New Zealand Government Web Guidelines

Version 2

25 October 2002

Guidelines for the management and design of New Zealand public sector websites

NOTE: Any reference to a particular product or commercial website in these guidelines is to be taken as an example only and does not constitute and endorsement by the New Zealand Government.

1 About these guidelines

1.1 Purpose

This document establishes standards for public sector websites in New Zealand. The standards are based on core values of the public service:

- Equity
- Integrity
- Trust
- Economy

We provide practical ways to express these values in public sector websites. However, we don't attempt to cover every circumstance with a prescriptive rule. Rather, we encourage you to make sound judgements based on an understanding and appreciation of the four principles above, and how they can be applied to provide sound, trustworthy and truly accessible public sector websites.

1.2 Stewardship

The State Services Commissioner is Steward of the New Zealand Government Web Guidelines (the "Guidelines"). The E-government Unit of the State Services Commission is the Custodian of Guidelines. The role of Steward and Custodian is set out in the Policy Framework for Government-held Information.

In these Guidelines "we" and "us" refer to the E-government Unit of the State Services Commission as Custodian.

1.3 Maintenance

The Custodian is responsible for recommending to the Steward changes to the Guidelines at least on an annual basis.

1.4 Current version

The current version of the Guidelines is available at http://www.e-government.govt.nz/web-guidelines/. Anyone can suggest changes to the Guidelines by

- submitting comments using the "feedback" link in each section of the online version or
- sending comments to web.guideline@ssc.govt.nz

Suggestions will be evaluated and may be included in future revisions.

All major revisions to the Guidelines supersede earlier revisions.

We list intermediate revisions below:

Version number	Date	Detail of changes

1.5 History

The first version of these guidelines was written in 2000. It was based on guidelines developed for government organisations in the United Kingdom. Members of the GOVIS (http://www.govis.org.nz) web support forum modified them for use in New Zealand. The E-government Unit offered a draft for consultation and issued version 1.0 in August 2001 incorporating the feedback we received.

Since then, minor changes have been made to version 1.

The current version is the first major revision since we issued the Guidelines.

1.6 Interpretation

In these guidelines, interpret "must", "should" and "may" as set out in RFC2119.

1.7 Application

[Comment: The final version of this section is subject to Cabinet decision on the status of the Guidelines.]

Public Service agency websites, including websites part-funded by Public Service agencies, *must* adhere to the Guidelines regardless of the domain chosen to host the site. Other State sector agencies, local authorities and other entities are *encouraged* to adopt the Guidelines.

The Guidelines *must* be followed for public websites. Restricted-access websites, such as extranets, *should* follow the Guidelines. Intranets *may* follow the Guidelines.

1.8 What to read

We recommend these Guidelines be read by

- senior managers (sections xxx particularly)
- business managers (sections xxx)
- website managers (sections xxx)
- communications and IT support people (sections xxx)
- vendors tendering for government Internet service requirements (sections xxx)

2 The Public Service

2.1 About this section

Public sector websites should reflect the values of the Public Service in New Zealand. This document provides practical ways to reflect these values in the development and management of public sector websites. Not every circumstance will be covered explicitly.

The Public Service values should be used as a basis for decision-making when the extending these Guidelines.

Business managers, website managers, implementers and vendors should read this section.

2.2 Values

2.2.1 Equity

Equity means being fair and reasonable. People have no choice about where to go to get government services. Only one agency issues passports and one collects taxes. This places an onus on agencies to make their websites widely accessible. Public service websites that disable users for whatever reason are not equitable.

2.2.2 Integrity

Integrity means being whole and incorruptible. A website with integrity will be secure from interference, up to date, complete and authoritative. It will also be capable of being archived as a complete record of what was available publicly at some point in time. For example, future uses of site archives may not be able to determine the relationship between a web document and the pages it links to if you present the links and the document in a frame.

2.2.3 Trust

Trust and integrity go hand in hand. But trust goes further. For example, a site worthy of trust will provide appropriate authentication and security where personal information is accessed online, will not store cookies without explaining why and be free from errors (like spelling mistakes and incorrect dates).

2.2.4 Economy

Economy means using public resources in a way that is efficient, effective and fiscally economical. This is expressed more fully in the New Zealand E-government Interoperability Framework (e-GIF), which sets out common standards that enable agencies can exchange information efficiently in delivering services online.

3 E-government

3.1 About this section

This section outlines the main objectives of the e-government programme in New Zealand. More information is available on the e-government programme website.

Senior and business managers should read this section.

3.2 Aims

E-government is about taking government online to provide:

- Better services
- Cost effectiveness and efficiency
- Improved reputation
- Greater participation by people in government
- Leadership in supporting the emerging knowledge society

Resource

E-government Strategy April 2001 launched by the Minister for State Services. [URL]

3.3 Actions

Better service means:

- Better discovery (I can find what I need)
- Better delivery (I get what I need)
- Better accessibility (I get it the way I want it)

3.3.1 Discovery

The government portal (www.govt.nz) and special-interest portals provide ways to find what you need:

- NZGLS metadata standard provides the framework
- agencies feeding the portal with metadata provides the means.

3.3.2 Delivery

A range of e-government activity is addressing delivery:

- the e-services project will encourage the moving of more services online
- the authentication project will ensure people's privacy is maintained and services are delivered securely to the right person

- the interoperability framework will ensure that agencies work together electronically to deliver services effectively.

3.3.3 Accessibility

A major focus of these guidelines is accessibility:

- opening the door to government by removing impediments to online access
- providing content that is accurate, timely and relevant.

4 Web strategies

4.1 About this section

This section is an introduction to help agencies develop sound web strategies. Web strategies play an important part in ensuring your agency's web presence is consistent with other agency and government drivers.

Senior and business managers should read this section.

4.2 Understanding the environment

This section describes government policy and legislation that should be reflected in your web strategy.

4.2.1 The Policy Framework for Government-held Information

First principle

Government departments should make information available easily, widely and equitably to the people of New Zealand (except where reasons preclude such availability as specified in legislation).

Commentary

The content and delivery sections of these guidelines set out basic requirements to embody this principle in websites. They also provide recommendations for cultural change, training and the design of business processes to achieve its aims.

Second principle

Government departments should make the following information increasingly available on an electronic basis:

- *all published material or material already in the public domain;*
- *all policies that could be released publicly;*
- *all information created or collected on a statutory basis (subject to commercial sensitivity and privacy considerations);*
- *all documents that the public may be required to complete;*
- *corporate documentation in which the public would be interested.*

Commentary

There is little today that is not produced electronically. To embody this principle in your web strategy, emphasise making the listed information "increasingly available" on your websites.

Resource

http://www.ssc.govt.nz/policy-govt-info/

New Zealand Public Service chief executives and the State Services Commission developed the framework. Cabinet approved it in 1997.

4.2.2 Official Information Act 1982

Commentary

Part I, section 4 of the Official Information Act 1982 sets out the government's responsibility to "increase progressively the availability of official information to the people of New Zealand".

Resources

http://www.legislation.govt.nz/

4.2.3 Human Rights Act 1993

Commentary

Putting information on your website and making services available online does not automatically make it available to everyone. People without ready Internet access are discriminated, but not in terms of the Human Rights Act 1993. People who are disabled because of their impairment may be (section 21(1)(h)).

Requirement

Do not treat any person less favourably because they are impaired. This applies to both public websites and websites used solely by government employees.

Resources

http://www.legislation.govt.nz/

4.2.4 New Zealand Disability Strategy

Commentary

The New Zealand Disability Strategy – Making a World of Difference – Whakanui Oranga – aims to eliminate the barriers for the one-in-five New Zealanders who have long-term impairments to participating in and contributing to society. It provides a framework for government departments to ensure people with impairments are considered or involved in decision-making so they are not disabled by the consequences of those decisions.

Recommendation

Incorporate the Disability Strategy into your web strategy. Poor decisions disable people with impairments.

Resources

http://www.odi.govt.nz/nzds/

The Minister for Disability Issues launched the strategy in April 2001.

4.2.5 Māori Language Strategy

Commentary

Māori is the most widely spoken language in New Zealand after English (Census 2001). It is also an official language of New Zealand (Māori Language Act 1987).

In September 1997 Cabinet agreed "the Crown and Māori are under a duty derived from the Treaty of Waitangi to take all reasonable steps to actively enable the survival of Māori as a living language".

In December 1997, Cabinet agreed the overarching policy objectives for Māori language, including "to increase the opportunities to use Māori by increasing the number of situations where Māori can be used".

Recommendation

Incorporate the objectives of the strategy in your website strategy.

Resources

See also section 5.2.6 of these Guidelines.

The Government's Māori Language Strategy is set out in Te Tūāoma – The Māori Language: The steps that have been taken [PDF, 1.3MB]

Mātātupu: Māori Language Policies and Plans: Guidelines to Assist Public Service Departments [PDF, 500 KB]

4.3 Organisation-wide approach

Websites have become an information source within your organisation; as well as for the people you serve. They channel your publishing activity and host your public relations or communications functions. They can support your business activities and frontline service delivery. They can even help you determine what people think about what your organisation does and what they think it should be doing.

To achieve this takes organisation-wide thinking and investment in training and cultural change, more so perhaps than in technology.

How ever you shape your approach to your organisation's web presence, the very public nature of your websites demand a commitment to ongoing support from the whole organisation.

4.4 Goals and drivers

Government values are embodied in a range of legislative and policy instruments that shape strategic planning, policy development and service delivery:

- Cabinet decisions
- Central Government legislation/strategies/policies
- Agency strategies/policies (including web strategy)
- Agency implementation plan
- Agency operations plan.

The work of agencies can be categorised in a number of ways:

- Policy
- Transaction/operational
- Review/audit

A web strategy for an agency that has a predominant review and audit function will concentrate on information delivery through analysis, reporting and publishing. The web strategy for one concerned with policy may well have as a goal some interactive or transactional elements, to support online consultation, as well as a core of information delivery. The web strategy for a transaction/operational agency will need to incorporate the goal of integrated electronic service delivery.

4.5 Components of a web strategy

4.5.1 Executive summary

The executive summary provides an overview of the key objectives of the strategy, what it will deliver, for how much money, when and with what operational implications.

4.5.2 Introduction and background

This section provides background detail about your organisation - its functions, core business, and current environment.

4.5.3 Vision and mission statements

These are the agency's or business unit's vision and mission for their use of the Internet.

Example

- "Our web site will allow people to quickly, easily and conveniently find information and services relevant to our business. It will provide a positive user experience consistent with the e-government requirements."

4.5.4 Fit with agency business strategies

Desired business outcomes drive business strategies. These in turn should drive the web strategy. Highlight the key business strategies the agency wants to achieve in the medium term that the web strategy will align with. This might include the agency's strategies for customer engagement or service delivery improvement.

Sitting behind these business strategies there may be strategies for electronic dealings with the public, publication of information, records management, information management, document management, knowledge management, recruitment and consultation.

4.5.5 Scope

Explicitly state any assumptions about what the web strategy **will** and **will not** enable.

Example

- "The implementation of the web strategy will enable more simple interactions to be carried out with target audiences."

- "The implementation of the web strategy will not enable faster turnaround of enquiries from the public; these will continue to be processed at the same rate as enquiries received through the postal system."

4.5.6 Audience

Identify the core and non-core audience(s), where possible, based on market research or dialogue with client groups. Identify each audience's interests and concerns to be addressed by the strategy.

It is may be useful to identify a secondary audience whose need may not be explicitly addressed. This keeps all likely audiences in mind and can, over time, provide an impetus to keep evolving the site to meet changing needs.

4.5.7 Fit with cluster or sector strategies

Consider whether there are broad business strategies emanating from related organisations or groups of organisations that impact on your agency's business strategies and the web strategy.

Identify also where others share your audience with a related purpose. A web strategy should consider all options for collaboration and sharing across agencies, services and other organisations. This includes customers, the E-government Unit, other government agencies, local authorities, non-government organisations, private sector and internationally.

This may lead to wider thinking about how to satisfy audience needs from a content and service perspective. Where overlaps and alignments exist between agencies these should be exploited in order to achieve the goals of the E-government Strategy.

Example

Statements in a web strategy responding to a sector perspective could include:

- "We will describe services and resources using NZGLS, so they can be found by the government portal, after consultation with the sector roadmap working group."
- "We will provide information in the language most appropriate for the audience, using the assistance of community groups to set priorities for translations."
- "We will develop information on managing personal health and safety in a collaborative fashion with all relevant agencies, but it will be from a single authoritative source (the Crown) by one agency."

4.5.8 Fit with central government drivers

Government policy and legislation covered in section 4.2 and section 5.2 may impact on the web strategy or its implementation.

Example

Web strategy responses to central government drivers could include:

- "We will present and sort information for many different audiences (Māori, Pacific peoples, disabled, recreation and culture, communities)."
- "Online authentication of users will protect privacy."
- "Responses to users' emails through the website will be provided in the same timeframes as the published response times for other communications channels."
- "Information presented on the website and in print publications will be generated from the primary record held in the document management system."
- "Browser presentation of specialised file formats will be carried out according to the New Zealand e-GIF ."

4.5.9 Governance and operations

Identify the website custodian. This person is responsible for monitoring the contribution the website makes to the achievement of organisation objectives, and ensures that it continues to support business objectives by providing relevant, complete, up to date and reliable content and services.

While there will be a single business owner for the agency's web presence, there are likely also to be many stakeholders, including service delivery, information management, technical and communications staff.

Example

- "The Communications Unit is the custodian of the agency presence on the government portal."
- "The Communications Unit will QA metadata and content provided by the business units."
- "Individual business units are responsible for dealing with enquiries received through the website about the information or services they provide."

4.5.10 Goals and objectives

The specific objectives to be achieved by implementing the business and web strategies should be Specific, Measurable, Achievable, Relevant and Time bound (SMART). They are written statements that describe an intended outcome and clearly describe measurable targets for the major functions and operations of the agency's website.

Example

- "To reduce the annual demand for printed publications by 50% by 30/6/02, by making them available online."
- "To double the annual downloads of online information, by 31/12/02, by promoting the website URL and details of what information is available."
- "To allow online renewal of C2/153/11g licences, by 30/6/03."

4.5.11 Critical success factors

These are things that have to go right in order for the web strategy to achieve its goals successfully. They can include a risk assessment of the organisation and its environment.

Example

- "We must be able to understand and respond to users' satisfaction with the site (through both feedback assessment and user satisfaction research)."
- "We must be able to integrate the Internet site with our intranet and other information systems."

- "We must be able to monitor the development of the site and its success as a means of meeting our organisational objectives."
- "We must be able to demonstrate to users how our services and information fit in the context of related services and information."
- "We must be in alignment with the overall E-government Strategy."

4.5.12 Implementation projects

This is a programme plan detailing the main high-level projects required to deliver the strategy. It should include resources, objectives, time-scales, deadlines, budgets and performance targets. The projects are likely to deliver infrastructure improvements, support new processes or add new functionality.

4.5.13 Operational implications of the web strategy

Once implemented, the strategy is likely to have operational implications. The web strategy is not the document to detail exactly how each operational impact will be dealt with, but to signal the broad areas in which they are likely to occur and how they could be dealt with.

5 Content

5.1 About this section

This section covers the principles that apply to website content, how to manage that content, the minimum content requirements for different types of site and the principles governing links to non-government content.

Business and website managers, communications and IT support teams, and vendors should read this section.

5.1.1 Content objectives

The content of government websites should be consistent with the core value of the Public Service. It should be

- *Equitable* - fair and reasonable, easy to understand by everyone
- *Have integrity* – be complete and free from interference
- *Trustworthy* – free from error and clear about how errors have been corrected
- *Economical* – easy to digest on screen, without the need to print.

In other words, government sites should be

- rich in authoritative content
- up to date
- well written
- clear and concise
- meeting the needs of a wide range of audiences and
- easily accessible.

5.1.2 Audiences

Begin any consideration of content by identifying and understanding the needs of the core and non-core audiences for your agency's site. The audience groups and their needs should be regularly reassessed, since both may change over time. Feedback from well-chosen focus groups using your site can be invaluable.

5.2 Understanding the environment

5.2.1 Archives

Archives are not simply records of documents that are not longer used. Archiving is on-going record management that will safeguard versions of electronic documents against

loss, interference or degradation.

Web documents are part of the public record and subject to the requirements of the Archives Act 1957.

Recommendations

Agencies must properly manage records of what was publicly available on their sites at any given time and which may influence the actions of people. The archive will also preserve the context in which those documents were made available. Web documents that are part of the public record must be disposed of only with the authorisation of the Chief Archivist (Archives New Zealand).

Resources

Archives New Zealand can provide advice for agencies on archiving.

Refer to their *Recordkeeping Framework*, *Electronic Records Policy* and *Advisory Notice NZAN 2*.

5.2.2 Crown copyright

The Policy Framework for New Zealand Government-held Information (1997) provides:

> *"Copyright: Information created by departments is subject to Crown copyright but where wide dissemination is desirable, the Crown should permit use of its copyrights subject to acknowledgement of source."*

Requirement

You must make it clear that material on your agency's websites is Crown copyright. Make it equally clear where it is not. Make it easy for people to request permission to use Crown copyright material by providing contact details.

You must provide a copyright statement. For example:

> *© Crown copyright [Year of publication to current year, e.g. 1997-99]*
>
> *Material featured on this site is subject to Crown copyright protection unless otherwise indicated. The Crown copyright protected material may be reproduced free of charge in any format or media without requiring specific permission. This is subject to the material being reproduced accurately and not being used a misleading context. Where the material is being published or issued to others, the source and copyright status must be acknowledged.*
>
> *The permission to reproduce Crown copyright protected material does not extend to any material on this site that is identified as being the copyright of a third party. Authorisation to reproduce such material must be obtained from the copyright holders concerned.*

Provide a link to at the end of the copyright statement to any additional information relating to copyright licences or terms covering the reproduction of material.

5.2.3 Other copyright

In the electronic world, and especially in the online world, copying material from one source for reuse in another has become routine. These Guidelines use sections copied from other New Zealand government documents. It is an entirely different matter if the material is not Crown copyright.

Your organisation needs to be aware of the ease and implications of infringing the copyrights of others. What begins casually - copying a picture from a website to dress-up a presentation - can just as casually end up in one of your organisation's core documents publicly available on your website.

Not all copyright material is visible. Scripts and programming code can just as easily be copied and used on your website. The same principles apply.

Requirement

Your agency must

- have policies and procedures that are understood throughout the organisation to protect the copyrights of others
- have a clearly understood policy for getting written licence from copyright holders and keeping a record of the response
- be clear when commissioning reports or graphic design work, where copyright rests – with the Crown or with the authors
- make copyright acknowledgements clear and placed close to the material being used. This is as much for the protection of your organisation, as for the interests of the copyright owner.

5.2.4 Content disclaimers

Public sector websites should not generally disclaim content: agencies should keep material on their website accurate and up to date. Some material will inevitably be kept on websites after it has been superseded or is no longer current. Always show clearly when the material 'expired' and provide a link to what has replaced it.

There may be cases where it is appropriate to disclaim content (depending on the source of the material, its likely use and the reliance people might place on it), but agencies should assess these case by case. For example, where material on a government website originated outside government, the following may be appropriate:

The following information [specific document etc.] is provided for convenience as part of the service we offer at this website. However, the [organisation name] cannot accept any liability for its accuracy or content. Visitors who rely on this information do so at their own risk.

Websites should certainly not carry disclaimers where the agency's printed content does not.

A link to any content disclaimer should be available on every page covered by the notice.

A suitable disclaimer for links to information on non-government websites might read:

The [organisation name] is not responsible for the contents or reliability of the linked websites and does not necessarily endorse the views expressed within them. Listing shall not be taken as endorsement of any kind. We cannot guarantee that these links will work all of the time and we have no control over availability of the linked pages

Place this notice as an intermediate page rather than as a 'pop-up' window, which may disorient some people.

5.2.5 Defamation

There is no definition of defamation in statute. Case law has it that defamatory material will

- be false
- tend to lower a person in the estimation of right-thinking people
- be without justification, calculated to injure a person's reputation.

Anything likely to be defamatory should not survive your organisation's normal content development process. Talk to your legal advisors early on if in doubt.

Content provided without the checks that are part of a normal publishing process, particularly through online discussion forums, might be more difficult to monitor. Moderating discussion forums is recommended.

Make sure content providers are aware of the risks of defamation and know what to do when doubt arises.

Requirements

Do not publish anything defamatory. It does not matter whether a public servant or someone else wrote it, it is still defamatory. Immediately remove any content likely to be defamatory from your website and talk to your legal advisors.

Take legal advice before publishing material covered by Parliamentary privilege.

Resources

Defamation Act 1992

5.2.6 Māori content

Agency website content in and for Māori should be consistent with the agency's Māori language policy (see web strategies section) and the Crown's commitment to the Treaty of Waitangi. Content in English should have the same status as content in Māori.

Recommendations

Options for agencies include providing:

- agency names in both English and Māori
- major navigation labels in both English and Māori
- key documents in both English and Māori

Resources

The Government's Māori Language Strategy is set out in Te Tūāoma – The Māori Language: The steps that have been taken [PDF, 1.3MB]

Mātātupu: Māori Language Policies and Plans: Guidelines to Assist Public Service Departments [PDF, 500 KB]

Macronisation of Web Content report and see section 6.3.7 of these Guidelines.

5.3 Managing content

Typically content will flow from all sections of your organisation to your website.

Once a year the senior management team will want the annual report published. Research or policy teams will have reports they want disseminated every so often. There will be a newsletter or two regularly from the communications team and some vacancies to post from human resources. Projects come and go and most want to consult with stakeholders beyond your organisation through the website.

For some users of your website, this matters very little. They have never visited your site before and just want to know the street address of the department. The most neglected, mundane content on your site can be the most useful for some people.

5.3.1 Information management

To deliver e-government effectively, online publishing has to be fully integrated into your organisation's information processes and fostered in your organisation's culture.

Integration begins well before you start writing.

Think in terms of collections of information rather than documents. All information needs a custodian not simply an owner. Not all information behaves like a single document. For example, list of branch contact information may have one custodian or one for each branch.

The custodian should consider the whole life-cycle of the collection, identifying who will take care of the information both during and after publication. People in your organisation need to know which roles or workgroups take care of which piece of information.

Over time there will be several versions of an information collection published. Each

version will typically be available in several formats. The custodian should always make changes to the source document, and lock and store it as an official record.

For each information collection consider the best way to let people know what has changed between revisions and when. For example, dating documents, using version numbers or a log of changes at the beginning of a document.

Resources

Policy Framework for Government-held Information

Electronic Records Policy (Archives New Zealand)

5.3.2 Publishing online

Electronic publishing means producing and distributing material electronically. Usually it also means making this material available online, typically on a publicly available website.

While the e-government mission is for the Internet to be the dominant means of enabling ready access to government information, electronic publishing and traditional print-based publishing are likely to sit side by side in the foreseeable future. The challenge for government organisations, often publishers of large volumes of information, is to integrate print and online publishing to best serve the public.

Electronic publishing allows material to be more easily (and cheaply) updated, but it is often easier for people to tell from printed material which edition they are looking at and when it was published. Publishing material online makes it available any time, anywhere. The onus is on custodians to keep all online material up to date all the time. Information on websites disseminates rapidly, along with any errors that creep through.

Electronic distribution, either by subscription or by making material freely available on a website, is cheap for the publisher but can be expensive for the user, especially if the material is written in a way that makes it is unusable on screen and it has to be printed. And electronic distribution itself may not be enough if the people you are publishing the information for can't or don't want to receive it electronically.

Recommendations

Have a clear understanding of how your organisation publishes information, both online and in print. Have procedures for correcting errors so that people using the information are clear when incorrect information has been corrected and what has changed.

5.3.3 Information architecture

Information architecture can be thought of as the arrangement and inter-relationships of collections of information according to some defined principles. A principle might be "policy documents will be kept with the related service area of the site, rather than collected together."

There are many ways to express information architectures. Diagrams and short descriptions or definitions are often used. However it is expressed, the information architecture becomes a blueprint for your organisation's site that is ultimately expressed in its navigation and visual design.

A well-designed architecture should outlast changes to the visual design, and accommodate new material easily, even when the organisation itself changes.

Changing the information architecture of a site typically may mean moving information from one URL to another. It should not be undertaken lightly. See section 6.3.5 of these Guidelines.

Recommendations

Change the information architecture of your organisation's site only if the current architecture has no future. Consult widely within your organisation about any new information architecture and test your assumptions with users. Consider the consequences of major changes and ensure that URLs are preserved whenever possible.

5.3.4 Structuring documents

Before you start writing, make a structure for the information that will work well online (or rather on-screen). Each part of the document should be more or less self-contained without being too repetitive. Although parts of the document may be linked together online much like the pages of a book, you cannot assume people will read the 'book' from cover to cover. Nor can you assume people will always start at the beginning. Search sites often take people to what looks like the middle of a 'document'.

Use plenty of headings. Headings that read like headlines often work well on screen, but it is a hard craft to master. Headlines are more than just labels. They are signposts that should tell you what you will find before you get there.

If you are using a word processor, always use heading styles rather than simply change the appearance of words to make them look like headings. Use only a few basic styles. When pasting material from other documents, leave their styles behind (paste unformatted) and apply your own. This will save time in the long run.

Use outline views, if your word processor has them. They only work if you have used styles and will help you organise the collection hierarchically.

Recommendations

Always start with structure, not content. Establish the structure with styles or templates so that the structure has meaning, much as a set of slides can convey the meaning of a presentation.

5.3.5 On-screen writing

Write for the screen not paper. Generally, what works well on screen, works well in print; but not the other way around. A common rule of thumb is to use fewer than half the number of words appropriate for a printed document.

Use plain and inclusive language, free from jargon. Consider linking to a glossary of terms and abbreviations, rather than explaining them each time.

Provide an "executive summary" at the beginning of each webpage. Executive summaries have been a part of printed documents for a long time. Online we are all "executives". Each web page we visit offers numerous choices. Each choice offers more possibilities, demanding more decisions and more of our time.

Keep sentences and paragraphs brief.

Recommendations

Consider using a larger font while you are writing. (If you are using styles, it is easy to change back to the corporate look.) A larger font gives you a better idea of how much people see online before they have to scroll. Aim to get the main points across on the first screen, putting detail further down or somewhere else entirely. Headings help here.

Ask reviewers to read your work on screen rather than print it out. They'll quickly tell you if it doesn't work on screen (and you'll save some trees too).

Don't rely solely on computers to check your spelling and grammar.

5.4 Content requirements

Different types of site have different requirements for content. The focus of this section is on single-agency public websites. Sites for agency business units or portal sites for many agencies will have different requirements.

Content for all types of government site must be trustworthy. It should always be clear which organisation is accountable for the site and which business units or other agencies are responsible for which parts of the site.

5.4.1 Required homepage elements

Homepages have several important jobs to do. They let you know

- *where* you are
- *why* you are there
- *how* you can move around.

Homepages for single-agency or business unit sites *must* contain

- the name and logo of the organisation (including any parent organisation)
- a statement of the site's purpose
- navigation links to the main parts of the site.

Portal homepages should reflect the identity of the site, rather than the lead or host organisation. It should, none the less, be easy for users to identify the organisations participating in the portal and the organisation responsible for the site itself.

Homepages for single-agency or business unit sites *must* link to

- **govt.nz,** the government portal
- "Search" – the site search facility
- "What's New" - highlighting new material on the site
- "About Us" - including statement of purpose, organisational aims and objectives, organisation structure, accountability documents if appropriate
- "Contact Us" - including phone and fax numbers and physical, postal and email addresses for the main and any branch offices
- "Feedback" - letting people say good things as well as bad
- a complaints procedure
- a disclaimer, if an agency must disclaim content
- privacy and security statements
- a copyright statement

An "About this site" section may be used to cover several of these requirements. Care should be taken to make sure people are aware of any disclaimers when they are using the disclaimed content.

Portal or multi-agency sites must make clear who people should contact about which parts of the site.

5.4.2 Required site elements

Single-agency sites *must* provide:

- List of Ministers relevant to the agency and their responsibilities and a link to their biography (on www.parliament.govt.nz)
- Membership and terms of reference of any advisory groups
- Responsibilities, aims and objectives of divisions or branches within an organisation
- Any reports your agency is required by statute to produce.
- Consultation documents (which must be linked from **govt.nz**)
- Press notices from the organisation and links to press notices from the Minister where they set the context for a specific release of information
- Electronic versions of forms published by the organisation and guidance for their completion
- Contact details for specific policy or services
- Recruitment policies, procedures and information

Single-agency sites *should* provide:

- Legislation or regulations for which the organisation has the lead responsibility, or a link to a site that contains the legislation or regulation in full
- Agency purchase agreements and similar defining documents
- Research reports and statistical information
- Links to other primary sources of information relevant to the organisation's functions

5.4.3 General email addresses

It is a requirement of the Internet Engineering Task Force (IETF) that Internet mail systems provide a generic postmaster@domainname email address and that a person is responsible for handling messages to that mailbox. Any domain supporting email must comply with this requirement. People typically report problems, including complaints about relayed 'spam' messages, using the postmaster address.

The following general email addresses should also be provided:

- info@domainname
- webmaster@domainname (or sitemanager@domainname)
- abuse@domainname
- privacy@domainname
- complaints@domainname

Smaller organisations may choose to redirect these to one mailbox. However, having these general email addresses available allows people to contact the organisation easily, without having to find specific addresses on your agency website. It is essential that someone is responsible for handling messages to the destination mailboxes.

Equivalent physical and postal addresses should also be provided on the website.

5.4.4 Role-based mail addresses

Always use role-based, rather than personal, email addresses on websites. Personnel changes should not mean changes have to be made to web documents. Agencies should ensure that mail to role-based addresses is always handled by people assigned to that role.

5.4.5 Links to other sites

For many commercial organisations, it is desirable to keep people on their site and not distract a potential customer with links to other sites. Government sites, however, should as a matter of course link together where this would be helpful for people. Linking sites in this way is a useful first step toward a more integrated view of online government services. It may also avoid having information in more than one place and the consequent problems of maintenance and conflicting advice.

Requirements

- Link to relevant sites in other agencies or non-government sites if appropriate.
- Request permission to make links to other sites
- Be open to requests of you to link to other government websites.
- Link to the nearest stable URL (e.g. http://domainname/news/2002/October/, not just to the site home page.
- Regularly check external links to ensure they are still valid. Fix broken links rapidly.
- Make the destination of the link clear, especially when the site is not a New Zealand government website.
- Make clear that a link to a commercial site is not intended as an endorsement.
- Make clear that linked information is not the responsibility of referring agency, especially when the information is provided by a non-government organisation.
- Identify where links *to* your website could usefully be made from other websites.
- Notify any changes you make to URLs that affect links you have requested to your site.

5.4.6 Advertising and promotion

Government sites must not carry paid advertising, including editorial advertising ("advertorial"), that is unrelated to an agency's core business. Where an agency has significant involvement a commercial event (such as a conference), it may be appropriate to promote the event and link to a commercial website, where the user can get more information or register. Agencies may recover costs, but no more, promoting the event.

An agency may, however, promote its own products or services, including those provided in part by other parties or business partners.

Care must be taken to avoid any implied endorsement of products or services, unless reporting on an open formal accreditation process. Links to commercial organisations should only be provided if they are relevant to the content of your agency's website and the interests of the user. Any such links should be factual and make clear that no endorsement should be inferred.

Resources

See also section 5.2.4 of these Guidelines.

6 Delivering content

6.1 About this section

This section covers both the standards-based approach to delivering government website content in an accessible way and how to apply those standards in practice to deliver equitably.

Business and website managers, communications and IT support teams, and vendors should read this section.

6.2 Web content accessibility

Public sector organisations are not like those in the private sector. Each has a monopoly in the service area it administers. As such public sector organisations must deliver services in a way that is accessible to the people it serves.

Digital delivery has the potential for significantly greater accessibility to government information and services. Visually impaired people, for example, who have until recently been poorly served by print and proprietary electronic media can now read web content as Braille or hear it with voice browsers.

There is some truth in the saying that "100% of people use the browser they prefer." Visually impaired people may prefer a voice browser, people with older computers may have older browsers, some may have up-to-date browsers but prefer a black and white screen, and others may prefer not to buy a computer that can run the latest software.

In other words public sector organisations must design websites in a way that is flexible and adaptable, rather than for one or two leading brand browsers. This is all the more so now that there are more browsers, alternative platforms and different devices to choose from. This trend is likely to continue.

Designing adaptable sites supports the principle of equity. It also supports the principle of economy. Adaptable sites are simpler to maintain, less likely to conflict with newly introduced browsers, require less support from site managers when users have trouble using your site, and are easier and therefore less expensive to build in the first place.

Recommendation

Design sites to be adaptable from the outset. Do not design specifically for one type of browser. Consider the needs of people with impairments from the beginning and throughout the design process.

6.3 A standards-based approach

6.3.1 Role of the World Wide Web Consortium (W3C)

The World Wide Web Consortium (W3C) sets Internet standards by making Recommendations. W3C recommendations are reviewed to ensure that accessibility is considered at an early design phase. The recommendations are developed in an open process of consensus building.

Use of W3C recommendations provides government organisations with a stable, common point of reference. It also supports the development of the W3C recommendations, on which much of the potential of the Internet and e-government relies.

The recommendations of the W3C aim to "lead the web to its full potential". While paying close attention to the consortium's recommendations, the principles of equitable access and economy must also be applied. The Custodian of these Guidelines will regularly review the recommendations of the W3C and their impact on equitable and economic access to public sector websites for future revisions.

6.3.2 Web Content Accessibility Guidelines 1.0

Most of the recommendations of the W3C are technical. The W3C Web Content Accessibility Guidelines 1.0 or WAI (Web Accessibility Initiative) guidelines, as they are sometimes called, are different.

They recognise that what matters is that people are not impeded in their use of content on the web. Each of the WAI guidelines (there are 14 altogether) has a number of checkpoints. Each checkpoint has a priority level: 1, 2 or 3.

Requirements

Content on New Zealand government websites must be developed and presented in accordance with the WAI guidelines. Content developers

- *must* satisfy priority 1 checkpoints
- *should* satisfy priority 2 checkpoints
- *may* satisfy priority 3 checkpoints

of the Web Content Accessibility Guidelines 1.0.

Resources

WAI Web Content Accessibility Guidelines 1.0: http://www.w3.org/TR/WCAG10/

Web Accessibility In Mind (WebAIM) is a useful collection of resources about online accessibility: http://www.webaim.org/

Bobby (http://www.cast.org/bobby/) is one of several tools that can help you assess your

site's accessibility.

Viewing your site in a text-only browser like Lynx may also highlight accessibility issues for you. Impaired users are best able to tell you where the difficulties may lie. Lynx-me shows web documents as Lynx 2.7.1 sees them: http://ugweb.cs.ualberta.ca/~gerald/lynx-me.cgi?url=URL

6.3.3 Web document mark-up

Hypertext Mark-up Language (HTML) is the lingua franca of the web. Early browsers only loosely adopted earlier versions of the W3C HTML recommendations, notably version 3.2. This led the W3C to revise the recommendation and encourage browser manufacturers to follow more closely the new specification, version 4.01.

HTML 4.01 reinstated HTML as primarily a structural document mark-up language based on SGML, by "deprecating" some display mark-up tags (notably the <font> tag) and encouraging the use of style sheets for presentation.

HTML 4.01 is likely to be the last revision of the HTML recommendation based on SGML. Future recommendations for structural mark-up for the web will be based on XML, providing a framework for the language to extend.

XHTML 1.0 is the first such recommendation based on XML. Some recent browsers support XML-based mark-up like XHTML, as well as the SGML-based HTML. It is likely over time that XML browsers will be the norm, but this is not the case now.

It is possible to exploit the leniency of older browsers in their interpretation of the HTML specification to deliver XHTML 1.0 as mediatype text/html and have it rendered as if the document were HTML. This approach is not recommended currently by these guidelines as discussed in the Appendix.

Requirements

All content available on government websites must be provided as valid HTML 4.01. Other formats can be provided to supplement the HTML version.

Recommendations

Use HTML primarily to mark-up the document's structure, not merely to control the visual appearance of the document.

Avoid the use of tags that are deprecated in the HTML 4.01 specification. These are <applet>, <basefont>, , <dir>, <font>, <isindex>, <menu>, <s>, <strike>, <u>. Do not use proprietary tags like <layer> and <comment>.

Especially when setting up new templates or document conversion/management systems, validate your code. Valid code is more likely to render correctly in browsers of all kinds.

Valid code is not a guarantee of problem-free rendering in all browser types. Check how adaptable your code is in different browsers on different platforms and various devices.

Resources

HTML 4.01 specification: http://www.w3.org/TR/html401/

W3C HTML validator: http://validator.w3.org/

XHTML 1.0 specification: http://www.w3.org/TR/xhtml1/

6.3.4 Style sheets

Style sheets are text files that some browsers can interpret to change the way web documents are rendered. The W3C recommendation, Cascading Style Sheets (CSS), has two levels. CSS1 is more widely supported by mainstream browsers than CSS2, which extended the standard.

Sites designed with CSS are generally more adaptable, and therefore more accessible. People can ignore your style sheet in favour of their own, if they need to. They are also adaptable in the sense that a single change to a style sheet can affect documents site-wide.

Support for style sheets is still patchy, even for more recent browsers and will have no effect on non-visual browsers (level 1). It is therefore important that style sheets are used in conjunction with proper structural mark-up in HTML and are used conservatively. In other words make sure text is properly marked up to signify document semantics (headings, lists, emphasis, etc) rather than use styles to change appearance alone.

Recommendation

Use style sheets to define the visual appearance of pages. Do not rely on custom styles to denote document structure. Use HTML structural tags (<h1> to <h6>, <ol>, <ul> etc) instead, so that people are not disadvantaged using non-visual browsers or browsers that ignore style sheets.

Requirements

Use selectors, properties and values that are defined in CSS1 only. Avoid elements that are poorly supported in browsers. Test in a variety of browsers.

Resources

Cascading Style Sheets, Level 1 (http://www.w3.org/TR/REC-CSS1)

CSS Validator: http://jigsaw.w3.org/css-validator/validator-uri.html

6.3.5 Uniform Resource Locators (URLs)

The similarities and differences between the filing system of a desktop PC and a web server's URLs have probably caused more problems than any other since the web became an essential tool of government, business and communities alike.

Web servers are designed to separate the file structure of their operating system from the URL scheme in the domain they serve. In other words once you have assigned a URL to a document, there is no reason to change it, provided you have chosen it well.

For example, the Web Guidelines are available, at a discovery level, from the permanent URL http://www.e-government.govt.nz/web-guidelines/. The resource available from this location is currently a document called index.asp. In time it might become index.php or index.xml. The file itself might be moved in the operating system file structure, perhaps because a future content management system stores documents in a /docs/ directory.

When it does, the URL will not change provided the web server is properly configured and URL requests are directed to the correct file, wherever it might be. This is best done by remapping URLs to files, but can also be done by leaving a file in the original location and redirecting the request to the true location of the document assigned to this URL.

Recommendations

You must not change the URL of discovery-level documents. Discovery-level documents include 'home pages', indexes for collections of documents, like media releases or reports, and the delivery point of online services. URLs should be carefully chosen, succinct and meaningful. They should not, where possible, refer to the specific technology used to deliver the information, since this is likely to change eventually.

Authors should always refer to the nearest stable discovery-level URL, rather than using a 'deep' link that may change.

Designing URLs

Discovery-level URLs should reflect a general hierarchy and grouping of documents relevant to the agency's business function. For example, http://servername/services/info/ or http://servername/policy/reports/2002/ or http://servername/contacts/auckland/.

File naming

A few simple rules for file names (and URLs) will help web teams manage links within your sites:

- Use lowercase a-z only, rather than mixed case
- Use a hyphen, rather than a space or an underscore, as the only form of punctuation. Underscores get lost in underlining.
- Keep names short (no more than 50 characters) yet descriptive.
- Use .html in preference to .htm, but in any case be consistent throughout the site.

6.3.6 Metadata

New Zealand Government Locator Service (NZGLS) metadata standard is the official New Zealand Government standard for creating discovery-level metadata. The metadata

is held in a central repository called Metalogue, and may also be stored in agency databases and in web documents.

Metalogue stores discovery-level metadata. In other words, it does not describe every document on government web sites, but rather describes collections of documents (like a collection of media releases or consultation documents). It also stores metadata describing resources that are not available online, like printed pamphlets.

Although the NZGLS standard describes ways to express NZGLS metadata in HTML metatags, there is no requirement for agencies to add NZGLS metatag blocks to web pages. If it is desirable for your agency to store metadata, either in web documents or a separate searchable database, the NZGLS standard *should* be used. If the standard does not meet your specific needs, you *may* add elements to extend the scope of the metadata.

Metadata stored in web documents must be identical, element for element, with metadata stored in Metalogue for a given URL. It is therefore important that your agency establish information management processes to keep the two sources of metadata in synch.

Recommendations

Use the NZGLS standard for metatag blocks where there is a business need to store metadata in web documents. Add metatags such as keywords where this might be useful.

Resources

NZGLS Metadata standard: http://www.e-government.govt.nz/nzgls/standard/

6.3.7 Unicode

Te Taura Whiri i te Reo Māori (Māori Language Commission) recommends use of the macron to mark long Māori vowels. The reliable rendering of the macronised Māori vowels in browsers has been problematic for some time. The problem stems from a combination of character encoding, operating system support, the availability of fonts and browser behaviour.

Unicode is a standard that allows characters from a wide variety of languages to be encoded electronically, including the Māori macronised vowels. Unicode is now more widely supported by operating systems, fonts and browsers than was the case earlier. Its use is recommended in these Guidelines.

To reliably render Unicode-encoded documents in browsers, web documents have to correctly specify the encoding that the browser should use to interpret the steam of bytes it receives after the document is requested. In HTML this is done with the “charset” parameter in the content-type declaration at the beginning of the document, e.g.

<META http-equiv="Content-Type" content="text/html; charset=UTF-8">

Most browsers are designed to be lenient, and will attempt to render a document even if the declaration is missing. Often this will mean empty or unintelligible characters appearing in the user’s browser, especially when the characters do not belong to the earlier, much smaller character sets, like ACSII and ISO-8859-1, which some browsers may assume when the intended character set is not declared.

UTF-8 is an encoding that that references a subset of the full Unicode character set that must be specified in the content-type declaration. UTF-8 encodes the Māori macronised vowels.

A document with Māori words that is declared as charset=UTF-8 can be prepared in one of two ways:

- Using a font in a UTF-8 compliant authoring tool, which makes the encoded characters visible, so non-technical authors can see the macron. Authors should not use altered fonts that substitute umlauted vowels for macronised vowels.
- Using HTML numerical character references (NCRs), which allow authors to use authoring tools that are not UTF-8-compliant. NCRs are sequences of plain ASCII characters that together encode a single UTF-8 character.

The numerical character references for the Māori long vowels are:

- Ā Ā
- ā ā
- Ē Ē
- ē ē
- Ī Ī
- ī ī
- Ō Ō
- ō ō
- Ū Ū
- ū ū

Note: the trailing ";" is required.

Requirements

Encode Māori long vowels using Unicode and declare UTF-8 in the charset parameter of the content-type declaration.

Resources

Macronisation of Web Content report

Unicode

6.4 Delivery in practice

Adopting common Internet standards makes content more accessible, but standards do not cover everything. Providing content equitably to New Zealanders mean taking account of the full range of conditions in which people access that content.

Fast connections to the Internet are not yet the norm. Therefore sites must be designed to be fair and reasonable to those who cannot quickly download documents. It should be remembered that for many people in rural areas, large web pages time-out and remain completely inaccessible. Many people access the Internet in public access points like libraries, colleges and Internet cafes. They may not so easily be able to save or print information. Therefore it is fair and reasonable to make information easier to read and digest on screen. When people choose to print information, be fair and reasonable by providing a print-friendly version that doesn't needlessly consume ink in banners and backgrounds.

6.4.1 Web document size

It is neither fair nor reasonable to have to wait long for a large web document to load before you can assess whether it is relevant or useful. Load time depends on many factors - server response, connection quality, modem speed, caching, PC specification and the efficiency of the browser – factors that are well beyond the control of content providers.

Document size, however, can be controlled. The size of a web document is the combined file size of the HTML document, any external script files or server-side includes, and images.

In ideal conditions, a 55KB homepage (including graphics) will take 46 seconds at 9.6kbps; 30 seconds at 14.4kbps; 15 seconds at 28.8kbps and 8 seconds at 56kbps. Many rural users in New Zealand are currently only able to connect at the equivalent of 9.6kbps or less. You should not assume that dependent files, like images, have been cached.

Requirements

- Web documents primarily concerned with navigation, particularly homepages, should not exceed 55KB.
- Web documents primarily delivering content should not exceed 100KB.
- Web documents provided for special purposes, such as printing a complete report, can be up to 300KB, but the link should indicate document size and the purpose in providing it.

6.4.2 Special-purpose documents

HTML documents are not always suitable for printing, calculation or editing. Web documents may link to documents in alternative formats that meet specific needs like these.

Choose formats that are widely accessible, such as RTF (editing), CSV (calculation) or PDF (printing) in preference to closed proprietary formats. Present links to the alternative formats in such a way that users are aware that the information is presented primarily in HTML.

Requirements

Make it clear that other formats are alternatives to the HTML. Show the format and file size alongside the link to the alternative formats, e.g. PDF [250KB]. Compress large files or collections of smaller files, and provide a link to a suitable decompression utility. You should use the Zip 2.3 format.

6.4.3 Code design

There are any number of ways that web documents can be coded within the scope of the W3C recommendation. Poorly coded documents may affect the overall integrity of the site, because they are difficult to keep consistent or difficult to archive. Some code designs make documents more adaptable and therefore more equitably accessed than others. Some designs encourage trust in the organisation and the information it provides. Some are more economical to create and maintain.

This section provides requirements and recommendations for web document code design that support the principles of equity, integrity, trust and economy.

Coding correctly

Most browsers are designed to be lenient. They can display web documents that are not coded to the HTML specification. This may not always be the case. For a web document to be accessible as an archival record of what government made publicly available on the web, documents must as a minimum be valid HTML. Careful consistent document coding will make them easier to maintain in the short term.

Document type declaration

A document type declaration says how the document tags are to be interpreted. It does this by referring to a document type definition (DTD) and may point to where the DTD can be found. The declaration may be important for future retrieval of archived documents. It can easily be added to global templates for web sites.

Use the ‘transitional’ HTML DTD unless all deprecated HTML 4.01 tags have been avoided, e.g.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"

"http://www.w3.org/TR/html4/loose.dtd">

Document title

Provide a document title in the <head> element. The meaning of the title, and therefore the content of the document, should be clear out of context. For example a document listing contact details for the Department of Public Administration, should be titled "Contacts - Department of Public Administration" rather than just "Contacts". Keep the same syntax consistently throughout the site.

Keep titles brief: no more than 60 characters, but preferably around 30. Overlong titles are truncated in browsers and make for unwieldy bookmarks.

Correct tagging

Use elements as they were intended. Mark up the structure of the document, rather than just alter the appearance of text. Close elements properly. Write element attributes in a consistent order.

Correct tagging will save time and effort in the long run.

Templates and code layout

Use templates to apply common document elements, like the header and footer. Lay out tags and content consistently, using HTML Tidy if need be. Consistency makes documents easier to maintain.

Commenting

Commenting helps those maintaining web documents. You must not use commenting to credit individuals or other companies. Comments should be few and short, adding little to the size of the web document.

Metatagging

Metatagging keywords and document descriptions has less relevance now than some time ago. Internet search sites have largely abandoned metatags as a way of ranking relevance because of widespread abuse. However, search engines within your site may still use metatags. Keywords in particular can be used as a mini thesaurus, providing alternative terms to broaden searches. For example, listing "e-government, e government, egovernment" or "Maori, Māori, Māori, Maaori" may help find the document, regardless of how a person uses the search term.

6.4.4 Navigation

Home pages

Simply put, websites are collections of web documents, associated with a domain, that are interlinked in such as way that any part of the collection can be reached by following a series of links starting from the home page.

The home page clearly plays a crucial role in making the web site what it is. It is the

document that is served when, without any knowledge of the structure or content of a website, an initial request is made of the web server, usually at http://www.domainname/.

The home page must show the main parts of collection, how to reach them and why the collection is there in the first place. Home pages are often called on to serve other purposes (like showing important news stories) because they play such a central role, but typically the home page should have little content of its own.

Typically documents linked from the homepage will have more content and fewer links, although for portal sites the opposite may be true. Documents linked from the homepage will usually have a common set of navigation links repeated on each page.

Requirements

- The home page must be served when http://www.hostname/ is requested. The request should not depend on a file type being specified (as in http://www.hostname/index.html).
- The main sections of the site should be linked directly from the homepage, therefore homepages must never be merely 'splash' screens.
- Every document must link to the homepage. Making the organisation logo a link to the homepage is the usual way.
- The home page must link to **govt.nz** - the New Zealand government web portal at www.govt.nz. Instructions for linking and logos are available from [LINK].

Frames

It is tempting to contain common navigation links in separate frames, which need only be downloaded once. There are several reasons why frames must not be used.

Well-designed navigation should not greatly increase the size of a document. If you are considering frames to reduce download time, you should probably be using more economic ways to do the same thing.

Frames are containers, not documents. From both an historical and a legal point of view it is important that a URL refer to a web document, complete in and of itself, rather than a container for web documents that may no longer exist.

Putting content and navigation in separate documents is the antithesis of what a web document should be. Unless the frameset document travels with the navigation document and the frameset and navigation documents travel with the content document, in the long term no one will have a complete picture of what was presented or why. In the short term, frames make it difficult for people to say where a document is by referring to an easily identifiable URL.

Requirement

Frames must not be used on publicly available government websites.

Common navigation elements

Most web documents start with a block of global navigation that links to the site home page and to the main sections of the site. This block may also link to important pages that describe the purpose of the site, who to contact in the organisation and a search page.

There is then a block of navigation specific to the section of the site. Following this is the content itself (sometimes mixed with navigation).

Finally there is a block of general navigation linking to pages that describe privacy and security, contact information, other related sites and the site's home page.

Not all sites are like this, but most are. Various techniques are used to lay these elements out for as an aid for visual users of mainstream browsers, such as placing the links on the left and the content on the right in a table. Similar consideration should be given users of screen readers and Braillers or users of browsers (on hand-held devices) that ignore tables so that the links and content are presented in a sensible order.

Designing accessible navigation

Traffic lights are a tool of navigation that everyone has to use in their everyday life. For pedestrians with sight, there are lights. For pedestrians that can hear but not see, there are sounds. For pedestrians that can neither see nor hear, there is a vibrating pin below the button you press when you want to cross. In other words traffic lights adapt to the needs of a variety of users.

The web was designed to be adaptable too, but design for the web often overlooks this.

Accessible navigation design should begin with plain text. Text is the most efficient way of creating navigation labels. As text, a word like "Contacts" takes 8 bytes. As an image it will be at least 50 times as large and the text will have to be provided in any case, as alt text.

Text is accessible. Text can be read or spoken. Properly designed, users with poor vision or motor control can made it bigger or change its colour. You can't do that with an image. Underlined text, usually coloured blue, is universally recognised by visual users as a link.

Javascript menus can obscure the destination of a link, be ignored by users (that can't or don't want to run scripts) or blocked by firewalls, be difficult to use if you have trouble controlling a mouse, add considerably to the size of a document and lead occasionally to fatal errors in older browsers. Text-based navigation *must* be provided as an alternative to the javascript menu. Careful assessment of the needs of users and the benefits of javascript should be made before adopting this approach. Similar considerations apply to navigation that relies on plug-ins.

Adding accessibility features to global templates is not onerous.

One kind of image-based link aids accessibility for non-visual users and should be added to the beginning of every web document. A single-pixel 'invisible' image that links to an anchor at the start of the main content of the page. Visual users don't see it, but non-visual users hear it at the start of the page so they can avoid hearing the global navigation block yet again.

Navigation blocks are usually lists of links. It is important that the list is properly punctuated. The WAI Accessibility Guidelines recommend putting a printing character like a " | " between adjacent links. This can help users of older screen readers, as well as people with motor impairments. A tab index for link lists can also help people who have difficulty controlling a mouse to tab through to the link they want in a predictable order.

Image maps

Image map navigation should only be used when the spatial relationship between parts of the image are important in determining the destination of the image map links, for example in a map of New Zealand divided into regions. A text alternative should also be provided. The image map should be client-side, unless the areas are complex non-geometric shapes.

Access keys

Access keys are potential useful for people who have difficulty using a mouse. They are less widely used than they might be because each site has a different set that the user must learn. This is the recommended allocation for government websites:

0 list of access keys

1 home

2 site map

3 search

4 to 8 agency defined

9 contact us

[beginning of main content

/ go to govt.nz

Their use, which normally involves a simple change to a global template, is required on government websites.

Recommendations

Design navigation to be adaptable, accessible and economical.

6.4.5 Text

HTML is primarily a text mark-up standard. It has a rich set of text-handling features, some of which are rarely used; others abused. Properly applied, HTML can mark-up the semantics of the document (the hierarchy of headings and lists) as well as the semantics of passages (e.g. citation) and even individual words (e.g. emphasis).

A properly structured document is more likely to make sense in an increasingly wide range of browsers than one that ignores this basic aspect of HTML in favour of purely visual effect.

Type in a web document is not “set” in the same way as a printed page. While some of the rules of traditional typography can usefully be borrowed in web document design (such as making headings stand out), attempts to constrain type on the web are likely to fail or, worse still, make the document less accessible. For many people with visual impairments, the malleability of a web document makes it easier to use than traditional printed documents. Good typography for a web page is typography that is amenable to changes in font size and colour to make it more legible to people with poor vision, while retaining the visual relationships between elements.

Fonts

Fonts should be specified in style sheets rather than the deprecated <font> tag. The choice of san-serif or serif does not have a great bearing on accessibility or usability. People with a strong preference for one or the other should be able to substitute your style sheet for theirs.

Fonts should be specified as ‘families’ of alternatives in order of preference (Arial, Helvetica, sans-serif). The principal font must have in its character set glyphs for the UTF-8 encoding of the long vowels of Māori. It must also be commonly available. In practice this means Arial as a san-serif and Times New Roman as a serifed font.

If text must be in a particular font, say, for reasons of branding, use an image and provide the same as alt text.

Government agencies should not ask people to download fonts or software to view text. Apart from the inconvenience and technical know-how required to install a font, fonts are usually licensed in the same way as software – to individuals or organisations. Redistribution of a font, even one altered to incorporate macronised vowels, is not acceptable unless the copyright holder explicitly grants permission. The terms of use for the altered font should be clear to the user and you should provide fonts for different platforms.

Font size

Font size must be expressed in relative rather than absolute units. The recommended relative units em-height (em) and percentage (%).

Font colour

There should be good contrast between text colour and the background colour. Patterned backgrounds make text difficult to read, particularly if you have poor vision, and should be avoided.

White text should be used with caution because it may not print if background colours are ignored.

Font colour alone cannot be relied on to impart meaning. For example, red text for important messages may not be as prominent for a colour-blind person or someone using a black and white monitor. In this case you should reinforce the message by emphasis or a symbol like “*”.

Other font attributes

Text must be static. Blink and marquee tags are browser-specific and have no place in government web sites.

All-caps and italics should be used sparingly: neither aids legibility in big blocks. Do not s p a c e l e t t e r s for effect, especially in titles, which are indexed by search engines

Underlining should not be used for emphasis or in headings. It is too easily confused with a link.

Resources

Research on font usability can be found at
http://wsupsy.psy.twsu.edu/surl/usabilitynews/2S/font.htm

6.4.6 Images

Formats

Recommended image formats are GIF and JPEG. The Portable Network Graphic (PNG) and Scalable Vector Graphic (SVG) file formats are not yet readily supported and should not be used, except as alternatives.

Use the GIF format for images with only a few colours and with areas of solid colour. Use colours that are web-safe. Web-safe colours are the 216 colours common to the Windows and Macintosh 256-colour palette. Colours that are not web-safe will be dithered on a display set to 256 colours, which may affect legibility.

Use JPEG for images with more than 256 colours, such as ones with textures or colour gradients.

Animated GIFs are not recommended but, if used, must cycle no more than four times before stopping. Animated GIFs must not be used for logos or other core brand elements. Animated GIFs should not exceed 30k.

Size

Single images should wherever possible be under 30k. Large images should not be used on homepages. Both GIF and JPEG formats should be compressed to reduce file size without unduly affecting the quality of the image. Links to larger images should indicate the file size. A thumbnail may also be useful.

Text in images

Images should not generally be used to display text, except where a specific font or foreign language character set is required. Identical alt text should be provided, unless this can't be represented in that language.

Anti-alias large type (larger than 6pt) to improve its legibility by making its edges smoother. The converse is true of type smaller than 6pt.

Text equivalents

You must provide a text equivalent for all images. You must provide alt text for each area of an image map.

The alt attribute of the <img> tag provides a way to give a short description of the image, and must always be used. Alt text should be no longer than 100 characters. The alt text should not just be a label (e.g "E-government graph"), but aim to describe briefly (e.g. "The uptake of e-government is predicted to rise steeply over the next five years. "). The text should end with a full point and a space, so that it can be heard without blurring into the next piece of text.

The text equivalent of a purely decorative image (like a textured border) or an 'invisible' spacer image should be "" because it conveys no meaning. The text equivalent of a fancy bullet image should be "*".

Images, such as complex graphs, that cannot be described adequately in short alt text should either be described in the text of the document or separately on a page of longer image descriptions. This page can be linked using the longdesc attribute or as an adjacent text link (e.g. "Full description of image").

Other attributes

Both height and width attributes must be specified in the <img> tag. This can significantly improve the time browsers take to render the text part of a page, allowing people on slow connections to start reading the page before the images are delivered.

The hspace and vspace image attributes are depreciated in HTML4.01 in favour of stylesheet techniques for providing white space around images.

Web bug images

'Web bug' images are generally invisible images fetched from remote sites to monitor site activity. They should not be used on government sites.

6.4.7 Colour

Colours used for text, backgrounds, hyperlinks and solid-colour graphics should be from the 216-colour web-safe palette to avoid dithering on 256-colour displays. Background colours must contrast with text colours, bearing in mind the high levels of red-green colour blindness in New Zealand. Do not refer to colours by name, e.g. "The red fields are mandatory".

Resources

See http://www.lynda.com/hex.html for more discussion on web-safe colours.

6.4.8 Visual identity

For many people, the visual design of a site provides confirmation that they are dealing with an agency that may already be familiar. A logo and colour scheme that matches what they have seen in printed material, advertising in other media and signage in branch offices, is reassurance that the site is consistent with these other communication channels.

The value and values of agency and government 'brands' should be protected as carefully in electronic media as they are in print media. The visual design of sites should draw on agency documentation that sets the rules for use of core brand elements in the online world. What works at 300 dpi on paper may well not work at 72 dpi on screen.

Site content is branded content. It should support the values the brand carries. Spelling mistakes, cloudy language and out of date information commonly undermine these values in printed material. In the online world, the same applies with download time, poor navigation, inaccessible sites and badly rendered logos as additional factors to be aware of.

Layout

The web is a flexible medium. It responds best to fluid designs. Documents with fluid designs respond to the user's needs, resizing columns and rewrapping text when the size of the browser window is changed. They continue to work well visually when text is enlarged. They allow users to strip away design elements like background colours if they want to.

Some degree of control over the position of elements of web document is desirable to make them usable for visual users. Tables may be helpful to place and separate elements to the right or left of a page, but they should be used sparingly and not relied on fully, since not all browsers for some devices support tables.

Fluid design means defining element attributes (size, position, width) relatively rather than absolutely.

Requirements

- Use tables for layout only sparingly.
- Use as few columns as possible.
- Nest tables only where there is no alternative and check across a range of browsers.
- Make fixed-width table less than 535 pixels so that the page can be printed on a standard sheet of paper.

7 Exchanging information

7.1 About this section

This section covers requirements for government websites when information is exchanged online. It outlines the government's policy and implementation principles for the authentication of identity. It covers the design of forms, the use of cookies and other 'involuntary' information-gathering techniques, as well as discussion forums.

Business and website managers, implementers and vendors should read this section.

7.2 Understanding the environment

7.2.1 Privacy Act 1993

Personal information is information about an identifiable person. The collection, storage and use of personal information is covered by the Privacy Act 1993. The Act sets out 12 privacy principles that should be followed when forms are used to collect personal information. In particular:

- **Purpose:** only collect personal information if it is necessary to collect it
- **Source:** collect the information directly from the person concerned
- **Informing the user:** let people know that the information is being collected, what the purpose it in collecting it, who is collecting it and who will hold it, and the person's rights to access and correct the information. This includes providing the name and address of the agency collecting and holding the information.
- **Security:** information must be protected against loss and unauthorised use
- **Storage:** personal information should not be kept any longer than necessary
- **Reuse:** information collected for one purpose should not be used for another.

Refer directly to the Act or your agency's privacy officer for details.

Resources

Privacy Act 1993

Website of the Privacy Commissioner

Your agency's privacy officer

7.2.2 Authentication principles

In April 2001 Cabinet established policy and implementation principles for the online authentication of identity in government-to-person (G2P) transactions.

Policy principles

- **Security:** Suitable protection must be provided for information owned by both people and the Crown
- **Acceptability:** Ensuring that the proposed authentication approach is generally acceptable to potential users, taking into account the different needs of people and emerging industry standards, and avoids creating barriers
- **Protection of privacy:** Ensuring that the proposed authentication approach protects privacy appropriately
- **All-of-government approach:** Balancing public and agencies' concerns about independence with the benefits of standardisation while delivering a cost-effective solution
- **Fit for purpose:** Avoiding over-engineering, recognising that the levels of authentication required for many G2P transactions will be relatively low
- **Opt-in:** Ensuring that members of the public retain the option of authenticating their identity and carrying out transactions offline and are not disadvantaged by doing so. However, it will not be possible for an individual to conduct secure online G2P transactions without the use of the appropriate authentication process.

Implementation principles

- **User focus:** Ensuring the recommended solutions are as convenient, easy to use and non-intrusive as possible
- **Enduring solution:** Providing a solution that is enduring yet sufficiently flexible to accommodate change and a wide range of current and future transactions
- **Affordability and reliability:** Ensuring the recommended solutions are affordable and reliable for the public and government agencies
- **Technology neutrality:** Ensuring a range of technology options is considered, and as far as possible avoiding 'vendor capture'
- **Risk-based approach:** Providing an approach based on agreed trust levels that protects identity and personal information
- **Legal compliance:** The solution must comply with relevant law, including privacy and human rights law
- **Legal certainty:** Relationships between the parties should be governed in a way that provides legal certainty
- **Non-repudiation:** The issue of non-repudiation must be considered for those transactions that require it, so that the risk of transacting parties later denying having participated in a transaction is minimised
- **Functional equivalence:** Authentication requirements should be similar to those that apply to existing transactions except where the online nature of the transaction significantly changes the level of risk.

Resources

Cabinet paper on the authentication of identity

7.3 General requirements

7.3.1 Privacy

Talk to your privacy officer about any aspect of your organisation's website that may have bearing on privacy, particularly new or redesigned online forms.

Provide clearly worded privacy statements in a prominent position, particularly on relevant forms. Link to more detailed privacy codes of practice if necessary.

Resource

The OECD Privacy Policy Statement Generator, http://cs3-hq.oecd.org/scripts/pwv3/pwhome.htm helps organisations develop privacy policies and statements for display on websites.

7.3.2 Authentication

Talk to the E-government Unit about any aspect of your organisation's site that requires individuals to authentication themselves.

Resource

Cabinet paper on the authentication of identity

7.3.3 Security

Personal information including payment information (such as credit card details) must be encrypted between user and agency using Secure Sockets Layer (SSLv3) protocol as a minimum. Agencies using SSL should use common browser-trusted certificates for encryption. This means people do not have to install a certificate and avoids proliferating certificates than have to be trusted individually. Advice on PKI and the use of digital certificates should be sought from the S.E.E. Manager.

Advice on security should be sought from Government Communications Security Bureau.

Resource

Security in the Government Sector

7.4 Forms

Traditional printed forms are now available electronically on most government websites. They are either electronic replicas of the printed form (e.g. PDFs), designed to be downloaded and printed, or forms that are completed on-screen and submitted online.

7.4.1 Form design for printing

Forms that are designed to be printed must be provided as PDFs. They must also be designed to print effectively and economically on domestic printers. This may mean making some changes to the form design your department bulk prints (usually with colour).

Forms must print correctly in black and white on A4 paper. There should be no background colours or shading or blocks of colour that will be expensive for people to print from their PC.

7.4.2 Form design for online submission

Forms designed to be completed on-screen and submitted online must be provided in HTML. Properly designed, HTML forms can be used by blind people that can't complete a printed form. Therefore special care should be taken to make the form accessible.

Proper design should begin with simple arrangement of the form elements. This will help both blind and visual people alike. A two-column layout with descriptive labels to the left and fields to the right is usually all that is needed.

The <fieldset> tag should be used to group related form elements. The legend attribute of the fieldset tag must be used to caption the set.

Every descriptive label should be tagged as <label> and associated with the name of the field. The "for" attribute of the label tag is used by modern screen readers to identify a field reached by tabbing. Without this, tabbing between fields is completely disorienting.

Tab order for both visual and non-visual users should be checked carefully.

Don't rely on colour alone to indicate compulsory fields or important information. Red text can appear as a muddy green to most colour-blind people and will not stand out.

Provide help notes online.

7.4.3 Form handling

Form handling must be transactional. The user must receive confirmation, either as a web page or an email or both, that the information they have submitted has been received. If there are further steps the agency will take (e.g. replying to a question) make this clear and indicate how long each step is likely to take.

7.5 Website use

Various techniques are used to track the use of websites. All involve the exchange of information between the user's computer and the website server.

For the most part this information can only be used to directly identify an Internet connection or a computer rather than an individual. However, the privacy principles designed to protect information about an individual should be followed in the case of information about a computer that may indirectly be associated with an individual.

In particular, make sure that people are aware of any information collected (from cookies or click-stream data, for example), why the agency is collecting it and how they intend to use the information. Neither the agency nor your Internet Service Provider (ISP) should reuse the unaggregated information for any other purpose.

Cookies should not be used to track personal use of a website.

7.6 Interactive forums

Any interactive online forum should have an acceptable use policy covering style of communication, privacy concerns and an agency liability disclaimer.

7.6.1 List servers

Make it a condition of joining list serves that members do not use people's email addresses for any other purpose. Monitor this if necessary by 'seeding' the list with a mail address used for no other purpose.

7.6.2 Discussion forums

Open bulletin boards and discussion groups must be moderated to protect the agency against defamation or unlawful use of such forums.

The minimum level of moderation is to register people as members before they can contribute to the forum. Moderators may choose to monitor use of the forum regularly or vet every contribution before accepting it as a posting.

7.6.3 Chat rooms

The use of permanent online chat rooms is not generally recommended.

8 Commercial arrangements

8.1 About this section

This section provides guidelines for agencies tendering and contracting for web development and hosting services. It is not intended to be a comprehensive guide and should not be used as the only basis for requests for proposals (RFPs) or contracts. This section also covers domain name registration.

Business and website managers, and vendors should read this section.

8.2 Tendering and contracting

All tenders and opportunities NZ$50,000+ (per annum) must be notified on the Government Electronic Tenders Service (GETS) website. This is to ensure that government purchasers are given fair and equal opportunity to competitive local producers of goods and services when using public money.

Agencies are also required to post on their website brief details of contracts awarded for purchases of goods or services above a threshold of NZ$50,000 (excluding GST) and, in relation to contract awards which are the outcome of an open invitation to tender/register interest, provide the same information directly to the ISO, for posting on the ISO's GETS website; the department must also arrange with the ISO the establishment of a permanent hyperlink from the GETS website to the page on the departmental website where all published contract award information is posted.

Resources

http://www.med.govt.nz/pubs/publications-01.html#P86_3271

8.3 Major IT projects

A major IT project is a new initiative, an ongoing development or acquisition project, an operational system, or other type of IT project (including studies against existing contracts) that meets any one or more of the following criteria:

- The project is not an existing operational system and its projected total life cycle costs are NZ$15 million or more (GST inclusive). Cost included all equipment, software, contractor services, supplies, staff compensation and related staff costs, and inter/intra agency payments; or
- The project includes a projected IT capital investment totalling NZ$7 million or more (GST inclusive) in any one year; or
- Failure to deliver the project in line with the projected functionality requirements, cost, and timelines, would expose the department to significant risk of impaired operational capability, or expose the Government to significant fiscal or ownership risk; or

- The project will impact significantly on more than one department or agency; or
- The responsible Minister has requested that the project be monitored.

Resources

Guidelines for Managing and Monitoring Major IT Projects

8.4 Domain name registration

A separate policy covering domain name registration and use is currently being drafted and will be linked from these Guidelines.

8.5 Web development services

8.5.1 Minimum requirements

Tender documentation (RFIs, RFPs, etc) and final contracts must make compliance with the Web Guidelines a requirement. It may also be appropriate to explicitly specify compliance with other government policy and standards referenced in the Guidelines.

8.5.2 Responsibilities

In contracts, clearly distinguish the supplier's and the purchaser's responsibilities to:

- design
- liaise with the host
- provide content
- test and correct bugs
- maintain and update the site
- promote the site.

8.5.3 Intellectual property

In contracts, specify who owns the intellectual property for all aspects of the design (including scripts and other coding). Unless covered by an open source licence (e.g. GNU public licence), agencies should ensure intellectual property is transferred to the Crown.

8.5.4 Support

Contracts for on-going support of the website should clearly distinguish what is maintenance and what is new development requiring a separate contract. Specify services levels for the support being contracted.

8.6 Hosting services

8.6.1 Security

All government websites must comply with the Minimum Standards for Internet Security in the New Zealand Government. (Section 8, Annex A, Security in the Government Sector).

Agencies should ensure that hosted sites are covered by a comprehensive documented security policy. This should specify

- the physical and electronic security of the hosted site
- routine and emergency security procedures including reporting security threats and breaches.

Agencies should test the host's compliance with the security policy, including penetration testing.

Resources

Departmental Security Officer or the Departmental IT Security Officer should be consulted before setting up hosting arrangements.

Government security publications are available from the Government Communications Security Bureau.

8.6.2 Disaster recovery

Contracts with hosts must set out a comprehensive disaster recovery plan. The plan should cover the host's routine backup procedures and set a maximum time to recover from failures.

Agencies should ensure they keep separate backups of documents and data.

8.6.3 Connection guarantees

Contracts with hosts must specify guaranteed connectivity or uptime for the hosted site. While no downtime is important for the business of e-government, 100% connectivity can only be guaranteed if the site is mirrored using more than one server in different locations.

Hosting agreements should guarantee no less than 99.5% uptime. This is equivalent to up to 44 hours downtime per year. Contracts should specify compensation for any downtime and whether this is to be calculated annually, quarterly, monthly, etc.

8.6.4 Technical Support

Contracts should specify telephone technical support and monitoring of the site, which should be available around the clock.

8.6.5 Bandwidth

Bandwidth requirements are difficult to predict. Whatever arrangement is made with your host, make sure contracts allow you to make changes to meet demand. Specify the terms for higher or lower bandwidth requirements, including the amount of notice required and the cost involved.

8.6.6 Other requirements

Contracts should specify any other requirements necessary to support the site, such as database integration, scripting support and access to the server and server logs.

8.6.7 Web server statistics

Contract should specify that the host provide statistics for:

- Page visits (hits alone are misleading)
- Unique visitors (based on visits from unique IP addresses at lengthy intervals)
- Successful requests
- Unsuccessful requests
- Most frequently visited pages
- Least frequently visited pages
- Most common entry pages
- Top referring sites
- Search terms used

Site managers should retain server logs and ensure that statistics are available across the agency for business planning.

8.6.8 Pricing

Contracts should set out the cost of:

- Additional bandwidth
- Differential charging for international and national traffic
- Additional disk space
- Additional software
- Surcharges on quarterly as opposed to annual payments
- Maintenance of any hardware provided as part of the contract.

8.6.9 Privacy

Contracts must specify that hosts do not independently collect or reuse data collected in the course of operating the web server, including cookies, click-stream data, HTTP request header information or upstream monitoring.

9 Appendices

9.1 XHTML

While currently it is not generally recommended that agencies migrate established websites from HTML to XHTML, solutions for new or redeveloped sites may warrant migration to XHTML. Agencies considering this approach must assess the impact of this against the principles set out in these Guidelines.

Equity

Adoption of XHTML should not prevent people currently accessing your HTML site from continuing to access it, especially those using assistive technology. Although XHTML can be made more readily available to devices like PDAs, most people currently use these devices as alternative browsers. It is not currently equitable to trade one gain against the other loss.

Integrity

XHTML can be produced more readily from (XML-based) content management systems that may improve the overall integrity of the site by making it easier to update. On the other hand, poorly implemented XHTML conversion can mean broken links to named anchors, faulty URLs containing the "&" character, etc.

Economy

HTML is a forgiving standard, and most HTML browsers are quite lenient. XHTML is not forgiving, and XML browsers not so lax. Agencies should not underestimate the cost of maintaining XHTML-compliant sites that are also backwards compatible with HTML rendering in established browsers.

Factors to consider include the need to:

- drop the initial XML declaration and serving documents as mediatype text/html rather than application/xml
- observe the strict case sensitivity of tags and their proper nesting
- fully quote tag attributes (size=12 is wrong)
- avoid attribute minimisation (for a box to appear ticked, you write checked = "checked")
- use a trailing "/" to close an empty tag and the need to 'hack' this to allow HTML browsers to accept it (eg <br />)
- make scripts and style sheets external, or to declare them as CDATA to avoid < and & being interpreted as mark-up and the problem of commented scripts being ignored altogether
- use id rather than name to identify all links, images and forms, etc and have a belt and braces approach using name and id in links

- use character references for "&" in URLs and elsewhere.

9.2 Terms and conditions

[Comment: suggestions for model Terms & Conditions for government websites would be welcome for possible inclusion here as a resource for site managers.]

9.3 Disclaimers

[Comment: suggestions for a model Disclaimer notice for government websites would be welcome for possible inclusion here as a resource for site managers.]

9.4 Copyright clearance

[Comment: suggestions for model letters requesting and granting permission to use copyright material would be welcome for possible inclusion here as a resource for site managers and communication teams.]

9.5 Requests for Proposals (RFPs)

[Comment: suggestions for a model RFP, covering the main component necessary for a typical IT-related RFP, would be welcome for possible inclusion here as a resource for site managers.]

9.6 Development contract

[Comment: suggestions for a typical contract for web design, development and maintenance would be welcome for possible inclusion here as a resource for site managers.]

9.7 Hosting contract

[Comment: a model hosting contract will be provided on the e-government website as a resource for site managers.]

9.8 Security policy

[Comment: suggestions for a typical components of a website security policy document would be welcome for possible inclusion here as a resource for site managers.]

10 Glossary

Sites like http://www.webopedia.com/ provide more comprehensive glossaries.

Access keys

Keyboard shortcuts, usually to important links on a web page. Access keys are part of the HTML 4.01 specification, designed to help people who have difficulty using a mouse.

Alt text

Text that is used when images can't be shown to the user.

Cascading style sheets (CSS)

Usually separate text files that specify the appearance (CCS1) and sound (CSS2) of web pages. They "cascade" in the sense that one style can override another, so that users can change the appearance or sound of web pages to suit their need.

Commenting

Adding comments in code, like HTML, that help programmers understand how the code has been written. Comments are not displayed in browsers.

Cookies

Small text files send by web servers to your computer when you request certain pages. Browser manufacturers introduced cookies as an aid for e-commerce applications, but they since have found many more uses. Some people refuse to accept cookies because their purpose is not clear.

CSV

Comma-separated values: a well-established open format that can be opened by spreadsheet and database applications.

Deprecated

A term used by the W3C to suggest people don't use elements that are defined in their specifications, but which are not likely to be included in future revisions because there are better ways of achieving the same result.

Dithering

Using a range of available colours to simulate one that is not available.

DTD

A Document Type Definition defines the syntax to use when using mark-up languages like HTML.

e-GIF

Shorthand for the New Zealand E-government Interoperability Framework.

G2P

Shorthand for the term “government to people”.

GCSB

The Government Communications Security Bureau

govt.nz

The name of the New Zealand government portal which can be found at http://www.govt.nz.

Host

The Internet Service Provider (ISP) that makes a website available on the Internet.

Image map

Regions of an image that can be defined in HTML, usually so that different parts of the image link to different documents.

ISO-8859-1

A character set that extended ASCII to incorporate some of the characters used in languages other than English.

ISP

Internet Service Provider

Javascript

A scripting language understood by most browsers that can be used to change the appearance of a page as a user moves the mouse, for example. Javascript is different from Java, which can be run independently of a browser.

JPEG

An image format in widespread use on the Internet. Sometimes shortened to JPG and usually pronounced “J-peg”.

Lynx

A browser that shows only the text parts of a web page, including links. How a page appears in Lynx is a good guide to how a person using assistive technology will experience the page.

Metadata

A description of a resource, either online or offline, and where to find it. Metadata can be compared to a library card that tells you where to find a library book.

Metatags

A way of putting metadata into a web document. Metadata is not normally displayed in the browser.

Numerical character references (NCRs)

A way of denoting characters in HTML using a sequence of numbers so that a browser can display the character even if it is not available to the author.

NZGLS

Shorthand for the New Zealand Government Locator Service (NZGLS) metadata standard. The NZGLS is the metadata standard used describe the services and resources provided by government agencies in New Zealand.

PDAs

Personal Digital Assistants: small portable devices some of which can be used to browse websites.

PDF

Portable Document Format: a format that is suited to printing documents intended for paper rather than screen.

PNG

Portable Network Graphic: An image format suited to the web but not yet widely supported.

Portal

A website that is intended primarily to link to other websites.

Postmaster

The person responsible for ensuring the smooth running of an email service for an Internet domain.

RFIs

Request for Information: usually a public notice inviting vendors to provide information about technical solutions they offer for a briefly described requirement

RFPs

Request for Proposal: usually a public notice inviting vendors to provide a detailed proposal for a technical solution to requirement described in detail.

RTF

Rich Text Format: an open but evolving format that can be understood by most word processing software.

Scripting

The use of programming code, usually in the midst of document mark-up, that is interpreted and executed either by the web server or the users browser.

SGML

Standard Generalized Mark-up Language: a system for defining mark-up languages that preceded the web by a number of years.

Sitemanager

The person who variously creates, administers and maintains a website, or is responsible for a team of people that do this.

SVG

Scalable Vector Graphics: a W3C specification for a graphic format based on XML

Tab order

A way of specifying the order of elements on the webpage for people using the tab key rather than the mouse.

Thumbnail

A small version of a bigger picture that a person can use to assess whether it is worth requesting the larger version.

Unicode

A standard for a very large character set that encompasses many of the characters used in languages around the world.

URL

Universal Resource Locator: a way of describing the location on the Internet of a wide variety of resources and a method (protocol) for requesting a copy. A web address is an example of a URL.

UTF-8

A subset (albeit a large one) of the full Unicode character set that incorporates the macronised long Māori vowels.

W3C

The World Wide Web Consortium develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential. W3C has around 500 member organizations

WAI

Web Accessibility Initiative: a W3C initiative to promote web accessibility.

Web bugs

Images fetched from a remote web server that are used by commercial organisations to monitor people's use of websites.

XHTML

A recasting of HTML as an XML application rather than an SGML language.

XML

Extensible Mark-up Language: a system for defining and extending mark-up languages.

Index

Example only – Index to be refined and completed after review and final edit.