#### **CHAPTER 9**

## **AUDIT OF GOVERNMENT WEBSITES**

#### 1. INTRODUCTION

During the evaluation of *SA Government Online* it became evident that the perceptions of respondents and evaluators about the usability, effectiveness and quality of government websites negatively influenced their perceptions of the *SA Government Online* website. The purpose of this chapter is to provide an overview of the quality and usability of South African government websites overall. The objective is to identify the usability problems on government websites, thereby determining if above-mentioned perceptions about government websites can be confirmed. In addition, the author aimed to determine if there was any similarity between usability problems experienced on government websites in general, and those identified for the *SA Government Online* website.

In February/March 2001, the author co-ordinated an audit of national government websites that was conducted by GCIS. The purpose was not to do a comprehensive evaluation, as was the case with *SA Government Online*, but to assess the effectiveness of national government websites in providing access to government information. The audit was therefore not conducted on the same level of detail, but was a more overarching analysis of government websites. A shortened version of the criteria used for the evaluation of the *SA: Government Online* website was used, and the audit was conducted by means of the heuristic evaluation methodology.

This chapter provides a brief overview of the aim, objectives and scope of the audit of national government websites, the methodology used, as well as a consolidated discussion on the findings of the audit. The complete audit results for individual departments are available in *Audit of government websites*, February/March 2001 (South Africa, GCIS, 2001).

## 2. AIM, OBJECTIVES AND SCOPE OF THE AUDIT

### 2.1 Aim and objectives

The aim of the audit was to assess the effectiveness of national government websites in providing access to government information. The main objectives were to determine to which extent government websites

- contained the information content that is expected of government websites
- · allowed users to access and find information easily
- allowed interactivity between the department and the user.

The purpose was not to do an extensive evaluation of departmental sites, or to prescribe to government departments how their websites should be developed. The purpose was rather to identify issues that influenced the usability of government websites and to identify information and functionalities that could be added in order to commence with processes to enhance the effectiveness of government web publishing, and to ensure that government websites develop towards the South African government's vision for e-government.

### 2.2 Scope of the audit

The audit was conducted for 26 national government departments. A list of departments whose sites were audited is attached as Annexure D. Provincial websites and some national government websites did not form part of the audit.

The following national departments were excluded from the auditing process:

- The Departments of Home Affairs and of Foreign Affairs. These departments were in the process of developing websites, but had not yet officially launched them.
- The Department of Sport and Recreation. At the time of the audit, no information was available on this website. On accessing the site the user was met with the following statement: "This site is under construction". No indication was provided of when the site would become available.
- The Department of Health. The site was not accessible during the period the audit was performed.

 The National Intelligence Agency, the SA Secret Service and The Presidency did not have a web presence.

The Public Service Commission and the Secretariat for Safety and Security each had a web presence on the GCIS website. These 'sites' were not comprehensively audited, as they were not considered independent sites.

#### 3. METHODOLOGY

#### 3.1 Criteria used for the audit

A list of criteria was compiled against which the websites were audited to ensure that auditors used the same criteria and indicators for the auditing process, and to ensure that they followed a consistent approach. These criteria were derived from those developed by the author for the evaluation of *SA Government Online* (see chapters four and five). The criteria were grouped in three broad categories, and then under subsidiary headings. The following criteria were used:

#### 3.1.1 Information content criteria

### (a) Orientation to the website

- The scope and the aim of the website are clearly stated/the services and the information on the website are described.
- Instructions on the use of the website are provided.

#### (b) Authority

- It is clear on each page that it belongs to the website (e.g. name of department on all pages).
- The name of the department is provided in the title and/or URL so that the source may be recovered.
- Bibliographies/references/lists of sources are available (including original publishing dates of documents).
- The URL supports authorship (one can easily tell from the domain name where pages originate; URLs are not likely to be confused or mistyped).

## (c) Currency

- The information on the site is current and up to date and the most current information is available.
- · 'Last updated' information appears on pages with substantive content.
- The site provides an indication of frequency of updating.
- New information posted on the site is announced prominently.

### (d) Writing and editorial style

- The writing style (information to be read online) is concise and structured for fast scanning (text).
- Headings and subheadings are clearly phrased, descriptive and understandable.
- Information provided through links matches the headings and descriptions, and links are properly used in text.
- · Typing, spelling and grammatical errors are absent.

## (e) Content

- The site includes necessary and useful information.
- · Breadth of information is adequate.
- Depth of information is adequate.
- Links are made to relevant external sites.
- Provision is made for online service delivery (for the purpose of this audit, services were
  defined as any action/transaction that could be executed online, even if only to a limited
  extent).
- Provision is made for interactivity.

## Content was audited against the following minimum requirements:

- Contact information
  - Department's general contact information (telephone, fax, e-mail, street address, mail address)
  - Contact information for regional offices (if applicable)
  - Minister
  - Deputy minister (if applicable)
  - Director-general/head of department/senior officials
- Structures, functions, officials
  - Vision, mission, mandate of department

- Organisational structure
- o Functions of main components
- o Information about senior officials
- o Minister
- Deputy minister (if applicable)
  - Director-general/head of department
  - Information on bodies/institutions related to/affiliated to/attached to the department

#### Documents

- Annual reports
  - o Legislation/Bills relevant to the department
  - o Policy documents/discussion documents/green papers/white papers
  - Departmental publications/newsletters/other documents
- · Speeches, media statements, interviews
  - o Minister
  - o Deputy minister
  - Director-general/head of department/other senior officials
- Services offered by the department
  - Listing of services
  - o Description thereof
  - o Information on how to apply for services
  - o Forms to complete to obtain services
  - Contact information
- Departmental activities, programmes, events, news
  - o Announcements of activities, upcoming events, conferences, etc.
  - o Annual calendar of events
  - o Departmental programmes, projects
  - o Information on current, topical issues
  - o Vacancies/jobs/employment opportunities
- Links to related sites
  - Related sites
  - Government Online
- Interactivity and other value-added features
  - Feedback about the site
  - o Comments, queries on departmental activities/policies
  - Discussion forum/chat
  - Subscription services

Frequently asked questions (FAQs).

### 3.1.2 Organisational structure/information architecture navigation/search

#### (a) Organisation

- The home page is well organised and gives a clear overview of information contained on the site.
- There is a logical site structure and internal hierarchy.

### (b) Navigation

- Local links are made to related content.
- Main navigation options are displayed prominently.
- Indexes/tables of content are provided for long pages/documents.
- There are no dead/broken links.
- · Links are provided on all pages to return to the home page.
- Links are provided to assist navigation (to higher level pages; 'return to top' for long documents; 'previous page'; 'next page' links).
- Dead-end pages are avoided (pages with no links to any other page on the site).
- The site does not launch additional browsers to pages that form part of the same site.
- · A warning statement is provided when a link leads to a large document or image.
- Additional navigation aids are provided, for example a site map or site index.
- It is easy to switch back and forth from search to browse.

#### (c) Search

- A search facility is available for the whole site.
- Provision is made for advanced searching (e.g. sorting of results, refinement of searches).
- Relevance ranking is available for results.

#### 3.1.3 Design and layout

- The design is visually appealing.
- There is a consistent look and feel across pages.
- The home page is short and simple.
- The site is based on the national Coat of Arms.
- Screens are uncluttered.

- Information is organised effectively on screens.
- There is minimal use of large graphics or of too many little graphics on a page.
- Very long pages (meant to be read online) that require a lot of scrolling are avoided.
- · Backgrounds are not too busy or distracting.
- Use of bold, italics, blinking and other attention-getting devices is not distracting.
- Single document options are available for files that may be printed or downloaded.
- The use of frames does not limit functionality of the site.
- It is indicated when document formats other than HTML are used.
- There is a way to interact with the developers of the site.
- There is an indication of applicable browsers with which the site can be viewed.
- The site is consistent when accessed via the standard browsers (Internet Explorer, Netscape).
- Script error messages do not appear.
- Pages fit on a screen of 800 pixels by 600 pixels.

## 3.2 Conducting the audit

The criteria were used in the form of a checklist against which the auditors could check the level of compliance to criteria identified. Questions were answered by indicating "yes", "no" or "partly", and by providing comments where applicable. "Yes" was used when a site conformed with a criterion to a great extent, and "partly" when a site conformed to it only to some extent or not consistently. The GCIS Directorate: Research captured these responses, using appropriate software.

The websites were audited during the period 12 February 2001 to 8 March 2001. The audit was conducted by employees of the GCIS subdirectorate Electronic Information Resources and the Information Centre. Each website was audited by two auditors to enable a second phase during which the first-round results could be verified. After each audit had been performed, one person involved in the audit for the particular site compiled a report. The report was verified by the second person involved in the audit, as well as by the author, who was not involved in the initial audit.

## 3.3 Interpretation of findings

On interpreting the results, the following must be kept in mind:

- The audits for individual sites were performed during a specific period. The report therefore reflected websites as they were during that period. Some sites have since implemented changes.
- The criteria used did not entail a complete set of criteria against which websites may be audited or evaluated. An attempt was made to select general aspects that influence the usability of websites. In addition, the audit mainly focused on site level issues (such as the home page, information architecture, navigation, search, layout, site-wide design standards, etc.) and did not attempt to identify specific issues pertaining to individual pages or to accessibility principles.
- Although every effort was made to avoid subjectivity and to ensure a consistent approach, some individuals may disagree with some of the findings. In addition, as different auditors performed the audit, the level of detail, depth and style of reporting for departments may have differed slightly.
- Certain aspects were not tested in depth. For example, all links were not tested.
   Similarly, the submit function for online forms was not tested.

### 3.4 Reporting to departments

A comprehensive report was prepared, including aspects as discussed in the previous paragraphs, as well as the findings for each of the government departments audited. The complete report was only provided to the e-government office in the Department of Public Service and Administration (DPSA), but considered as confidential and not to be provided to individual departments or other parties. The individual departments were provided with the introductory sections covering the aim and objectives of the audit, the scope thereof, the methodology followed, the overview of the findings (see paragraph four), as well as the findings for the respective department.

#### 4. OVERVIEW OF FINDINGS

This section provides an overview of government web publishing as it emerged from the audit of individual government websites and discusses prominent issues and trends pertaining to the three main categories of criteria used for the audit.

#### 4.1 Content

#### 4.1.1 Orientation to the website

This criterion was the worst met of all the content criteria. No single departmental web page contained clearly defined aims or a statement on the scope of the site in such a way that it suggested that the website had been designed to help the department achieve its aims. Only one site attempted to provide this type of information. Furthermore, only nine sites provided basic information on the use of the website. This mainly constituted information about applicable browsers and, in some instances, on the use of the search engine.

#### 4.1.2 Authority of the website

This aspect was also found to be unsatisfactory. The main problem identified was the insufficient indication of sources and especially publication dates for documents (24 sites). Another problem was the poor indication that web pages form part of a specific website. This problem became evident from the fact that either the department's name was not provided on all pages of the website (15 sites), or was not provided in HTML document titles or sufficiently in the URL for the source to be easily recovered.

#### 4.1.3 Information posted on the site

The audit examined various information features contained on sites as listed in paragraph 3.1.1e. Information most commonly available were speeches and/or media statements by the relevant minister, media statements issued by the department, policy or discussion documents, departmental contact information, information on the organisational structure of the department, information or links to bodies/institutions related to/affiliated to the department, Acts and/or Bills, other departmental publications/newsletters/documents, and links to related websites. Table 19 provides an overview of the information most featured on sites.

Table 19: Information most featured on government websites ("no" answers taken into account)

Information	Number of websites			
	Yes	Partly	No	
Ministerial speeches	20	3	3	
Departmental media statements	19	3	4	
Links to related websites	20	2	4	
Green papers/white papers/discussion	17	5	4	
documents/policy documents				
Organisational structure of department	18	3	5	
Departmental publications/	17	4	5	
newsletter/other documents		granting the s	nishero's est	
Legislation/Bills	15	6	5	
Information or links to bodies/institutions	14	7	5	
related to/affiliated to the department		r end Mildestry	after a second	
Departmental contact information	10	11	5	
Vision/mission statements	20	000 Tes 4	6	

From this table it is also clear that the government websites audited varied significantly in the extent to which information had been made available. As with the breadth of information provided, there was also disparity with regard to the depth of information. This situation is evident from the "partly" column in table 19. These numbers reflect the number of sites that contained the information listed to *some* extent, even if there were only one or two appearances thereof.

Table 20 provides an overview of information least featured on government websites. Few websites provided information such as profiles of senior officials in the department (four sites), a departmental calendar of events (two sites), or job opportunities in the department (seven sites). Only six sites provided frequently asked questions (FAQs) with corresponding answers, of which on'y one provided this feature for the major part of the site.

Table 20: Information least featured on government websites ("yes" and "partly" answers taken into account)

Information	Number of websites			
	Yes	Partly	No	
Vacancies/employment opportunities	7	d szeminkus	19	
CV/profiles of senior officials	4	-	22	
Calendar of events	1	1	24	
Frequently asked questions (FAQs)	1	5	20	

These tables provide a clear indication that, at the time of the audit, government websites still had a long way to go before they disseminated information to the satisfaction of all users.

With the exception of one site (of the Department of Trade and Industry), which offered translation services into six European languages, no provision was made for the use of languages other than English. In some instances, individual documents such as annual reports were available in other languages.

#### 4.1.4 Services

Of the 26 websites audited, 15 featured one or more online services, albeit very basic. Only five of those could be considered as having a relatively comprehensive array of services. In most instances services were not listed together and were scattered over the sites, making them difficult to identify or find as such.

As with information content, there was a variation in the extent of services available on websites audited. Services ranged from the provision of publications to order, subscriptions to databases or services, and an application for a housing subsidy. The lack of standardisation among government websites regarding this feature extended to the way services were presented, as well as to the way in which to obtain them. For example, some sites allowed users to obtain forms online, print them and then post the paper copies to the department, while others only provided an e-mail address.

#### 4.1.5 Democratic outreach

While the technology to facilitate interactivity is readily available, many government sites had not taken full advantage of its benefits. Government websites tended to offer more basic information than features to make their websites interactive. For the audit, several key features were identified to determine to what extent government websites facilitated this functionality. These included:

- Offering phone contact information and/or addresses. Most sites contained at least basic contact information.
- The facility to contact the webmaster firstly by e-mail, and secondly by means of an interactive form. With the exception of seven websites, the majority of websites contained either of these options.
- The facility to e-mail a person in the department other than the webmaster. With the exception of five sites, the majority of sites contained at least one e-mail address, for example a general e-mail address for the department. The websites of the Department of Communications and the Department of Trade and Industry handled this feature exceptionally well, as an extensive list of contact information for different topics was made available on each.

This functionality also referred to sites that invited comments on discussion documents. This feature, however, was available on a limited number of sites, and then only for some documents.

- Employment of methods to facilitate conversation other than through e-mail, for example bulletin boards, chat rooms and discussion forums. With the exception of one site this feature was absent from websites.
- Features to make information available to users according to their particular needs, i.e.
  the ability to register to receive updates regarding specific issues or the capability to
  personalise the website. Six websites complied with the first and none with the latter
  requirement.

It was clear that government websites had not progressed very far with regard to providing options and features towards online democracy, and had a long way to go to fully realise the benefits thereof at the time of the audit.

### 4.1.6 Currency

It was evident that updated and current websites were not the norm with government websites. The audit identified only 12 websites that were sufficiently updated, while seven sites conformed only partly to this criterion. Seven lacked updated information.

Users need to be assured that information on a website is in fact up-to-date. This requirement was often not met. Only seven websites consistently provided an indication of when pages were last updated, and only two provided some indication of frequency of updating. The fact that most government sites did not consistently include dates as part of document listings exacerbated the difficulty of determining currency.

The usability of a website is enhanced by the prominent announcement of new information posted on the site. This criterion was sufficiently met by only 17 websites. Six sites conformed partially to this criterion, for example not incorporating all new information posted, while three sites did not make provision for this feature at all. A common problem was that the listings of new information posted did not make provision for the original publication date of documents, contributing to uncertainty about the currency of the information.

#### 4.1.7 Writing and editorial style

This aspect was not audited in depth. However, websites generally performed satisfactorily in this regard. The most common problem was clarity of links – links did not always provide a clear indication of what information was found at the other side of the link. Gross spelling, typing and grammatical errors were limited.

### 4.2 Organisational structure/navigation/search

Due to the organisational schemes and the navigation options provided (or omitted), information was often difficult to find on many sites. In addition, search engines were not always available or only provided for a basic search.

### 4.2.1 Organisation of information

Table 21 provides an overview of audit findings with regard to information organisation.

Table 21: Organisation of information

Feature	Number of sites		
	Yes	Partly	No
The home page is a well-organised conceptual space leading to information on the site	8	13	5
There is a logical internal hierarchy	6	16	4

From this table, it is clear that government departments had to pay attention to the way information was organised on their websites. The main problems experienced were:

- Important information was hidden due to its placement in the organisational hierarchy or as part of certain categories.
- The same type of information was often scattered all over a site and included in different main categories (e.g. online services).
- · Information was listed inconsistently on the same site, for example:
  - o Sometimes information was listed from the oldest to the latest information, in other instances it was the other way around.
  - In some instances websites used topical indexes, but not all information on the topic was categorised accordingly.
- The choice of main categories on the home page was often not logical and did not provide a clear overview of the information on the website.
- Information was categorised in 'wrong' categories. Often a more relevant category was available for a specific type of information.
- In some cases there were as many as 15 and 24 links (main categories) on home pages. Relevant items were not grouped together.
- The choice of headings or naming conventions for links was often not logical it was not always clear what was available at specific categories and what was meant by specific headings. Vague headings such as "general information" may have contributed to users not finding important information.
- Deep hierarchical structures were presented, requiring users to click many times before reaching the actual information.
- In cases where sub-sites were available, general categories spanning the whole site did
  not contain all the information from all those sub-sites.

With the exception of a few sites most government websites were designed with a department-centric focus and were a reflection of the stovepipe nature of government and of the inability to organise information and services around the user. For example, the typical website home page featured media statements and other information about the department, publications and documents of the department, the department's organisational structure and functions, etc. However, the few sites that followed a more topical approach did not implement this approach correctly. It was found that information was often not consistently provided at all the relevant headings and that important information was scattered over the site (e.g. departmental projects, services).

There was no conformity among government websites with regard to their approach to information organisation. For example, speeches and media statements were presented in the following different ways:

- As separate main categories accessible from the home page.
- As one main category accessible from the home page.
- As a secondary category (separately or combined) as part of government documents, accessible from second or third level pages.
- As a secondary category (separately or combined) as part of a category such as Media, or Communication or something similar.
- Six sites presented speeches and media statements combined in one list, while the rest
  of the sites provided them as two separate listings.
- There were also differences with regard to the sequence in which speeches and statements were listed. In some instances there was one listing for different years, in other instances different listings for separate years. In some instances listings were chronologically from the latest to the oldest, in other instances from the oldest to the latest.
- There were differences in naming conventions for the same type of information.

Similarly, documents were treated in various ways, e.g. in some cases all types were combined in one listing, in others they were organised according to the type of document (categories varied between sites). A limited number of sites also followed a subject approach.

Another finding was that, in many instances, existing information resources created for media other than the web, were provided on sites without providing guidance to or adding value for the user, or without utilising web design techniques for improved online access.

#### 4.2.2 Ease of navigation

Table 22 provides an overview of the main aspects audited and the results obtained.

In general, government websites did not comply with basic principles for navigation. The absence or inconsistent use of navigation options on the websites often made them difficult to browse and information difficult to find. Of concern was that even one of the most basic principles, "a link from all pages to the home page", was not applied on as many as eight government websites.

Table 22: Compliance with navigation principles

Principle	Number of sites		
	Yes	Partly	No
Links from all pages to home page	18	5	3
Prominent display of main navigation options	13	7	6
Local links to related content	12	5	9
Absence of dead-end pages	12	2	12
Absence of dead/broken links	9	5	12
Links to higher level index pages	8	9	9
Indexes/tables of content for long pages	7	16	3
Availability of site map and/or site index	5	-	21
Warning statements when links lead to large documents or images	4	6	16
'Previous page'/'next page' links	3	9	14
'Return to top' (long documents)	2	10	14

#### 4.2.3 Search facility

Government websites made use of relatively basic search functionalities. Eighteen websites had a search function covering the whole site. Two of these also allowed for some parts of the site to be searched. Seven websites had no search facility.

The majority of search engines allowed only 'simple' searches, i.e. the search facility did not allow for advanced features such as sorting of results and refinement of searches. Only three websites had more advanced features, albeit not an 'advanced search' in the true sense of the word. Only eight websites allowed for relevance ranking of results.

### 4.3 Design and layout

The following were identified as the most prominent limitations (number in brackets represents the total of "no" and "partly" answers, i.e. websites that did not comply or only partially complied with stated criteria):

- Documents were not too long, thus not requiring excessive scrolling (23 websites).
- Clear and consistent indication of document formats (19 websites).
- Indication of applicable browsers with which the site could be viewed (18 websites).
- Availability of single document options for files to be printed or downloaded (16 websites).
- Clean and simple screens, not cluttered with too much information (13 websites).
- Organisation of information on screens (13 websites).

The following principles were best adhered to (number in brackets represents the total of "yes" answers):

- pages that fit on a screen of 800 pixels by 600 pixels (22 websites)
- acceptable use of italics, bold, animation, sound or other attention-getting devices (21 sites)
- provision of a way to interact with the webmaster (20)
- acceptable use of backgrounds not too busy or distracting or making pages difficult to read (20 sites)
- correct use of graphics (16 sites)
- consistent look and feel (15 sites)
- short and simple layout of the home page (14 sites).

In some cases websites used superfluous or inappropriate navigational, organisational and other techniques that did not directly support the purpose or ease of finding information.

Most websites required the use of software such as Adobe Acrobat, and most of these provided users with the facility to download this software. For those users wanting an alternative to printed information on the website, the options were limited.

Some departments included the national Coat of Arms on their websites, but in most cases it was included as an add-on to the existing design and not incorporated into the overall design and visual identity of the site.

#### 5. RECOMMENDATIONS

The audit report (South Africa, GCIS, 2001) acknowledges that the vision of electronic government was becoming a reality with the development of websites by most government departments. It, however, recognises that the realisation of e-government objectives through the medium of websites still has a long way to go, as, with the movement towards e-government, citizens and businesses will increasingly expect electronic services to be flexible, convenient, accessible, fast and efficient.

The report considers that overall, South African government websites were demonstrating a well-meaning and constructive participation in the web and that they displayed certain basic levels of technical competence in web authoring, with some, which rose well above that. It, however, also states that there was clearly a lack of knowledge on some critical points of web design and information design that impacted on the accessibility of information.

In order for government to improve its efficiency, effectiveness and responsiveness, the report (South Africa, GCIS, 2001) identifies some key issues that should be addressed in order to enable government to fully exploit this way of communicating with its citizens and transacting its business:

- Government needs to expand the diversity of resources available through its websites.
- As government sites contained rapidly changing information care should be taken that
  the most current information is posted as soon as possible after it becomes available.
  The web should be made the first place to publish information, not the last.
  Departments need to post information on their websites even before they publish it in
  other forms.

- Websites should make optimal use of the web as medium.
- Most of the organisational problems could have been avoided by the proper planning of sites in order to develop logical hierarchies.
- Key issues that need attention are improved search engines and the availability of additional navigation aids to help users determine quickly if the information they need is likely to be there, and to locate it. If information is not on the website, assistance should be provided to enable users to identify where it is available.
- Websites should utilise the Internet to its full capability, not simply as a tool for information dissemination, but also as a means to deliver services. Websites must enable citizens and business to interact and transact business with government. Forms for online transactions should be expanded and standardised. It is, however, not good enough to simply build a website with online forms for people to fill out, print and submit into the same bureaucratic system. Online transactions and embracing technology for online monetary transactions should be implemented. Furthermore, government forms should be publicly available and searchable on a national government website.
- The issue of democratic outreach needs to be addressed more prominently on government websites. The ability to communicate with appointed and elected public officials can make a difference between passive information delivery and a site that provides dynamic interaction. Providing contact information such as phone numbers and e-mail is the most basic stage of interactive communication. Digital democracy also includes issues such as discussion forums, online voting, public opinion polling and communication among elected officials and their constituencies. Listservers can provide an effective tool for users interested in similar subjects it can be used to announce the availability of new or updated information to interested users, while questions and comments can be raised about specific topics.
- In an attempt to make government websites more accessible, simple baseline standards on design, file architecture and information display will make it easier for users to navigate sites and retrieve information.

#### 6. CONCLUSION

It is clear that the majority of government departments have started to embrace the Internet for information dissemination. However, it is evident that in general these websites did not conform to the basic usability principles and principles of good website design, thus confirming the perception of respondents about the quality of government websites overall.

Inadequate and uneven information provision as well as currency of sites contributed to insufficient access to government information. Departments varied significantly in the extent to which information was made available electronically – there was a disparity with regard to the breadth as well as depth of information. Furthermore, strong emphasis was placed on the presentation of departments and their activities, especially the provision of documents, speeches and media statements. Value-added features such as frequently asked questions (FAQs) were limited. Some departments started to provide some of their services online, but departments were still far from becoming true online service providers. Aspects such as currency and authority were also not satisfactory.

An important concern was the lack of ease with which information could be found on government websites, as the aim of government websites should be to contribute to improved access to government information. Factors contributing to this problem spanned over all aspects audited, from information organisation and site navigability, to the design and layout of pages. There was also not a consistent design and organisation of information across government websites. This might have resulted in confusion amongst users and did not give the national web system a feel of coherence and unity.

The audit findings demonstrated South African government websites to have had similar problems than that of the *SA Government Online* website, and also that those problems were on similar or even worse severity levels. *SA Government Online* was thus not unique with regard to unsatisfactory quality and usability problems. The audit findings, together with the findings for the evaluation of *SA Government Online*, demonstrate that there is an urgent need for South African government websites to be improved with regard to content, information architecture, navigation, search, as well as the look and feel thereof.

Furthermore, the audit proved that there was no consistency or conformity between South African government websites as part of a government strategy to assist users to find information that they expect, and to find it easily. It also demonstrated that there was no

clear visual identity for South African government websites to identify them as websites of the same government.

As a result of these findings, the author believes that the overall poor quality of and lack of conformity between South African government websites necessitates government to initiate a project aiming at the development of web guidelines and standards and that these should be made available to national and provincial government institutions as a matter of priority. The author believes such an initiative will contribute to improved government websites, in its turn contributing to government's e-government vision for improved dissemination of government information and services by means of the Internet.

The next chapter proposes a model for such a guideline document. The model addresses the importance of quality government websites and of achieving some form of integration or common approach to web publishing in government, and proposes standards, guidelines and best practices for web publishing in South African government institutions.