

Papua New Guinea

Department of Information and Communications Technology

Government

Website Standards and Guidelines

2023

Document Control:

Document Name	PNG Government Website Standards and Guidelines 2023
Prepared By	Department of Information and Communications Technology
Edition	Version 1
Approved by	Public Service ICT Steering Committee
Date Approved	26 th May 2023
Effective Date	1 st July 2023
Next Review Date	



PNG Government Website Standards and Guidelines 2023.

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PNG Government Website Standards and Guidelines 2023.

PART 1. - PRELIMINARY.

1. NAME.

This instrument is the Website Standards and Guidelines 2023.

2. COMMENCEMENT.

This instrument commences on [1 July 2023].

3. AUTHORITY.

This instrument is made under Section 64 of the *Digital Government Act 2022*.

4. SIMPLIFIED OUTLINE.

(1) This instrument prescribes the standards and guidelines for government websites. All public bodies must comply with this instrument.

(2) The standards set out in Parts 2, 3 and 4 of this instrument are mandatory and the guidelines set out in Part 5 of this instrument are recommended. Part 6 contains other matters and Appendices 1 to 5 are also part of this instrument.

(3) Notes are included in this instrument to help understanding by drawing attention to other provisions and providing information or explanations. The notes are in small type, so that they don't disrupt the text. They do not contain statements of law.

5. DEFINITIONS.

In this instrument, unless the context otherwise requires:

“DICT” means the Department of Information and Communications Technology;

“e-Accessibility” means a measure of the extent to which a product is or can be used by a person with a disability as effectively as it can be used by a person without the disability for purposes of accessing or using ICT related products or services;

“e-Accessibility Policy” means refers to the PNG Digital Transformation Policy available at <https://www.ict.gov.pg>;

“e-Participation” means the process of engaging citizens through ICTs in policy and decision-making in order to make it participatory, inclusive, and deliberative;

“government domain” has the same meaning as in the *Digital Government Act 2022*;

“ICT” means Information and Communications Technology;

“Open Data” means the concept that information and data should be made available for everyone to access, reuse, and redistribute without any restrictions. In addition, the datasets opened should be in a machine-processable format, free of charge and devoid of any personal information;

“Public body” has the same meaning as in the *Digital Government Act 2022*;

“W3C” means the World Wide Web Consortium where member organisations, full-time staff, and the public work together to develop Web standards;

“WCAG 2.0” means the Web Content Accessibility version 2.0 published by W3C. It covers a wide range of recommendations and guidelines which will make content accessible for persons with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity, and combinations of these;

“Website development” means the process of planning, designing, building and maintaining a website. A well-designed website is vital to reach a wider audience.

6. OBJECTS OF STANDARDS AND GUIDELINES.

The objects of these Standards and Guidelines are to -

- (a) achieve consistency across all the websites of public bodies by providing a clear, consistent, and uniform online communication channel for all users; and
- (b) ensure a consistent, intuitive, and seamless online experience when moving from one government website to another; and
- (c) facilitate the navigation, retrieval of information, and access to online services within and across government websites; and
- (d) promote and foster a common identity of Papua New Guinea Government by making it easier for users to identify and recognize government websites; and
- (e) accelerate access and e-service development using common components and services; and
- (f) ensure user trust, dependability, and confidence when transacting e-Services.

7. SCOPE AND APPLICATION.

(1) These Standards and Guidelines apply to all public bodies and all government websites using the government domain **.gov.pg** domain.

(2) Government websites not using the government domain **.gov.pg** domain (for example, edu.org, .com.pg, .org.pg) and non- government websites may choose to comply with these Standards and Guidelines.

(3) However, these non **.gov.pg** websites must not use the PNG Government logo.

8. PUBLIC BODY CORPORATE WEBSITE.

A public body must establish and maintain a corporate website to present information about the public body, which includes informing members of the public of its mission, organization, and structure, as well as its priorities and services provided to the public.

9. WEBSITES IN ENGLISH AND PIDGIN.

The websites of a public body must be in English and, if possible, in Pidgin. The Pidgin and English versions of a website must be identical in terms of both content and layout.

10. PAPUA NEW GUINEA DIGITAL TRANSFORMATION POLICY.

(1) The Papua New Guinea Digital Transformation Policy sets the mandate of the Department of Information and Communications Technology (DICT) and provides that DICT has the authority to supervise, regulate and develop Government Information and Communications Technology in Papua New Guinea. DICT must do so in a manner consistent with the requirements of national development goals, with objectives:

- (a) to create an environment suitable for fair competition; and
- (b) to support development and stimulate investment in sectors; and
- (c) to secure and raise efficiency on information and technological infrastructure; and
- (d) to implement and supervise e-Government programs; and
- (e) to promote community awareness of the importance of ICT to improve lives and the community, and to build a knowledge-based society and digital economy.

(2) All public bodies must comply with the Papua New Guinea Digital Transformation Policy which is published on the DICT website.

(3) In accordance with the PNG Digital Transformation Policy, a public body must ensure that information and e-Services on its websites are securely provided.

(4) The policy also aims to ensure persons with disabilities in Papua New Guinea are able to access technologies available and covers a range of e-Accessibility issues, including all websites which are required to comply with W3C Level AA standards.

11. GOVERNMENT WEBSITES AND E-SERVICES FRAMEWORK.

(1) The Government Websites and e-Services Framework set out in these Standards and Guidelines was developed to define a set of both standards and best practice guidelines for the overall design of government websites and e-Services in order to ensure that government websites are easy for the public to access and provide a more consistent experience when navigating across different government websites.

(2) The Papua New Guinea Digital Government Strategy further stipulates the requirement of having policies, guidelines, and standards (framework) in place to ensure a consistent user experience when navigating through different government websites and using e-Services from different government entities. DICT is charged with designing such a framework under this Strategy.

(3) Each government website and online service has its own distinct design, layout, interface, and navigation architecture. This disparity in “look and feel” can be perplexing and difficult for the public, as they must reorient themselves when visiting each government website. To ensure that government websites and services are public-centric and user-friendly, standardization and uniformity are required.

PART II. - GOVERNMENT WEBSITE LAYOUT AND ELEMENTS STANDARDS.

12. OVERVIEW.

(1) Part 2 sets out the Government Website Layout and Elements Standards. These Standards describe the key elements required for all public body websites. The Government Website Layout and Elements Standards provides a consistent structure for the placement of key website elements on all public body websites. These Standards have been developed based on international best practices.

- (2) The objects of the Government Website Layout and Elements Standards are to -
 - (a) ensure a common “look and feel” throughout all PNG Government websites; and
 - (b) foster a common PNG Government identity, making it easier for users to identify PNG Government websites; and
 - (c) make it easier for users to navigate across different PNG Government websites.

(3) So far as practicable, a government website must adopt the design and layout, as shown in Figures 1 and 2, for every page of the website.

- (4) The design and layout are grouped into 17 sections on the webpage.

FIGURE 1. - BASIC WEBSITE DESIGN AND LAYOUT ELEMENTS.

1. Webpage Title
2. Verification Badge (for authenticity)
3. PNG Government Logo Space (Mandatory placement at top panel)
4. Public body name with its logo (if any)
5. PNG Digital Government Program Logo (Mandatory Placement at Top Panel)
6. Header Links
7. Search Box
8. Accessibility Buttons
9. Content Links
10. Horizontal Navigation Panel
11. Left vertical Navigation Panel
12. Page Body Space
13. Right Vertical Navigation Panel
14. External Links
15. Social Media Accounts
16. Footer Panel

Refer to appendices for samples of each website element.

FIGURE 2. - KEY ELEMENTS REQUIRED IN WEBSITE DESIGN AND LAYOUT.

Section.	Section Name.	Key Website Elements Required.	Requirements.
1.	Webpage Title	To display the title of the webpage user is viewing	Mandatory
2.	Verification Badge	To show the authenticity that the website is PNG officially verified and recognized.	Mandatory
3.	Bilingual Language Link	To provide a bilingual language selection link to both Pidgin and English	Recommended
4.	PNG Government Logo Space	To display PNG Government Logo at the top panel	Mandatory
5.	Public Body Name Space	To display name of public body, and logo (if applicable)	Mandatory
6.	PNG Digital Government Program Logo	To display logo of the PNG National Government Services Program at the top panel	Mandatory
7.	Header hyperlinks space	To include Header links to Contact Us, Feedback, Site Map	Mandatory
8.	Search	To include the website search function	Mandatory
9.	Accessibility Buttons	To include components to assist people with disabilities for easy access to the webpage, and options to promote the website over social media by the users	Mandatory
10.	Content links	To include Print and Save symbols for users to either print or save the webpage, and options to promote the website over social media by the users	Mandatory

11.	Horizontal Navigation Panel	To include panel containing links to webpage content in a structured manner	Mandatory
12.	Left vertical navigation panel	To provide additional navigational assistance to users; such as links to departments	Recommended
13.	Page Body Space	To display content of the selected topic or service	Mandatory
14.	Right Vertical Navigation Panel	To include additional panel to highlight important events, news, or announcements	Recommended
15.	External Links and Logos	To include all external and useful links such as SEOs, Ministries, etc.	Mandatory
16.	Social Media Accounts	To include hyperlinked logos of all social media accounts	Mandatory
17.	Footer Panel	To include the following: Accessibility Information	Mandatory
		To include Privacy Statements and Terms of Use	Mandatory
		Copyright	Mandatory

(5) The standards set out below describe each important design and layout element shown in Figures 1 and 2. Also refer Appendix 1 for Sample of Website Layout and Elements.

STANDARD 1.1. - WEBPAGE TITLE.

- (1) Each page of a government website must have a title using the HTML <TITLE> tag.
- (2) The title of a webpage must be simple, clear and concise.

Note: The title of a webpage tells a search engine how relevant a page is to a searcher's query. As a result, search engine optimisation improves. Furthermore, when a user bookmarks a page, the default name displayed is the page title; thus, it is important that the title of a webpage is relevant to the page content.

STANDARD 1.2. - VERIFICATION BADGE.

- (1) The PNG FLAG (Verification Badge) is a standard used on PNG websites to confirm our authenticity and credibility.

(2) The Verification Badge serves as a visual indicator, in this case would be the National Flag of Papua New Guinea accompanied by a label indicating verification. ***“An official website of a PNG government department” with the following features:***

- (a) *Font size: 7*
- (b) *Label Font: Bahn Schrift Semi Bold Semi Condensed –bold*
- (c) *PNG FLAG Image size: Height 1.91-inch Width: 2.86 inch*

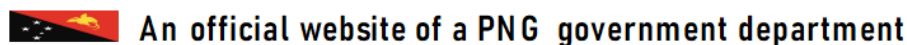
(3) The purpose of the Verification Badge is to assure users that the website and its owner have undergone a verification process.

(4) The badge helps establish trust and credibility, ensuring users can confidently engage with the website and its content.

(5) The Verification Badge enhances the overall user experience, encouraging users to interact, share information, and conduct transactions with confidence. It contributes to brand protection by reducing the risk of others misrepresenting the verified website's identity.

(6) The PNG FLAG serves as a recognizable symbol that distinguishes verified PNG websites, promoting transparency and credibility within the online community.

Example:



STANDARD 1.3. - BILINGUAL LANGUAGE LINK.

(1) A government website must include a bilingual link to both its English and Pidgin (if any) versions.

Note: It is critical to provide as much access as possible to people who do not speak English to encourage their participation.

(2) Below is an example of how such a link could be configured.

FIGURE 3. - SAMPLE OF BILINGUAL LANGUAGE LINK.

A rectangular button with a thin orange border containing the text "Pidgin | English" in a black, sans-serif font.

STANDARD 1.4. - INDEPENDENT STATE OF PAPUA NEW GUINEA LOGO.

(1) A government website must display the Independent State of Papua New Guinea Government logo at the top panel.

(2) No other images or text are to be displayed in this section.

Note: The designer of a website may choose to hyperlink this logo which points the user back to the homepage.

STANDARD 1.5. - PUBLIC BODY NAME AND LOGO.

The name and logo (if applicable) of a public body must:

- (a) be in section 4, see Figure 2; and
- (b) be hyperlinked for users to navigate back to the homepage.

STANDARD 1.6. - PAPUA NEW GUINEA GOVERNMENT SERVICE PROGRAM LOGO.

Section 5, see Figure 2, must be used to display the logo of Papua New Guinea Government Service Program. This logo must be placed at the top panel and may be requested from DICT to ensure standardization.

STANDARD 1.7. - HEADER LINKS - CONTACT INFORMATION, FEEDBACK AND, SITEMAP.

- (1) Section 6, see Figure 2, must contain the following links:
 - (a) Contact Us; and
 - (b) Feedback; and
 - (c) Sitemap.

Contact Us.

- (1) The Contact Us page must provide users with a list of up-to-date communication details.
- (2) The Contact Us page or a similar link must allow users to request assistance with the website or from the public body.
- (3) The following information must be included on the website's "Contact Us" or similar webpage:
 - (a) office address; and
 - (b) a regularly monitored postal address; and
 - (c) an email account that is regularly monitored by the Department or Agency; and
 - (d) operating hours of the offices of the public body; and
 - (e) the main telephone number and that for each call centre that supports a service provided by the public body and the hours of operation; and
 - (f) contact details for its Media Liaison Officer; and
 - (g) a map of the area or directions to each office must also be included.

Feedback.

- (1) The "Feedback" link to the webpage must allow users to send comments or post enquiries about the website or matters relating to the public body.

- (1) A form, in both online and offline format, may provide different types of communication options.
- (2) The form is to be designed to accommodate the following uses:
 - (a) Enquiry - for enquiries about the website, information, or services offered by the public body.

Note: In order to inquire about specific services, users should first read the information provided for all services on the e-Services page (as mentioned in Standard 2.1) and then submit an inquiry only if their questions are not addressed there.

- (b) Feedback - to allow users to provide feedback about the website, information or services provided; Refer Standard 2.12.
- (3) The form must -
 - (a) clearly identify the purpose (as noted above) or allow users to select the option; and
 - (b) be easy to complete; and
 - (c) be designed to be as accessible as possible; and
 - (d) indicate if the user would like a response. If a response is required, the form must capture the user's name and email or postal address.

Site Map.

- (1) The site map must be on a single page.
- (2) The site map:
 - (a) represents the structure of the website both textually and graphically; and
 - (b) provides an excellent overview of the website; and
 - (c) allows for quick access to the website's pages and content.
- (3) However, if a website has only two levels (the homepage is the top level) and the entire website can be accessed from the homepage, the sitemap can be omitted because the homepage serves as the sitemap for the website.

STANDARD 1.8. - SEARCH FUNCTION.

- (1) A government website, including its public website and any other major entry point, must include a search function.
- (2) The search function must be placed in a prominent and consistent location on the website so that users can easily find it, for example, at the top right corner of the website.
- (3) Where feasible, the search results are to display the following information:
 - (a) title;
 - (b) description;
 - (c) file format;
 - (d) file size.

(4) To view the minimum required search functionalities, no rollover, drop down, or mouse click actions is to be provided.

(5) A website must display the text 'search this site' or similar text in the search box to improve usability.

(5) The following is an example of how it will appear:

FIGURE 4. - SAMPLE OF SEARCH FUNCTION.



Note: While typing in the search box, users may not be aware of the exact topic or service name. As a result, the website search engine should be capable of responding to user terminology and displaying the desired topic or service in results. For more information, see Guideline 13.

STANDARD 1.9. - ACCESSIBILITY BUTTONS.

(1) This section contains assistive buttons, such as text resizers, color or contrast changes, and text-to-speech.

(2) This ensures that all users' needs, including those with disabilities, for access to the website and services are met.

FIGURE 5. - ACCESSIBILITY BUTTONS.



Note: Refer to the PNG Digital Transformation Policy (<https://www.ict.gov.pg>) for more information.

Text Resize Function.

(1) The text resize function must be placed in the upper right corner of the "Page body" section. It can be displayed with the alt text "increase text size" and "decrease text size" as follows:

- (a) A+ A; or
- (b) Text Size: A A A.

Note: Except for captions and text images, text can be resized without assistive technology up to 200 percent without loss of content or functionality, according to WCAG 2.0. Because some users find online text difficult to see or read, the default browser function for text resizing must always be available. The text resize function can also be accessed via the website. Websites that have this option must ensure that the script enabling this function is correctly implemented in order to meet web accessibility standards.

Change Color or Contrast Function.

(1) To understand the contents of a webpage, some people with cognitive disabilities require specific color combinations of foreground text and background or contrast.

Note: Although it is not required for WCAG 2.0 compliance, it is important to consider providing controls with a sufficient contrast ratio to allow users to switch to a presentation that meets their needs.

STANDARD 1.10. - CONTENT LINKS.

(1) The content link elements must be placed on the main webpage's top right corner so as to increase the website's visibility.

(2) Elements include the ability for the user to print, email, save, or share via social media. A separate like button may also be included to help propagate the website on social media.

(3) Examples of how these content links could appear are shown below.

FIGURE 6. - CONTENT LINKS.



(1) Alternative text in the above order would be “Print | Email | Save | Share | Like”.

Note: If the share button is used, clicking on it should also result in a drop-down or pop-up list containing icons for relevant social network websites from which the user can choose to share the content.

Print this page.

(1) A website must provide a print-friendly function that is configured to print only the page's core content, that is, the main content without navigation, formatted to print correctly on the page.

(2) The function can be displayed as:


(a) Text - “Print this page”; or

(b) A print icon (shown in above Figure), with alternative text “Print this page”.

Note: This function should open in a new window displaying the content to be printed, with a print button at the top right corner of the new window to activate this function.

Email this page.

(1) The ‘Email this page’ function makes it easier for web users to email the current page to a contact/friend.

- (2) The function can be displayed as:
 - (a) an icon (e.g., an envelope  image), with the alternative text ‘email this page’; or
 - (b) as text - ‘Email’ or ‘email this page’.

Note: The function should bring up a pop-up box with the following fields:

Title (e.g., Email to Friend or email this page)

From: <your name>

To: <recipients email address>

Optional message field

Option to send a copy of the email to the sender. If this option is selected, the sender’s email address will need to be captured.

- (1) The pop-up box must also display the ‘Send’ and ‘Cancel’ buttons.

Save This Page.

- (1) This function allows users to save the webpage in compatible formats such as PDF, HTML, and so on.

Social Media Elements.

- (1) Social media elements may also be available to raise awareness about the website via social media.

Example: For social media elements, see Figure 9.

STANDARD 1.11. - HORIZONTAL NAVIGATION PANEL.

The hyperlinks on the horizontal navigation panel must be consistent throughout the website and cannot take up more than one row, as shown below, see Figure 7.

FIGURE 7. - HORIZONTAL NAVIGATION PANEL.

[Home](#) | [About Us](#) | [Programs & Services](#) | [Publications](#) | [News & Events](#) | [Open Data](#) | [e-Participation](#) | [Careers](#)

Where applicable to the website, it must use the following structure and labels for basic information, see Figure 8.

FIGURE 8. - STRUCTURE OF INFORMATION PUBLISHED.

Top Level Links.	Second-level Links.	Description.	Requirement.
	Legislations/Regulations	Legal statutes/Acts/Regulatory frameworks, etc.	Recommended
	Policies/Standards/Guideline	Public policies and guidelines	Recommended
	Annual Reports	Annual reports	Recommended
Open Data	Open Data Catalogue	List of all available Open Data with links	Mandatory
E-Participation	Consultation Papers	Public ConsultationPapers	Mandatory
News & Events	Press Releases	Press Releases by the agency	Recommended
	Speeches	Speeches by management team members	
	Calendar of events	Past and upcoming events	
Career	Job Opportunities	Job openings	Recommended
	Scholarships (if applicable)	Scholarships offered by the Agency	Recommended

STANDARD 1.12. - LEFT VERTICAL NAVIGATION PANEL.

For additional navigation, a vertical left navigation panel is to be used.

Note: This is due to the fact that users look for additional navigational hyperlinks on the left. A typical example is websitenavigation by agencies and departments and their respective functions.

STANDARD 1.13. - PAGE BODY SPACE.

This is the main page body space where content for the topics selected by the user will be displayed.

Example: if the user clicks on "Organization Structure," this area should display the public body’s structure with a briefdescription.

STANDARD 1.14. - RIGHT VERTICAL NAVIGATION PANEL.

This section, see section 13 (Figure 2), is optional, but it may be used by a public body to display important news, events, or announcements that require users' immediate attention.

STANDARD 1.15. - EXTERNAL LINKS AND LOGOS.

(1) Logos with hyperlinks must appear in the bottom right corner of the page.

(2) When appropriate, the website can provide links to appropriate cross-agency portals to direct the public to further resources available throughout other government websites. The list of external links must contain the GoPNG (national e-Government portal) and ministry websites, among others.

Note: Public bodies should also create and execute detailed agency-wide linking rules that outline management controls for linking both within and outside the government website.

(3) If there is an appropriate, useful government-wide portal on a specific topic or website for a specific audience, that portal must be linked from the public body's webpages on that topic.

Note: Links to such agency portals, like all links, must be reviewed on a regular basis to ensure they are current and accurate. The website/portal content should only be linked if it adds more information or is a natural "next step" for the user or audience.

STANDARD 1.16. - SOCIAL MEDIA ACCOUNTS.

(1) If a public body uses social media on its website, the public body is to display the relevant social media profiles.

(2) The social media components must be represented as icons with corresponding alternative text.

Example: The following is a sample representation of links to social media accounts, see Figure 9.

FIGURE 9. - SOCIAL MEDIA BUTTONS.



(1) Alternative text in the above order would be "Facebook | Instagram | Twitter | LinkedIn | YouTube."

Note: The user should be sent to the public body's page on the corresponding social media account by clicking on these buttons. When incorporating social media aspects on their websites, it is important to comply with the principles and requirements outlined in the PNG Digital Transformation Policy.

STANDARD 1.17. - FOOTER PANEL.

(1) The hyperlinks in the horizontal footer panel are to be consistent throughout the website and must not take up more than one row, as shown below:

FIGURE 10. - FOOTER PANEL SHOWING HYPERLINKS AND COPYRIGHT.



(1) The footer panel may also contain system requirements such as minimum supported web browsers and plug-in information. Refer to Guideline 4.4.

Accessibility Information.

(1) The accessibility content page must be used to provide information on options by which the public body's accessibility features can be enabled.

- (2) It must contain information on the following:
- (a) how to change text size;

Note: Detail how users can change the text size on the website. Explain how users can change the size of the text on the website. Government websites should be designed so that text resizing is possible regardless of browser type or version. This can be accomplished by using relative text sizes rather than absolute values.

- (b) website document viewing tools;

Note: The description should include information on how users can change the color or contrast to suit their needs. Also, if the website includes the option to read the content aloud, the users should be instructed on how to use it. Websites should also provide links to free third-party reader and viewer software, allowing all documents on the website to be viewed on any computer system, e.g., Readers or viewers from Microsoft or Apple, Open-source readers or viewers, and PDF conversion tools.

- (c) any other accessibility issues unique to a particular public body's website;
- (d) the website's accessibility level per WCAG 2.0.

Privacy Statement.

- (1) Each website must include a privacy statement.

Note: Giving website visitors notice about how the public body collects and uses personal information is good practice and will help the public body comply with privacy laws and principles while also gaining public trust and confidence in those who use government websites and services.

- (2) The privacy statement must set out the following:
 - (a) the scope of the statement;
 - (b) the circumstances in which personal information is collected, by whom it is held (e.g., the responsible public body or any other third parties);
 - (c) the uses to which such collected personal information may be put by the collecting public body and the circumstances in which it may be disclosed;
 - (d) if cookies are used, a statement and a brief description of their purpose should be included.

(3) On the home page of the website, a link to the privacy statement must be visible. Refer Appendix 2 which contains a sample of how the privacy statement could be worded.

Terms of Use.

(1) There must be a link to a page outlining the website's terms of service, which is to include any disclaimers, copyright clauses, privacy clauses, and hyperlinking policies. Refer Appendix 3 which contains a sample of the Terms of Service.

Copyright Notice.

(1) This space must be used to insert a copyright notice in the format © followed by the current year (e.g., 2020) and “Papua New Guinea.”

PART III.E. - SERVICES STANDARDS.

13. OVERVIEW.

(1) Part 3 sets out the E-Services Standards. The Standards describe the design and development of e-Services and include the common components that public bodies must access for optimization and an accelerated development of their e-Services.

(2) The object of the E-Services Standards is to ensure a common user experience and minimum level of service to users transacting with the Government online and assist public bodies to plan and implement e-government services in a consistent and integrated manner.

(3) One of the core strategic objectives of the PNG Digital Government Services 2020 Strategy is to better serve individuals and businesses, with a strategic Key Performance Indicator set for all government departments and agencies to put 100 percent of their services online and 80 percent of services end-to-end. The Strategy requires all government departments and agencies to provide citizen-centered services online, allowing users to complete e-services from start to finish online.

(4) The E-Services Standards will ensure that public bodies simplify processes, eliminate redundancies, and use online workflow in delivering services from a citizen-centric perspective.

(5) All websites must also take appropriate measures, such as adopting the PNG e-Authentication Framework and assuring citizens about the security of their personal information and data protection, by publishing privacy policies on their websites.

STANDARD 2.1. - PROVIDE ADEQUATE INFORMATION ABOUT ALL SERVICES.

Adequate information.

(1) A public body must publish adequate information about all services provided by the public body on its e- Services pages or its websites.

(2) If the service is an e-service, users must be provided with a link to begin the e-service transaction.

Note: The PNG Digital Transformation Policy recognizes three levels of e-Participation, e-Consultation and e-Decision-making. e-Information is the most “passive” or basic level of e-Participation, allowing citizens to participate by providing public information and on-demand access to information. Users should be able to enter an e-Service knowing what it is about, who it is for, what is required to complete the transaction successfully, and how long it will take. Users should not be caught off guard in the middle of a transaction and be forced to abandon it. A credit card, for example, may be required to complete an e-payment transaction. In light of this, users should not be asked to authenticate or login before reading this information on the first page of any e-service that requires user authentication.

Hyperlinked list of services.

(1) A hyperlinked list must set out the names of all services provided by a public body and the service names must be descriptive and simple to understand.

(2) A brief narrative is to be provided alongside the service names.

(3) The hyperlink provided on service names must take the user to the main service page containing the information set out in Subclauses (6) to (14) below and allow the user to transact the e-service if the service is available online.

Note: See Standard 2.3 for a listing based on e-service grouping and categorization.

Description of service.

(1) There must be a brief description of each of the services listed, including:

(a) the target user - whether PNG citizen, expat residents, businesses or visitors;

(b) whether transacted online, offline or a combination of both; and

(c) an estimated time to complete the process as well as service transaction, including the pre-requisites for the successful application of the e-service.

Examples: of estimated completion or processing times include: “this e-Service will take about 5-10 minutes to complete” and “this application will take 1 week to process.”

Requirements for services.

(1) There must be information on requirements for services, including:

- (a) any information or details that an applicant is required to have ready prior to using the service; and
- (b) the procedures and steps required to complete the service transaction; and
- (c) if some steps or the entire service are to be availed offline, contact office, location and timings must be provided; and
- (d) information on required fees and different payment options.

Attachments and downloadable forms.

(1) Attachments and downloadable forms must also be provided, as well as assistance in completing the form and all required fields must be highlighted.

(2) Information on what supporting documents must be submitted or uploaded as attachments for online services is to be provided.

(3) Government websites must include links to Terms and Conditions, Frequently Asked Questions (FAQs), and Help.

Frequently Asked Questions and Help Pages.

(1) FAQs must be prepared and published, and they must address common questions or situations that users may encounter.

(2) FAQs and Help hyperlinks must be located at the top of every page of the e-Service to assist users at all times during the transaction.

(3) The Help hyperlink must bring the user to a help page containing key information which must include the following:

- (a) an overview of the service;
- (b) details of who is eligible for the service;
- (c) details of what is needed to complete the online service;
- (d) a user guide on instructions for users to complete the transaction;
- (e) information on how payment collections, refunds, and failed deductions will be handled;
- (f) information on what happens in the event of an error, such as error messages, descriptions, and the resolution process.

Terms and Conditions Page.

(1) The terms and conditions for an e-Service differ from the terms and conditions for the public body website and are unique to that e-Service. It could contain user declarations and disclaimers. The “Terms and Conditions” for e-payment services must also include payment and refund policies.

STANDARD 2.2. - PLAN AND DESIGN USER-CENTRIC ONLINE SERVICES.

A public body must ensure that -

- (a) the design of its e-Services and websites is consistent; and
- (b) the e-Services are user-centric and easy to use, with relevant and up-to-date contents.

Public bodies must conduct a Business Process Review of their current service delivery flow and processes when designing their e-Services, with the goal of removing non-value adding steps and streamlining process flow. Public bodies must strive to automate manual processes in order to achieve end-to-end backend integration and a seamless service flow with reduced cycle time.

STANDARD 2.3. - CATEGORIZE AND GROUP ONLINE SERVICES.

- (1) Online services must be grouped with the goal of providing end-to-end service from application to final approval.
- (2) All sub-services, such as form printing and status inquiries, must be grouped together under the main service transaction, which covers all aspects of the service being delivered.
- (3) Even if multiple public bodies or multiple sub-services are involved, the name of the main service transaction must reflect the main service sought by citizens.
- (4) Public bodies must also categorize main e-Services logically based on target user groups or beneficiaries of e-Services, so that users can easily search and navigate through the services list (refer Standard 2.1) I to the target service page.

STANDARD 2.4. - USE RIGHT LEVEL OF USER AUTHENTICATION.

A public body must assess, classify, and implement the appropriate level of authentication for its e-Services in accordance with the PNG e-Authentication Framework and the PNG Information and Communication Policy.

Note: The service classification will determine whether one-factor (for example, username-password), two-factor (for example, username-password and smartcard/One Time Password (OTP)), or no authentication is required for e-Services transacted by the user.

STANDARD 2.5. - INDICATE PROGRESS.

- (1) A public body must include an indication of where the user is currently at in relation to the entire transaction for an e-Service with multiple steps, for example, “You are at Step 1 of 5”.
- (2) An e-Service must provide an acknowledgement to the user upon completing the transaction and must include the following:
 - (a) an acknowledgement code or “receipt number”; and
 - (b) the date and time of making of the transaction; and
 - (c) a list of services or items transacted.

STANDARD 2.6 - PROVIDE NOTIFICATIONS.

A public body must send automated notifications to users via email or SMS for all key stages (e.g., Payment Received, Application Under Process, Application Approved or Rejected) of the service request processing.

STANDARD 2.7. - PROVIDE ASSISTANCE AND SUPPORT.

- (1) If users encounter problems or difficulties while using an e-Service, they must be able to easily obtain assistance.
- (2) Public bodies must provide the following options to users:
 - (a) online tutorials or assistance with screen shots and instructions, and FAQs and other online self-help resources; or
 - (b) telephone contact details with working hours must be provided so that users in need of help can get instant assistance, refer Standard 2.10; or
 - (c) live chat with service agents, particularly for services aimed at remote users such as overseas citizens, tourists and businesses, and chat support for such services is to be available 24 hours a day, seven days a week, taking into account different time zones per user location; or
 - (d) training and hands-on workshops if an e-Service is complex and intended for a specific group of users or corporate users.

STANDARD 2.8. - PROVIDE TRACKING OF SERVICES.

- (1) A public body must provide users with the ability to track the status of e-Services received.
- (2) The status result must include an estimate of how long the e-Service will take to complete.
- (3) Users must be able to inquire about the status of services both online (via the web) and offline (via phone or visits), and, upon request, they must be provided with a description of the various tracking options available.

STANDARD 2.9. - SHOW USER DATA.

- (1) Users must be able to view their key account information, such as name and contact details, after a securelogin.
- (2) If users discover an error, a procedure for correcting the error must be provided.
- (3) Users must be able to initiate requests for data correction or an online update.
- (4) Users who are logged in must be able to view their previous transactions for the e-Service that they are currently using.

STANDARD 2.10. - ADOPT GOVERNMENT-WIDE ICT INFRASTRUCTURE AND SERVICES.

- (1) Public bodies must leverage and adopt Government-wide ICT Infrastructure and Services to ensure:
 - (a) efficiency in operations; and
 - (b) adherence to common standards and platforms; and
 - (c) secure connectivity and information exchange within the Government in accordance with the PNGDigital Transformation Policy.

- (2) The Government-wide ICT infrastructure and services are managed by DICT and all public bodies must adopt them.
- (3) The Government-wide ICT infrastructure and services include -
- (a) Government Contact Centre: A single telephone contact number for assistance in all e-Services is to be provided for the convenience of users. Public bodies must appoint and use the Government Contact Centre as the primary point of contact for their e-Services; and
 - (b) Government Authentication Service: Public bodies must adopt Government Authentication Service and adhere to PNG's e-Services Registration and Authentication Policy (NEC Decision No. (252)/2020-Third Attachment) so that users are not required to register with each agency and authenticate separately for different e-Services. In order to gain users' trust in transacting e-Services, public bodies must also publish information about security levels and methods used, as well as privacy statements, on their e-Services webpage; and
 - (c) Government e-Payment Platform: To ensure a safe and efficient payment process, public bodies must utilize the PNG central e-payment platform. SSL Certificates are to be installed on the respective web server in order to initiate secure sessions with browsers during payment transactions. Online payment must adhere to the National Information Assurance Policy as well as the Banking Supervision Rules issued by the PNG Central Bank, specifically the clauses governing online payment. In general, the payment process is not to take more than three steps: entering secure payment information, secure verification, and confirmation of transaction success or failure. Following the completion of the payment transaction, a printable payment receipt must be provided to the user. Notifications must be delivered in accordance with Standard 2.6.
 - (d) Government Network Infrastructure: Public bodies must connect to the DICT Government Network for connectivity to its Data Exchange services for backend data verification for e-Services enablement in order to ensure secure connectivity and leverage common network infrastructure.
- (4) In addition, public bodies must align themselves to adopt other Government-wide ICT services and infrastructure as they become available.

STANDARD 2.11. - AUTOMATE DATA VALIDATION/VERIFICATION.

Key user data must be auto populated in the online service application form upon login. Public bodies must then automate data validation for user-entered data through intra and inter-agency system integration.

Note: The main advantages of these requirements are the simplification of online e-Service forms with little or no need to attach documents, as well as fast and secure verification because validation would occur through systems.

STANDARD 2.12. - USER FEEDBACK AND RATING.

To continuously improve service levels, public bodies must:

- (a) establish mechanisms to solicit user feedback on government services and use that feedback on a regular basis to improve those services; and

- (b) establish processes for collecting, monitoring, and reviewing feedback, and ensure that appropriate follow-up actions are taken; and
- (c) include a “Rate this e-Service” option for user feedback where services are transacted online; and
- (d) publish feedback ratings on the Services page or section.

STANDARD 2.13. - INCREASE ADOPTION OF E-SERVICES.

(1) Public bodies must plan for and identify various methods for increasing adoption and usage of their e-Services.

(2) Such methods include -

- (a) providing early information to the public in order to engage them prior to the launch of any e-Services;

Note: Information can be disseminated through websites, direct mailers, or the mass media. When appropriate, government bodies should use the media to disseminate information about key and important announcements.

- (b) educating and explaining the changes that have been implemented;
- (c) offering incentives to encourage user adoption.

Examples of incentives are time or price differentiation (e.g., lower fees or shorter processing time if transaction is completed online).

STANDARD 2.14. - CONDUCT CONTINUOUS REVIEW AND INTRODUCE IMPROVEMENTS.

(1) Public bodies must conduct periodic reviews, semi-annual or annual reviews to improve their e-Services and determine how they can better deliver services to the public.

(2) Websites must be maintained and upgraded following reviews.

Note: For more information on best practices for conducting usability testing, refer to Guideline 14.

PART IV. - WEBSITE DEVELOPMENT PROCESS STANDARDS.

14. OVERVIEW.

(1) Part IV sets out the standards for the website development process for government websites.

(2) The object is to ensure that a consistent website development process will be followed in the planning, design, building and maintenance of government websites. The process must comply with the Website Layout and Elements Standards and E-services Standards.

(3) In order to deliver a consistent digital experience to all viewers, it is important that the proper process of web development is followed.

(4) Information Security Controls for Website Development and Hosting as provided by DICT must also be applied in website design and development.

STANDARD 3.1. - WEBSITE DEVELOPMENT PROCESS.

- (1) A public body must follow the web development process set out below:

Planning.

(1) Planning is the first stage of the website development process. Gaining a clear knowledge of your future website's purposes, the primary objectives you hope to achieve, and the target audience you want to draw to your site is the most crucial task at this time. This stage is also called information gathering.

Note: Different types of websites provide visitors with different functionality. For example, a government website is different from an entertainment website. A government website provides information about the government, organizational values, codes of ethics, and information about elected officials.

Design.

(1) Design is the second stage of the website development process. In the design stage, the developer creates what the website will look like based on the information gathered.

Note: This stage usually requires using tools such as sitemaps, storyboards and wireframes to describe in detail different pages of the website. Throughout this stage, always keep in mind the target audiences when making design decisions.

Building.

(1) The building of the website is the third stage of the website development process, and includes testing, reviewing, and launching.

Note: Every page or link should be checked before launching the website. It is important the developer checks all forms and scripts. After checking and re-checking the government website, it may be upload it to a server.

Maintenance.

(1) Maintenance of the website is the fourth stage of the website development process.

(2) Public bodies must keep their websites up-to-date and make sure they are reviewed and changed, as required, to satisfy users' needs.

STANDARD 3.2. - APPROVAL OF CHANGES.

(1) A change to the website design or layout of a public body's website must comply with the Website Layout and Elements Standards and E-services Standards and be approved by the head of the public body or senior management.

(2) However, this does not apply to any changes regarding latest news, events and press releases that need to be updated on a government website.

STANDARD 3.3. - DEVELOPMENT FRAMEWORK TOOLS.

(1) Government websites are encouraged to utilize approved development framework tools to enhance consistency, security, and maintainability. The following are the recommended development framework tools:

- (a) WordPress; or
- (b) Typo3; or
- (c) Drupal; or
- (d) Joomla; or
- (e) Bootstrap.

(2) Development teams should consider the following factors when selecting a development framework tool:

- (a) Compatibility with PNG standards and guidelines; or
- (b) Robustness and stability of the framework; or
- (c) Availability of community support and regular updates; or
- (d) Security features and adherence to best practices; or
- (e) Flexibility and scalability for future enhancements.

(2) It is recommended to thoroughly evaluate the requirements and objectives of the website project before selecting an appropriate development framework tool.

(3) Regular assessments should be conducted to ensure compliance with the chosen framework tool and any associated updates or security patches.

PART V. - GOVERNMENT WEBSITE DESIGN GUIDELINES.

15. OVERVIEW.

(1) Part V sets out guidelines for the design of government websites. The guidelines describe design guidelines that can be applied to all websites based on international best practices.

(2) The object is to optimise user experience and ensure websites are user-friendly and accessible by all users.

(3) When information is displayed in an easily accessible format and content structure is highly intuitive, users will be able to easily use the websites. The ease with which a user can search a website and the quality of their first experience are both important factors in a website's success.

(4) The guidelines are provided to assist public bodies in designing and improving their websites in accordance with international best practices to ensure that the above objects are met.

(5) The guidelines are not mandatory, but it is recommended that departments and agencies apply them to their websites.

Guideline 1. - Website Searchability and Performance.

The ease with which a user might discover a website while searching and the quality of their first experience are both important factors in a websites' success.

Guideline 1.1. - Optimise Website Searchability.

To increase the likelihood of being accessed, a website should be among the “top 30” references presented by a major search engine. According to studies, users rarely visit websites that are not in the “top 30” Some of the requirements for ranking in the “top 30” include appropriate meta-content and page titles, the number of links to the website, and current registration with the major search engines. Refer Figure 11.

FIGURE 11. - SNIPPET OF HTML CODE SHOWING METATAGS.

```
<meta name="description"
content="The Official Website of the Department of Information and Communications Technology">

<meta name="title" content="Ministry of Information and Communication Technology">

<meta name="subject" content="Department of Information and Communication Technology,
DICT, D.I.C.T., Ministry of ICT, ICT, MICT, e-Government, e-Services, e-Government Steering Committee,
Digital Government 2020, i-Government, Cyber Security, Q-CERT, Department of Information and Communications
Technology, Minister of ICT">
```

The HTML code demonstrates one important method of ensuring that a website is found by search engines - embedding keyword metatags. These keywords are read by search engines and used to categorize websites. Understanding typical users will provide hints on which keywords to use.

Guideline 1.2. - Enhance Website Performance.

Performance goals such as success rates and the time it takes users to access specific information should be set, as well as preference goals such as user satisfaction and acceptance. Setting user goals assists developers in the creation of better websites. It can also help make usability testing more effective. For instance, a goal may be set that information will be found eighty percent of the time and in less than one minute.

Guideline 2. - User Experience.

Websites should be created in such a way that they facilitate and encourage efficient and effective human- computer interactions.

Guideline 2.1. - Enhance Website Credibility.

Public bodies should consider the following actions to ensure high website credibility:

- Provide a useful set of frequently asked questions (FAQs) and answers;
- Ensure the website is arranged in a logical way;
- Provide articles containing citations and references;
- Ensure the site looks professionally designed;
- Provide an archive of past content (where appropriate);
- Ensure the site is as up to date as possible;
- Provide links to outside sources and materials; and
- Ensure the site is linked to and by the national GoPNG government portal (www.digitalservices.gov.pg).

Guideline 2.2. - Standardise Task Sequences.

Users of websites should be able to complete tasks in the same order and manner across all government websites under similar conditions. Users learn specific behavior sequences and perform best when they can be reliably repeated. Users, for example, become accustomed to looking for additional information in either the left or right panels. This also helps users become acquainted with the steps in a search or payment process.

Guideline 2.3. - Minimise Page Download Time.

The time taken to download the pages of a website should be reduced. User fatigue and dissatisfaction are exacerbated by long page download times. The best way to ensure quick page loading is to reduce the number of bytes per page.

Guideline 2.4. - Time-Out Secure Information.

Automatic timers should be created for pages that require or present secure information. Users should also be notified before time runs out and be given the option to request more time. Be aware that pages that require users to use them in a specific amount of time can present unique challenges to users who read or enter data slowly.

Guideline 2.5. - Display Information in a directly usable Format.

Data and information should be displayed in a format that does not require users to convert it. Do not require users to convert or summarize information before it can be used. It is best to display data in accordance with the standards and conventions that users are most familiar with.

To accommodate a diverse web audience, information should be provided in multiple formats (e.g., Celsius and Fahrenheit for temperatures) or users should be able to choose their preferred formats (e.g., the 12- or the 24-hourclock).

Users should not be required to convert, transpose, compute, interpolate, or translate displayed data into other units, or to consult documentation to determine the meaning of displayed data.

Guideline 2.6. - Provide Status of Process Completion.

While users are waiting for a process or transaction to complete, they should be provided with appropriate feedback. For example, if the processing will take less than 10 seconds, use an hourglass to indicate status; if the processing will take up to sixty seconds or longer, use a process indicator that shows progress toward completion; and if the computer processing will take more than one minute, notify the user and provide an auditory signal when the processing is complete.

When users are aware that they will have to wait for the computer to process information for an extended period, they frequently engage in other activities. Under such conditions, processing completion should be indicated by a non-disruptive sound (beep).

Guideline 2.7. - Provide Download Information.

The time required to download an image or document at a given connection speed should be provided to users. Providing the size and download time of large images or documents gives users sufficient information to choose whether or not they are willing to wait for the file to download.

Guideline 2.8. - Design Webpages in Printable Format.

If users are likely to print one or more webpages, pages with print-friendly widths should be developed. Pages that are too wide to print completely on standard 8.5 x 11-inch paper in portrait orientation can be displayed. Printing from margin to margin should be possible and the content should not be truncated while printing.

Guideline 2.9. - Disallow unsolicited Windows and Pop-Ups.

Unsolicited windows or graphics to 'pop-up' to users should be disabled. Unwanted windows or graphics that appear may be irritating and distracting to users who are focusing to complete their original task.

Guideline 3. - Accessibility.

Websites should be designed to be accessible by all users, including those who have difficulty seeing, hearing, or making precise movements. It is important to ensure that websites make common assistive technologies easy to use.

Guideline 3.1. - Adopt W3c guidelines for Website Accessibility.

The W3C guidelines define 3 sets of priorities for accessible website design:

- (a) Priority 1 or 'A' level accessibility;

Achieving this level is a basic requirement for some groups to be able to access information and use Webdocuments. A web content developer must be satisfied with this level.

- (a) Priority 2 or 'AA' level accessibility if this and priority 1 are satisfied.

Achieving this level will remove significant barriers to accessing information in web documents. A webcontent developer should satisfy this level.

- (b) Priority 3 or 'AAA' level accessibility if this and priorities 1 and 2 are satisfied.

Obtaining this level improves access to web documents. If a web content developer does not address this level, one or more groups will find it difficult to access information in the document.

While the PNG Digital Transformation Policy requires Level 'AA' accessibility, government websites should adopt higher levels where feasible.

Guideline 3.2. - Create forms and functions for assistive technology users.

Users using assistive technology should be able to complete and submit online forms and functions. Much of the information gathered via the Internet is through the use of online forms. All users should be able to access forms and interact with field elements such as radio buttons and text boxes.

This includes functions like the search bar. All users should be able to search for the information they require either through assistive technologies i.e., voice search or through utilizing the keypad available.

Guideline 3.3. - Avoid using color to deliver information.

All information conveyed with color should also be available in black and white. Color should not be relied upon to indicate critical activities. Most color-blind users have difficulty seeing colors in the green portion of the spectrum. Color must not be used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element, according to WCAG 2.0 Success Criterion 1.4.1.

To accommodate color-deficient users, the following should be adopted:

- Select color combinations that can be distinguished by color-blind users;
- Utilize tools that simulate how webpages will appear to color-blind users;
- Ensure contrast between the foreground and background colour is high. The “visual presentation of text and images of text must have a contrast ratio of at least 4.5:1, “according to WCAG 2.0 Success Criterion 1.4.3”.
- Increase the contrast between colors at opposite ends of the spectrum (e.g, blues and reds); and
- Combine light colors from either end of the spectrum with dark colors from the middle of the spectrum should be avoided.

Guideline 3.4. - Provide text equivalent for non-text elements.

Text equivalents should be used for all non-text elements, including images, graphical representations of text (including symbols), image map regions, animations (e.g., animated GIFs), applets and programmatic objects, ASCII art, frames, scripts, images used as list bullets, spacers, graphical buttons, sounds, stand-alone audio files, audio tracks of video, and video.

Guideline 3.5. - Test plug-ins and applets for accessibility.

To ensure accessibility, applets, plug-ins, or other applications required to interpret page content should be tested to ensure that assistive technologies can use them. Applets, plug-ins, and other software can cause issues for people who use assistive technologies, and they should be thoroughly tested for accessibility.

Guideline 3.6 - Ensure that scripts allow accessibility.

When designing for accessibility, ensure that the information provided on pages that utilize scripting languages to display content or to create interface elements can be read by assistive technology. When a script modifies the content of a page, the change must be indicated in a way that a screen reader can detect and read. If mouseovers are used, make sure they can be activated with a keyboard.

Guideline 4. - Hardware and Software.

Websites should be designed to address the compatibility requirements of the majority of users' hardware and software.

Guideline 4.1. - Design for common browsers.

Develop, test, and design the website for the most popular browsers. It should be a requirement to accommodate the vast majority of users. Website testing should be carried out using the most common browsers.

Note: Internet Explorer (59 percent), Chrome (23 percent), and Firefox (12 percent) account for 94 percent of desktop browser market share as of December 2014.

Guideline 4.2. - Design for popular operating systems.

Websites should be designed to be compatible with the most popular operating systems. Designers should attempt to accommodate a majority of all users. The testing of websites should be carried out using the most common operating systems.

As of December 2020, the most popular desktop operating system is Microsoft' Windows 10 which has around 56% of the market share followed by Windows 8/8.1 (~18%) and Windows 7 (~14%). Overall, Windows and OS X operating systems collectively account for around 99% of desktop OS market share. Designers should consult one of the many sources that keep up to date statistics to ensure that they are designed to accommodate as many users as possible.

Guideline 4.3. - Design for commonly used screen resolutions.

Design for monitors with the screen resolution set at 1024x768 pixels. Designers should attempt to accommodate a majority of all users.

As of December 2020, 72 percent of users had a screen resolution of 1024x768 pixels or higher, with 1366x768 being the most commonly used pixel at 16 percent. By designing for a minimum resolution of 1024x768, designers can accommodate both the most common resolution and any higher resolution.

Designers should consult one of the many sources that keep up to date statistics to ensure that they are designed to accommodate as many users as possible.

Guideline 4.4. - Specify System Requirements.

On the website's home page, the minimum supported web browsers and their version numbers should be displayed. Before using the plug-ins, information about any required plug-in software should be displayed.

Websites may use Java applets or Macromedia Flash where appropriate, however, a link should be provided so that users who do not have the required software can download and install it on their computer hardware.

Guideline 4.5. - System Security.

When developing or improving websites, public bodies should refer to Information Security Controls for Website Development and Hosting. When using cloud solutions, the Cloud Security Policy for Government Agencies should be followed. Hardware and software used should comply with the National PNG Information and Communication Technology Policy.

Guideline 5. - Homepage.

The homepage is different from all other webpages. A well-designed homepage will make a favorable first impression on all visitors to the site. A homepage should clearly communicate the purpose of the site and display all major options available on the site. It should be straight-forward yet intuitive and effective.

Guideline 5.1. - Ensure Universal Access to Homepage.

Allow users to access the homepage from any page on the site. Many users return to the homepage to begin a new task or to restart an existing one. Ensure it is easy and obvious for users to return to the website's homepage from anywhere on the site.

Many websites feature the organization's logo at the top of each page, with a link to the homepage. While many users expect a logo to be clickable, many others are unaware that it contains a link to the homepage. As a result, include a 'Home' link near the top of the page to assist those users.

Guideline 5.2. - Present all Major Topics/Options on the Homepage.

The homepage is your website's 'front door'. Public bodies should design their homepages to feature the most frequently requested information and services by the public, as well as to serve as a top-level directory to access the primary sections of a website.

Government websites must prioritize assisting the public in locating the services and information they desire and require. In general, users evaluate websites solely based on their homepages. As a result, users should not be required to navigate to the second or third level of a website to discover the full range of topics or options. Selectively place content on the homepage, and ensure that the topics, options, or links presented are the most important.

Guideline 5.3. - Limit Prose Text on the Homepage.

On the homepage, keep the amount of prose text to a minimum. Most users' first action is to scan the homepage for link titles and major headings. Requiring users to read large amounts of prose text can slow them down significantly or cause them to avoid reading the home page entirely.

Guideline 5.4. - Limit Homepage Length.

If at all possible, keep the homepage to one screen of information. Information that cannot be seen in the first screenful may be missed entirely, reducing the effectiveness of the website. If users conclude that the visible portion of a page is uninteresting, they may not bother scrolling to see the rest of the page.

Guideline 6. - Page Layout.

All webpages should be structured for ease of comprehension, i.e., readability. This includes arranging items on the page in a logical order based on their relative importance. Users should have a sense of predictability when browsing government websites for ease of navigation. As a result, webpages should be designed with a consistent structure.

Guideline 6.1. - Show Webpage Titles.

All webpages, including those within frames, should be titled (via the HTML TITLE> tag). Webpage titles should be clear and concise.

Guideline 6.2. - Avoid Cluttered Displays.

Pages should not be perceived as ‘cluttered’ by users. Clutter occurs when there are too many items on a page, causing it to perform poorly when trying to find specific information. All-important search targets should be highly visible, i.e., easily accessible, on an uncluttered display.

Guideline 6.3. - Place Important Items Consistently.

Important clickable items should be on the same places, preferably closer to the top of the page, where their location can be more accurately estimated. Users may attempt to guess where items will appear on their screen. Before the layout appears on their screen, they will begin ‘searching’ a page. Users learn their location on a page when screen items remain constant, and they use this knowledge to improve task performance. Before the eye detects the item, experienced users will begin moving their mouse to the target area. Users can predict the location of items near the top of the page far better than those further down the page.

Guideline 6.4. - Establish Level of Importance.

Establish a high-to-low level of importance for information and apply it to each page of the website. The page layout should make it easier for users to find and use the most important information. Important information should be placed higher on the page so that users can quickly find it. The least frequently used information should appear towards the bottom of the page. Information should be presented in the order that is most useful to users.

Guideline 6.5. - Optimise Display Density.

Create pages that are not overly crowded with information to make it easier to find target information on a page. The number of items per degree of visual angle within a visually distinct group is defined as density. This density can be either dense with many items or sparse with few items.

According to one study, finding a target in a crowded area took longer than finding a target in a sparse area. In addition, participants in the sparse areas searched and found items faster than those in the crowded areas. In the crowded areas, participants used fewer fixations per word, but their fixations were much longer when viewing items. Finally, participants preferred to visit sparsely populated areas before densely populated areas. To summarize, targets in sparse areas of the display (as opposed to crowded areas) were searched for earlier and found faster.

Guideline 6.6. - Align Items on a Page.

Align page elements visually, either vertically or horizontally. Text blocks, rows, columns, checkboxes, radio buttons, data entry fields, and other items with consistent alignments are preferred by users. Apply consistent alignments to all webpages.

Guideline 6.7. - Use Fluid Layouts.

To monitor resolutions of 1024x768 pixels or higher, use a fluid layout that automatically adjusts the page size. Much of the available screen space is wasted when webpage layouts are fixed to the left or center. It is best to use as much screen space as possible because this will allow you to move more information above the fold. Keep in mind that larger monitors and higher pixel resolutions allow you to view multiple windows at once. Public bodies should consider fluid design to support higher screen resolutions as they become more popular among users, eliminating the need for re-design.

Guideline 6.8. - Set Appropriate Page Lengths.

Use shorter pages for homepages, navigation pages, and pages that must be browsed or read online quickly. Longer pages help facilitate uninterrupted reading, particularly on content pages; match the structure of a paper counterpart; simplify page maintenance (fewer webpage files to maintain) and make pages easier to download and print.

Guideline 7. - Navigation.

The method of finding information on a website is referred to as navigation. The navigation scheme and features of a website should enable users to find and access information in an effective and efficient manner.

Guideline 7.1. - Provide Navigational Options.

Create webpages with proper navigation that ensures users can be directed through the pages without difficulty. Many web pages include links that launch new browser windows. This can pose as an issue as the new browser window is unaware of the user's previous navigation, the Back button is disabled when these new browser windows open. If such links are used on a website, the newly opened window should include a prominent action control that will close the window and return the user to the original browser window.

Furthermore, the Back button of the browser should not be disabled in all webpages. Disabling the Back button causes users confusion and frustration, and severely limits their navigation.

Guideline 7.2. - Differentiate and Group Navigation Elements.

Create a site-wide navigation scheme to assist users in learning and understanding the structure of a website. Use the same navigation scheme across all pages by consistently positioning tabs, headings, lists, search, site map, and so on. Place critical navigation elements in places that imply clickability (e.g., lists of words in the left or right panels are generally assumed to be links).

Guideline 7.3. - Use a Clickable ‘List of Contents’ on Long Pages.

Provide a ‘list of contents’ with links that take users to the corresponding content further down the page on long pages. Such links can serve two functions: they can provide an outline of the page so that users can quickly determine whether it contains the desired information, and they can allow users to quickly navigate to specific information.

Guideline 7.4. - Provide Feedback on Users’ Location.

Feedback gives users the information they need to know where they are on the website and how to move on to the next activity. Feedback examples include providing path and hierarchy information (i.e., ‘breadcrumbs,’), matching link text to the heading of the destination page and creating URLs that relate to the user’s location on the site. Other types of feedback include changing the color of a clicked link (indicating that the destination has been visited) and using other visual cues to indicate the active portion of the screen.

Guideline 7.5. - Use Appropriate Menu Types.

Use ‘sequential’ menus for simple forward-moving tasks, and ‘simultaneous’ menus for tasks that would otherwise necessitate multiple Back button presses. Most websites employ well-known ‘sequential’ menus, which require items to be selected from a series of menus in a specific order. After each selection, a new menu appears. The sumtotal of all previous choices constrains the final option.

Simultaneous menus display options from multiple levels of the menu hierarchy, allowing users to make menu selections in any order. Simultaneous menus are frequently presented in frames and are best used in situations where users would have to use the Back button frequently if presented with a sequential menu.

Guideline 7.6. - Use Site Maps.

Sitemaps are important navigation tools that provide an overview of the website. They may show the website’s hierarchy, be designed to look like a traditional table of contents, or simply be an index.

Guideline 7.7. - Use ‘Glosses’ to Assist Navigation.

Glosses are short phrases of information that appear when a user’s mouse pointer is near a link. It shows a preview of the information behind a link. Users prefer that the preview information be close to the link, but placed where it does not interfere with the primary text.

Guideline 8. - Scrolling and Paging.

Users should be able to move from page to page as efficiently as possible. If website designers are unable to decide between paging and scrolling, it is usually better to provide several shorter pages rather than one or two longer pages.

Guideline 8.1. - Avoid Horizontal Scrolling.

To eliminate the need for users to scroll horizontally, use an appropriate page layout. Horizontal scrolling is a slow and inefficient method of viewing an entire screen. Fluid and left-justified page layouts, for example, may require some users to scroll horizontally if their monitor resolution or size is lower than that used by designers.

Guideline 8.2. - Use Paging Rather Than Scrolling.

Use paging rather than scrolling if users' system response times are reasonably fast. Users should be able to navigate from page to page by clicking on links rather than scrolling to find important information. If scrolling is unavoidable, keep it to fewer and shorter screenfuls. For many websites, users deal best with smaller, well-organized pages of information rather than lengthy pages because scrolling can take a lot of time. Older users scroll at a much slower pace than younger users.

Guideline 9. - Links.

Users will select and click on a hypertext link on a starting page (usually the homepage), causing a new page to load. This is known as linking. Users progress toward their goal by finding and clicking on additional links.

Guideline 9.1. - Match Link Names with Their Destination Pages.

Make sure the link text matches the title or headings on the destination page. In many cases, links provided for a specific page within a website land the user on the homepage, from which he or she must navigate to the desired page. Closely matched links and destination targets assist in providing users with the necessary feedback that they have arrived at the intended page. If users must click more than once to reach a specific destination, avoid repeating the exact same link wording because users may become confused if the links at each level are identical or very similar.

Guideline 9.2. - Use Text for Links.

Use text links instead of image links. Text links are more easily recognized as clickable in general. Text links are typically faster to download, are preferred by users, and should change colors after being selected. It is usually easier to convey the destination of a link in text rather than with an image.

Another advantage of using text links is that users with text-only or disabled graphical browsers can see the navigation options.

Guideline 9.3. - Designate Used Links.

Color changes can be used to notify users when a link has been visited. In general, use the default text link colors (blue for unvisited locations/links and purple for visited locations/links). Link colors assist users in determining which parts of a website they have visited.

Guideline 9.4. - Use 'Pointing-and-Clicking'.

When selecting menu items from a cascading menu structure, 'pointing-and-clicking' rather than mousing over is preferred.

Guideline 9.5. - Indicate Internal vs. External Links.

Indicate to users when a link will take them to a new location on the same page or to a different website.

Guideline 9.6. - Clarify Clickable Regions of Images.

If any part of an image is clickable, ensure the entire image is clickable or that the clickable sections are clearly visible. Users should not have to use the mouse pointer to find clickable areas in images. For example, if individual cities are clickable on a PNG map, sufficient cues such as differentiable colors should be provided to indicate the clickable cities.

Guideline 10. - Text Appearance.

Consistent text appearance, appropriate color coding, and highlighting all contribute to visual consistency and effectively communicating the message.

Guideline 10.1. - Use Black Text on Plain, High-Contrast Backgrounds.

Use black text on a plain, high-contrast, non-patterned background when users are expected to read and understand prose text quickly. Black text on a plain background consistently produces faster reading performance than medium-textured text on a plain background. In general, the higher the contrast between the text and the background, the easier it is to read the text.

Guideline 10.2. - Format Common Items Consistently.

Ensure the format of common items is consistent from page to page. Users should be familiar with the formatting convention used. Dates, for example, should be punctuated with a forward slash (31/12/2022), and time records may be punctuated with colons (HH:MM:SS).

Guideline 10.3. - Use Mixed-Case for Prose Text.

Use lower-case fonts and appropriate capitalization when users are required to read a lot of information to ensure the fastest possible reading speed. When reading prose text in 'mixed-case' fonts, most letters will be lowercase, with all letters that should be capitalized in uppercase. Most users have had a lot of practice reading lowercase letters and are therefore proficient at it.

Guideline 10.4. - Ensure Visual Consistency.

Ensure that website elements are visually consistent within and between pages. The size and spacing of characters, the colors used for labels, fonts, and backgrounds, and the placement of labels, text, and pictures all contribute to visual consistency.

Guideline 10.5. - Use Bold Text Sparingly.

Use bold text only when it is necessary to draw the user's attention to a specific piece of information.

Guideline 10.6. - Use Familiar Fonts.

To achieve the fastest reading speed, use a familiar font such as Times New Roman or Georgia (serif fonts) or Arial, Helvetica, or Verdana (sans serif fonts).

Guideline 10.7. - Use at Least 12-Point Font.

On all webpages, use at least a 12-point font (e.g., typeface). Users read slower when the font size is less than 12 points. Fonts of at least 14 points may be preferable for users over the age of 65. On a website, never use a font smaller than nine points.

Guideline 11. - Screen-Based Controls (Widgets).

Users typically require the use of screen-based controls (also known as ‘widgets’) to interact with a website. Pushbuttons, radio buttons, check boxes, drop-down lists, and entry fields are examples of screen-based controls. Familiar widgets should be used in a standard or commonly used manner.

Guideline 11.1. - Distinguish Required and Optional Data Entry Fields.

Users should easily determine which data entry fields are required and which are optional. For required fields, many websites currently use an asterisk in front of the label. Other websites include the word ‘required’ near the label.

Guideline 11.2. - Label Pushbuttons Clearly.

When a pushbutton is clicked, its label should clearly indicate the action that will be taken. ‘Update,’ ‘Go,’ ‘Submit,’ ‘Cancel,’ ‘Enter,’ ‘Home,’ ‘Next,’ and ‘Previous’ are examples of common pushbutton labels.

Guideline 11.3. - Label Data Entry Fields Consistently.

Ensure data entry labels are consistently worded, so that the same data item is assigned the same label even if it appears on different pages. When labeling data entry fields, do not invent new jargon. Instead of arbitrary labels, use common terms (e.g., male, female) (e.g., Group 1, Group 2). Rather than requiring users to enter the desired measurement units, specify them with the field labels (e.g., kilograms, centimeters, etc.).

Guideline 11.4. - Do Not Make User-Entered Codes Case Sensitive.

When users enter codes, treat upper- and lowercase letters as equivalent unless there is a valid reason to do otherwise (such as increased security of passwords). When retaining user-entered data, display the data exactly as entered by the user.

Guideline 11.5. - Minimise User Data Entry.

Users should not be required to enter the same information more than once. Requiring data re-entry adds another task for users and increases the possibility of entry errors. When users’ entries on one page are needed on another, the computer should retrieve the original entries rather than requiring re-entry of the same information.

In general,ask users to enter as few details as possible and ensure the cursor is always placed in the first data entry field.

Guideline 11.6. - Allow Users to See Their Entered Data.

Make data entry fields large enough to display all entered data without scrolling. If a field has a character limit, make it clear near the entry field. Designers should pay close attention to the length of data entry fields used to enter search terms. According to one study, this entry field should be at least 35-40 characters long in order to accommodate 95% of search terms.

Guideline 11.7. - Use Radio Buttons for Mutually Exclusive Selections.

When users must select one response from a list of mutually exclusive options, provide radio buttons. Users should be able to make their selection by clicking on the button or its text label. When appropriate, set one of the radio button options as the default.

Guideline 11.8. - Anticipate Typical User Errors.

Anticipate potential user errors and, when possible, assign responsibility to the computer to identify and suggest corrections. For instance, if the date is entered as ‘February 31,’ the computer should generate an error message requesting a revised entry.

Guideline 11.9. - Prioritize Pushbuttons.

If one pushbutton in a group of pushbuttons is used more frequently than the others, put that button in the first position. Make the most frequently used button the default action, that is, the one that is activated when users press the Enter key.

Guideline 11.10. - Use Check Boxes to Enable Multiple Selections.

Allow users to select one or more items from a list of possible choices by using a check box control.

Guideline 11.11. - Use Open Lists to Select One from Many.

To choose one of many options, use open lists rather than drop-down lists. In general, the more items users can see in a list without scrolling, the faster they can respond and the fewer omission errors they will make. Users should ideally be able to see all available items without having to scroll.

Open lists outperform drop-down lists in terms of performance, owing to the extra click required to open a drop- down list. A drop-down list, on the other hand, may be preferable if the list is extremely long. The available research does not specify a maximum number of items that should be displayed in a list.

Guideline 12. - Graphics, Images, and Multimedia.

The organization’s logo is an important image to display on most pages of a website. Graphics such as images, animation, video, and audio, when used correctly, can add a lot of value to a website.

Guideline 12.1. - Use simple background images.

Background images should be used sparingly and should be simple, especially if they are used behind text. Background images can make foreground text difficult to read. A single large, complex background image (including a picture) can significantly slow down page download speeds. If background images must be used, use small, simple images with 'tiling,' or keep the image resolution as low as possible.

Guideline 12.2. - Use original images, videos, and other multimedia.

It is important that all media that is available on each website is original.

These images or videos may be branded to make the audience aware they are originally the organizations', for integrity purposes. This also adds a certain authenticity to the government website, prevents mistrust between the viewers and the public body, and does not violate copyright.

Guideline 12.3. - Use high-quality images.

The use of high-quality images is very important. Images should not appear blurry or unclear to the viewers.

Guideline 12.4. - Label Clickable Images.

Occasional or infrequent users may not understand or remember the meaning of an image. Make sure that images and their associated text are close together so that users can easily integrate and use them together. Every clickable image should also be accompanied by alternative text.

Guideline 12.5. - Include Logos.

Put the organization's logo in the same place on every page. Users are frequently unaware when they navigate to another website. The presence of a logo on each page provides a frame of reference throughout a website, allowing users to easily confirm that they have not left the site. The logo should be in the same place on each page, ideally in the top left corner of the English version and the top right corner of any Tok Pidgin version.

Guideline 12.6. - Limit the Use of Images.

Images should only be used when they are critical to the success of a website. Users are most irritated when they wait several seconds for a graphic to download only to discover that the image adds no value. When they do not distract the user, some decorative graphics are acceptable.

Guideline 12.7. - Include Actual Data with Data Graphics.

Adjacent numeric annotation can be used to mark the ends of displayed bars on a bar graph or to mark the points of a plotted curve. Some displays may necessitate complete data annotation, whereas others may necessitate annotation only for specific data elements.

Guideline 12.8. - Use Video, Animation, and Audio Meaningfully.

Use video, animation, and audio only when they help to convey or support the message or other content of the website. Multimedia elements (such as video, animation, and audio) can easily capture users' attention; therefore, it is critical to have clear and useful reasons for using multimedia to avoid distracting users unnecessarily. Some multimedia elements may take a long time to download, so they must be worthwhile.

When used effectively, multimedia can add significant value to a site's content by directing users' attention to the most important information in the most useful order.

Guideline 13. - Search.

Users should be able to conduct searches on every page of a website. It is usually sufficient to allow simple searches without allowing the use of more advanced features.

Guideline 13.1. - Design Search Engines to Search the Entire Site.

Users tend to believe that a search engine will search the entire website. Do not allow search engines to search only a portion of a website without clearly informing users which parts are being searched. Allow users to narrow the scope of their searches on large websites by making specific sub-sites easily accessible when searching.

Guideline 13.2. - Design Search around Users' Terms.

Create a search engine for a website that responds to user terminology. Determining the keywords that users are using may necessitate extensive data collection. Designers should use search engine logs, surveys, and other techniques to determine the preferred search terms for their site, and then make information relevant to those terms easily accessible via the site's search engine.

Guideline 13.3. - Assist in Search Input to Improve Search Performance.

To improve search performance, search boxes may include intuitive features such as open lists. Providing open lists allows users to enter the most commonly used search criteria, resulting in the most effective search results. While running the search, it may also include type-ahead suggestions and account for spelling errors.

Guideline 14. - Usability Testing.

When conducting usability testing, there are two major factors to consider. The first is to ensure that the best testing method is used. In general, the most effective method is to run a test in which representative participants interact with representative scenarios. The tester collects information on the participant's success, performance speed, and satisfaction.

A test report contains the findings, which include both quantitative data and qualitative observations information. Using 'inspection evaluations' instead of well-controlled usability tests requires extreme caution. Inspection methods such as heuristic evaluations and expert reviews generate a large number of potential usability 'problems' that never turn out to be actual usability problems.

The second major consideration is to employ an iterative approach. Designers should make changes after receiving the first test results and then have the website tested again. In general, the more iterations there are, the better the website.

Guideline 14.1. - Use an Iterative Design Approach.

Create the most useful and usable website by developing and testing prototypes iteratively. Iterative design entails creating paper or computer prototypes, testing them, and then making changes based on the results of the tests. The ‘test and make changes’ procedure is repeated until the website meets performance targets (usability goals). When these objectives are met, the iterative process concludes.

Guideline 14.2. - Solicit Test Participants’ Comments.

Solicit feedback from usability testing participants either during or after task completion. Participants may be asked to provide feedback while performing each task (‘simultaneously’) or after completing all tasks (retrospectively). The ‘simultaneous’ method requires participants to report incidents as soon as they occur. When using the retrospective approach, participants complete all tasks without interruption before watching their session video and reporting any observations (critical incidents).

Guideline 14.3. - Evaluate Websites Before and After Making Changes.

When revising a website, conduct ‘before and after’ studies to determine changes in usability. Conducting usability studies before and after a redesign will assist designers in determining whether the changes made a difference in the usability of the site.

Guideline 14.4. - Prioritise Tasks.

Participants make an initial assessment of how difficult or easy a task will be before attempting to complete it, and then make a second assessment after completing the task. Based on these expected versus actual ratings, each task is eventually assigned to one of four categories:

- Tasks that were expected to be easy, but were difficult;
- Tasks that were expected to be difficult, but were easy;
- Tasks that were expected to be easy and were easy; and
- Tasks that were expected to be difficult and were difficult to complete.

When deciding which usability issues to address first, focus on tasks that users initially believe are simple but turn out to be difficult.

Guideline 14.5. - Select the Right Type and Number of Participants.

The number of participants to use when conducting usability tests is determined by the method used:

- Inspection evaluation by usability specialists:
An inspection evaluation’s typical goal is to have usability experts separately inspect a user interface using a set of broad usability guidelines. This is usually done in groups of two to five people. In general, the more knowledgeable the usability experts, the more useful the results.

- Performance usability testing with users:
Usability testing with a small number of users (approximately six) early in the design process is sufficient to identify problems with the information architecture (navigation) and overall design issues. If the site has a wide range of users (for example, novices and experts), it is critical to test six or more of each type of user. Another important aspect of this preliminary testing is the presence of trained usability specialists as the test facilitators and primary observers.

Once the navigation, basic content, and display features are in place, quantitative performance testing (measuring times, incorrect pathways, failure to find content, and so on) can be carried out to ensure that usability objectives are met. To measure each usability objective to a specific confidence level, such as 95%, a larger number of users must participate in the usability tests.

When comparing the performance of two sites (i.e., an original site and a revised site), quantitative usability testing should be used. The tests may require a larger number of participants depending on how confident the usability specialist is in the results.

Guideline 14.6. - Use the Appropriate Prototyping Technology.

Create prototypes with the most appropriate technology for the design phase, the required fidelity of the prototype, and the skill of the person creating the prototype.

Paper-based or computer-based prototypes can be used by designers. Paper prototypes can be used when it is necessary to view and evaluate many different (usually early) design ideas, when computer-based prototyping does not support the ideas that the designer wants to implement, or when all members of the design team - even those who do not know how to create computer-based prototypes must be included.

MS PowerPoint, MS Visio, and other HTML base tools are among the software tools available to aid in the rapid development of prototypes. Medium fidelity prototypes can be created using Microsoft PowerPoint. These prototypes can be interactive as well as dynamic, and they are useful when the design requires more than a 'pencil-and-paper' prototype.

Guideline 14.7. - Use Inspection Evaluation Results Cautiously.

Heuristic evaluations, expert reviews, and cognitive walkthroughs are examples of inspection evaluations. Before conducting usability tests, it is common practice to conduct an inspection evaluation to detect and resolve obvious problems.

Inspection evaluations should be used with caution because, according to several studies, they appear to detect far more potential problems than actually exist, and they also tend to miss some real problems. Evaluators appear to have the most success identifying usability issues that are visible by simply looking at the display and the least success identifying issues that require users to take several steps (clicks) to a target.

Expert reviews and heuristic evaluations may be the best ways to identify potential usability issues to test during usability testing.

Guideline 14.8. - Apply Automatic Evaluation Methods.

An automatic evaluation method employs software to assess a website. An automatic evaluation tool can assist in identifying specific types of design issues, such as pages that load slowly, missing links, the use of jargon, potential accessibility issues, and so on. While automatic evaluation methods are useful, they should not be used in place of human evaluations or usability testing. There are numerous commercially available automatic evaluation methods for testing a wide range of website parameters.

Guideline 14.9. - Use Cognitive Walkthroughs Cautiously.

Before performing performance tests, cognitive walkthroughs are frequently used to resolve obvious issues. When compared to performance usability testing results, the cognitive walkthrough appears to detect far more potential problems than exist. Several studies have found that many potential problems predicted by the cognitive walkthrough are not always found to be actual problems in a performance test, and that many actual problems in a performance test are sometimes missed entirely in the cognitive walkthrough. Cognitive walkthroughs may be most effective for identifying potential usability issues to be evaluated during usability testing.

PART VI. - MISCELLANEOUS.

16. IMPLEMENTATION SCHEDULE.

(1) This instrument is effective from [01. 07. 2023].

(2) All government websites and e-Services must adopt the mandatory standards in Parts 2, 3 and 4 on or before [01.07. 2024].

17. COMPLIANCE AND MONITORING.

(1) Upon request by DICT, each public body must:

- (a) conduct an internal self-assessment and prepare evaluation report on its compliance with these Standards; and
- (b) submit the evaluation report to DICT on its assessment findings and an action plan regarding any areas of non-compliance on how and when it intends to comply fully with these Standards.

(2) Refer to Appendix 4 for a detailed checklist.

18. SUPPLEMENTAL STANDARDS AND GUIDELINES.

DICT may issue supplemental standards and guidelines to support the Government Website and e-Services Framework.

Appendices.

Appendix 1. - Sample of Website Layout and Elements.

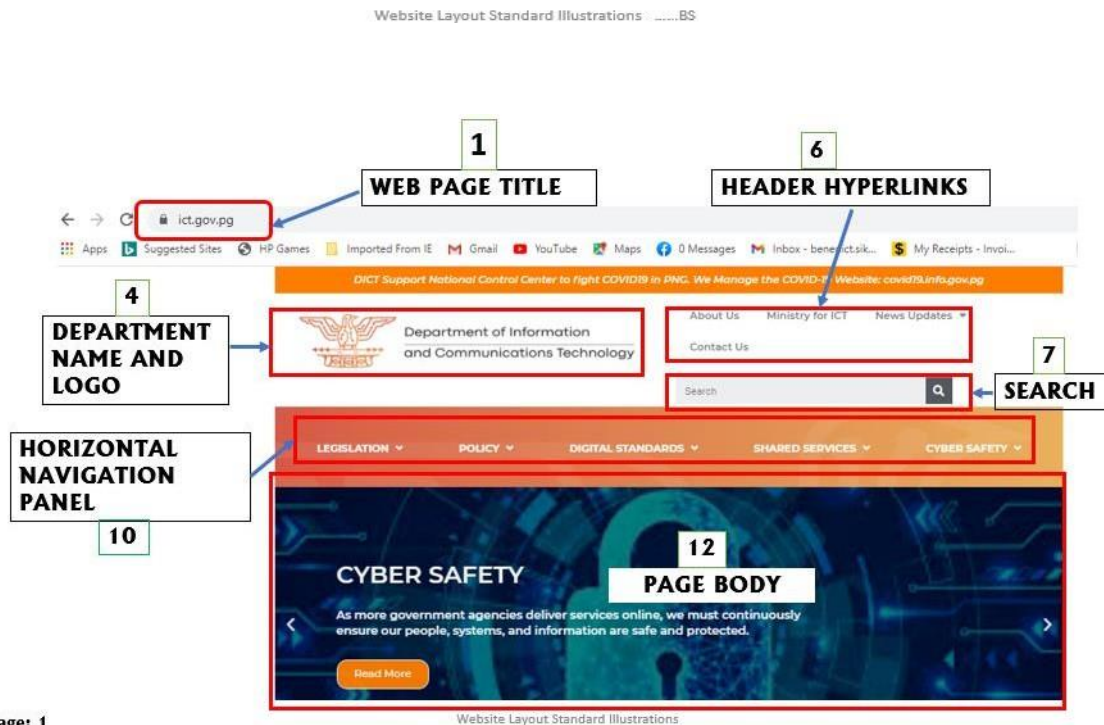


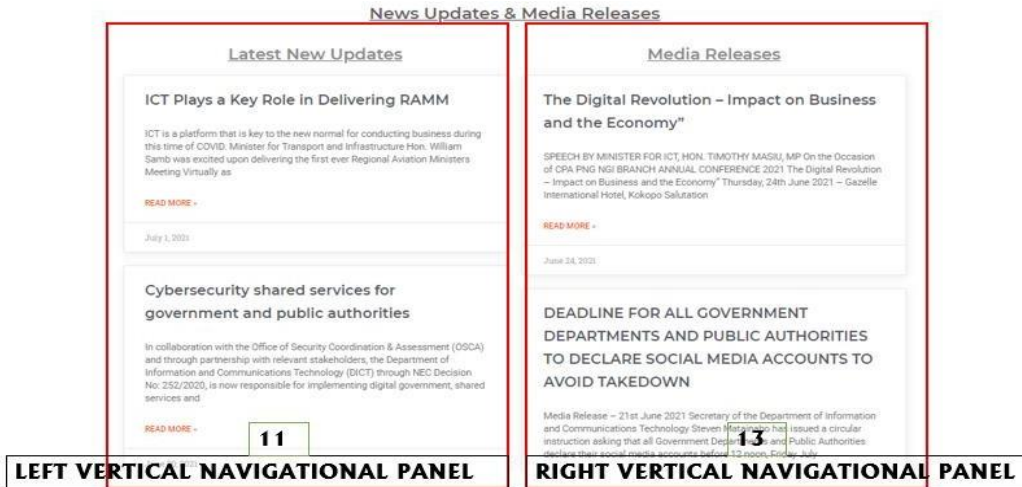
Department of Information
and Communications Technology

DIGITAL GOVERNMENT SERVICES WEBSITE LAYOUT STANDARDS

Below are example of a website layout standards checklist using the Department of Information and Communication Technology (DICT) Website.

<https://www.ict.gov.pg>





Page: 2

Website Layout Standard Illustrations



Page: 3

Website Layout Standard Illustrations

Appendix 2. - Sample of Privacy Statement.

This is a [Name of Ministry/Department/Agency] website.

We are committed to protecting your privacy and providing a secure website environment. We take precautions to protect your information. When you submit sensitive information via the website, your information is protected both online and offline.

Information Collection, Use, Sharing and Rectification.

If you are only browsing this website, we do not capture any information that allows us to identify you individually.

If you are making an online e-Service application that contains your personal information, we may share such data with other Government bodies, or with non-Government entities which have been authorized to carry out specific Government services, so as to serve you in an efficient and effective way, unless such sharing is prohibited by law.

For your convenience, we may also display to your data you had previously supplied to us or another Government entity. This will help speed up the transaction and save you the time of providing us with the same information as in your previous submissions.

Although all reasonable efforts will be made to keep your information update, please do provide us with the latest updated information should you find the information inaccurate.

Security.

To safeguard your personal information, all electronic storage and transmission of personal data are secured with appropriate security technologies.

Links to External Websites.

This site may contain links to external non-Government sites whose data protection and privacy practices may differ from ours. We are therefore not responsible for the content and privacy practices of these other websites.

Please contact us using our feedback form if:

- (a) you have any enquiries or feedback on our data protection policies and procedures; or
- (b) you require more information on or access to the data which you have earlier provided to us.

Updates to Privacy Policy.

Our Privacy Policy may change from time to time and all updates will be posted on this page.

Appendix 3. - Sample of “Terms of Use” Statement.

General.

These Terms of Use govern your use of our website; by using our website, you agree to these terms of use in full. If you disagree with these terms of use or any part of these terms of use, you must not use our website.

Proprietary Rights.

This Website is maintained by **[Name of Public Body]**.

Privacy Policy.

Please click here to review this website’s Privacy Policy Statement.

Restrictions on use of Materials.

Except as otherwise provided, the Contents of this Website must not be reproduced, republished, uploaded, posted, transmitted, or otherwise distributed in any way, without the prior written permission of **[Name of Public Body]**

General Disclaimer and Limitation of Liability.

We do not guarantee the completeness or accuracy of the information published on this website; nor do we commit to ensuring that the website remains available or that the material on the website is kept up to date.

In no circumstances must we be liable for any damage or loss of any kind caused as a result (direct or indirect) of the use of the Website, including but not limited to any damage or loss suffered as a result of reliance on the Contents contained in or available from the Website.

External Links.

This Website may contain hyperlinks to websites which are not maintained by us. We are not responsible for the contents of those websites and must not be liable for any damages or loss arising from access to those websites. Use of the hyperlinks and access to such websites are entirely at your own risk.

We reserve the right to disable any unauthorized links or frames and disclaim any responsibility for the content available on any other site reached by links to or from this Website or any of the Contents.

Restricted access.

Access to certain areas of our website may be restricted. If you are registered to access restricted areas of our website or other content or e-Services, you must ensure that the password is kept confidential and to report immediately if you become aware of any unauthorized use of your account or password.

You are responsible for any activity on our website arising out of any failure to keep your password confidential and may be held liable for any losses arising out of such a failure.

Security.

Where appropriate, we use available technology to protect the security of communications made through our website. However, we do not accept liability for the security, authenticity, integrity or confidentiality of any transactions and other communications made through this Website.

Internet communications may be susceptible to interference or interception by third parties. Despite our best efforts, we make no warranties that our website is free of infection by computer viruses or other unauthorized software.

You should therefore take appropriate steps to keep your information, software and equipment secure. This includes clearing your Internet browser cookies and cache before and after using any services on our website.

Policy Updates.

We may revise these Terms at any time by updating this page. We may modify or discontinue any information on our website at any time, with or without notice to you, and without liability.

Terms and Conditions for e-Services.

In addition to these Terms, you must also be required to comply with all other terms and conditions of the respective e-Services when using them.

In the event of conflict, the terms and conditions of the respective e-Services must prevail.

Governing Law.

These Terms of Use must be governed and construed in accordance with laws of the Independent State of PapuaNew Guinea.


Appendix 4. - Website Checklist.


Papua New Guinea Website Layout Standards Checklist.

Departments Name :

Website Address :

All government websites should use the following basic design and layout (highly recommended) for each page. They are divided into sixteen sections on the website, as described below. Please keep in mind that, while the attached layout is highly recommended for use by public bodies, the placement of the Crest for the Independent State of Papua New Guinea on the Top Panel with Department logo is mandatory.

Section	Section Name	Tick where appropriate	
		Yes	No
1.	Webpage title		
2.	Verification Badge		
3.	Bilingual language link		
4.	PNG logo - Crest		
5.	Department/Agency name and logo		
6.	PNG Government Services Program Logo (Optional)		
7.	Header hyperlinks		
8.	Search		
9.	Accessibility buttons 		
10.	Content links		

11.	Horizontal navigation panel			
12.	Left vertical navigation panel			
13.	Page body			
14.	Right vertical navigation panel			
15.	External links and logos			
16.	Social media accounts 			
17.	Footer Panel	Privacy Statements		
		Terms of Use		
		Copyright		
18.	Android Phones & Tablet viewing compatibility			
19.	Cross-Browser Compatibility			

Additional Evaluations:

Public bodies should also do additional testing on their websites in terms of usability and accessibility, low network simulations and if necessary, website security tests.

	Evaluation	Details	Tick where appropriate	
			Yes	No
1.	Heuristic Evaluation	Inspect and evaluate the user interface through cognitive walkthroughs.		
2.	Usability Tests	Evaluate functionality of the website, from testing potential users.		
3.	Accessibility Tests	Use W3C tools, such as SortSite, to perform accessibility tests. Test if website can be accessible by all users. These include color contrast tests, etc.		
4.	Network Simulations	Run simulations on high-to-low (2G, 3G, 4G and 5G – if necessary) network connectivity to ensure website can be accessed.		
5.	Website Security Audit	Run security scans, review site settings, make sure IP and domain are secure, check user accounts and permission, assess website traffic, perform regular updates.		

Comments:

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Compiled By:	
Division/Wing:	
Position:	
Date:	
Signature:	

Papua New Guinea Digital Government Services - Managers Recommendations (Digital Wing).

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