

CHAPTER 6

FINDINGS FOR THE EVALUATION OF SA GOVERNMENT ONLINE**1. INTRODUCTION**

Chapters four and five presented detailed discussions about guidelines and principles for website development in general and for government web publishing respectively. These guidelines and principles were integrated as part of the four evaluations methods selected and developed for the evaluation of the *South African Government Online* website (see chapter two). The website was evaluated during the period 14 August to 16 September 2000.

The purpose of this chapter is to provide detailed reports on the findings of the evaluation methods that were applied. The findings of each evaluation method are discussed separately and each report is presented in accordance with the evaluation instrument that was developed for each test. However, the exact sequence of questions is not followed in the discussion of the user tests (see paragraph four), in order to logically group related questions together. The author attempts to represent the findings in a comprehensive and unbiased manner, also reporting on comments and suggestions made by evaluators and respondents during the evaluation. No attempt is made to draw conclusions or suggestions for improvement, since a consolidated summary of the findings is presented in chapter seven, and solutions for improving the site in chapter eight.

2. HEURISTIC EVALUATION – EXPERT OPINION**2.1 Introduction**

Four expert evaluators were chosen to conduct this part of the heuristic evaluation. They were asked to complete a semi-structured evaluation guide based on the broad usability criteria (see chapter four), which was provided to them online. The evaluation was conducted during the period 23 August to 8 September 2000. See chapter two, paragraph 4.1 for a description of the method, and Annexure A for the evaluation guide.

2.2 Content

2.2.1 Orientation to the website

Among the aspects that were positively remarked on by the evaluators was that the orientation statement provided a clear overview of the information covered, and that the website provided a clear indication of when each section was last updated. Descriptions were regarded as comprehensive and the layout as “clear and easy to navigate”.

One evaluator recommended that the site be clearly announced as the official website of the South African government and also remarked that a sentence to explain the purpose of the site would be useful to novice users.

2.2.2 Authority

Two evaluators were of the opinion that the organisation responsible for the website was clearly indicated, as well as that it was the official website: “It is clear that the GCIS is responsible for the official government site of South Africa – the GCIS page provides ample information on the services rendered.” One evaluator, however, indicated that it was not clear who was responsible for the website in the final instance, while another remarked that the overview page should indicate that this was the official website of the South African government.

One evaluator stated that the names of authors of documents were provided, and that in some instances e-mail links were provided to enable the user to send a message directly to the author. This evaluator also commented that there were references to other relevant information that could be accessed if required.

Criticism was directed towards the fact that document formats were not always indicated, that departmental contact information was not updated and that incorrect information on the structure of departments was sometimes found.

2.2.3 Comprehensiveness/information coverage/scope

Three evaluators considered the scope of information to be sufficient or “comprehensive enough”. Comments made were: “it covers an excellent variety of topics”; “the content is of interest and value to the user”; “the site includes critical and relevant information, e.g.

contacts”; “there are links to other relevant sources of information, e.g. parliament”; “appropriate links are provided”; and “a clear indication is given of all other relevant information sources and links provided”.

Suggestions for the inclusion of additional content included

- Hansard and the Government Gazette
- more speeches on provincial and local government level
- organisational structures of departments, the so-called “clusters” of government and updated visions and missions of departments
- definition of “*Government Bodies and Institutions*”
- information on parastatals
- discussions of parliamentary committees.

2.2.4 Currency

Three evaluators commented that the website (and especially the home page) was current and up to date. Positive aspects commented on included that there was a clear indication of the date of update, that there was a warning to “refresh”, and that “aspects mentioned in the news, or newscasts, are given on the website, which almost makes it a news service”.

The fourth evaluator, however, was not satisfied with the currency of the site. According to her the vision and mission of departments, departmental contact information, and changes made to the names of departments were not up to date. One evaluator indicated that dates did not appear on all the pages, for example *Ministries*. According to her “it is extremely important that people know when the page was last updated.” Two evaluators indicated that there were links that did not work: “there are pages without active links, although the navigation bar is there”, and “I have encountered a number of dead links”. It was recommended that all links be thoroughly checked. Lastly, one evaluator encountered some old pages (April/May 2000), but was unsure if the information had indeed changed since that date.

2.2.5 Objectivity and fairness

All evaluators were satisfied with the objectivity of the website. They stated that no bias was found, and that the content was balanced. One evaluator remarked: “I compliment the designers for ensuring a balanced, non-political influence and content with most of the pages and the content thereof.”

2.2.6 Editorial style

Positive remarks made on the writing and editorial style were for example: “surprisingly few spelling/typing errors”, “no editing problems”, “pages are easy to read”, and “overall the site makes a good impression”. One evaluator also remarked on the clear headings and page titles.

There was criticism as well. One evaluator pointed out that some pages were very long and “if you need only a portion of the information it can be very frustrating to print everything out”. She suggested that pages be broken up into shorter pages using the same table of contents, “but instead of anchors use links to other pages”. Another evaluator was of the opinion that the site “warrants chunking to prevent unnecessary scrolling”. She alternatively suggested the use of “frequent return to top buttons” on pages.

2.2.7 General comments on the contents of the website

A negative aspect commented on was the slow downloading of some pages: “as much as 20 minutes very early in the morning”. Another comment was that a sophisticated search engine would enhance the content. One evaluator was of the opinion that the content covered the most relevant issues that should appear on a government website.

2.3 Information architecture/organisational structure

2.3.1 The website as portal to South African government information

This aspect was found to be satisfactory. One evaluator remarked: “The website is an excellent entry point to government information”. Reasons put forward were that relevant information on other sites was easy to access, that navigation was clear, and that “the home page enables users to get an overview of the information on the site”. One evaluator recommended that scrolling on the home page be avoided.

2.3.2 Organisational structure

In general, the evaluators commented positively on this aspect. Specific issues commented on:

- The home page was well designed and “short enough”.

- Information was broken down in logical units: “I never wondered which link to follow”.
- The organisational structure of the website was “excellent” as there was “a clear interface where users are able to see at a glance where they are and what is presently on the page”.
- The home page provided an organisational scheme of the website.
- The information was organised in easily digestible chunks “with the added advantage of downloading some of the information from the website”.

Issues pointed out for attention were:

- Pages were too long.
- One evaluator remarked that there was too much detail on the home page, influencing the impact of the main issues.
- The PDF format was found to be “very unfriendly”, especially because “you have to rely on the ‘find’ functionality”.
- The search engine: “You desperately need a search engine to make sense of the width and depth of the site”. It was recommended that results be provided in a standardised, easily browsable and user-friendly format.

2.3.3 General comments on the information architecture

Comments were made that information was sometimes too compartmentalised, and that more use should be made of information chunking.

2.4 Navigation and search

2.4.1 Site navigation

There were conflicting findings with regard to navigation on the website. Two evaluators found the site easy to navigate and browse. One of them commented positively on the consistency of navigation and also commented: “I always knew where I was”. However, two evaluators felt that navigation had to be improved. One commented that there was not enough navigation and that “one loses track of position within the website”. The other was of the opinion that the website would be significantly improved by adding navigation options such as ‘previous page’, ‘next page’, ‘home’, and ‘events’. She was of the opinion that these would help to improve orientation to the website. Cases of inconsistency were found, and “sometimes underlined words are clickable but do not look like links”.

A question was raised about the functioning of *What's New* on the home page: "Is it clickable or not?"

One evaluator remarked that the website had a clear interface, but that the top navigation bar took up too much space on the screen: "One must always remember that the top 10 cm of a page is what is most often read and if the top navigation bar is too wide, it takes up space which could have been used for the actual content of the page and the user loses interest and leaves that page."

Evaluators found internal links that did not work, for example *Deputy Ministers*, *Prof DC du Toit* and *Speeches*. Some links to external pages also did not work, for example *Boeredata* and the *Constitutional Assembly* links. The legislation choice did not display at <http://www...../greenpaper/index.html> and <http://www...../whitepaper/index.html>. In addition, <http://www.local.gov.za/SALGA/salindex.html> linked to a blank page, and some of the pages failed to open, for example the Identification Amendment Act – the evaluator commented that she had to wait too long.

2.4.2 Search

Two evaluators were satisfied with the search mechanism. One did three searches and detected no problems: "I found the information that was retrieved correct and the ranking useful." The other considered the search mechanism as "easy and effective", and that ranking and weighting were well done.

However, the other evaluators did not find this aspect satisfactory at all. One described it as "bad, bad, bad", and another considered it as an area that impacted negatively on the actual success of the site: "It puts you off and one thinks twice before trying it again."

The search mechanism was considered not user-friendly for the following reasons:

- There was no clear distinction between simple and advanced search facilities, or between the part of the site that facilitated full-text retrieval and the indexed database.
- Evaluators felt the advanced search was hidden and that users should have had an option earlier or higher up to access the search category.
- No explanation was provided of how searches were going to be executed

(boolean + or -, proximity, etc.), how ranking took place and what 'power' search meant. It was also not possible to determine whether headings were indexed, to what depth pages or records were indexed and whether stop words were used, and if so, how they were determined. One evaluator also stated: "Author does not mean anything".

- One evaluator stated that keywords were not available. In addition, It was not clear if and how truncation and wildcards were functioning: "It seems as if * does the job, but I couldn't find the description in the help." One evaluator suggested including proximity and date selections for the simple search.
- One evaluator commented on "serious inconsistencies" in the functioning of boolean operators. She stated the example of a search on the names of premiers of provinces. The search query "premiers and province" yielded a result count of 273 retrieved documents, of which none of the first twenty-five displayed were relevant, although the top three listed were indicated as 100% relevant. In addition, the same search, separating the keywords by a comma, yielded 1281 documents, and the relevance ranking started at 75%. However, when the boolean OR was used, 1281 documents were again retrieved, but the first 25 records were not the same records retrieved by using the comma, and the relevance ranking started at 100%.
- The search interface was criticised because of the use of pull-down menus. An evaluator regarded these as deceptive: "I only saw the *Speeches and Press Releases* options and later found out that other options are listed below those." The query box was regarded as too small.
- Several negative remarks were directed at the returned results. Firstly, different results were found when entering the same search term in lower and upper case (for example SITA versus sita): "Either the coverage is very superficial or the retrieval is very shallow." Secondly, one evaluator regarded the first lines of actual text of documents displayed as "often not descriptive". Further criticism included that the search mechanism did not support clustering, sorting, subcategories, image searching and search limiting, that the sizes of files were not displayed, that second level searching was not available, and that only 25 results were displayed per page and that this was not customisable.

2.4.2 Design and layout

2.4.3 General comments on the navigability and/or search mechanism of the website

One evaluator remarked that navigation was “good”. Another described navigation and search as “bland and unfriendly”. Reasons provided by the latter were:

- Results did not give any context, for example information on the category the result originated from or where in the text keywords occurred, or how many hits/keywords occurred.
- “If you open a link in the result of a search, for example a tender, you get a very funny format.”
- Documents were provided in PDF format.
- No provision was made for easy updating/search on newly added information on the whole of the website, e.g. “information added within the last week”.

Recommendations included the inclusion of a site map and the availability of multiple ways to navigate. In addition, one evaluator commented that cross-referencing/linking of information might add to the functionality and a more integrated feel on the website.

2.5 Design and layout

2.5.1 General impression

The general impression of the website ranged from “professional” to “practical, but boring/bland”. The use of the South African flag and flag colours was commended, while one evaluator remarked that considerable consideration had been given to making it appealing and representative of South Africa.

The “cave drawings of the Boesmans” were questioned for its “political correctness”. One evaluator considered the look and feel of the site as excellent, but criticised the use of the black navigation bar: “The extensive use of the black navigation bar can be distracting.” Another evaluator, who considered the white on black as too strong, shared this sentiment: “It interferes with the layout and the lettering is difficult to read.” In addition, one evaluator remarked that the website was not “terribly exciting for young people”.

2.5.2 Design and layout

The design and layout of the website were considered as user-friendly, and not too complex. There were conflicting findings on consistency: one evaluator remarked positively on the fact that the static components of the site were presented in the same place on all the pages, while another remarked that the design and look of the site felt consistent. However, one evaluator mentioned a lack of consistency in creating links, for example to tenders.

Evaluators recommended giving attention to “style and flair”, to the navigation bar with regard to size and colour, and to the prominence of links on some of the pages. It was also stated that the layout was not resizable. One evaluator considered the use of tables as “good”, but another considered the tables on the pages of the different ministers as “very stereotyped and boring – they could be more exciting, with more graphical information”.

2.5.3 Text readability and visibility

All four evaluators considered this aspect as satisfactory. Specific aspects mentioned were the font colour and pitch and visibility of text. However, one remarked that the site was boring, and recommended that more colour/background be used. She also remarked that fonts were not standardised and in most instances “old-fashioned and drab”.

2.5.4 Graphics, images and animation

One evaluator was satisfied with the use of graphics: “I didn’t find any distracting animation or large graphics, and did not experience any problem with downloading time.” However, she felt that the site could be more colourful. The second evaluator felt that graphics were very limited and not used in a creative way. The third considered this aspect as a potential problem. She found that the contents of the national symbols page took a long time to download, “which means a no interest page”. An evaluator recommended: “The excessive use and combination of various images and animation must be carefully controlled to ensure that there is no clashing with regard to image orientation on the home page and most importantly the downloading time of the pages.”

2.5.5 Interaction/use of forms

Comments made were that forms were clear and easy to understand, that they provided clear and easy to follow instructions, and that *Contact Us* was simple and effective. One evaluator indicated that more government forms should be made available.

2.5.6 General comments on the design/layout/presentation of information/aesthetic aspects of the website

The following comments were put forward:

- “Overall, I think it is a good and clean design.”
- “Graphics, for example the logo of the specific department, could be added to speeches to make it more appealing (as part of a house style).”

2.6 Purpose and audience

The general view was that the site suited its purpose and intended audience. One evaluator commented that the content appeared to be relevant to the subject domain and would therefore probably have been interesting and valuable to the user. However, two evaluators thought that it was not clear who the intended audience was. According to one: “I am not sure if it is for South Africans or for overseas visitors”.

One evaluator considered the site as an excellent source of information on government issues, especially “if you have the time and ability to delve deep into the layers of usable information”. One evaluator felt that needs with regard to current awareness were not catered for.

2.7 General assessment and remarks

2.7.1 Overall rating

Three evaluators rated the site as “good”, and one rated it as “poor”.

2.7.2 General comments

One evaluator commented that the site was a good attempt at bringing together diversified information into one usable form whilst still maintaining a unique character. One respondent remarked: "Congratulations on a job well done."

3. HEURISTIC EVALUATION – CRITICAL EVALUATION OF THE WEBSITE

3.1 Introduction

The critical evaluation was conducted by the author during the period 23 August to 8 September 2000. The list of criteria and indicators (see chapter four, paragraph 7) was used for this method, and the content and features of the website were compared against the criteria to determine to what extent the website complied with them.

3.2 Content and scope

3.2.1 Orientation to the website

An overview of the website was available from the *About the site* button at the bottom of the home page. Background information on the development of the website, its main objectives, a short listing of information content, as well as information on document formats and instructions on how to open documents were provided. However, no statement on the intended audience was found.

The overview did not provide a real understanding of the breadth and depth of content. Although it was stated that the website acted as an entry point to government information and that it carried information content, it was not clear when content and when links were provided and how linking to other websites was approached. Some of the main pages, for example *Documents, Reports & Forms* did not provide a clear indication of the content thereof, on the information included or omitted or on how the information was handled. It was also not made clear (either in the overview or within the site itself) how far back information dated.

There was no disclaimer statement on the website. Without a disclaimer statement the developers of the site would not have been covered should information have been out of

date or incorrect. Only some instances were found where a page was copyrighted (*National System & Structure; Speeches as delivered per Deputy Minister*).

3.2.2 Authority of the website

It was clear that the Government Communication and Information System (GCIS) maintained the website. Almost every page displayed a link to the GCIS's website which provided an overview and contact information for the department. However, the statement "Maintained by Government Communications" was omitted on a few pages (for example *Ministries*) and it was not phrased consistently throughout.

The URL (<http://www.gov.za>) gave a clear indication of the 'domain' of the website and thus supported the concept of an 'official' site, i.e. that it was the website of the South African government. The site did not, however, contain an explicit statement that it was the official South African government website.

Authors of documents or references were provided where applicable, for example the *South Africa Yearbook 1999* (in the case of *National System & Structure*), the *South African Government Directory* (in the case of contact information) and for speeches and media statements. It was thus easy to determine where documents originated. However, where chapters of the *South Africa Yearbook* were used at *SA: An Overview*, a general reference to the source was found only on the index page, and not on the individual pages themselves. This could have caused problems when these pages were printed, since with later use the users might not know what the source and date were.

Where the *South Africa Yearbook* was listed as a source, a link was provided to the index page of *SA: An Overview*, obviously with the intention to link to the complete publication. This would have been acceptable if the entries to this page had linked, since that page also included links to information from other sources. This practice might have been confusing to users, as the link and the information found at the other side thereof did not correspond.

In some cases contact information for an author was not available. Where this information originated from the GCIS, it was not regarded as a problem. However, at *National Symbols*, contact information should have been provided.

With regard to reliability, most information seemed to be error-free and accurate. However, incorrect or out of date facts were presented on some of the main pages providing text

overviews. For example on the *Constitution* and *Local Government* pages, the text still referred to the Department of Constitutional Development (changed to Justice and Constitutional Development at the time of the research). In addition, when information on the vision and mission of government departments was verified against the same information on departmental websites, instances were found where the information differed. Discrepancies were also found with regard to contact information.

3.2.3 Comprehensiveness/information coverage/scope

The website presented a fairly comprehensive and balanced choice of material, since it provided access to information about a variety of topics, such as government documents, speeches and media statements, information on government systems and structures on national, provincial and local level, and information on South Africa and Africa. In addition, there were announcements on upcoming national and government events/activities and links to relevant websites were provided. All information was necessary and useful. However, when compared to the type of information covered on other government websites as described in chapter five, and considering the scope of South African government activities as well as documents available in hard copy format, the website was not comprehensive enough.

With regard to the breadth of information, information categories such as public service vacancies, government projects, campaigns and programmes, and government services were not available on the website. In addition, the opportunity for two-way communication between government and citizens or for so-called digital democracy (see chapter 5, paragraph 2.3.3.12) was not provided.

The depth of information in most categories could also be improved. The situation with regard to individual categories was found to be the following:

- Government documents and publications. Only five government forms and two annual reports of government departments were available on the site, while sub-categories such as *White Papers* and *Reports & other documents* were not complete.

Important documents such as the Government Gazette and provincial gazettes were not available. With regard to the former, Acts and Bills were available as separate document categories. Some Bills published as notices were found in the *Bills* sub-category, but with no explanation that some notices were indeed available. There were

some regulations and proclamations on the *All documents per subject* page that were not included on any other document page.

Legislative documents were listed on the site according to specific categories or subjects. There was, however, no indication what their status was, and how different documents ultimately related to the same legislation in process or ultimately passed.

Other types of government publications that were not available or comprehensive enough were reports of the Auditor-General, statistical reports and reports of commissions and committees, amongst others. Another omission was online publications of government departments and bodies, or any reference or links thereto.

The site only contained government documents published since 1997. This seemed to be inconsistent in comparison with the *Speeches* category, where information since 1994 had been made available.

- Government structures, functions, officials and contact information. This category was relatively comprehensive, especially on national government level. In some cases, e-mail addresses of departments or officials were not available, while the *Presidency* page did not include information on the Minister in the Presidency. The question arose whether the listing of *Government Bodies & Institutions* had been comprehensive, and if the website should not have contained more information about some of these institutions, for example those specifically mentioned in the South African Constitution.

Some information about government departments was contained on the site, for example the mission, vision, functions and contact information of each. This, however, was found not to be comprehensive and updated, and as already mentioned, differed from that found on departmental websites. Should this type of information be carried on the website itself, the user might also expect information on organisational structures of departments.

The scope of information presented for this category was not consistent for the three levels of government – more detail was provided for national government than for the other two levels of government. In fact, except for links to provincial government websites, contact information, name lists of premiers and MECs (members of executive councils) and profiles of the premiers, the *Provincial Government* category did not contain much information on the various provincial governments structures. Local

government information was even more limited, and no contact information for local government structures was available.

- Government activities, programmes, events and news. Provision was made for the announcement of events from *Events* on the home page. Announcements linked mainly to other websites or to press releases or newly released documents carried at relevant sections on the website. It did not seem as if there was a policy that determined the length of the period the event was carried, inter alia how long before the event actually took place was the announcement posted on the site or for how long were announcements kept available. It was also not clear if events were selected according to specific criteria – it was, for example, not always evident why a media statement would be classified as an ‘event’ or merely as ‘new’ information on the site.

The site did not contain any information on government projects (for example presidential lead projects), while recent news about government (for example newsletters), fact sheets or FAQs on specific key issues such as HIV/AIDS also did not feature.

- Press releases and speeches. This category seemed to be comprehensive – it included information since 1994, as well as speeches made by the former president, Nelson Mandela.

Despite the fact that speeches and media statements of government officials not in office any more (since 1994) were available on the site by means of the search engine (*Searchable Database*), access to this information was not available from the web pages. In addition, the speeches made by provincial officials were not as comprehensive as those made by national government representatives.

Provision was made for a category: *Speeches by foreign delegates*. However, only six speeches made between August 1994 and November 1999 were available. This raised the question about the scope or purpose of this section. As in the case of previous government officials, this category was only available from the *Searchable Database* and not from the *Speeches & Press Releases* page.

- Information about South Africa. The site contained a wide variety of information about South Africa at the *SA: An Overview* section. The information was mainly sourced from the *South Africa Yearbook 1999*. Information from other sources included public

holidays, school calendars and entries on work permits and immigration. Important topics missing from this category were statistics on South Africa, for example labour statistics and census information, as well as a country profile and demographic information.

- Tourism and business information. Links to travel and tourism websites were available from *Travel and Tourism* on the home page and *SA Webs*. Links to business sites were also available from the latter, but was not evident from the title. Except for indexes to sites, no additional value had been added to make this an interesting and more attractive section to attract investment and tourism to the country.
- Links to other websites. The website was found to be useful as information resource in itself, as well as with regard to links to other information. The site contained an extensive index of websites that linked to a wide variety of South African, and a selection of some international websites. The topics covered were relevant for a government site to link to, as it covered, amongst others, topics such as development, education, health, labour, tourism, environment, housing, business and finance, etc. Links to government sites in other countries were also included. No explanation was found about a selection policy for external websites. It was not clear from where external sites could be accessed. Some users might have expected *SA Webs* to be the logical location from where all external links could be accessed. However, it was hidden and only accessible from a deeper layer (*SA: An Overview*). There were also other links, some embedded in text and others from sidebar links at other sections of the website, for example *National System & Structure (Government Bodies & Institutions; Related links)*, *Provincial Government* (provincial government websites), *Local Government* (websites of municipalities), and so on.

A separate button on the home page was effected for links to African sites. This section contained links to SADC countries, the SADC and OAU websites and to an index page linking to websites of African countries. This page provided only a set of links, without information on important issues such as regional co-operation.

- Information in non-text formats. The only information in non-text formats included photographs of government officials and images of national symbols.

3.2.4 Currency and timeliness

Frequency of updating was found to be satisfactory and relevant to the subject matter. During the evaluation period the website was updated three times per day, but no updates were made during weekends. New information (shortened titles of documents or speeches) was announced prominently on the home page, with the latest additions highlighted. These announcements were provided per category, for example *Speeches/statements*, *Legislation*, *Bills*, *Tender Bulletin*, *Contact Information*, *Government Structure*, and others as the situation determined. This enabled users to immediately see the latest additions to the main sections.

The date and time of the latest site update was indicated at the top of the list of new information on the home page. However, no indication was given when specific documents were added to the site, or what the update frequency of the site was.

It was also not clear if the *What's New* section announced new content posted on this website only, or that posted on other government websites as well. It appeared as if only selected information items on other government sites were announced on this site. In addition, it was not clear for how long 'new' information was displayed on the home page. It seemed as if this was determined by the amount of new information available, and thus differed from day to day and from category to category.

A clear indication of when individual pages and documents were last updated or 'modified' was provided on almost every page, thereby indicating that the site contained current information. Some instances were found where these dates were omitted, for example *Foreign Missions in SA*, *SA Webs* and *Africa*. Update dates were also not displayed consistently at the same place on pages. The norm was at the bottom of pages, but at *South African Representatives abroad*, for example, the last updated date was displayed at the top of the page, and at *The Presidency* in the content table.

It was difficult to determine if the latest information was available in all instances. Refer for example to a previous statement (paragraph 3.2.3) about the 'overview' information of departments – the bulk of this information was last updated during 1998. In addition, contact information for government bodies was generally updated during February/March 2000, which raised the question if later changes were always identified and added. The same question may be asked with regard to the profiles of government officials. In addition, the latest speeches and documents were not always included in the last updates.

Another page that was not updated was the *Elections* page. It only had information on the 1999 elections. At the time of the research users might have expected information on the site about the municipal elections scheduled for the period between November 2000 and January 2001.

Some dead links were found, including both internal as well as external links. An example was the *SA: An Overview* link on the *SA Webs* page.

3.2.5 Objectivity and fairness

The website was found to be objective and free of advertising. Only factual information was provided and in an unbiased manner.

3.2.6 Writing and editorial style

Text was written in a clear and consistent style, and a professional tone was used. Jargon was absent and no obvious grammatical, spelling and other typographical errors were found.

In general, the presentation of information meant to be read online was concise and easy to scan because of the use of bulleted lists, the clear display of headings and the bold text used for headings. The writing style of longer documents was suited for printing.

Headings were mostly simple, plain and distinct enough to allow users to find information. However, in some cases menu entries and headings of the page linked to differed, or headings did not match the content linked to. Examples were: *Government System* and *National System & Structure*; *Deputy President* and *The Presidency*; *Ministers* and *Ministries*; and *Speeches* and *Speeches & Press Releases*. Some of these pages did not present any real problems, but others might have caused ambiguity. Using *Government System* might have created the expectation that users would find all information on national, provincial and local level; instead it linked to a page with national government information. Similarly, after selecting *Speeches*, a page offering press releases in addition to the speeches was displayed.

Instances where headings were missing were found, for example *1999 Documents per subject* and the page containing the government diagramme.

In some cases, different headings linked to the same information: the *Government & Politics* heading at *SA Webs* linked to *South African Embassies*; *Related links* at *National System & Structure* linked to *SA Missions abroad* – the first contained links to websites, and the latter contact information on South African representative offices in foreign countries.

In addition, text chosen for the side navigation bar or menu entries were not always self-explanatory. While an attempt was made to keep the entries short and concise, context was lost in some cases. Examples included: *Portfolio list* and *Combined Contact List (Ministries and Deputy Ministries pages)*; *Related Links (Provincial Government and Local Government pages and the Constitution page)*, *MEC List (Provincial Government page)* and *Related Links (National System & Structure)*. In addition, a heading such as *A rainbow country (SA: An Overview)* did not give the impression that it would link to information on, for example, the climate of South Africa. Some inconsistent headings were also found, for example *Cabinet* and *Cabinet Members and Ministers*. Also, the term *Legislation* was used for Acts carried on the site. This concept (legislation), however, actually has a broader definition and pertains to other government documents such as Bills. In the case of *Overview and diagram*, the page linked to a text overview (*Government Overview*), whereas the diagramme was presented one level deeper.

Overall, appropriate titles for index pages allowed the evaluator to quickly understand the information presented. There were instances, however, where page titles were not changed to reflect changes in content, for example in the case of *Presidency*, "Office of the President" was used for the page title. Some inconsistencies were also found with regard to naming conventions for titles, for example *Ministers home*, versus *Deputy Ministers index* versus *Green Papers index page*. Also, as titles were already short, the use of abbreviations was not necessary. In contrast with index pages, not all HTML documents contained HTML titles, or in the case of PDF documents, not all PDF fields were indexed. This became evident in the results lists displayed after searching.

3.2.7 Language

Language used on the website was mainly English. Only two instances were found where some of the other official languages had been used. This was at *National Symbols* and *Speeches* (some Afrikaans speeches when originally delivered as such).

3.3 Information architecture/organisational structure

3.3.1 Organisational structure of the home page

The home page was busy, but well organised. It was clearly divided to provide distinct functionality; the main categories were provided prominently on the left hand side of the screen in the form of a bulleted list, the announcement of events in the middle column and new information was posted on the right hand side.

The main categories provided a general overview of the content available on the site. The choice of main categories, however, created the impression that the main focus of the site was organisational information, but when one browsed the site, it was found that this information was spread out more horizontally than other categories, not necessarily constituting more important or broader information content. The first category presented on the home page, for example, was *Government System*. However, the subject matter of the other main categories, *President*, *Deputy President*, *Ministers*, *Deputy Ministers*, *Provincial Government* and *Local Government*, also form part of the government system. This immediately raised the question about what the choice of sub-categories for each would be. Should the developers have reasoned that these categories were more important than others, and therefore decided to put them on a higher level, I do not believe choices were made logically – should information such as governmental contact information, the Tender Bulletin, national symbols and the websites of government bodies not also have been handled in the same manner?

It was not evident from the links on the home page that certain information was available at deeper levels of the website. Contact information, links to other websites, profiles, budget information, as well as information relating to national identity are examples of information that was not easily identifiable from the home page.

The font size used for titles listed under *What's New* was very small in relation to other information on the page, and therefore difficult to read. Individual titles were not clickable. Headings linked to general category listings presenting all the information available in these categories and not only to the new titles. In addition, the new information was not always presented in the same sequence as on the home page.

The search option was displayed at the bottom of the page amongst navigation options such as *Contact Us* and *About the site*, making it difficult to detect. This problem was

exacerbated when the home page became very long when there was a substantial amount of new information and/or events and one had to scroll to see all the new information or announcements of events.

The mix of graphics and text items on the home page was aesthetically pleasing. The graphic banner at the top was well presented and contributed towards making the home page visually attractive. Graphics were not applied too extensively as to impose long downloading times. However, text used for the announcement of events was difficult to read due to the imbalance created as a result of the size of the accompanying graphic.

3.3.2 Organisational scheme of the website

The website mainly applied a hierarchical organisational scheme. In general, the site made use of menus linking to sub-menu and sub-sub-menu structures and then to the information itself. In these cases the menu structures made provision for a hierarchy from the more general concepts to more specific topics.

This practice was, however, not consistently followed. In some cases an index provided access to different categories of information for a variety of similar entries (*Ministries, Deputy Ministries, National Departments*). In other cases the information itself was immediately presented on main pages. The *Provincial Government* and *Local Government* pages were for example presented as detailed text overviews from where embedded links lead to relevant information or more detailed information. Where the text did not allow for information topics that were needed for the specific main category, provision for these topics was made from the side navigation bar. On the *Presidency* page some detailed information content (contact information) was provided in tabular format, while links to information that could be considered just as important were provided from the same table or from the side navigation bar. Other examples of information relegated to lower levels include indexes such as *All documents per subject*, the profile list and the MEC list, all of which were only available from the side navigation bar (from the various document pages and the *Ministries* and *Provincial Government* pages respectively). Users would in all probability not have realised this information was available on the site. In addition, the index page of *Documents, Reports & Forms* served as an entry point to different categories of documents; one of these 'categories', however, was the title of one specific document, the *Government Term Contract*. Was this document really so important that it justified a separate entry?

A positive feature was the depth of the hierarchy structure, which varied from one to three levels. Only one instance of a fourth level page was found, namely the page constituting the government diagramme. Despite the relatively shallow link hierarchy, some important information was still hidden and difficult to discover because it was not accessible in the shortest route possible. Examples of this include information such as contact directories (so-called *Combined Contact List*), national emblems, provincial and country-wide profiles, topical information (for example health and HIV/AIDS), provincial and local government websites and websites of government bodies other than national departments.

Another problem experienced was the many long documents that were on the website, for example *Administration of Justice*, most documents available from the *SA: An Overview* page, and some of the index pages such as *SA Webs* and the document index pages. In addition, no links were provided to some of the important information contained in these documents, making this information difficult to locate or even to know about its existence. Many users would, for example, probably never know that information about the Office of the Public Protector and the Commission on Gender Equality existed on the site. Extensive use was made of the *South Africa Yearbook* to provide background information on South Africa and the South African government. Value was added in the sense that improved access to this information was provided, but by publishing complete chapters without chunking them further, much of the valuable content was hidden and only accessible by means of the search engine or by scrolling down very long documents.

Documents that logically related to each other were placed in separate sections of the website so that key concepts spanned across multiple pages. This could have meant that users who favoured browsing would find incomplete information on specific topics, as they would not know that there was more information on the same topic available on other pages. Examples are:

- Information on the Constitution formed part of a comprehensive *Government Overview* document (available from the *Overview and diagram* entry point on the *National System & Structure* index page), but was also presented as a separate document available from the *Constitution of the Republic of South Africa* entry on the same index page as well as from the *SA: An Overview* page. Although the text of these documents was similar, the second also contained links to the various chapters of the Constitution and the third had even more detail, for example election results.

- Different versions of information on public holidays were available at *Arts, culture and religion (SA: An Overview)* and as a separate entry on the same main index page.
- Information on some of the national symbols was available at *Arts, culture and religion (SA: An Overview)* but a complete description of all was available at *National System & Structure*.
- Speeches and press releases of some provincial officials were not grouped with those of the national and other provincial officials, but were only available from the side navigation bar from the *Provincial Government* page.
- Information on provincial profiles was available at *Provincial Government* as well as at *SA: An Overview*. A country profile was available at *SA: An Overview*.
- A separate *Elections* page existed, but other information on this topic was also available from *SA: An Overview*.
- Duplication of entries was found on different levels of the website, for example the home page, and from the *National System & Structure* and *Government Overview* pages (*President, Deputy President, Ministers, Deputy Ministers, National Departments*); in some cases different information was presented and in other cases information was similar.
- Another example was *South African Missions abroad* and *Foreign Missions*; information on these was available from *National System & Structure*, but links to some of the websites of these offices were provided at *SA Websites*.

The way in which *Portfolio lists* on the *Ministries* and *Deputy Ministries* pages was treated is another example of inconsistency. The information was available from the side navigation bar on the relevant pages, but with *Deputy Ministries* the list formed part of the index page, without a heading other than *Portfolio List*. Were it printed as an independent unit (which had probably been the aim), context would have been lost. A solution could be to treat it the same way as at *Ministries*, i.e. as an independent page that can stand on its own.

A positive aspect of the website was the alternative methods of organising and providing access to documents as well as speeches and press releases. In the *Government*

Documents & Reports section the different types of documents (for example legislation) were chronologically ordered per annum. The different types of documents were also arranged alphabetically per subject for each year. Thirdly, all documents for all years and all types were presented together and organised per subject. Speeches and media releases were sorted per annum, or alphabetically per speaker. Other alternative methods such as different listings of, for example, ministers and their portfolios were also found valuable, but were not sufficiently visible or identifiable as additional organisational tools.

3.4 Navigation and search

3.4.1 Site navigation

Overall, the site provided an easy way to browse and navigate it. Structural as well as local links were provided, and pages provided easy access to relevant pages.

Structural links were available on all pages. All pages contained a link to the feedback form and search mechanism, and the top navigation bar contained links back to the home page as well as links to the main information categories as presented on the home page. This allowed users to immediately access other main sections of the website from any page on the site, without having to use the *Back* or *Home* buttons. However, the sequence presented in the top navigation bar differed from that of the home page, while the phrasing of some entries was inconsistent with that used on the home page. In addition, the *Africa* entry was omitted from the top navigation bar. The principle of applying 'breadcrumb trails' (links to the levels of the hierarchy immediately above the current location) was followed only in some instances, such as on the *National Flag* page, where a link was provided in the sidebar to *National Symbols*.

Despite the fact that the top navigation bar provided various navigation options, it was not optimally usable and accessible. The text used on the top navigation bar was difficult to read because of the small font size and the use of white text against a black background. In addition, it was cumbersome to scroll back to the top of the page on longer pages.

Some duplication of structural links was found, for example: on the *Department of Agriculture* page and similar departmental pages the home page link was duplicated in the sidebar; on the *SA: An Overview* content pages a *Back to Index* button linked back to the *SA: An Overview* index page, while the link was already available from the top navigation bar; on the *Ministries* page, the entry *Deputy Ministers* was available from the side

navigation bar as well as from the top navigation bar; on the *National System & Structure* page *Provincial Government* and *Local Government* were duplicated in the side and top navigation bars.

The sidebar navigation constituted a method to provide local links to relevant information, as the links provided access to information deeper down in the information hierarchy and to relevant information. This feature provided the user with the opportunity to cross-navigate between different types of information without having to go back to the home page or the main categories. However, the side navigation bar was not applied consistently and logically and was used for various types of links. It linked, inter alia, to:

- Related information that was available on the site itself, for example *List of Profiles (Ministries page)* and *Legislation/documents on Public Service (National Departments page)*.
- Information that provided more detail about the relevant page, for example *Section in the Constitution (Ministries, Deputy Ministries, Provincial Government pages)*.
- Other websites, for example *Related Links* on the *Provincial Government* page.
- Other sub-categories of the same information category, for example at *Documents Reports & Forms*.
- Additional indexes, for example *Portfolio list* (on the *Ministries* and *Deputy Ministries* pages), *All Documents combined* (on the various *Documents, Reports & Forms* index pages), *Cabinet Members' Speeches* (on the *Speeches & Press Releases* page).
- Information that formed part of the same category, but was placed on a deeper level. For example, on the *Presidency* page, the sidebar linked to the profile of President Mbeki; on the *Provincial Government* page, the entry *Contact Lists* linked to the contact information for provinces.

Other problems identified are as follows:

- Only a few of the longer pages (for example *Government Overview* and *Green Papers*) contained bookmark links or a short list or index to assist navigation. Longer text pages as well as some index pages (for example *Documents per subject* and the other

document index pages) would have been more usable if 'top of the page' options were available. In addition, pages such as *The Presidency* would have been more usable if a link from the *Deputy President* section was provided to the top of the page. In contrast, on pages such as *Deputy Ministries* and *Speeches & Press Releases*, links such as *President*, *Deputy Ministries*, or *Speeches per Annum* respectively would possibly have been more suitable than *Top of Page*.

- The bottom navigation bar was missing on some pages, for example *Ministries*, *South African Missions abroad*, and *Foreign Missions in SA*.
- Links did not give users explicit clues to where they would lead and how much information was at the other end of the link.
- Other than the subject indexing of documents and an A-Z index bar on some of the documents pages, the site did not contain methods to assist the user to form a mental model of the website – such as an alphabetical index, a site map, tables of content, spatial or geographic overviews or help sections.

3.4.2 Search mechanism

Although the use of Verity's Search97 search engine offered a potential powerful search mechanism for the site, the practical implementation thereof was not successful.

A positive feature of the search mechanism was that the search option was available from the top as well as the bottom of all pages. Both search facilities allowed for boolean searching, the entry of phrases and variants (such as case sensitivity and stemming), the selection of default, simple, standard or power view for search results, and for controlling the size of the results list. Documents in both HTML and PDF formats could be retrieved. Refinement of searches was possible when the standard and power views were selected. In addition to the above, the *Searchable Database* also made provision for the selection of specific data collections, field searching (structured fields as well as text fields) and the sorting of results according to date or score (descending or ascending).

The following main problems were detected:

- The criterion about the availability of some kind of simple as well as advanced search was adhered to. However neither of these two options was available for the complete

site – the 'simple' search (*Search the Government Online World Wide Website*) could only be used for documents on the web pages, while the 'advanced' feature (*Searchable Database*) searched for documents that had been indexed in an information retrieval system. Also, the *Search the Government Online World Wide Website* could not really have been considered a simple search, as it contained features such as 'standard' and 'power' view.

- It was not possible to use the two search mechanisms together for a comprehensive search on the site. For example, using the first and most prominent search facility (*Search the Government Online World Wide Website*) to find Mbeki's speech at the AIDS conference did not yield the relevant speech, not because it was not available on the site, but because it was not available through the specific search mechanism. An aspect that might have exacerbated confusion was that some provincial speeches were picked up by the latter search engine (*Search the Government Online World Wide Website*) – something that might have created the impression that speeches were available by means of this search engine. These were, however, speeches that were available from the *Provincial Government* page.
- It was not clear what the scale of resources was and what type of terminology was used in the database. Natural language searching was also not possible. In addition, the search interface was too complex. Terms such as 'default', 'simple', 'standard' and 'Result count' would probably not have been familiar to the average user, and were also not explained. Another factor that contributed to the difficulty of use of the search mechanism was that there was no indication whether stemming, case matching, stop words or other transformations could be applied.
- In one instance, at *Speeches & Press Releases*, an attempt was made to include a scoped search, and a link, *Search on Speeches*, was provided on the relevant page. However, the link took the user to the search interface of *Searchable Database*, where speeches were listed together with other information categories. The relevant data collections for speeches still had to be selected, adding an extra step for the user. In addition, as these data collections were listed at the top of the list (other options were not visible), the user could easily have entered a search query without realising he/she had to make a selection, thus getting back many irrelevant hits.
- It was difficult to search for speeches or media statements of specific officials. When entering a specific name in the text field, the results returned many irrelevant

documents. The reason for this was probably that although provision was made for date and title fields no field was available for names of officials. It was therefore easier to browse to find speeches made by specific officials.

- The system did not allow for variants such as phonetic variations, abbreviations, or synonyms from a thesaurus. When a search had been executed, it was also not possible to immediately change the search parameter to produce a new set of results.
- No provision was made for the clustering of results lists. No explanation was provided of how relevance ranking was performed. It was also not possible to save search results and to set parameters.
- Some results included incomprehensible titles, for example “zer1708.tmp” or only a URL. This was especially found with older documents on the site and resulted from PDF files or HTML titles that had not been indexed.
- Search terms were highlighted in documents searched from the *Searchable Database* but not from the *Search the Government Online World Wide Website*.
- When the ‘power view’ was selected, results indicated that documents found contained “no pages” (this occurred when documents were less than one full page).
- No facility was available on this website to search for information on other government sites.

3.5 Design and layout

3.5.1 Design and layout of the website

Overall, the website was found to be visually pleasing in terms of aesthetic qualities such as colour, layout and appeal, and the use of the South African flag and Khoisan figures contributed to giving the site a national identity. The use of features such as images on the home page to visualise upcoming events, icons at menu entries, photographs on the *Ministries* and *Deputy Ministries* pages, as well as the use of the images of the national emblems (*SA National Symbols*) contributed to its general appeal and to make the site colourful.

Overall, the graphic balance of pages was good. The balance between the header and rest of the pages was satisfactory, and the page elements were in most cases consistently applied for all pages. However, the size of the images used for *Events* on the home page was too big, and contributed to an unbalanced relationship between text and images, making the text more difficult to read. Some inconsistencies were detected in the display of information in specific locations, for example indication of 'last updated' dates. In addition, pages that acted as index pages were not consistently displayed. The index for *Combined Contact Lists*, for example, was displayed in a visible table, while other pages made use of bulleted lists or provided text overviews.

In general, information was organised effectively on the screens. However, some pages were cluttered and some index pages contained information that just kept on and on, for example *SA Webs*. In addition, on many pages links were underlined, a practice that is not necessary on these pages, while spacing between entries was often too limited.

It was not always clear what criterion determined the sequence of menu entries on pages. For example, the *Documents, Reports & Forms* page did not present information alphabetically; neither were similar things grouped together, or more important aspects displayed in more prominent positions or 'first in the normal reading order'. In contrast, pages such as *Ministries* displayed information alphabetically.

Overall, the site was well designed and easily viewed with a 15" monitor. In some cases the right hand part was cut off when printed, for example *The Presidency, Department of Agriculture* and similar departmental and *Ministries* pages, as well as the page containing the government diagramme. A few index pages were also cut off, but these would probably not have been printed by users (home page and *National Departments*).

As already mentioned, the website contained a number of documents that were too long and took long to download. Most of these documents did not contain internal navigation aids such as indexes at the top of the page and 'top of the page' links. Sometimes one had to scroll through as many as 24 or more pages or print them to determine what content was included. Amongst these were *Administration of Justice*, most documents in the *SA: An Overview* category and a Power Point presentation available from the *Presidency* page.

Main index or menu pages were generally within acceptable limits, but as stated before, the home page sometimes got too long with the addition of new information or events, necessitating scrolling to see all entries. Despite the statement made in chapter four that

longer index pages are not necessarily unacceptable, several secondary index pages on this site were still too long, for example *SA Webs, Government Bodies & Institutions*, and generally all indexes in the *Documents, Reports & Forms* category (*2000 Documents per subject* was 10 pages long), requiring users to scroll too much.

Index pages such as *Ministries* and *Deputy Ministries* and content pages such as *The Presidency* made use of visible tables, of which the table borders were shown. The use of double lines, together with the underlined links resulted in some of these pages looking busy and cluttered. The display of entries such as *Speeches and press releases* in an extended table on the *Presidency* page made the text difficult to read.

The website was written in standard HTML. Government documents were, however, provided in either PDF or HTML format. No indication was provided of which documents were available in which formats. Downloading time of PDF documents generally took too long.

3.5.2 Text readability and visibility

Fonts were not always used consistently. Different font types and sizes were used. This was apparent for documents as well as for index pages. Compare for example *SA: An Overview* with *National System & Structure, Documents, Reports & Forms* and *Africa*. Different font types and sizes were also used for headings within documents. In some cases font size was found to be too small, for example at the *What's New* on the home page and the entries in the top navigation bar. The font used for the summaries of search results was also difficult to read.

In general, justification of text did not present problems, but sometimes spacing, or the lack thereof made text difficult to read. At the *Director-General in the Presidency* page, for example, the postal address, street address and telephone and fax numbers were all presented without proper spacing, while the entries on the *Presidency* page were also difficult to read.

On some pages (for example *Government Overview*) text spanned over the complete width of the screen, making it difficult to read and requiring extra effort to scan through.

Throughout the site the colours of the South African flag were used for the side navigation buttons. The five colours used could be considered as sufficient. Unfortunately these

colours were relatively bright and became a bit overwhelming on pages with many sidebar options, for example the *Documents, Reports & Forms* pages. The background image, however, was applied well and did not distract from the readability of the text.

3.5.3 Graphics and images

The graphical elements chosen were found to be relevant to the information content and contributed towards enhancing it. The photographs of government officials (*Ministries* and *Deputy Ministries* pages) contributed to making these people more personal to the user, while the images on the *SA National Symbols* pages contributed to the user's visualisation thereof, thereby enriching the textual description. The use of the South African flag for the icons on index pages and the flag colours added to the perception of visual unity. Graphics were not too big to influence the downloading speed negatively. The evaluator was of the opinion that there were many more photographs that could have been added to the site and that the design might have been enhanced if more graphics were used as an integral part of the design.

3.5.4 Interaction (forms)

Easy access to the feedback facility was provided on the home page and all other pages. The feedback form invited users to comment on the site or to submit general questions and was simple and easy to complete. The automatic response the user received after submitting the feedback form, as well as the fact that the form provided the opportunity to request response or comment on the website, contributed to two-way communication and demonstrated government's willingness to respond to the users.

However, no indication was given of the time-frame within which users could have expected a response. The distinction between the types of query that could be submitted by means of the form versus those that had to be submitted to the Information Centre was also not clear, both in the wording and in the display of the instruction. In addition, the distinction between website related queries and content queries, and the fact that the first was handled by means of a feedback form and the latter by means of an e-mail facility did not make sense.

3.6 Purpose and audience

Overall, the website fulfilled its purpose to act as an entry point to government information on the Internet. However, it seemed as if priority was afforded to carrying information content and keeping it maintained in favour of providing access to government information on other sites. At the time of the evaluation, users had to go to the individual government sites to determine what information was available on them.

A formal and official style was achieved by following a formal writing style and by presenting mainly official documents. As this evaluation concentrated on the more sophisticated user, the site was considered as appropriate for its audience.

4. USER TESTING

4.1 Introduction

The discount usability approach was followed for the user tests. Five users were selected as respondents. They were selected to be representative of the most common user populations, to have different levels of Internet and *SA Government Online* experience, and to be from different age and gender groups. The user tests were conducted during the period 14 to 21 August 2000. The respondents were provided with work tasks, and the tests were conducted individually for each respondent in his/her normal work environment. See chapter two, paragraph 4.3 for a description of the method, and Annexure B for the questions used.

4.2 The home page and *What's New*

4.2.1 Impression of the home page (Question 1a)

When asked to give their overall impression of the home page, respondents mostly commented positively. Comments included the home page was colourful, lovely, looked professional and well thought out, that the header was nice and effective, and that "the background is effective and not at all distracting from the content". The icons used next to the main category entries were also commented on positively. In addition, the home page was considered as comprehensive and "loaded with information", and "the left hand side seems to be a good display". One respondent thought that the home page was a good representation of the government's identity.

However, the respondents regarded the following aspects as problems:

- According to one respondent, the design of the home page in three columns was not clear enough: "When I used it the first time, the three columns did not hit me immediately - perhaps it is the font size, or the headings are not clear enough; it is also not immediately clear what the main content is and what is new."
- Three respondents were of the opinion that the *Search* button at the bottom of the page should be more prominently placed, as "I don't want to scroll down to find it", and "it is not at all clear at the bottom of the page". It was commented that the options it was grouped with did not have an equal weighting to a search facility and it was recommended that it be included at the bottom of the main content list: "You can scan down to see if you want a specific category, and then select search if necessary."
- One respondent said the home page was too cluttered.
- One respondent initially attempted to click on the icon next to the main headings on the home page, but immediately corrected this by clicking on the menu title itself.

Respondents provided the following suggestions for improving the home page:

- When moving over the buttons, descriptive information should be displayed for users to see what it is about, especially in the case of the main content: "This will entice users to use the site".
- Two respondents suggested that the home page should be livelier: "The home page is too static, more graphics could be used"; "introduce something lively, like a flashing flag or something".
- One respondent suggested that the hit counter could perhaps be omitted, as "it may appear as if the site is being boosted – as it is, however, it is used discreetly".

4.2.2 Find a specific speech that was posted on the website today (Question 1b)

All respondents got confused with various aspects of the *What's New* function. When asked to look for a specific speech under the *What's New* heading, the following problems were experienced:

- Each and everyone attempted to click on the required entry. They complained when the specific item was not returned, and expressed the need to go directly to the required item. Remarks made were: "The link is not active"; "I would have expected to click on the speech itself to find it, and not on the heading"; "I expected to be able to get the specific document when I click on it"; "This is not a hot link – I need to link immediately to the relevant information".
- Two respondents expressed dissatisfaction with the highlighting of the latest additions. One remarked: "I don't understand the colours – why is it necessary to distinguish between the newer ones and others – everything here should be new."
- Respondents commented on the fact that other information was found: "I expected to find only new information when selecting information at *What's New*, and not everything"; "*What's New* is a combination of *What's New* and a database – it's not just new documents"; "I don't need 3800 documents, only the new ones – the downloading speed would also have been faster"; "It took me to all the speeches when I needed just the specific one".

In addition, two respondents could not immediately establish that the right-hand column provided new information posted on the website, and got confused with the repetition of headings in the left and right columns. One of them wanted to know what happened with the speeches at *What's New* – "I don't know where it moves to and then I don't know where to find it."

One respondent felt that the presentation of new information was too cluttered and recommended that less information be presented. In addition, the font used was considered as too small, and the red colour as ineffective – "the red on white does not work and strains the eyes".

Lastly, one respondent remarked that he did not think it necessary to inform the user that information is updated continuously and that speeches are added daily, as “I assume that it should be done”.

4.3 Presidency page

4.3.1 Who is the President of South Africa? And Deputy President? (Question 2)

No problems were experienced to identify the correct category on the home page to determine who the president was. A specific recommendation made about the *Presidency* page was: “One page for the president and deputy president is confusing – it will be better to use office of the presidency, or presidency, or president and deputy president; either have all photos on top, and also those of other important people, with e-mail addresses.”

Positive comments were made about the inclusion of photographs on the *Presidency* page. One respondent remarked that it “will help to bring a face to the name”. Other comments made about the *Presidency* page were that the lines of the tables were unattractive and that the typeface (italics) did not work well “as it made reading difficult”. In addition, one respondent found it confusing that *TM Mbeki* was used for the link – he expected the photograph and name to be one link.

Respondents approached the task of finding information on the deputy president in various ways. Two respondents made use of the *Deputy President* button at the top ‘index’ of the page, and one of them remarked positively on the inclusion of the ‘index’ links at the top of the page: “This is ok, now I don’t have to scroll.” Two respondents did not use the index – they realised the information on the deputy president was on the same page and preferred to scroll down to this information. One respondent selected *Back* to go to the home page and there selected *Deputy President*, only to return to the same page.

4.3.2 Find the profile of President Mbeki (Question 7a)

Overall, respondents experienced no problem to locate the profile of President Mbeki. However, one attempted to find it from the *Ministries* page, expecting to find a link to the *Presidency* page.

The following behaviour was observed: Only two respondents immediately clicked on the name at the bottom of the photograph. One searched for a specific heading (CV),

remarking: “a flag on the links will help”. Two respondents expected to find the president’s profile by clicking on the photograph, as “one normally assumes it is an icon, and one would not see the distinction between the name and the icon” (expecting the photograph and name to be one link).

4.3.3 What is Mankahlana’s position in the Presidency? (Question 7b)

It was interesting to observe that some respondents did not realise that the information on Mankahlana was contained on the same page as President Mbeki’s information. One respondent used *Back* to go to the home page, selected *Speeches* and then *Search on Speeches*, with the explanation that “Mankahlana is the president’s spokesperson”. Another respondent initially wanted to do a search, but then left the *Presidency* page to go to the *National System & Structure* and *Ministries* pages: “Perhaps he is a minister or has some relation to a minister.” He then tried *Cabinet*: “Perhaps he is a member of the National Assembly.”

4.4 Documents, reports & forms

4.4.1 Find the Act relating to nuclear energy, Act No. 46 of 1999 (Question 3a)

When asked to find the Act, respondents overall were able to identify that Acts were grouped under *Documents, Reports & Forms* and then at *Legislation*. It is, however, worth noting that one respondent initially looked for this in the general category listing on the home page, and that one respondent initially opened the *Bills* sub-category to find the Act, only realising after scrolling through the index page for Bills that the wrong heading had been selected. Another respondent browsed through the right hand column on the home page (*What’s New*) and clicked on the heading *Acts*. When he found the wrong information, he opted for the search option, but when asked to browse again, he again browsed through the *What’s New* column, this time selecting *Documents*. This behaviour corresponds with similar problems with the *What’s New* column as described in paragraph 4.2.2.

However, respondents experienced considerable problems to find the specific Act requested. After selecting the correct category (*Legislation*), they did not immediately notice that the page they found only listed the legislation for 2000, and that further navigation tools were provided to find Acts published in other years. The only one who was able to identify this remarked: “If I did not know the site, I would probably have used the search option or go to the relevant department’s website.” Respondents immediately started to scroll

through the index, and when realising that the relevant document was not there, started to look for other options. Three then found the *1999 Legislation* entry in the side navigation bar. However, even then one respondent did not notice this option and returned to the *Documents, Reports & Forms* index page, selecting *Documents listed per subject*.

Specific remarks made were: "I almost got confused with the reports" (when selecting the correct option – *1999 Legislation* – in the side navigation bar). On realising that the page only contained documents for the year 2000, another remarked: "I rather should have used the search, without having so much trouble."

4.4.2 Name government documents and reports which cover transport issues from 1997 to 2000 (Question 3b)

Two respondents initially selected the option *Government Departments* with the aim of getting the documents on the website of the Department of Transport. The other three selected the category *Documents, Reports & Forms* and then *Documents listed per subject*. It was interesting to note that two of these went back to the home page and selected the category from there, even if they were already within pages of the relevant category. When they could not find the information there, they also considered going to the website of the Department of Transport.

When the first two were requested to look for the documents on *SA Government Online*, both opted to search. After observing their search behaviour, they were requested to find the information by other means.

When the relevant sub-category (*Documents listed per subject*) was selected, respondents did not notice that the *2000 Documents per subject* page was displayed and that the *All Documents combined* option was available from the side navigation bar. When alerted about the option, one respondent remarked: "I found it confusing, I didn't realise that *All Documents combined* will go to documents of all years." Another responded that she expected that *All Documents combined* would be "for all subjects, but not for all years; the title 'archive' can probably be used".

One respondent scrolled down the *2000 Documents listed per subject* page and attempted to pick out the documents that might cover transport issues. He remarked that he only saw some of the documents pertaining to transport (he did not look for a heading 'Transport'), and also only documents from 2000. When asked to try again, he noticed the relevant

heading, but remarked: "It is still only 2000 documents." He then selected *1997 Documents per subject* and announced his further intention to repeat this for every year required. This behaviour (selecting the individual years from the side navigation bar) was repeated by another respondent. Both remarked that this was very cumbersome. Only one respondent made use of the alphabetical index to go to *Transport*.

Specific comments and suggestion on the *Document, Reports & Forms* category were as follows:

- The interpretation of documents "must be more clear".
- There must be a link to the relevant department's site from the subject heading.
- All documents should be "in all subjects in all years together".
- The *All Documents combined* should be on top of the side navigation bar, "because it is easier to get everything you need at once".
- One respondent remarked that she got confused between the meaning of, for example, *Documents listed per subject* and *Reports and other documents* and whether it was going to be an archive: "It would have been nice if a flag could show the meaning of headings while running with the mouse over the buttons."
- It was commented that the alphabetical index was confusing, as the respondent expected to find document titles when clicking on the alphabetical letters.
- All documents should be chronological as well as alphabetical.

A comment was also made about the way links were presented on the *National Departments* page: "I assumed one can click on the name of the department to get more information about the department or to go to its home page – it is not necessary to include the *Home page* or the other options in the table."

4.5 Speeches and media statements

4.5.1 Find all the media statements made by Minister Asmal (Question 4a)

An interesting observation was that not one of the respondents selected the option *Speeches* for this task. One respondent selected *Documents, Reports & Forms*. The reason she provided was that she was looking for a document named "South African Government Directory", which she knew contained information on ministers, and then expected to link from this page to Asmal's speeches. When this did not work, her second choice was *Ministers*. However, she then selected *Asmal* explaining that, as she only saw the link to *Speeches* and not media releases she expected to find media releases when

clicking on *Asmal*. When his profile was found, she went back to the *Ministries* page and tried *Speeches*, remarking: “perhaps it will be here”. When the results browser was displayed, she remarked: “Now I don’t know, it looks all like speeches – is there a difference?”

A second respondent preferred to search, with his second option the *Ministries* page. The others preferred the route through the *Ministries* page. One respondent also clicked on *Asmal*, and from the profile page he then selected *Speeches* in the side navigation bar.

4.5.2 Find the oldest speech on this site made by Minister Asmal (Question 4b)

Overall, the respondents did not experience problems to find the oldest speech made by Minister Asmal. However, only one respondent realised that this was not necessarily Asmal’s oldest speech, the reason being that the results list when using the browsing option was limited to a specific number of speeches (in contrast to when the search option was used). One respondent commented that it should be stated that speeches and statements are sorted from new to old.

4.5.3 Combination of speeches and media statements

Respondents were additionally asked to indicate their preference with regard to the combination or not of these two types of information.

Three respondents preferred speeches and statements to be presented under separate headings. Comments made were: “Enquiries will specifically state a preference for one of the two”; “If it’s only media releases, the current handling is good enough. However, should public debates or departmental speeches that are not carried in the media be carried on the site, the entry ‘speeches’ is not sufficient, and a distinction should be made between the two”; and “Speeches can be open for speculation about how the user will interpret it.”

One respondent did not mind that speeches and media statements were combined. One had a specific preference for speeches and media statements to be grouped together, as “you don’t know exactly what is needed, only that clients need information on what was said”. Another stated: “It does not matter, as long as you can search it on a theme.” A remark was also made that journalists might prefer them to be separate, as they would want to find a media statement quickly.

These comments must be seen against the background of respondents' behaviour already reported on which indicated that the presentation of speeches was not clear to them.

4.6 Questions relating to SA: An Overview

4.6.1 What is South Africa's national animal? (Question 5)

Overall, respondents experienced problems to find this information. It was evident that they were not able to deduct from the home page categorisation what the relevant category for this information was. One respondent was not able to identify a relevant category at all and opted for search, while the other four initially selected the *SA: An Overview* page. Different options were attempted on this page, for example *Arts, culture and religion*, and *Tourism, Sport and recreation*, and *A rainbow country* ("I expect to find information about the country"; "I don't know what it means"), all to no avail. Another's second attempt was *Systems & Structure* on the top navigation bar, remarking: "I assume it is part of how government functions."

One respondent, after selecting *SA: An Overview*, selected *Arts, culture and religion* on the *SA: An Overview* page, finding information on some of South Africa's national symbols, but not that on the national animal. She remarked: "This is strange, I expected it to be with the Coat of Arms, I really expected it here." When she was shown where the information was, she remarked that there was duplication of information on the Coat of Arms, and that she would not have expected it there.

Other remarks or suggestions were:

- "The national identity symbols are important, I would prefer them to be separate; if we want to sell the country everyone should be able to access them easily – perhaps it should be on the home page, it is even more important than the ministers."
- "It will be easier if the national icons could be included on the home page, as they are hidden now. Otherwise at the *Presidency*, but no, it symbolises the nation, it should be afforded its own space, as this is a national site."
- "Another thing that would be nice is the national anthem with its music."

- When entering the *SA: An Overview* page, one respondent remarked: “I see a lot of buttons, but I don’t have an idea what they are about, what type of organisation is being followed – alphabetical, topical – and where the information originated from.” She suggested that an explanation be provided on the site.

4.6.2 When is Youth Day celebrated in South Africa? (Question 8a)

Two respondents were able to find the information by following the route *SA: An Overview*, *Public Holidays* and *Youth Day*. Another respondent mentioned that search would be his first option, but when browsing, he selected *SA: An Overview* from the top navigation bar and found *Public Holidays* with the remark that “it is perhaps distinct from national days but I assume it is here.”

One respondent clicked on the heading *Events* on the home page, remarking: “It doesn’t allow me.” He then scrolled down the events and remarked he would “rather go the quick way and search”. Another respondent first scanned the right hand column. He then attempted to click on the heading *Events* with the remark: “Maybe it should be under events, something like national events.” He then tried the search option. When browsing again, he selected *Government System*, not scrolling down to look for a more relevant heading: “People will not make a clear, logical connection to look for it here.” He finally selected *SA: An Overview* and initially considered finding it at *Arts, culture and religion*.

4.6.3 What do you think you will find when you select ‘Back to index’? (Question 8b)

Three respondents indicated that they expected to find the previous page, namely *South Africa: An Overview*. Another commented: “I assume it will be the previous one where I came from, but when I used search, I would not have known.” The third remarked: “I don’t know why this is necessary, because there is a *Back* – it should not be replicated. To my mind I won’t need it.”

Two respondents expected to find the home page. One remarked: “Home page in Internet language is always referred to as such.” Another expected “probably a list of public holidays.”

4.6.4 How is the media regulated in South Africa? (Question 10)

One respondent selected *SA: An Overview*, remarking: "If you really want something on South Africa, go to SA Overview." The four others opted for search, three of them after first considering other options. One remarked: "If you know which is the relevant Act, you can go to *Documents, Reports & Forms*." However, as she did not know this answer, she opted to use search. The second remarked that his first option would be to go to the responsible department's website, but then, realising he did not know which that would be, he selected search "to make things easier". Another respondent wanted to look for policies with regard to the media, "but as there isn't a link to policies, I will look at documents, or use the search engine". When shown where the information was, one respondent remarked that it made sense, "because it is information on South Africa".

4.7 Ministries page

4.7.1 Who is South Africa's Minister of Foreign Affairs? (Question 6a)

Although different routes were chosen, respondents did not experience problems to find the answer to this question. Three respondents selected *Ministers* from the home page. One selected a slightly longer route through the *National System & Structure* page, thereafter selecting *Cabinet* and *Cabinet Members*. Another respondent selected *Government Departments, Foreign Affairs, Minister*.

4.7.2 What would you expect to find when selecting 'Portfolio List'? (Question 6b)

This question was asked to determine the legibility of the term *Portfolio list*. From the responses it became clear that the term was not phrased clearly enough, and that it caused confusion. Respondents expected, for example, an "alphabetical list of ministers", "the name of departments with its ministers", "ministers and departments they are heading – perhaps what departments are doing", "something the same as here at the ministries, perhaps according to the name of the ministers", and "a list of work descriptions and work titles and what they are responsible for". One respondent remarked: "This is confusing for me – will perhaps find portfolios of ministers or portfolio committees – although this is too parliamentary – the first perhaps."

All respondents expressed the opinion that the portfolio list was a duplication of information, and did not realise that it was in fact an alternative way of organising the information. When the list was displayed, comments were made such as: “Oh, this is the same”, “it seems like duplication, I don’t know if it gives me extra info, the list of profiles is duplicated also”; “It’s a duplication of the previous page – it is still the Minister of Education and his name”.

4.8 Links to other websites

4.8.1 Find the website of the South African Parliament (Question 9a)

One respondent expected to find the link to the website at *SA Webs*, explaining: “I expect it here because it is a related website.” The next option tried was *Government System, Cabinet*, “as parliament relates to the Cabinet”. When she was asked to try again, she selected *Government Diagram* and attempted to look for a link from the section on parliament. She only then saw the side navigation bar entry to the relevant page.

One respondent expected the link to parliament’s website to be on the home page, “as it is more important than local government”. Scanning the home page, he remarked: “I’m quite lost, perhaps I should look at the overview.” On the *SA: An Overview* page, he attempted *SA Websites* and only thereafter tried *Government System*. When he saw *Parliament of the Republic of South Africa*, he remarked: “Oh, but that’s ok!” However, he expected to find parliament’s website to be linked to from this menu item. A second respondent also went to the home page to “look for something related to parliament to go straight there”. Not finding it, he selected *Government System* and then *Parliament of the Republic of South Africa*. Only one respondent immediately selected *Government System, Parliament of the Republic of South Africa*. It is worthwhile to note that this was the respondent with a high exposure to the website.

Three respondents, when clicking on the last mentioned entry, expected to go directly to the parliamentary website, and not through yet another link.

4.8.2 Find the website of the Commission for Gender Equality (Question 9b)

This link was expected under a variety of headings – only one respondent found it at *Government System, Institutions, Bodies and Commissions* without any problem. However, he remarked: “It could be confusing for others, but it’s a problem, there is a lot of information to be placed”.

One respondent first looked for a heading “something like links”, but when she could not find it, she considered the option of going to the website of the Department of Justice to find the link. She never considered the possibility of finding it at *Government System*. Another also commented: “It will definitely not be under *Government System*, it’s more a commission, a working group – I see no logical grouping for this.” When shown where it was, she stressed that it was definitely not a system.

The other two options followed were the search facility and *Government Departments*, the latter with the expectation that there would be a “link to government controlled bodies”.

One respondent suggested that all links to other sites should be grouped together with a title such as “related links”. Another suggestion was to change the home page entry *Government System* to *System and Structure*.

4.8.3 Find the website of a government department with demographic statistics on South Africa (Question 9c)

Three respondents had no trouble to identify *Government Departments* as the relevant entry. One opted for search. The last initially looked for this link at *Government Diagram*, but then from previous experience with the diagramme realised that it would not work. She then selected *Government Departments* from the home page.

4.8.4 You need information about the departments of the Western Cape Provincial Government. Find a website with this information (Question 9d)

The initial identification of *Provincial Government* was obvious to all respondents. However, not one was able to identify *Related Links* to be the link to the websites of the provincial governments. All respondents expected the embedded link *nine provinces* to provide a list of the nine provinces. When they clicked on this link, not finding the expected list, they scrolled to *Western Cape* and then through the text under this heading, not realising that they were still in the *SA Government Online* website. Respondents scanned the side navigation bar a few times, still overlooking the *Related Links*. One eventually selected *MEC List* in the side navigation bar and from there *Western Cape*, remarking: “This is a very long way.” Other fruitless attempts included selecting respectively the name of the premier and *Contact Lists*. When respondents were eventually directed to the side navigation bar entry *Related Links*, comments made were: “I did not expect it here, it was

just a question of elimination”; “This is not clear at all, you would rather expect to find this information when clicking on *nine provinces*, as it gives the impression that it is going to the provincial sites”; “I expected the *Related Links* button to link to information on the NCOP, parliamentary issues, and things related to Provincial government”; “I expect information to be related to where I am”; “This is not really logical.” In addition, dissatisfaction was expressed that a further click was required to get to the required information: “Now I must click again to get it.”

During this exercise the following comments were also made about the *Provincial Government* page:

- “Something is missing from this page – a map where you can click on a province and get information about the province with different options.”
- “It should be more like the national part, to get used to the pattern of the site – I expect to find the same form.”
- “Most users will not need the general information; the page should rather be similar to the other menu pages. You can use a bullet in the menu to get the general information.”

4.9 Contact information and profiles

4.9.1 You need the addresses and telephone numbers of all deputy ministers, ministers, provincial premiers, as well as South African representatives in foreign countries (Question 11)

Respondents had some difficulty to locate the combined contact list – only one (the respondent with high exposure to the website) was able to easily identify the relevant information category as *Government System*.

The other respondents all selected either *Ministers* or *Deputy Ministers* and started to select *Contact Info* for each of the officials individually, some commenting that it was very time-consuming. Some only later saw the *Combined Contact List* option in the side navigation bar.

The following recommendations were made:

- A logical place could be “at the tables of the ministers, deputy ministers and the *Provincial Government* page respectively, and to go from there to the different contact info; if there was a way to display it all together, it should not be too cumbersome and

only include the most important information, something like minister, portfolio, e-mail, telephone.” The respondent also required it to contain an index, “or else it will become too long”.

- A combined list should be at *Ministries*, or *National Departments*, or *National System & Structure*, as it forms part of government structures: “Contact information is very important information, as you would want to complain, congratulate and so on.”
- Some respondents suggested that this information should be accessible from the home page: “Contact information is used often and should rather be presented on the home page.”
- Three respondents thought it would be logically placed under *Government System*. One explained: “It seemed to be overarching.” One suggested a heading such as *Government Directories*.
- The possibility of grouping contact information with *Documents, Reports & Forms* was also mentioned.
- After finding the index page for the *Combined Contact List*, one respondent commented: “It is still not one document”, explaining that many users will expect to find the *Government Directory*. The respondent suggested that the information contained in the *Government Directory* should also be made accessible as one document, even if it would take long to download, on the condition that a warning in this regard was included.

Two respondents expressed the need for the addition of a media directory on the website.

4.9.2 Find the profiles of all ministers, deputy ministers and provincial premiers (Question 12)

The respondent with high exposure of the website was able to identify immediately that the profiles could be accessed from *Ministers* and then *List of Profiles* from the side navigation bar. For the provincial premiers, she went to *Provincial Government* from the home page, and then selected *Premier List* from the side navigation bar.

The other respondents expected the information to be at *Government System* because of their experience with the previous question about *Combined contact lists*. One remarked: "Maybe I can try this place again, as I would look for the CVs the same way." Another selected *Contact information* at this category and remarked: "It doesn't seem as if there is also a combined list of CVs".

Thereafter, they attempted several other options, including *Overview and diagram* ("because it summarises everything") and *Ministries*. With regard to the latter, one remarked: "No, it is only those of the ministers." He then noticed and selected *List of Profiles* and thereafter *Deputy Ministers* in the side navigation bars of the respective pages. With the remark: "I need the CVs of the premiers on the same place", he returned to the *Ministries* page to find the CVs of the provincial premiers. On not finding it, he remarked that it was "scattered all over the place" and that he wanted it to be together.

Three respondents started to select each name on the *Ministries* page individually, expressing the intention to do the same with *Deputy Ministers* and *Provincial Government*. In this process, one noticed and selected *Portfolio list* in the side navigation bar, expecting to find a broader list than only the ministers and deputy ministers. He then opted to go to *Provincial Government* and then *Premier List*. He remarked: "It should be all together, perhaps from *Ministers* or *Government Departments*." He also remarked that the wording for the profiles as well as for the contact lists was confusing and should be made more clearly.

Another suggestion was made to make profiles of government officials accessible from the previously mentioned government directory.

4.10 Questions determining preferences for the inclusion of additional information on the website

4.10.1 Where on the website will you look for the Government Gazette? (Question 13a)

The respondents were all in agreement that the Government Gazette should be available on the website and that it should part of the *Documents, Reports, & Forms* category. One respondent expected the Gazette to be part of *Parliamentary Papers* category on this page, as "the Gazette is a result of parliamentary activities", but when she did not find it there, she remarked that it should rather be a sub-category of the *Documents, Reports, & Forms*

category. One respondent initially looked for the Gazette on the home page. Another suggested that the Gazette be put at *Government System*.

The following specific requirements or suggestions were put forward:

- A listing of the Government Gazette as such is needed, but users should also have access according to the type of information contained in the individual gazette (for example notices, Bills, etc.).
- The Gazette should be made available chronologically as well as alphabetically.

4.10.2 Where on the website will you expect to find a listing of government services to the public? (Question 13b)

Four respondents expected this information to be accessible directly from the home page. Another alternative mentioned was *Government System*. Noteworthy comments in this regard were:

- “The departments are very fragmented – there must be an easy way to search for this without going to individual sites – to search all services from a central place – however, as services have a wide scope, for example tourism, visas, etc., care must be taken to make clear what it is about.” She considered *Forms* to be part of the services concept, “as it is a type of service”.
- “It should be on its own on the home page – it is more important than some others on the current listing.” To create space, it was suggested that the entries on the home page be reduced: “Take away *Ministers* and *Deputy Ministers* and *Africa*. *Africa* is secondary and can be under something such as *Related Links*.” The respondent also suggested that *President* and *Deputy President* be integrated as one entry, namely “Office of the Presidency”.
- “It should be on its own on the home page, I don’t want to go to individual departments.”

4.10.3 You want to know which posts are available in the Public Service (Question 14)

All respondents commented on the importance of having this information available on government websites. It is, however, significant that three respondents did not consider it as this website’s primary responsibility to contain information on public services vacancies,

but commented that it should rather be a departmental responsibility. One reason put forward for this was: "This information changes from day to day and the government site will not be able to update it continuously."

If it were to be on the site, three respondents wanted it accessible from the home page. Remarks in this regard included: "If it becomes too many categories, *What's New* could be on the second level, especially because it does not link"; "Otherwise, I won't know where I will find it – there is not a relevant sub-category, and people will not expect it to be the DPSSA who is responsible for it."

Two respondents suggested that this information be categorised at *National System & Structure* while alternative suggestions were *National Departments and Services*.

4.10.4 Where on the website do you expect to find the Constitution of South Africa? (Question 16)

Recommendations for the inclusion of the Constitution entailed *Government System and Documents, Reports & Forms*.

Reasons presented for the first were that "government systems are based on the Constitution", and "we need a constitutional section here to explain the historical background".

4.11 Search mechanism

4.11.1 Find the Act relating to nuclear energy, Act No. 46 of 1999 (Questions 3a and 15a)

As previously stated, behaviour of respondents using the search mechanism for question 3a is also reported on in this section.

All respondents made use of the first search interface displayed (*Search the Government Online World Wide Website*) after selecting the *Search* button. They found it relatively easy to formulate their search queries ("nuclear energy"; "nuclear energy act"; "nuclear and energy and act"). Only one respondent did not enter a correct search string the first time. He entered the exact title of the Act "Nuclear Energy Act (Act No. 46 of 1999)" and got an error message, but was successful with the second attempt ("Nuclear Energy Act").

Afterwards, he commented: "When I use search, I should be able to type in the whole thing."

Other comments included that the search button should be displayed more prominently on the home page and that the italics used for the summative text of the search results was difficult to read. One respondent commented positively on the results returned: "44 documents are not too bad". When using the search form, she commented that it was well designed. In addition, a further search option "straight on the results page", to enable the refinement of results was recommended.

4.11.2 Name government documents and reports which cover transport issues from 1997 – 2000 (Question 3b)

The first respondent selected the *Search the Government Online World Wide Website* search and typed in "transport". When the results list was displayed, she remarked that she had found too many documents. She went back to the search page and typed "transport and act", and remarked that she did not know the meaning of some of the titles displayed in the results list.

The second respondent used the *Searchable Database*, remarking: "I expect this to be an advanced search, which is a function that will be important to me." He entered "transport" in the text field and considered various options to enter in the date field.

It is also worth noting that two other respondents considered using the search mechanism as an option when experiencing difficulties to find information by browsing the site.

4.11.3 Find all the media statements made by Minister Asmal (Questions 4a and 15b)

All respondents used the search page presented after selecting the *Search* button (*Search the Government Online World Wide Website*). Only two of them were able to identify that the *Searchable database* was an option after the first attempt had been unsuccessful.

Respondents experienced far more problems with selecting relevant query terms for this question. One entered "Asmal". As this did not return relevant results she tried "media statements", but remarked immediately: "Oh gosh, I will get everything now, not only those of Asmal!" She then tried *Searchable Database* and entered "Asmal" in the text field.

The following respondent entered "Asmal" with the remark: "This is going to take long." He then attempted "Asmal speeches" and exclaimed in surprise that he did not get any result. He thought of trying *Searchable Database*: "Perhaps I can manipulate the database." He did not select the relevant data collections and entered "Asmal speeches" in the text field, and thereafter only "speeches". When the results list was returned he complained that he was not able to modify the list he got "which is unfortunate".

The next respondent attempted search strings such as "media statements by Minister Asmal", "Media releases by Minister Asmal", "Asmal", "Kader Asmal speeches", all with no results. He was then supported by the experimenter and told to go to *Searchable Database*, where he entered "Minister Asmal press releases" in the text field, but did no selection on the data collections presenting different date options.

The fourth respondent initially made use of the first search page and entered "Asmal and media", with no results. When he was shown the searchable database, he selected the relevant data collections and entered "Asmal" in the text field.

The last respondent entered "Asmal and media and statements", expecting to find the same list as previously displayed (question 4a). It did not make sense to her that a different results list was displayed. When shown the *Searchable Database*, she remarked that she did not know what to expect "as it is not self-explanatory". She expected to go directly into the database and for the system to immediately activate the same query ("Asmal and media and statements") in the database. After clicking twice on *Searchable Database*, she remarked that the whole button should be active.

4.11.4 Find media statements made by Minister Asmal as from 1 May 2000 and sort them from old to new (Question 15c)

Overall, respondents were not able to use the search mechanism correctly to find this information.

Only one respondent selected the relevant data collections for the required years, while only two respondents made use of the sorting functionality. With regard to the date field, three respondents understood how to enter the date in the date field but two of them did not use the parameter correctly (used >) or left it out. One respondent entered "press statements" in the title field.

Afterwards, a respondent remarked: "This is too technical for me." Another commented that this interface would be too difficult for the more inexperienced user.

4.11.5 Find all information on the site concerning health issues (Question 15d)

Nobody was able to find the required information, as they did not realise that the site had two search mechanisms that provided access to different sets of information.

Except for one, all respondents remained on the search page they had been on for the previous search, i.e. *Searchable Database*. When asked to pick out speeches about health issues from the results list, the first was amazed that she could not find any speeches. Despite having used the site before, she never realised that speeches could not be found this way.

One respondent browsed the data collections to search for documents on health issues. Search terms used were: "health" and "health documents".

When results were displayed, a respondent asked: "Why is it giving me the Y2k stuff?" Afterwards he mentioned that he thought that *Searchable Database* meant that a search could be manipulated. He also expected all information to be searchable from one place.

4.11.6 Search mechanism used for other questions

Some respondents also opted to search for the following information:

- National animal (question five): when this information was not found quickly, three respondents opted to make use of the search mechanism. Two respondents entered "national animal". The third entered "coat of arms", expecting to find information on the national animal together with the Coat of Arms. One respondent remarked that the summary of the results list did not tell him what information was available.
- Youth Day (question 8a): After attempting to browse for this information, four respondents mentioned search as a better option for this question. One first looked for the information at *Events* on the home page, but then remarked: "I will rather go the quick way and go to search." He then entered "national youth day".

- Regulation of media (question 10): When respondents did not see an apparent category for information on the home page, they chose to search. “If you know which is the relevant Act, you can go to *Documents, Reports & Forms.*” However, as this respondent did not know this answer, she opted to use search. A next respondent remarked that his first option would be to go to the responsible department’s website, but then realised he did not know which that would be. He then selected search “to make things easier”. The third favoured a search “because it is fairly technical and not in the forefront of the website”. The last respondent initially considered if a specific body was involved and then decided to look for a report on media related issues “perhaps an Act” by searching.

Search terms used were “media and act and media and bill”, “media regulation” (which returned the Comtask Report) and “the media”, but did not return comprehensive or relevant information.

5. ONLINE SURVEY

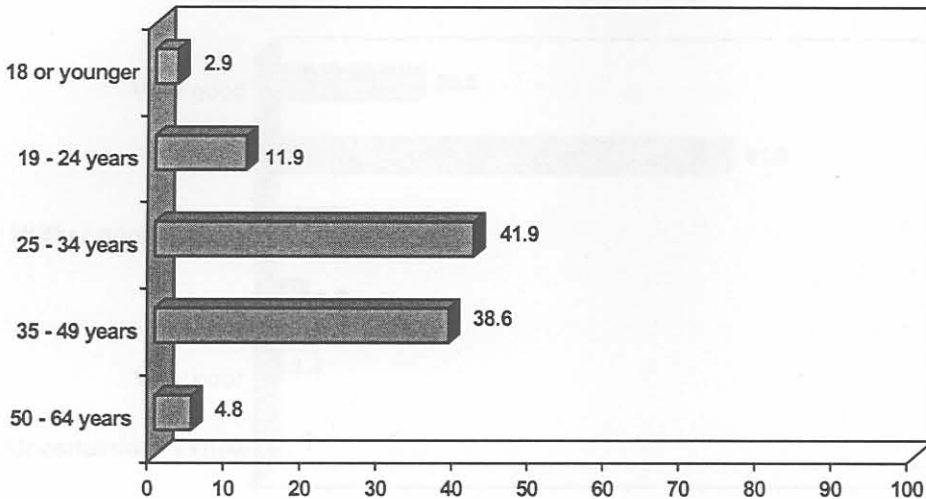
5.1 Introduction

The main purpose of this method was to provide a quantitative measurement of the usability of the website in the view of the user. An 18-item questionnaire was compiled and presented interactively on the website. Respondents had to give an overall rating for the website as well as rate various aspects from the four main evaluation categories presented in chapter four. Questions focused on information coverage, currency, ease of finding information, ‘look and feel’ and preference with regard to search versus browsing. Provision was made for quantitative as well as qualitative answers. A total of 210 respondents completed the online questionnaire during the period 14 August to 16 September 2000. See chapter two, paragraph 4.4 for a description of the method, and Annexure C for the questionnaire.

5.2 Profile of site visitors

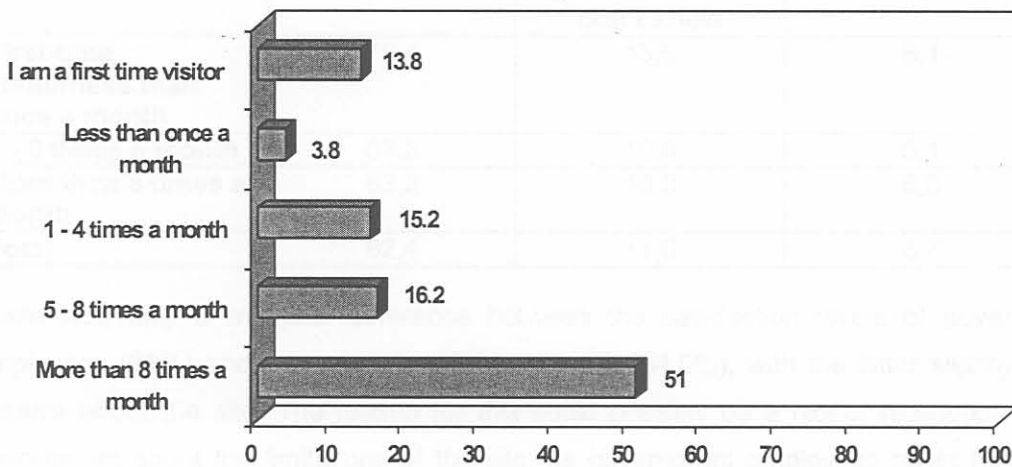
The respondents came from all age groups, with the distribution peaking in the age groups of 25 - 34 and 35 - 49 years (see figure 12).

Figure 12: Distribution of respondents according to age groups



Most of the respondents (60%) were government employees, and 10,5% represented the business sector. Nearly nine out of every ten respondents (86,2%) had previous experience of the website – just more than half (51%) indicated that they used the website more than eight times a month, and 31,4% used the site one to eight times a month. A total of 13,8% indicated that they were first-time visitors (see figure 13), and 85,7% of the respondents were from South Africa.

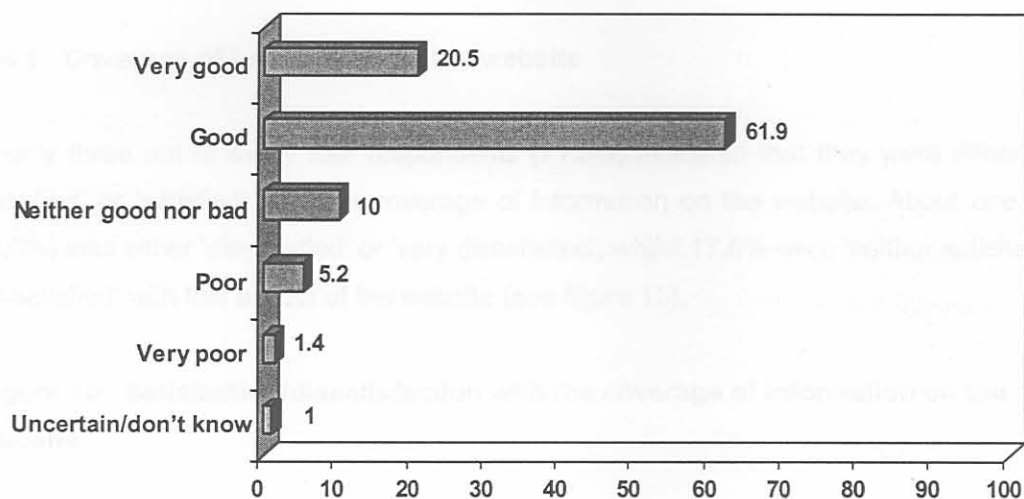
Figure 13: Frequency of use of the website



5.3 Overall rating of the website

In response to being requested to give an overall rating of the SA Government Online website, the majority (82,4%) rated it as either 'very good' or 'good'. A mere 6,6% rated it negatively ('poor'/'very poor') – see figure 14.

Figure 14: Overall rating of the SA Government Online website



Respondents who used the site at least once a month or more rated the site slightly more positive (83,3%) than those who used it less than once a month or responded as first-time users (78,4%) – see table 1.

Table 1: Overall rating of the website in relation to frequency of use

Frequency of use of website	Overall rating of website (%)		
	Very good/good	Neither good nor poor/uncertain/don't know	Poor/very poor
First-time visitor/less than once a month	78,4	13,5	8,1
1 - 8 times a month	83,3	10,6	6,1
More than 8 times a month	83,2	10,3	6,5
Total	82,4	11,0	6,7

There was only a marginal difference between the satisfaction levels of government employees (81%) and users in other fields of work (84,5%), with the latter slightly more positive about the site. The reason for this could possibly be a higher realisation within government about the limitations of the site, as government employees might have had better knowledge of the government structures and systems.

5.4 Content

In evaluating attitudes regarding the content of the website, questions were asked about

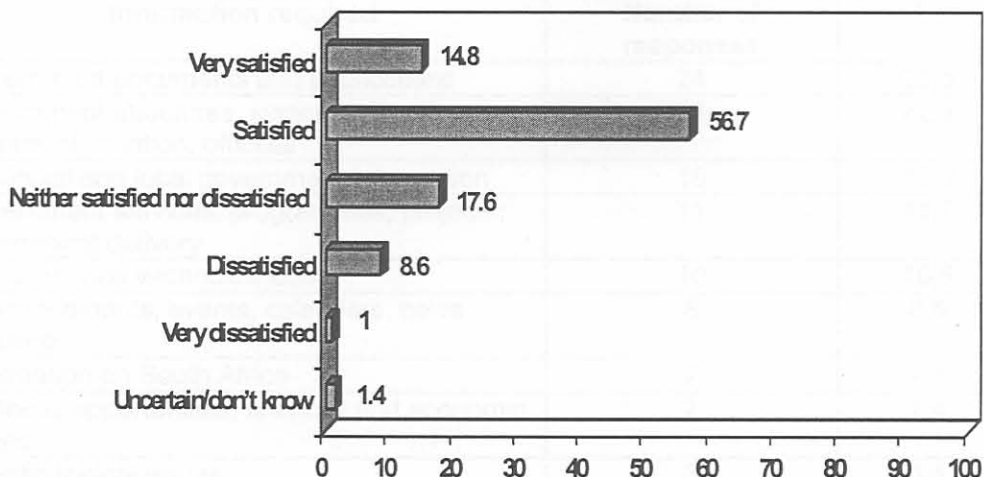
- coverage of information on the website

- currency of the website
- accuracy of information on the website.

5.4.1 Coverage of information on the website

Nearly three out of every four respondents (71,5%) indicated that they were either 'very satisfied' or 'satisfied' with the coverage of information on the website. About one tenth (9,6%) was either 'dissatisfied' or 'very dissatisfied', whilst 17,6% were 'neither satisfied nor dissatisfied' with this aspect of the website (see figure 15).

Figure 15: Satisfaction/dissatisfaction with the coverage of information on the website



As can be seen in table 2, a breakdown of responses to determine the satisfaction level for coverage of information in relation to frequency of use indicated the same general trend as for the results discussed in paragraph 5.3, with the more frequent users (more than eight times a month) more positive about the coverage of information (72,9%) than those being first-time users or using it less than once a month (67,6%).

In response to being requested to indicate any additional information respondents would like to see on the website, 118 responses came from the 210 respondents. Prominent responses were about the need for government documents and publications (25,5% of those responding to the question) and information regarding government systems, structures, functions and contact information (22,3%) – see table 3.

Table 2: Satisfaction with information coverage in relation to frequency of use

Frequency of use of the website	Satisfaction/dissatisfaction with the coverage of information (%)		
	Very satisfied/satisfied	Neither satisfied nor dissatisfied/uncertain/don't know	Dissatisfied/very dissatisfied
First-time visitor/less than one a month	67,6	21,6	10,8
1-8 times a month	71,2	18,2	10,6
More than 8 times a month	72,9	18,7	8,4
Total	71,4	19,0	9,5

Table 3: Additional information required on the website*

Information required	Number of responses	%
Government documents and publications	24	25,5
Government structures, systems, functions, contact information, officials	21	22,3
Provincial and local government information	15	16,0
Government services, programmes, projects; government delivery	11	11,7
Public Service vacancies/jobs	10	10,6
Announcements, events, calendars, news headlines	8	8,5
Information on South Africa	7	7,4
Business opportunities, financial and economic issues	7	7,4
Specific topical issues	6	6,4
Speeches, press releases, statements, specific topical issues	5	5,3
Other than South Africa	4	4,3

*More than one response allowed. Some respondents did not provide a response, whilst others provided more than one. "Percentage" indicates respondents providing the specific response as percentage of total number of respondents to this question.

Specific information required by respondents in the categories listed above include the following:

- In the category *Government documents and publications*, the Government Gazette was singled out more often than the others, followed by the need for government documents prior to 1997. Respondents also mentioned that they would have liked the website to include *Hansard*, regulations promulgated in terms of legislation, a policy section, and annual reports of government departments and annual financial statements of national

and provincial departments. One respondent also mentioned “feedback documents presented after international visits”.

- Requirements for additional information about government structures, systems, functions and contact information included more detailed information on the organisational structure of departments, for example staff structures, e-mail addresses for ministers, deputy ministers and departments, as well as updated contact information for heads and regional offices of departments. In addition, respondents suggested the inclusion of profiles of more government officials, for example that of directors-general and senior officials of departments. One specific comment was: “profiles of people, especially those in the president’s office – there is no information on the key players, such as Frank Chikane”. Lastly, access to “all organs of state’s websites” was suggested.
- Provincial and local government information featured third (16%) with regard to additional information needed. Specific requirements for local government information were mainly for contact information, for example for mayors and for media liaison officers from local government departments. Provincial information required included provincial events and activities, developments in provinces, provincial gazettes, Acts, Bills and annual reports. In addition, more speeches from provincial and local government officials were required.
- Respondents also suggested the inclusion of information pertaining to government services, programmes, projects, as well as on government service delivery (11,7%). The following quotes demonstrate some of the requirements for this type of information: “how to access government services”; “specific details on the government’s delivery process”; “service delivery standards of various departments”; “more information geared at youth development programmes”; “the various development projects occurring in government”; and “user-friendly interpretation of processes”. Specific services mentioned were home loans and visa requirements.
- With regard to *Announcements, Events, Calendars, and News*, the main requirements were for more comprehensive coverage thereof. One respondent also asked for “something like key issues in the news”.
- Additional information needed on South Africa included the history of the country, information on past presidents, term calendars of universities and technikons, statistical information and links to schools and tertiary institutions.

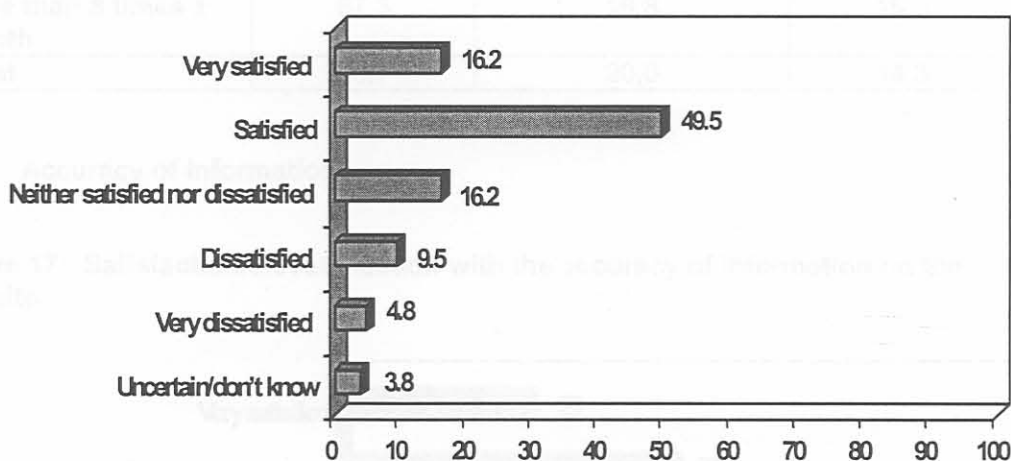
- Specific topical issues suggested for inclusion on the site included information on socio-economic issues, the upcoming municipal elections, HIV/AIDS and housing-related matters.

It is worth noting that, although not asked in this question, several references were made regarding the need for more updated and current information. Respondents required, for example, more current Bills and regularly updated contact details for government officials.

5.4.2 Currency of the website

Although nearly two thirds of the respondents (65,7%) expressed satisfaction with the currency of the website, it is important to note that 16,2% were 'neither satisfied nor dissatisfied' whilst 14,3% were 'dissatisfied' or 'very dissatisfied' (see figure 16).

Figure 16: Satisfaction/dissatisfaction with the currency of the website



Only 98 responses were provided by the 210 respondents to the request to motivate their answers with regard to their satisfaction/dissatisfaction with the currency of the website. It should, however, be noted that from those providing a reason, 43,5% of the 'dissatisfied' or 'very dissatisfied' respondents, and 55,6% of the 'neither satisfied nor dissatisfied' or 'uncertain' respondents motivated their responses by referring to the availability of the most current information. It is also worth noting that 21,1% of motivations provided to the question about the currency of information on *SA Government Online* related to the frequency of updating of the websites of other government departments.

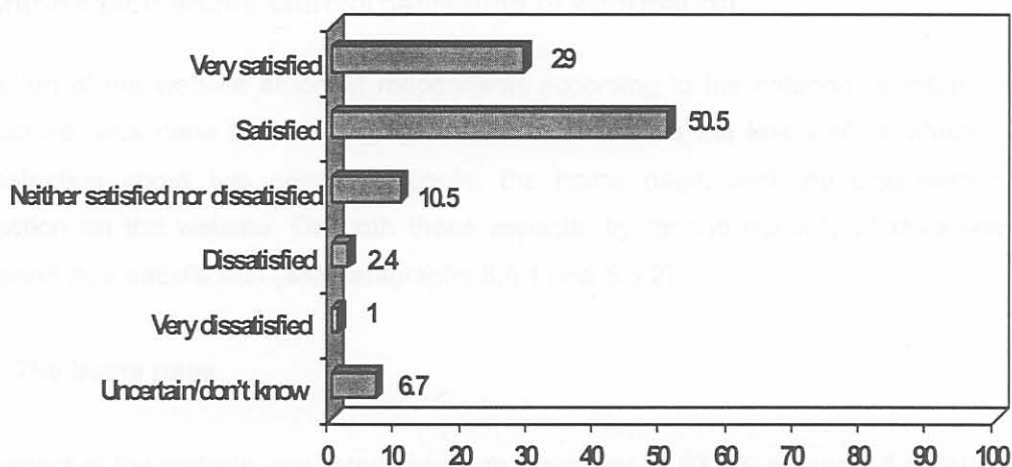
A breakdown to compare satisfaction/dissatisfaction with the currency of the website with frequency of use revealed that the more frequent users (more than once a month) were generally more positive about the currency of the website than the less frequent users (first-time visitors/less than once a month), but also that they were more 'dissatisfied' or 'very dissatisfied' than the less frequent users. It is, however, important to note that a higher percentage of first-time visitors or visitors that visited the site less than once a month was 'neither satisfied nor dissatisfied' (27%) than users that visited the site more than eight times a month (16,8%) – see table 4.

Table 4: Satisfaction with currency of information in relation to frequency of use

Frequency of use	Satisfaction/dissatisfaction with the currency of information (%)		
	Very satisfied/satisfied	Neither satisfied nor dissatisfied uncertain/don't know	Dissatisfied/ very dissatisfied
First-time visitor/less than once a month	62,2	27,0	10,8
1-8 times a month	65,2	21,2	13,6
More than 8 times a month	67,3	16,8	15,9
Total	65,7	20,0	14,3

5.4.3 Accuracy of information

Figure 17: Satisfaction/dissatisfaction with the accuracy of information on the website



As could be seen in figure 17, nearly four out of every five respondents (79,5%) expressed satisfaction with the accuracy of information on the website, whilst 10,5% were 'neither satisfied' or 'very dissatisfied'.

satisfied nor dissatisfied' and 3,4% expressed dissatisfaction regarding this aspect of the website.

5.4.4 Evaluation of content: a synopsis

It is clear from paragraphs 5.4.1 to 5.4.3 that the majority of respondents rated the website positively regarding specific content related issues. The following table (table 5), which consolidates the results reflected in above-mentioned paragraphs, reveals that the level of satisfaction ('very satisfied' and 'satisfied' responses combined) regarding accuracy (79%) was the highest, followed by coverage (71,5%) and currency (65,7%). From comments made it was evident that expectations about currency as well as coverage of information were not met to a sufficient extent.

Table 5: Consolidated results for the evaluation of content

Evaluation	Aspect of content (%)		
	Coverage	Currency	Accuracy
Very satisfied	14,8	16,2	29,0
Satisfied	56,7	49,5	50,5
Neither satisfied nor dissatisfied	17,6	16,2	10,5
Dissatisfied	8,6	9,5	2,4
Very dissatisfied	1,0	4,8	1,0
Uncertain/don't know	1,4	3,8	6,7
Total	100.1	100.0	100,1

5.5 Information architecture/organisation of information

Evaluation of the website amongst respondents according to the criterion of 'information architecture' was done by including questions to determine the levels of satisfaction or dissatisfaction about two specific aspects: the home page, and the organisation of information on the website. On both these aspects, by far the majority of respondents expressed their satisfaction (see paragraphs 5.5.1 and 5.5.2).

5.5.1 The home page

This aspect of the website was rated very high. As many as 83,8% expressed satisfaction with the home page – 27,6% were 'very satisfied' and a further 56,2% were 'satisfied'. About one out of every ten respondents (10,5%) indicated that they were 'neither satisfied nor dissatisfied' with the home page whilst a mere 4,3% indicated that they were either 'dissatisfied' or 'very dissatisfied'.

Only 32 responses were received in response to the request for suggestions for the improvement of the home page. Suggestions focused mostly on additional information categories, improvement of the organisation and structuring of information and design.

With regard to additional categories of information to be presented on the home page, specific recommendations entailed the adding of categories for business opportunities, public service vacancies, government projects, as well as direct links to other websites, specifically those of provinces and parliament. One respondent requested a “menu search on topics”.

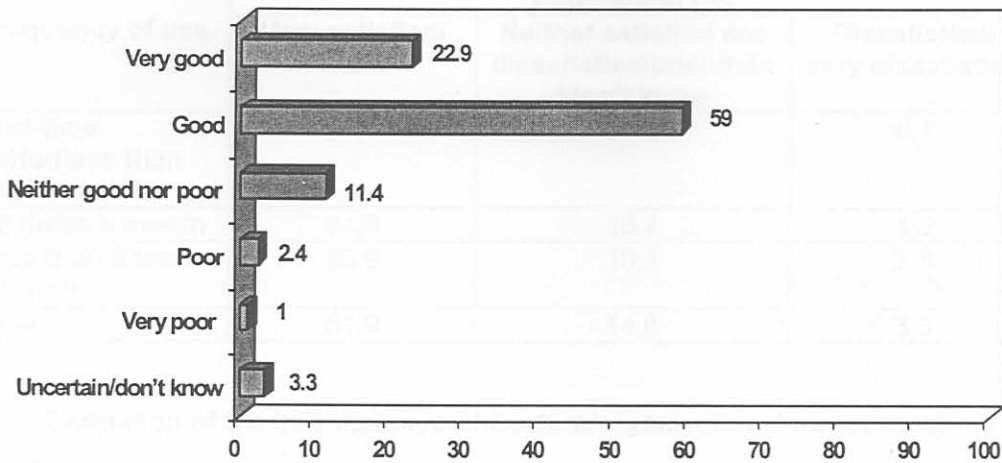
Suggestions with regard to organisational aspects were that some categories should be merged so that links could be provided to more important issues, while one respondent suggested a search box on the home page itself. Several comments were made about the way *What's New* should be handled. For example, it was recommended that there be direct links to the specific speeches or reports, that new information be presented for a specific period of time, and that a separate page be used for *What's New* to enable the provision of even more new information.

The most prominent recommendation with regard to the design of the home page was that it should be less cluttered. Specific suggestions included for example: “limit the number of speeches on the home page so it doesn't carry on so long”, and “It seems a bit busy; it would be nice if one could maybe navigate on the home page via folders, as in the websites of Business Day and Vodacom.” Other comments centered on the use of too many graphics, whereas a few respondents did not like the background graphic: “it adds nothing to the aesthetics of the page nor to the content; it is puzzling”; “to many foreigners they (stick figures) probably look like starving people and I wonder if that is the image you really want to convey? I think you would be better off with something that conveys a more modern...upbeat image”.

5.5.2 Organisation of information on the website

Just more than four out of five respondents (81,9%) rated the organisation of information as either ‘very good’ or ‘good’, while only 3,4% indicated that it was ‘poor’ or ‘very poor’ (see figure 18).

Figure 18: Rating of the organisation of information on the website



When asked to motivate their responses, the information structure and the ease/difficulty to find information featured most prominently. With regard to the information structure, positive responses focused mainly on the “logical”, “clear” “sequential” and “user-friendly” way information was organised, that it “is difficult to get lost” and that information could be found under the right headings. All respondents who referred to the ease/difficulty to find information as the motivation for rating of organisation, commented positively thereon. Negative responses about organisation concerned issues such as the categorisation of speeches, the fact that some information did not feature prominently enough on the home page, that there was duplication of information and that there “is just a lot dumped under documents”. One respondent commented negatively on the use of alphabetical navigation keys, while the fact that there was “no easy link to search on the home page” was criticised.

When a breakdown of responses was made to determine the satisfaction level for information organisation in relation to frequency of use, the general trend was once again that the more frequent users were more satisfied with the organisation of information on the website (see table 6). The fact that the percentage gap in this case is much wider (19,3%) could possibly mean these users were used to the site and knew where to find information they needed, and were no longer aware of limitations.

Table 6: Satisfaction with information organisation in relation to frequency of use

Frequency of use	Satisfaction/dissatisfaction with the organisation of information (%)		
	Very satisfied/satisfied	Neither satisfied nor dissatisfied/uncertain /don't know	Dissatisfied/very dissatisfied
First-time visitor/less than once a month	67,6	24,3	8,1
1-8 times a month	81,8	16,7	1,5
More than 8 times a month	86,9	10,3	2,8
Total	81,9	14,8	3,3

5.5.3 Evaluation of the information architecture/organisational structure of the website: a synopsis

The discussion in paragraphs 5.5.1 and 5.5.2 indicates that the majority of respondents were satisfied with the two aspects of information architecture evaluated – both issues rated above an 80% satisfaction level. Table 7 summarises these results.

Table 7: Consolidated results for the evaluation of information architecture/organisational structure of the website

Rating*	Aspect of content (%)	
	Home page	Organisation of information
Very positive	27,6	22,9
Positive	56,2	59,0
Neither positive nor negative	10,5	11,4
Negative	2,9	2,4
Very negative	1,4	1,0
Uncertain/don't know	1,4	3,3
Total	100,0	100,0

* For evaluation of the home page, ratings correspond respectively with 'very satisfied', 'satisfied', 'neither satisfied nor dissatisfied', 'dissatisfied', 'very dissatisfied'. For evaluation of organisation of information, ratings correspond with 'very good', 'good', 'neither good nor poor', 'poor', 'very poor'.

5.6 Navigation and search

To measure users' satisfaction with regard to navigation and the search mechanism, questions with regard to five aspects were included in the questionnaire, namely

- ease/difficulty to find information on the website,
- ease/difficulty to navigate the website,

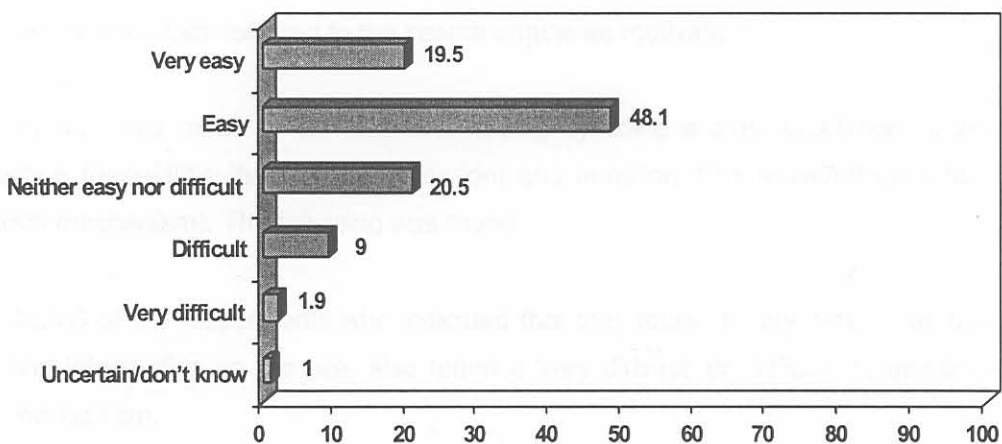
- methods used to find information, and
- effectiveness of the search mechanism.

In general, it was evident that the satisfaction level for this aspect of the website was markedly lower than that of the organisational aspects as discussed in paragraph 5.5, and also lower than for content.

5.6.1 Ease/difficulty to find information on the website

A cumulative percentage of 67,6% of responses indicated that respondents found it either 'very easy' or 'easy' to find information on the website, while almost a third of the respondents (32,4%) found it 'very difficult', 'difficult', 'neither easy nor difficult' or were 'uncertain' or 'did not know' (see figure 19).

Figure 19: Ease/difficulty to find information on the website



When asked to motivate their answers, the majority of responses (47,6%) concerned the organisation of information. Positive responses in this regard were that the site was “easy to understand”, “logically structured”, “well organised”, “well set out”, “user-friendly”, “self-explanatory” and had a “simple layout”. Respondents also commented: “I like the way you list all the government departments” and “the information is organised according to topics or individual minister and department”. Several comments referred to the fact that the content on the home page made it easy to find information.

In contrast to the above-mentioned positive comments about the role of the home page to find information, several respondents also remarked that information was not immediately visible or “was not made apparent on the home page”. Other issues that contributed to

dissatisfaction included that information was “spread out amongst the various departments... one does not always know in advance which department is in charge of which Act”, and that “you have to go down quite a few layers to get what you want”. One respondent remarked: “The absence of the words ‘laws’ or ‘legislation’ on the home page makes it difficult for a person unfamiliar with the site to navigate to these documents.”

A significant finding was that 27% of the responses concerned the search engine, and that the majority of these (15 out of 17) were negative. Among the comments were responses that the search engine was “hopeless”, “very unfriendly”, “unclear”, and “totally inadequate and slow”.

In addition, it was found that 54,8% of the respondents who were positive about the ease with which they found information on the website, used the organisation of information as motivation (mainly positive comments), while 14,3% mentioned the search mechanism (mainly negative comments). However, 63,6% of the respondents who found it ‘difficult’ or ‘very difficult’ to find information, and 40% of those who found it ‘neither easy nor difficult’ or who were ‘uncertain’ referred to the search engine as motivation.

An attempt was made to correlate this finding by doing a cross-tabulation between this question (ease/difficulty to find information) and question 10.1 (ease/difficulty to use the search mechanism). The following was found:

- 43,5% of the respondents who indicated that they found it ‘very difficult’ or ‘difficult’ to find information on the site, also found it ‘very difficult’ or ‘difficult’ to use the search mechanism.
- 73,2% of the respondents who found it ‘very easy’ or ‘easy’ to find information, also found the use of the search mechanism ‘very easy’ or ‘easy’.
- Only 7,7% of the respondents who indicated that it was ‘easy’ or ‘very easy’ to find information on the website indicated that they had difficulty with the search mechanism.
- 51,1% of the respondents who were ‘neither satisfied nor dissatisfied’ were also ‘uncertain’ about the search mechanism.

See table 8 for an analysis of these findings.

Table 8: Comparison between ease/difficulty to find information and ease/difficulty to use the search mechanism

Ease/difficulty to use the search mechanism	Ease/difficulty to find information (%)			Total
	Very easy/easy	Neither easy nor difficult/ uncertain/don't know	Difficult/very difficult	
Very easy/easy	73,2	31,1	34,8	60,0
Neither easy nor difficult/uncertain	19,0	51,1	21,7	26,2
Difficult/very difficult	7,7	17,8	43,5	13,8

A comparison between ease/difficulty to find information on the website and frequency of use indicated the same trend as with other aspects, namely that of increased satisfaction among the more frequent users, but this time with a gap of 12,4% between the more experienced and less experienced users (see table 9). The reason could possibly be that, because less frequent users did not have the same exposure to the site, they experienced difficulties where the more frequent users found a way around during their previous use of the site.

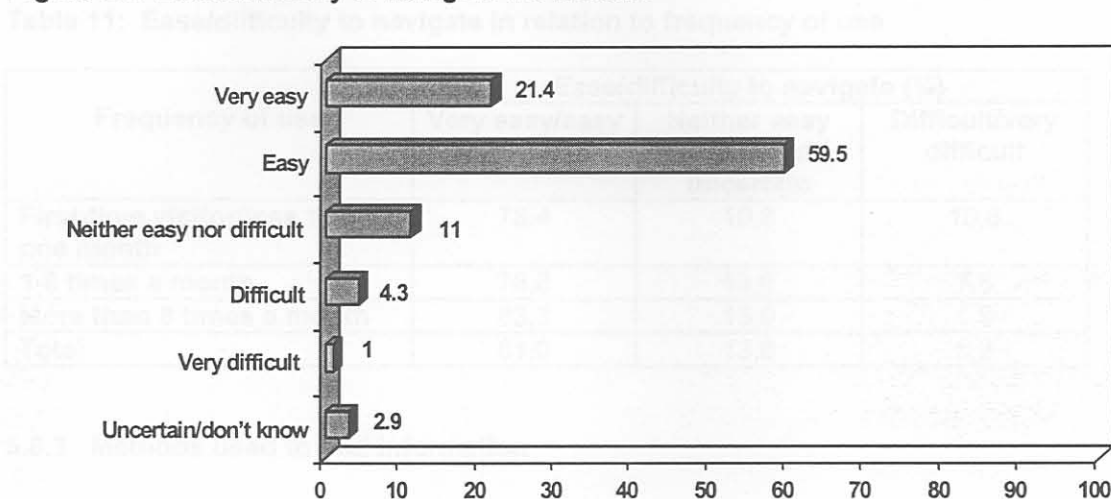
Table 9: Ease/difficulty to find information in relation to frequency of use

Frequency of use	Ease/difficulty to find information (%)		
	Very easy/easy	Neither easy nor difficult/ Uncertain/don't know	Difficult/very difficult
First-time visitor/less than one month	56,8	27,0	16,2
1-8 times a month	71,2	19,7	9,1
More than 8 times a month	69,2	20,6	10,3
Total	67,6	21,4	11,0

5.6.2 Ease/difficulty to navigate the website

Compared to the previous question, responses to this question resulted in a more positive rating – slightly more than four out of five (80,9%) respondents indicated that it was either 'very easy' or 'easy' to navigate the site, while 11% found it 'neither easy nor difficult' and only 5,3% found it 'very difficult' or 'difficult' (see figure 20).

Figure 20: Ease/difficulty to navigate the website



Again, very few respondents provided reasons for their ratings. Suggestions with regard to navigation were the inclusion of a site map and index, a more user-friendly directory, and provision of brief descriptions of what links really dealt with. There were two comments that the search engine was not user-friendly.

A breakdown was made to determine the relation between ease/difficulty to navigate the website and methods used to find information on the website: 80,6% compared to 46,5% of those who found it 'very easy' or 'easy' to navigate, indicated that they browsed and searched respectively (see table10).

Table 10: Ease/difficulty to navigate in relation to methods used to find information

Methods to find information*	Ease/difficulty to navigate (%)		
	Very easy/easy	Neither easy nor difficult/don't know	Difficult/very difficult
Browse	80,6	69,0	50,0
Search	46,5	55,2	50,0
Events	27,1	20,7	-
What's New	32,4	20,7	30,0
Bookmarked pages	8,2	27,6	10,0
Other	2,9	10,3	10,0

*More than one response allowed per respondent

A breakdown to correlate ease/difficulty to navigate and frequency of use indicated a relative even distribution – the most frequent users were slightly more positive than less frequent users, with only a 4,8% gap in the satisfaction level (see table 11).

Table 11: Ease/difficulty to navigate in relation to frequency of use

Frequency of use	Ease/difficulty to navigate (%)		
	Very easy/easy	Neither easy nor difficult/uncertain	Difficult/very difficult
First-time visitor/less than one month	78,4	10,8	10,8
1-8 times a month	78,8	13,6	7,6
More than 8 times a month	83,3	15,0	1,9
Total	81,0	13,8	5,2

5.6.3 Methods used to find information

For this question, respondents were allowed more than one response. The responses indicated that the dominant user behaviour on this website was to browse through the menu structure. The majority of respondents (77,5%) preferred to browse through the site to find information, while less than a half (47,8%) used the search engine. Just more than four out of every ten (43%) indicated that they made use of both the browsing and searching methods. 55% used browse but not search, and 25% searched but did not browse. In addition, 33 respondents (15,8%) indicated that they never searched and only three (1,4%) that they never browsed.

It is also significant to note the frequent use – and thus importance thereof – of the *What's New* and/or the *Events* sections to find information (see table 12).

Table 12: Methods used on the website to find information

Methods to find information*	Responses	%
Browse through menu structure	162	77,5
Search page	100	47,8
What's New section	64	30,6
Events section	52	24,9
Bookmarked pages	23	11,0
Other	9	4,3

*More than one response allowed per respondent

A comparison of the methods used to find information on the website with frequency of use indicated that 82,2% of the most frequent users (more than eight times a month) browsed the website and 45,8% used the search facility, compared to the less frequent users (first-time visitors/less than once a month), where 61,1% indicated that they browsed and 47,2% that they searched (see table 13).

Table 13: Methods used to find information compared to frequency of use

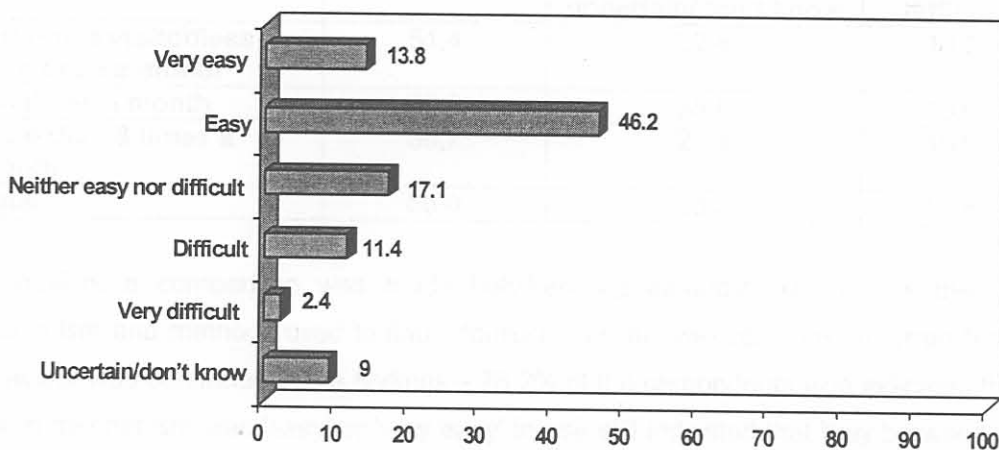
Methods to find information*	Frequency of use (%)		
	First-time visitor/less than once a month	1-8 times a month	More than 8 times a month
Browse	61,1	78,8	82,2
Search	47,2	51,5	45,8
Events	16,7	22,7	29,0
What's New	8,3	22,7	43,0
Bookmarked pages	5,6	13,6	11,2
Other	2,8	3,0	5,6

*More than one response allowed per respondent

5.6.4 Ease/difficulty to use the search mechanism

Although three out of five respondents (60%) indicated that they found it either 'very easy' or 'easy' to use the search mechanism, the satisfaction level regarding this aspect was the lowest of all aspects evaluated in the online survey. Whilst only about one eighth (13,8%) found the use of the search mechanism either 'difficult' or 'very difficult', a relatively high percentage (26,1%) found it to be 'neither easy nor difficult' or provided a response of 'uncertain/don't know' (see figure 21).

Figure 21: Ease/difficulty to use the search mechanism



When asked to motivate their responses, the main aspects that were commented on entailed firstly the search results, and secondly the search interfaces and search facility itself. In both cases the responses mainly reflected negatively on the search mechanism. Comments about the search results included comments that too much information was retrieved, or that no relevant information was found. The following were typical remarks:

- “It doesn’t narrow it down enough, so you have to sift through a lot of other stuff you don’t want.”
- “The search mode gives a host of results that are not necessarily what one wants, because it is too wide.”
- “It would help if you could search for specific information – not giving you everything – speeches reports, etc. where a search word is used.”
- “You have to know what information you want.”
- “The problem is that the underlying government sites are not part of the index and some of them have poor search facilities.”
- “It seems that more than one search can be done simultaneously – I found this very confusing.”

An analysis to compare the ease/difficulty to use the search mechanism with frequency of use again indicated a slightly higher satisfaction rate amongst more frequent users (see table 14).

Table 14: Ease/difficulty to use the search mechanism in relation to frequency of use

Frequency of use	Ease/difficulty to use the search mechanism (%)		
	Very easy/easy	Neither easy nor difficult/ uncertain/don't know	Difficult/ very difficult
First-time visitor/less than once a month	51,4	32,4	16,2
1-8 times a month	63,6	25,8	10,6
More than 8 times a month	60,7	24,3	15,0
Total	60,0	26,2	13,8

In addition, a comparison was made between the ease/difficulty to use the search mechanism and methods used to find information on the website. The preferred browsing behaviour was confirmed in the findings – 76,2% of the respondents who indicated that the search mechanism was ‘easy’ or ‘very easy’ to use still indicated that they browsed to find information, compared to 53,2% of this group which indicated that they used the search mechanism (see table 15).

Table 15: Ease/difficulty to use the search mechanism in relation to methods used to find information on the website

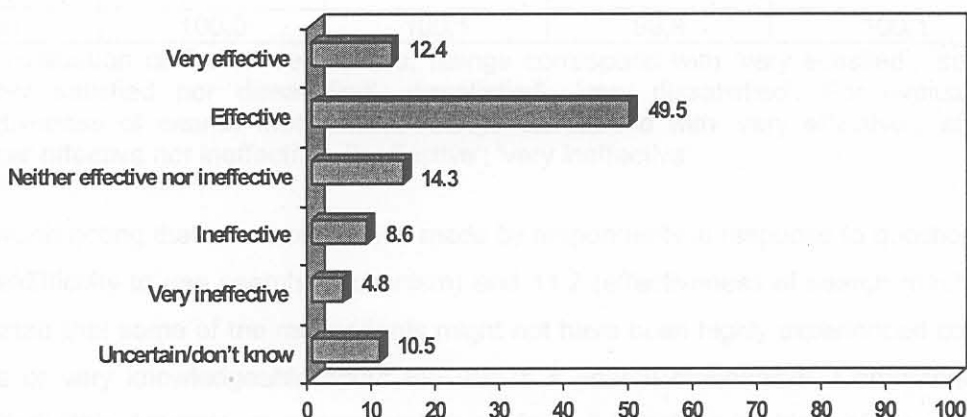
Methods to find information*	Ease/difficulty to use the search mechanism (%)		
	Very easy/easy	Neither easy nor difficult/ uncertain/don't know	Difficult/very difficult
Browse	76,2	74,5	89,3
Search	53,2	34,5	50,0
Events	25,4	16,4	39,3
What's New	31,0	20,0	50,0
Bookmarked pages	10,3	10,9	14,3
Other	4,8	5,5	-

*More than one response allowed per respondent

5.6.5 Effectiveness of the search mechanism

The results for this aspect correspond with those of the previous aspect (i.e. the ease/difficulty to use the search mechanism): 61,9% of the respondents indicated that the search mechanism was 'very effective' or 'effective', compared to 60% that found it either 'very easy' or 'easy' to use. In addition, a percentage of 13,3 respondents indicated that the search mechanism was either 'ineffective' or 'very ineffective', while 13,8% indicated that they found the mechanism 'difficult' or 'very difficult' to use (see figure 22).

Figure 22: Effectiveness of the search mechanism



Although few respondents motivated their responses when asked to do so, the majority of the responses (27 out of 31) reflected negatively on the search engine. Most of the comments made concerned search results that were not satisfactory.

5.6.6 Evaluation of navigation and search: a synopsis

5.7 Design and layout

In the evaluation of issues presented in paragraphs 5.6.1 to 5.6.5, it became clear that the satisfaction with navigation and search aspects rated well below that of information architecture, and also below that of content. Although respondents were satisfied overall with the ease with which the website was navigated, they found it more difficult to find information and to use the search mechanism. Table 16 presents an overview of the results discussed in these paragraphs.

Table 16: Consolidated results for the evaluation of navigation and search

Rating*	Aspect of navigation or search (%)			
	Finding information	Navigation	Use of search mechanism	Effectiveness of search mechanism
Very positive	19,5	21,4	13,8	12,4
Positive	48,1	59,5	46,2	49,5
Neither positive nor negative	20,5	11,0	17,1	14,3
Negative	9,0	4,3	11,4	8,6
Very negative	1,9	1,0	2,4	4,8
Uncertain /don't know	1,0	2,9	9,0	10,5
Total	100,0	100,1	99,9	100,1

*For evaluation of first three aspects, ratings correspond with 'very satisfied', 'satisfied', 'neither satisfied nor dissatisfied', 'dissatisfied', 'very dissatisfied'. For evaluation of effectiveness of search mechanism, ratings correspond with 'very effective', 'effective', 'neither effective nor ineffective', 'ineffective'; 'very ineffective'

It is worth noting that some comments made by respondents in response to questions 10.2 (ease/difficulty to use search mechanism) and 11.2 (effectiveness of search mechanism) indicated that some of the respondents might not have been highly experienced computer users or very knowledgeable about the use of a search mechanism. Comments made included: "this depends on computer skills attained, it is not the problem of the website"; "I am still a beginner on websites"; "it also depends on computer literacy"; "what is a search mechanism? My PC is a Win95 – it is slow but it gets there".

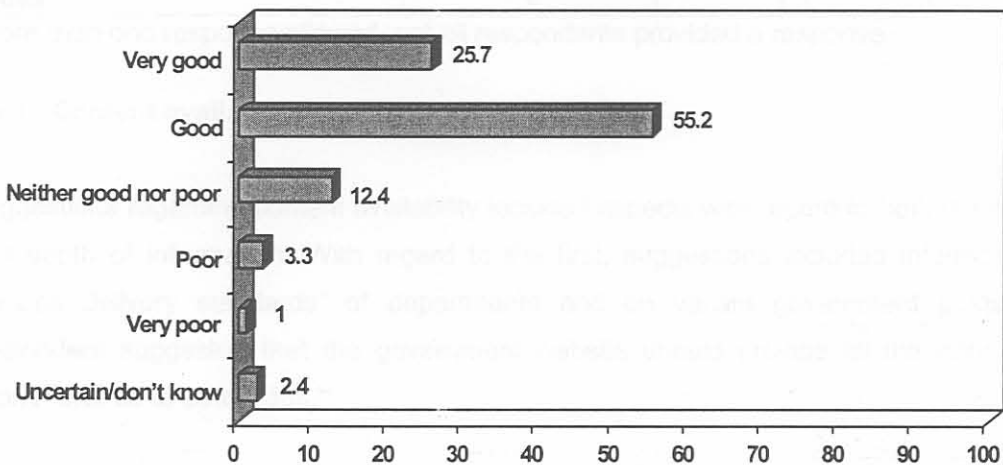
It is also evident that the search mechanism was the biggest problem experienced by both experienced and inexperienced users and that this contributed to the relative difficulty of finding information.

proceeding in the broader sense of the word, and not in the SA Government's narrow

5.7 Design and layout

The last aspect of the site that respondents had to rate concerned the visual aspects/look and feel/graphical layout of the site, for example the use of fonts, caps, colours, icons, use of graphics, consistent design and backgrounds and textures. Rating of this aspect was more in line with satisfaction as expressed with information architecture/organisation of information on the website and ease to navigate. About four out of five (80,9%) respondents indicated that the visual aspects were either 'very good' or 'good'. A mere 4,3 % rated this aspect as 'poor' or 'very poor', whilst 12,4 % regarded it as 'neither good nor poor' (see figure 23).

Figure 23: Rating of the visual aspects of the website



The view that the site was aesthetically pleasing constituted the majority of the positive responses when users were asked to motivate responses. The few negative responses included comments that the site was "too bland", that it "feels too busy", that too many graphics slowed down the downloading of pages, that there was a "random mixture of type sizes and faces", and "the use of a lot of serif faces".

5.8 Suggestions on how the website can be improved

Respondents were requested to provide suggestions on how the website could be improved. 103 responses were returned, and suggestions with regard to the availability of content, currency, organisation, navigation and search, as well as issues concerning software, downloading speed and document formats were the most prominent. It must also be noted that the second largest number of suggestions related to government web

publishing in the broader sense of the word, and not to the *SA Government Online* website specifically (see table 17).

Table 17: Suggestions on how the website can be improved*

Suggestion	Number of responses	%
Content availability	26	34,2
Government web publishing	17	22,4
Currency/frequency of updating	16	21,1
Organisation and navigation	13	17,1
Software, downloading speed, document formats	12	15,8
Interactivity	8	10,5
Search mechanism	5	6,6
Design	3	3,9
Language	2	2,6
Other	1	1,3

*More than one response allowed, not all respondents provided a response

5.8.1 Content availability

Suggestions regarding content availability included aspects with regard to both the breadth and depth of information. With regard to the first, suggestions included information on “service delivery standards” of departments and on vacant government posts. One respondent suggested that the government website should provide all the information: “Don’t refer us to other sites.”

With regard to depth of information on the website, respondents suggested the adding of

- the Government Gazette, Hansard and older legislation
- more government forms
- more detail on government departments
- names of deputy directors-general
- developments in government
- information on the Human Rights Commission
- history of the South African government
- a list of past presidents
- events, and more detail on the events presented on the home page
- a diary of weekly events that ministers take part in
- information relevant to government officials, such as “salary negotiations and developments in the Bargaining Council”

- a centralised press release service
- more comprehensive coverage of speeches
- a map of South Africa
- more Africa-focused items
- more links to popular sites
- more information relevant for school children.

5.8.2 Government web publishing

Suggestions on this aspect included suggestions that other government departments should update their information more frequently and should include more current and relevant information on their sites. One comment was made that other government departments should be motivated to “match your clarity, comprehensiveness and currency”, while another respondent remarked that government departments should add more relevant information to the *SA Government Online* website. Some respondents suggested standardisation of government websites – one respondent for example commented: “It will help if all government departments’ home pages are more or less the same”. Two respondents suggested that the Department of Foreign Affairs get a website.

In addition, more provincial government information was required, while the development of provincial websites was regarded as urgent. Comments in this regard included comments that “provinces must be compelled to have websites running and updated”, and “provincial web pages should be developed as a matter of urgency for investment networking purposes”.

5.8.3 Currency/frequency of updating

With regard to improvement of the currency of information, the following was specifically mentioned: names and contact numbers of media liaison officers, ministers’ speeches, press releases, Bills, Acts and other documents. One respondent considered a review period between updates as a matter of urgency. In addition, a suggestion was made to include a mail notification service, “so that if you are monitoring happenings in, for example the trade and industry sector, you will be e-mailed automatically if information is added to the site”.

5.8.4 Organisation and navigation

The following suggestions were put forward:

- Naming of entries on the home page should be clearly defined.
- Less detail should be presented on the home page.
- Easier access to departmental home pages should be provided by means of direct links from the home page.
- The press release section “has too many stories on one page so it takes a while to upload. Maybe you should categorise them so that you click on the year then the month that you are interested in, so it is not so much at once.”
- A “properly archived directory” will be a better option than the use of the search engine to list speeches/statements. The search engine should only be used for particular subjects.
- A full archive of all the year 2000’s speeches/statements should be available.
- There should be additional grouping of speeches and media statements, and cross-referencing between news stories.
- Government gazette numbers should be added at documents sorted according to subject.
- A further detailed breakdown of departments and their major sections is needed.
- A coherent index should be developed.
- More cross-referencing should be available.

5.8.5 Software, downloading speed, document formats

Although this was not asked, several respondents commented on the slow downloading speed of the site. With regard to document formats, it was suggested that all documents be made available in PDF format, while other respondents suggested more legislation available in HTML format.

5.8.6 Interactivity

Respondents suggested that current debates be highlighted. One enquired about the possibility of e-commerce. The suggestion was also made that there should be a “virtual spokesperson that can officially answer questions on a 24-hour turnaround basis”. One respondent suggested “more questionnaires such as this one...for input on policies that are formulated by government that affect the public directly”, and another suggested a “public

comment section, showing documents on which comment is being solicited". Further suggestions entailed an online chat with departments, and direct e-mail to ministers and the president.

5.8.7 Search mechanism

Additional suggestions with regard to the search engine included the following:

- There should be more options to "narrow information down".
- It must be more user-friendly.
- Users should be able to search for specific information.
- There should be only one search facility.
- The provision of "brief search tips on the search page would help".
- The search option should be supplemented with an "archived list".
- A "limit search option" should be included.
- The title fonts of the search results should be smaller.
- The search function should be more sophisticated – "more criteria rather than just a word".

5.8.8 Other suggestions

Among suggestions made to improve the website were the following:

- The background colour needs a "face lift".
- A clear South African flag and the Coat of Arms should be incorporated in the visual aspects.
- More photographs should be included.
- Some of the important information units could be packaged in various local languages, or that a "mechanism for translation into various local languages" should be provided.
- The use of long URLs should be stopped, as it makes it "extremely difficult to send URLs in e-mails".

5.9 Summary of findings for the online survey

From the results, it is evident that there was an overall positive rating of the site – all aspects rated positively above 60%. The highest satisfaction level was achieved for the broader category of information architecture/organisation of information on the website (82,6%), followed by the visual aspects/look and feel of the website (80,9%), and content

(72,2%). The lowest satisfaction level was achieved for navigational/search aspects of the website (67,6%).

The individual aspects of the site that were most positively viewed were the home page (83,8%), organisation of information (81,9%), ease to navigate the site (80,9%), visual aspects (80,9%), and accuracy (79,5%), which were all above the average rating of 73,4% for all the individual aspects. Aspects of the site that scored below this average were coverage of information (71,5%), ease/difficulty to find information on the website (67,6%), and currency (65,7%). The effectiveness of the search mechanism (61,9%) and ease/difficulty to use the search mechanism (60%) were viewed as the least positive aspects of the website. Table 18 provides a summary of these findings.

Despite the fact that all aspects of the website were rated relatively high, there are reasons for concern. Compared to the overall high rating of the website (82,4%) and the aspects that rated well above average, markedly lower satisfaction levels were achieved for aspects such as the search engine, ease of finding information, currency and information coverage. The difference between the aspects rated the highest and lowest differed as much as 23,8%. The developers should consider improving the aspects that rated lower to ensure that they match the higher satisfaction levels and the overall perception of the website.

An important concern is ease, or the lack thereof, of finding information on the website. Even though 67,7% of the respondents indicated that they found it 'very easy' or 'easy' to find information on the website, this aspect does not compare favourably with aspects such as organisation and navigation. After all, one of the main aims of this site should be to enable users to find the required government information as easily as possible. This occurred despite the fact that most respondents viewed both navigation of the website and organisation of information in a positive light. There could be various reasons for this. The one possibility could be that the search engine created this perception. Another reason could be that respondents looked for information that was not available on the site (or on other government sites) or not posted immediately on the site; this conclusion is correlated by a comment such as "it is hard to find information on job vacancies", and by responses, when asked what additional information was required, that referred to the need for more updated information. Yet another possibility could be that, despite the fact that organisation was rated positively, users did not realise that information was available at other locations on the site than where they expected it – respondents for example requested information that was already available in the site, such as provincial government links.

Many comments focused on the need for an improved search engine. The fact that only minimal user behaviour as described by Nielsen (1997c) was not evident for the website

Table 18: Consolidated results for the main evaluation categories and specific aspects evaluated

Evaluation category	Aspect evaluated	Positive rating* for specific aspect (%)	Ranking for aspect	Positive rating* for category (%)	Ranking for category
Overall rating	-	-	-	82,4	-
Content	Coverage	71,5	5	72,2	3
	Currency	65,7	7		
	Accuracy	79,5	4		
Information architecture/ organisation of information	Home page	83,8	1	82,6	1
	Organisation of information	81,9	2		
Navigation and search	Ease/difficulty to find information	67,6	6	67,6	4
	Ease/difficulty to navigate	80,9	3		
	Ease/difficulty to use the search mechanism	60,0	9		
	Effectiveness of search mechanism	61,9	8		
Design	Visual aspects/look & feel	80,9	3	80,9	2

*For the evaluation of coverage, currency, accuracy & home page, ratings correspond with 'very satisfied', 'satisfied'; for the evaluation of the effectiveness of the search mechanism, ratings correspond with 'very effective', 'effective'; for the overall rating, the evaluation of organisation and design, ratings correspond with 'very good', 'good'. For the evaluation of ease to find information, to navigate and to use the search, ratings correspond with 'very easy', 'easy'.

It is clear from the discussion that users both browsed and searched the site, with the majority of users preferring to browse, even the more experienced users. It is worth noting that users who did not experience major difficulties in searching, also preferred to browse. Despite this, the main reason for this behaviour appeared to be the way in which the search mechanism was perceived: i.e. difficult and/or ineffective. In addition, the organisational scheme of the website, as well as the navigation thereof was highly rated, which made it logical for users to prefer browsing.

Many comments focused on the need for an improved search engine. The fact that the normal user behaviour as described by Nielsen (1997c) was not evident for this website

might perhaps be ascribed to the fact that respondents found it too difficult to use the search engine or got irrelevant results, therefore preferring to browse. Another possibility is that users of this website were generally more inexperienced than those tested by Nielsen. It is, however, possible that the way the search engine was implemented could have impacted on users' overall perception of the website, but more importantly, on their ability to find information.

A second major issue that emerged was the perceived lack of updated information. There was a clear expectation that material should be kept current, and this expectation was not always met. The availability of additional information was also identified as an important concern. There were specific and varied expectations with regard to additional material that should be included on the website. Respondents sought information on all aspects of government, from comprehensive coverage of government documents and government policy, to government structures and activities and services rendered. Comprehensive information coverage on South Africa also featured, but perhaps not so prominently as might have been expected.

In addition, the results of the survey indicated that the following issues also needed attention:

- Improved organisation and structuring of information categories on the home page and the possibility of including additional information categories to make some important and frequently used information more apparent on the home page.
- The need for the search button to be displayed more prominently on the home page.
- Rethinking the way *What's New* is being handled, to make provision for more 'new' information, for items to be clickable and to link directly to the relevant items.
- Inclusion of additional aids to ease the finding of information, such as a site map and indexes.
- Description of links.
- In addition to issues raised with regard to the search engine the survey also pointed to specific aspects of the search engine that need attention, such as: simplifying the search interface; support to users to specify what they need, as well as on how to use the mechanism in general; inclusion of other government sites in the search index; and the combination of the two search mechanisms.
- Consistency in the use of fonts.
- The perception that pages were "busy" and cluttered (especially the home page).

There seems to be a correlation between frequency of use and satisfaction with the website. Users who used the website more frequently were more positive. This might be because they had a better understanding of the site's content and organisational and navigation features due to their longer exposure thereto, and thus did not experience some issues as a problem any more.

It also became evident that many respondents did not make a distinction between the *SA Government Online* website, serving as an entry point to government information, and the various government websites that it linked to. Respondents expected to find all government information from this site, and incompleteness, lack of currency or poor organisation of information on other sites also reflected negatively on this website.

6. CONCLUSION

This chapter provided detailed discussions on the findings for each of the four methods applied for the evaluation of the *SA Government Online* website. Each of the methods revealed that the website did not conform to various usability criteria nor general expectations for government websites. These deficiencies were demonstrated in each of the broad areas of the usability criteria used, namely that of content, information architecture and organisation, navigation and search, as well as design and layout. Valuable suggestions and comments by respondents and evaluators were also recorded. These will be consolidated and presented as part of the next chapter.

In the following chapter, the author presents a consolidation of the findings of the four evaluation methods, with the aim of providing a comprehensive overview of the deficiencies and usability problems of the website. Some correlations between the findings of each evaluation method are also pointed out. These, together with comments and suggestions by respondents and evaluators regarding the improvement of the website form the basis for the recommendations for improving the site as presented in chapter eight.