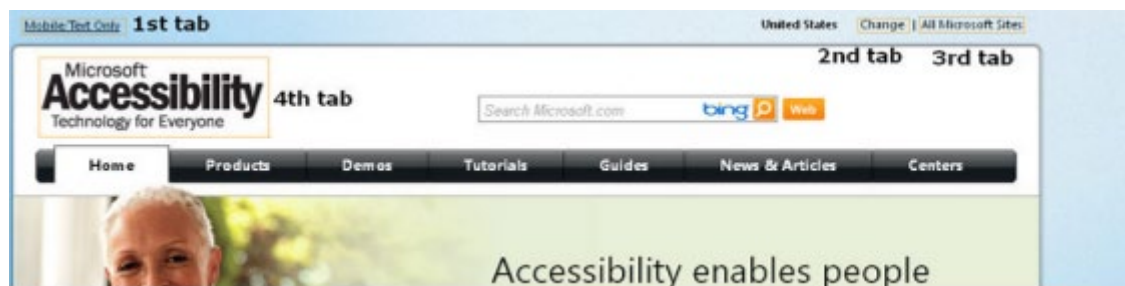
2.4.6 HEADINGS AND LABELS



How to test – no specialist knowledge required

Review all text content and form controls on the page. Verify that blocks of related content have headings whose text clearly describes the content it subsumes. Similarly, check that the labels for form and other interactive controls make it easy for users to understand what each control does.

2.4.7 FOCUS VISIBLE



Most browsers visually indicate focus by putting a fine dotted line around the element that has focus.

The visual indication provided by this dotted rectangle may be sufficient if it offers reasonable visibility. However, where the page's visual design diminishes the visibility or contrast of the focus rectangle, it may be necessary to provide some other visible indication of focus, such as by duplicating the link's CSS ":hover" state with the ":focus" state (and the ":active" state to support Internet Explorer 7 and below). This will give links that receive keyboard focus the same visual indication that they have when hovered over with a mouse.

How to test - good browser knowledge required

While you're performing the test for requirement 2.1.1, make sure there is a clear visual indication for each element when it receives focus.

Where "skip links" are concerned (see 2.4.1 Bypass Blocks), make sure that these links are visible at least when they receive keyboard focus.

WCAG 2.0 - Understandable

3.1.1 LANGUAGE OF PAGE

```
<!DOCTYPE HTML>
<html lang="en-NZ">
<head>
  <meta content="text/html; charset=utf-8" http-equiv="content-type" />
  <base href="http://webstandards.govt.nz/"><!--[if lte IE 6]></base><![endif]-->
```

How to test – minor HTML/good browser knowledge required

For pages that are mainly English, check that the `<html>` element identifies the page's language as using the LANG attribute as follows: `<html lang="en-NZ" . . . >`

For pages that are mainly in Māori, the language should be indicated with `<html lang="mi" . . . >`.

3.1.2 LANGUAGE OF PARTS

If a page includes a section of content in a language other than the page's main language, this section should be enclosed in an element that specifies its language, e.g., `<h2 lang="mi">Te Tari Taiwhenua</h2>` for content in te reo Māori on an English page.

How to test – minor HTML/good browser knowledge required

View the HTML source of the page in question and ensure that the appropriate LANG attribute and value is used on an element wrapping or containing the text and only the text that is in a language different from that of the page as a whole.

3.2.1 ON FOCUS



- forms submitted automatically when a component receives focus;



- new windows launched when a component receives focus;



- focus is changed to another component when that component receives focus

In essence, don't trigger any change of context when a page element receives focus. Changes in context include changes of focus, of viewport, and of the page the user is on. An example would be when setting focus to a form field and a popup window automatically opens with focus being moved to the pop-up. This would make it impossible for a keyboard user to ever tab past that field.

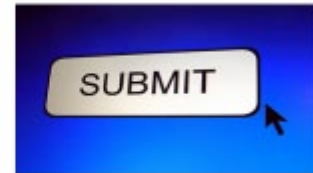
Note that loading a new window, e.g., a pop-up that advertises certain content, as soon as a page loads is a failure of this requirement (see [F52: Failure of Success Criterion 3.2.1 and 3.2.5 due to opening a new window as soon as a new page is loaded.](#))

How to test – no specialist knowledge required

Using the Tab key, move focus to each of the focusable elements on the page, and note the behaviour. If there is a change of context upon moving focus to an element, this constitutes a failure of WCAG 3.2.1.

3.2.2 ON INPUT

This requirement is similar to 3.2.1 On Focus, but applies when input is entered into a form element and there is an unrequested change of context. Don't send users off to a new page based on a value that they enter into a form field, without the user expressly clicking a submit button to initiate the change of context.



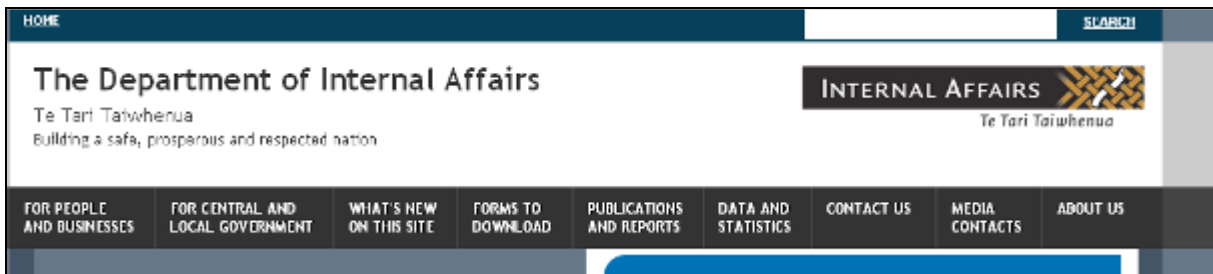
Note that not all changes of content are changes of context. Consider the kind of event where a user moves focus to a radio button, thereby populating the page with further options, e.g., a user checks a radio button labeled "Auckland" which causes a drop-down list of Auckland suburbs to appear immediately below. This is NOT considered a change of context and is acceptable.

In essence, the above two criteria suggest that a site shouldn't direct a user to a new page until an explicit submit button is activated.

How to test – no specialist knowledge required

For every form input, enter content or change its value, and note the behaviour. If there is an unrequested change of context, this constitutes a failure of WCAG 3.2.2.

3.2.3 CONSISTENT NAVIGATION



How to test – no specialist knowledge required

Ensure navigation is consistent (and labelled consistently) across the site. For example, do not change the order of main navigational elements across different pages or sections of a site.

3.2.4 CONSISTENT IDENTIFICATION

How to test – no specialist knowledge required

Ensure that functional components used in different parts of the site are consistently labelled. For example, with a search submit button, don't use the word "Search" in some parts of the site and "Find" in others.



3.3.1 ERROR IDENTIFICATION

Contact Us

There was a problem with the form.

- [Please enter Your E-mail Address.](#)
- [Please enter a subject or choose a subject from the drop-down menu.](#)
- [Please enter a Message.](#)

Your Name:

Your E-mail Address:

Subject:

Where an error has occurred when submitting a form, a textual error message describing the specific error is provided. It is not enough merely to indicate what form fields were in error.

How to test – no specialist knowledge required

Enter incorrect information into the form (i.e., try to cause errors), submit it, and note the error message(s), if any. Check that error messages are provided and that they adequately describe each error.

3.3.2 LABELS OR INSTRUCTIONS

Contact Us

Your Name:

Your E-mail Address:

Subject:

Message:

Phone: 435-797-7024 TDD 435-797-1981	Fax: 435-797-3944	Address: Center for Persons with Disabilities 6800 Old Main Hill Utah State University Logan, UT 84322-6800
---	-----------------------------	---

Form fields should be accompanied by labels and instructions that make it clear to the user as to what is expected in each field.

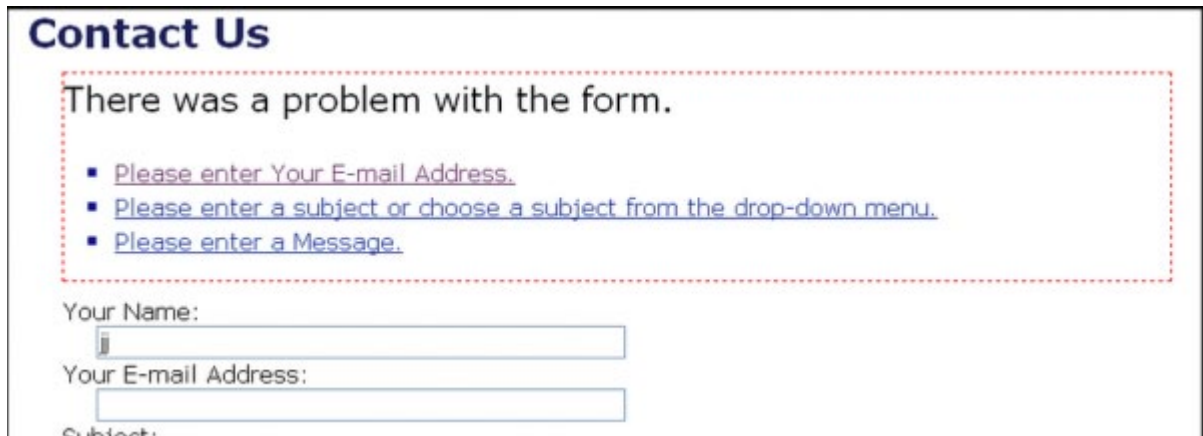
The labels or instructions should be visually located close to the input field (for users of screen magnification technologies who may be looking at a very small field of view). Where form fields that need specific values in

particular formats (e.g., date fields), clear instructions should be included, preferably as part of the relevant `<label>` element.

How to test?

For each form control, ensure that it is accompanied by a clear and descriptive label or instruction.

3.3.3 ERROR SUGGESTION



The screenshot shows a web form titled "Contact Us". A red dashed box highlights an error message: "There was a problem with the form." Below the message are three bullet points with blue underlined text: "Please enter Your E-mail Address.", "Please enter a subject or choose a subject from the drop-down menu.", and "Please enter a Message." Below the error message are three input fields: "Your Name:" with a text box containing "j", "Your E-mail Address:" with an empty text box, and "Subject:" with a dropdown menu.

The site must provide suggestions on how to correct form input errors. If, for example, a user is required to enter a day of the month, an entry of '32' could be met with an error message stating that allowable values are between 1 and 31. The W3C provides the following example:

An input field requires that a month name be entered. If the user enters "12," suggestions for correction may include

A list of the acceptable values, e.g., "Choose one of: January, February, March, April, May, June, July, August, September, October, November, December."

A description of the set of values, e.g., "Please provide the name of the month."

The conversion of the input data interpreted as a different month format, e.g., "Do you mean 'December'?"

How to test – no specialist knowledge required

Enter incorrect information into the form (i.e., try to cause errors), submit it, and note the error message(s), if any. Check that the error message(s) provide suggestions on how to correct the errors.

3.3.4 ERROR PREVENTION (LEGAL, FINANCIAL, DATA)

The screenshot shows a checkout page with a navigation bar at the top containing 'WELCOME', 'CATALOG', 'CART', and 'CHECK OUT'. Below the navigation bar, there is a yellow banner with the text: 'Confirm your account info and credit card payment info.' and a note: 'NOTE: Changing your email address here DOES NOT change your Login ID.' Below the banner, there is a section titled 'CHECK OUT' with a progress bar showing steps: 'CREATE ACCOUNT', 'BILLING ADDRESS', 'PAYMENT INFORMATION', 'CONFIRM INFORMATION', 'CONFIRM ORDER', and 'COMPLETE CHECK-OUT'. The 'CONFIRM INFORMATION' step is currently active. Below this, there are three sections: 'PERSONAL INFORMATION', 'CONTACT INFORMATION', and 'PAYMENT INFORMATION'. Each section has an 'Edit' link. The 'PERSONAL INFORMATION' section contains: E-mail Address: student@esslearning.com, Full Name: Jane Doe, Company: none, Title: , Telephone Work: 512-555-1212, Telephone Mobile: 512-555-2323. The 'CONTACT INFORMATION' section contains: Business/Personal Address: 123 main street any, TX 12345, United States. The 'PAYMENT INFORMATION' section contains: Card Type: *TEST*, Card Holder: Clark Kent, Card Number: ***** 1111. A yellow box highlights the text 'Click on CONTINUE to proceed with your checkout...' with a red arrow pointing to the 'CONTINUE' button at the bottom right of the page.

This refers to forms that lead to financial or legal commitments or involve storage of user-managed data. If your site has forms of this nature, read Understanding 3.3.4.

How to test – no specialist knowledge required

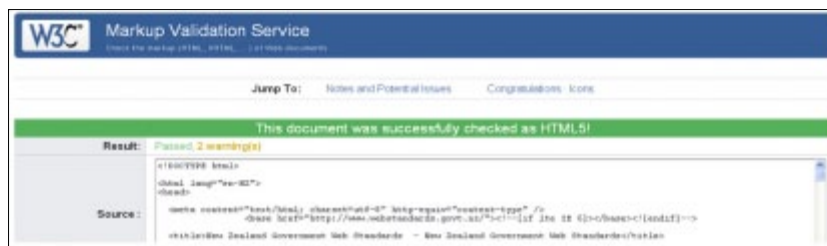
Review any relevant forms on the page and check that users are given the opportunity to review their information prior to submitting, to correct any input errors identified upon submission, or to reverse the submission if necessary.

WCAG 2.0 - Robust

4.1.1 PARSING

WCAG 4.1.1 requires that:

- elements have complete start and end tags,
- elements are nested according to their specifications,
- elements do not contain duplicate attributes, and,
- ID attributes have unique values.



How to test – expert HTML/browser knowledge required

The easiest way to check that a web page meets this requirement is to try validating the page's HTML as required by [New Zealand Layer requirement NZ 4.1.2](#). If a page uses all valid markup, you can rest assured that the page also passes this requirement. In other words, if a page meets [NZ 4.1.2](#), it also meets WCAG 4.1.1.

However, the reverse is not always true: If a page does not validate according to a published grammar, it does not necessarily mean that it also fails WCAG 4.1.1. A page with validity errors fails WCAG 4.1.1 only if one or more of those errors is an element without complete start and end tags, an elements that isn't nested according to its specification, an element with duplicate attributes, or an ID attribute whose value isn't unique on the page.

Various tools are available for validating HTML, e.g., the online service at <http://validator.w3.org>.

4.1.2 NAME, ROLE, VALUE

Interactive controls such as links and form inputs should be built using the standard elements already provided by HTML, such as `<a>`, `<button>`, `<label>`, `<input>`, etc.



When these are used properly, an interactive control's name (e.g., a link's or button's text) and role (i.e., is it a button, a link, a checkbox?) can be readily determined by assistive technologies such as screen readers. Similarly, the state and value of the control can be more easily read and manipulated, e.g., the state of a checkbox can be changed from "checked" to "unchecked".

When the default HTML elements are not used (as is the case with some custom-built widgets and controls), developers must ensure that the name, roll, state, and value of these interactive components are properly exposed and available to browsers and assistive technologies. Otherwise, some users will not know what components they are interacting with or what even interaction is expected of them.

How to test – expert HTML/browser knowledge required

Evaluating this standard requires specialist knowledge in HTML.