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Web Standards

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The council's public web presence

Requirements for meeting web standards, specifically in areas of accessibility and usability.

Council staff	●
Suppliers	●

● *target audience*

○ *awareness desirable*

Service managers	
Project managers	○
System implementers	○
System developers	●
Content authors	

Document history

Version	Section	Date	Name	Comments
0.1	ALL		Adam Newman	Working version.
0.2	ALL		Andrew Jones	Initial review.
0.3	ALL		Adam Newman	Revision.
0.4	ALL		Andrew Jones	Final review.
1.0	ALL		Adam Newman	1st released version.
1.1	Validation, Breadcrumbs	08/05/08	Ben Tanner	Revision.
1.2	ALL	11/08/08	Andrew Jones	Priority clarification. Added sections on DNS and SSL. Removed Scripts and A to Z.
1.3	3.1 Masthead	13/08/08	Adam Newman	Updated to SGC V2 site code and supporting image.
1.4	3.7 Header links	19/08/08	Adam Newman	Header image updated to suite SGC V2 site code.
1.5	5.6 Style sheets	19/08/08	Adam Newman	Addition of text/style changes (AAA buttons) and reference image.
3.0	ALL	15/10/08	Andrew Jones	2nd released version to account for restructuring of the overall pack.
3.2	ALL	11/11/09	Adam Newman	Cosmetic alterations & title updates
3.3	2.1	14/05/10	Adam Newman	Updated target browsers

Associated documents

Reference	Document	Version	Date

Definitions

Term	Meaning
Council	South Gloucestershire Council
Supplier	The 3rd party supplier of a web application or service

Contents

1 Overview

This document is designed to help all suppliers of the Council's public websites and systems meet our standards for web usability and accessibility.

1.1 Other documentation in the pack

We have produced a pack of documents that explain our requirements and offer additional guidance. Use this document in the context of the others within the pack.

1. An introduction to our package of guidance – **Introduction.doc**

   Here we explain what the pack contains and why we have created it.

2. A guide for content authors that has relevance to everybody – **Content.doc**

   Guidance for writing good quality web-based content that is also in the council style.

3. Web standards requirements - **Standards.doc**

   Requirements for meeting web standards, specifically in areas of accessibility and usability.

4. Implementing our website skin – **Skin.doc**

   Guidance for a consistent approach to implementing the council brand and site navigation.

5. Hosting requirements – **Hosting.doc**

   Requirements for hosting systems with detail about domain names and security considerations.

APPENDIX: Supplier specific guide – **Appendix-{Supplier}.doc**

a supplement to the pack that is tailored to the individual system being provided by the supplier.

2 Key points

2.1 Expectations

We **expect** supplier's sites and systems to:

- Meet **Web Content Accessibility Guidelines 1.0 to priority 2** (W3C WCAG - AA) compliance. Verify using a tool like http://www.tawdis.net/taw3/cms/en. Refer to standards documented at http://www.w3.org/TR/WAI-WEBCONTENT/.

- Have **valid XHTML mark-up** using the XHTML 1.0 Transitional DOCTYPE. Verify using http://validator.w3.org/. Refer to standards documented at http://www.w3.org/TR/xhtml1/.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

- Have valid **CSS 2.1**. Verify using http://jigsaw.w3.org/css-validator/. Refer to standards documented at http://www.w3.org/TR/CSS21/.

- Have been **tested against the most common target browsers**:
    - IE7 and higher
    - Safari 3 and higher
    - FireFox 2 and higher
    - Chrome 1 and higher
    - Opera 8 and higher
    - With standards compliant XHTML and CSS we expect a high level of support for all modern mobile device, games console and TV browsers.

2.2 Guidelines

We would **encourage** supplier's sites and applications to:

- Strive to meet **Web Content Accessibility Guidelines 1.0 to priority 3** (W3C WCAG - AAA) compliance.

- Test against mobile devices.

- Test against screen reading software.

- Test against less common browsers such as Opera and Safari.

- Test against browsers on an Apple Mac operating system.

3 XHTML

Adhering to XHTML standards and making correct semantic use of HTML elements is one of the best ways of achieving a high accessibility rating and ensuring cross-browser compatibility.

We expect supplier code to have **valid XHTML mark-up** using the XHTML 1.0 Transitional DOCTYPE.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

Refer to standards documented at http://www.w3.org/TR/xhtml1/.

Verify using the W3C validation service at http://validator.w3.org/.

3.1 Forms

This is a list of best practice guidance when designing forms. Following this guidance is more likely to guarantee a high accessibility rating.

- The HTML <form>, <fieldset> and <label> elements should be used correctly.
- Validation messages should appear in summary format at the top of the form.
- Fields with validation rules e.g. 'a password must be 8 characters in length' should be clearly stated in advance and next to the field in question.
- Use the *tabindex* attribute on form fields to enable logical order of field selection.
- Always set a default focus on the first form field using JavaScript.
- Tables should not be used for layout.
- Required field elements should be prefixed with a consistent symbol to identify them as such. (We use red asterisk before their title. The CSS class for this is applied to a tag around the '*'.) Its *title* attribute must be descriptive and the form needs a paragraph at the top explaining the purpose of the symbol.

```
<label for="sectors">
    <span title="This is a mandatory field" class="required">*</span>Select
Sectors</label>
```

3.2 Tables

Tables should be avoided for layout. A table should only be used for layout if the effect cannot be accomplished using CSS. Such a layout table should be tested to with a screen reader. Following this guidance is more likely to guarantee a high accessibility rating.

- Using CSS with layouts are usually achievable as an alternative.
- Lists (<ul>, <ol> and <dl>) are often more appropriate when displaying results that are not in a tabular format.
- Tables must be made using appropriate mark up to ensure that they are rendered properly by assistive technologies.
- Data tables should have table summaries (i.e. <thead>, <th> etc.) Abbreviations for header labels may be used for long header labels where they benefit the screen reader user.

Guidance for achieving CSS-based layouts instead of using <table /> can be found at this very useful site http://www.glish.com/css/.

3.3 Images

Images should meet the following criteria:

- Smallest size possible without compromising quality. We aim for a page size of less than **200kb**
- In general choose JPEG compression for photos and GIF compression for graphics
- Never use bog standard clip art. Use properly designed images that are in keeping with the rest of the site.
- Always use appropriate ALT text.

3.4 Lists

The various HTML list elements were designed for rendering content that is in a list format. Following this guidance is more likely to guarantee a high accessibility rating.

- Definition list (<dl>), definition terms (<dt>) and definition description (<dd>) should be used to layout name and value pairs of information instead of tables.

```
<h3>Administrative Assistant</h3>
<dl class="detailInfo">
    <dt>Department</dt><dd>Community Care &amp; Housing</dd>
    <dt>Location</dt><dd>Emersons Green</dd>
    <dt>Salary</dt><dd>£16,536 - £18,430</dd>
    <dt>Closing date</dt><dd>08 January, 2008</dd>
    <dt>Reference</dt><dd>SA49104138</dd>
    <dt>Hours</dt><dd>Part Time/Temporary 8</dd>
</dl>
```

- Do not use tables for lists of results. They are not tabular data - they are lists!

- Lists are normally the most appropriate choice for navigation elements. Here is an example of the HTML and CSS in combination to a simple set of horizontal links.

```
<ul>
    <li><a href="http://www.southglos.gov.uk/site-search">Site search</a></li>
    <li><a href="http://www.southglos.gov.uk/site-map">Site map</a></li>
    <li><a href="http://www.southglos.gov.uk/site-contact">Contact us</a></li>
</ul>

#topnav ul {
  margin: 0;
  padding:8px 0;
  text-align: right;
}

#topnav li {
  display: inline;
  border-right: 1px solid #E3E3E3;
  margin-right: 0.5em;
  padding-right: 0.5em;
}
```

Guidance for using XHTML and CSS correctly for navigation and lists can be found at this brilliant CSS resource site http://www.alistapart.com/stories/taminglists/.

3.5 Other HTML elements

3.5.1 Address and Acronym example

There are less commonly used HTML tags that should be used to provide document structure for screen readers.


```
<address>
    Ashton Court Visitor Centre<br />BRISTOL BS41 9JN<br />
    <acronym title="Telephone">t</acronym>: 0117 953 2141<br />
    <acronym title="Fax">f</acronym>: 0117 953 2143<br />
    <acronym title="email">e</acronym>: <a
href="mailto:info@forestofavon.org.uk">info@forestofavon.org.uk</a>
</address>
```

4 CSS

Adhering to CSS standards is another way of achieving a good accessibility rating and ensuring cross-browser compatibility.

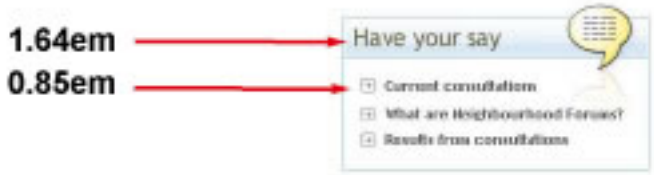
We expect supplier code to have valid **CSS 2.1**.

Verify using the W3C validation service at http://jigsaw.w3.org/css-validator/.

Refer to standards documented at http://www.w3.org/TR/CSS21/.

4.1 Fonts

Fonts should be specified in '**ems**' so that they scale in the user's browser.



4.2 Colour palette

The colour palette should take into account contrast that is acceptable to users with sight-related disabilities.

The tool at http://juicystudio.com/services/colourcontrast.php can be used to check colour contrast.

4.3 Accessibility options

Suppliers should implement some kind of dynamic stylesheet selection to provide alternative sizes and contrasts for users with disabilities who would benefit from this. The example below is a demonstration:

5 Accessibility and browser testing

5.1 WCAG commitment

The council has made a public commitment that we will meet WCAG – AA compliance, and strive towards WCAG – AAA compliance wherever possible.

We expect suppliers to:

- Meet **Web Content Accessibility Guidelines 1.0 to priority 2** (W3C WCAG - AA) compliance. Verify using a tool like http://www.tawdis.net/taw3/cms/en. Refer to standards documented at http://www.w3.org/TR/WAI-WEBCONTENT/.
- Strive to meet **Web Content Accessibility Guidelines 1.0 to priority 3** (W3C WCAG - AAA) compliance.

5.2 Device compatibility

It is impossible to test every device on the market (consider use of browsers in set-top-boxes and games consoles). This is why standards compliance is the most efficient way of ensuring a consistent result in the majority of browsers.

We expect suppliers to:

- Have been **tested against the most common target browsers**:
  - Mozilla Firefox 2 and above (now too common to be ignored).
  - Internet Explorer 6 and above.

We would also encourage suppliers to:

- Test against mobile devices.
- Test against screen reading software.
- Test against less common browsers such as Opera and Safari.
- Test against browsers on an Apple Mac operating system.

The Internet Explorer developer toolbar is an invaluable tool: http://www.microsoft.com/downloads/details.aspx?FamilyID=E59C3964-672D-4511-BB3E-2D5E1DB91038&displaylang=en.

The far-superior Firefox add-on is 'Firebug': https://addons.mozilla.org/en-US/firefox/addon/1843. Another Firefox add-on useful in testing is 'IE Tab': https://addons.mozilla.org/en-US/firefox/addon/1419. This enables Firefox users to toggle a tab between rendering with the Internet Explorer engine and the Firefox engine.