THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE, PUBLIC SERVICE MANAGEMENT AND GOOD GOVERNANCE
e-GOVERNMENT AUTHORITY

Document Title

Technical Standards and Guidelines for Public Institutions' Website

Document Number

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APPROVAL	Name	Job Title/ Role	Signature	Date
Approved by	Dr. Mussa M. Kissaka	Board Chairperson	*Mussah*	01/07/22

PREFACE

Online services continue to shape the landscape of the way people communicate and how information is transferred, and accessing different websites has now become one of the main ways citizens get what they are looking for. Public Institutions websites should depict the flavor of the area and its stakeholder. The important things are that citizens look to Government websites for information that's useful, timely, informative, and up to date.

To enhance the quality of online delivery of information and services, and also ensure high degree of consistency and uniformity, Government Websites have proven to be the most effective medium for information and services to the general public. To support this, the e-Government Authority has prepared these technical standards and guidelines to provide guidance to Public Institutions in preparation, design, maintain and host their websites in conformity and to the minimum security requirements.

Therefore, by creating a functional website with easy navigation, Public Institutions can better connect with its stakeholder and ensure that the public stays well-informed at all times.

Dr. Mussa M. Kissaka

BOARD CHAIRPERSON

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1. INTRODUCTION

1.1   Overview

e-Government Authority "e-GA" is a Public Institution established by e-Government Act No.10 of 2019 with mandate to coordinate, oversee, and promote e-Government initiatives and enforce e-Government related policies, laws, regulations, standards and guidelines to Public Institutions.

In recent times more and more people are accessing information online. Websites are increasingly becoming the citizens' first point of contact with Government offices. Further, web technology has been proven to be an effective means to deliver information to the public in a more cost-effective manner as compared to the telephone, face-to-face contacts or courier services.

This document provides technical guidance to all Public Institutions on how to design, operate, and maintain their websites in order to have a common level of quality, accessibility, look and feel, and consistency when presented to the public.

This guidance brings together a wide range of best practices, checklists and common useful information to help Public Institutions to publicize their services and information online effectively.

1.2   Rationale

To provide easy accessibility and usability on the design of the Government websites, as well as, as a way to making services accessible to the citizens and ensure the efficiency, transparency and reliability of service delivery.

1.3   Purpose

The Objective of this document is to establish a technical framework for the creation of professional Government websites that meet minimum criteria for website usability and accessibility design best practices.

1.4   Scope

The technical standards and guidelines outlined in this document apply to all public accessed websites which are owned, established, and maintained by or for Public Institutions.

The Technical Standards and Guidelines for Government Websites is a resource for staff and consultants involved in the development of Government websites. A basic understanding of website development is assumed. However, the guidelines can be applied by any Public Institution that intends to improve the quality of its website and to improve the user experience. The areas addressed in this document include the following:

(a)   Website Development Process

(b)   Website Design

(c)   Website Content Management

(d)   Website Hosting

(e)   Web Information Security

2. WEBSITE DEVELOPMENT PROCESS

2.1. Domain Name Registrations and Uniform Resource Locators (URLs)

Public Institutions shall ensure that:-

i. Domain name registration adheres to the Government Domain Name Standards;

ii. The URL are obvious; i.e. using the name of the Public Institution or abbreviation;

iii. The web address is kept short, this will allow site users to remember it easily and will enhance usability;

iv. When creating URLs with multiple words in the format of a phrase, it's better to use hyphens to separate the terms (e.g. Electronic Government can be Electronic- Government);

v. URLs does not contain both uppercase and lowercase characters that are more difficult to type, remember and mention;

vi. They use short URL's which are easier to type, write, remember and mention; and

vii. URLs (web addresses) remain stable to remain reliable to link to and feature well in search engines.

2.2. Navigation Elements and Branding Requirements

The term navigation refers to the menus and links which allow users to move from one page to another within the website. Having clear, consistent and well-structured navigation is essential so that users can interact with the website easily and find the information quickly.

Four main types of navigations are:

i. Global Header Navigation

ii. Top Level Navigation

iii. Body Elements or Utility Navigation

iv. Footer Navigation

On the other hand, branding is pivotal to the Government's goal of providing a consistent, seamless look and feel to the Web presence. Branding encompasses matters of site architecture, navigation, layout, graphics, colours and fonts, minimum page elements, and consistent terminology, usage, and spelling as shown in Table 1 below:

Global Header Navigation
Top Level Navigation Elements
Body Content Area
Right Navigation   Right Navigation
Footer Navigation

Table 1

Table 2 below shows the common design for home page for government websites.

	Contact Us	Help	Search	Feedback	English
Government Logo	Masthead				MDA/LGA Logo
Home	About Us	Menu 1	Menu 2	Menu 3	Menu 5
Left navigation			Body		Right navigation
Disclaimer	Privacy policy	sitemap			

Breadcrumbs box anywhere in the document. Use the text box tools tab to change the formatting of the pull quote text box

Table 2

2.2.1 Global Header

The term global header navigation is used to describe links to important links which users tend to access very frequently such as links to search functions, site map, user accounts, language change, help etc.

Global header shall have the following:

    a) Contact us

    b) Feedback/e-Mrejesho

    c) FAQ

    d) Search

    e) Language change Link (Kiswahili or English)

2.2.2 Feedback/enquiry

Customer feedback is useful for improving the customer relationship and retention. Feedback enquiry should have a link to specific institution page of e-Mrejesho system.

2.2.3 Sitemap

A site map provides a visual overview of the site's areas at a single glance and allows site visitors to see all available content areas on one page in order to provide them instant access to those site pages.

Site maps shall have the following:

i. Site maps must be provided a clean, simple view of the user interface and the available content by providing links to every page in one place.

ii. All Government websites must have a 'Sitemap' linking to the Homepage.

iii. The site map should be universally accessible from every page.

iv. Site map must be up-to-date to reflect the present site structure and contents

2.2.4 Frequently Asked Questions (FAQ)

It is a type of webpage that lists questions and answers frequently asked by users, usually about different aspects of the website or its services.

2.2.5 Search/Advanced Search Function

This is a tool used by users to search for information in the website
Search function shall have the following:

i. The basic search box must appear on every page of the website

ii. The search box must be clearly visible, quickly recognizable and easy to use.

iii. The search box text field should be large enough to allow a maximum of 20 characters to be entered

iv. The font size in the box should not be smaller than 8 points

v. The right of the search box should be a button labelled "Search"

vi. The search should begin with either touch of the return key or the click of the "search button'

vii. Should allow the site visitors to search with familiar terms

viii. Provide clear search results page

2.2.6 Contact Us

Government Websites must have the Contact us menu for users to contact the respective institution.

Contact us shall have the following:

      i. Telephone and fax numbers;

     ii. Physical and postal addresses;

   iii. Email address;

   iv. Location map; and

    v. Enquiry form.

NOTE: The email address mentioned above should be official email address of the respective institution.

2.2.7 Languages Selection

Government Institutions shall publish all the content on their website in Kiswahili as the default language and English as the other language. Users should be given an option to switch between the two languages. This is pursuant to section 40 (a) of the e-Government General Regulations.

2.3. Top Level Navigation-Masthead

Masthead is a graphic image or text title at the top of web page that identifies the Website. Also, it is a place where the Government institution logo can reside. The Government institution logo promotes brand identity.

Top Level Navigation shall comply with the following:

      i. National Logo should be on the left hand side and Institutional logo(if it exists) on the right hand side

     ii. The logo on the masthead must link to the home page and must have an Alternative text.

   iii. It should not be animated object

   iv. It should be compatible with most common browsers

2.4. Navigation elements

Navigation elements shall have the following features:

i. Navigation elements must always be clearly available and inform users where they are and where they go.

ii. Don't use animated menus in navigations to avoid browsers incompatibilities.

iii. Links should be organized into recognizable and logical groups using submenus and/or headings.

iv. There should not be too many links per group.

v. It should contain a link to the home page at the top of the menu

2.4.1 Home

The following shall be observed when designing home page:

i. Clearly establish the organization identity on the home page

ii. The "Home" link must point to the home page of the particular public Institution website.

iii. Design the home page to be clearly different from all the other pages on the site.

iv. All pages should have links to the "Home" page Avoiding unnecessary large images, animations and plug-ins.

v. Disable the links to the homepage on the homepage itself

vi. Websites should not have multiple "Home" buttons or links that point to different pages.

2.4.2 About Us

"About Us" link is to be placed on the top navigation bar or banner area of the site. "About us" shall include the following:

i. The organization overview

ii. Vision/Mission statement

iii. A brief overview of Organization structure

2.4.3 Publications

Public Institutions Websites must have the publications menu on the navigations to display the open government data.

The publication menu may contain the following.

    i. Reports

    ii. Speeches

    iii. Statistics

    iv. Act

    v. regulations

    vi. Tenders

    vii. Budgets

2.5. Body elements

This area must contain the following elements:

    i. Content Area: usually structured in multiple paragraphs with headings, dates and/or subtitles that relate to the main topic of the page

    ii. Bread crumb trails

    iii. Body links

2.5.1 Content Area/Body

Content Area/Body shall have the following features:

    i. Content page should begin with page title followed by text

    ii. Website content should usually be structured in multiple paragraphs with headings and sub title that relate to the main topic of the page

    iii. Page title should be the same as the corresponding link in the navigation column

    iv. Longer pages are broken up with "Top of page" links located on the right side of the page.

    v. Should have last modified date to indicate the recent date on which the content was formally issued, substantially changed or reviewed.

    vi. Avoid tables and if used should be used for tabular data only

    vii. If graphics are included, they should have ALT-TEXT description

    viii. Leave enough margins at the left and right edges of the content area to prevent it from butting directly against the border.

ix. Breadcrumb trails, links should always be placed directly above the main page showing position of the web page in relation to home page.

x. Icons that represent actions on a web page, including printing, bookmarking and forwarding links should be placed on the top right corner of the web page.

2.5.2 Bread Crumbs

The following are the basic requirements for Breadcrumbs tool:

i. Public Institutions websites must have breadcrumbs navigation.

ii. Breadcrumbs should be shown at the top of the content area

iii. Breadcrumbs should consistently be used across all pages in the website

iv. Flow should go from the highest level to the lowest level

v. Separate each level by using separators. The symbol that could be used is the greater than (>) or forward slash (/) character.

vi. Single out the current page. i.e. The currently viewed page can be distinguished by making the item bold or changing its color.

vii. Do not make a current path a link.

2.6. **Global footer**

Global Footer shall have the following characteristics:

i. It should be plain text and must include the following:

a) Disclaimer

b) Privacy Policy

c) Terms and Conditions

d) Copyright Statement

e) The above links should appear in all pages of the website

f) If a Public Institution uses social networking applications, the links can be included in footer space.

2.6.1 Privacy Policy Statement

Every website must incorporate a privacy policy statement that states how the institution respects and protects the privacy of its users.

A Public Institution website shall have a privacy statement if:

Provides an e-service.

i.   The personal information is collected or processed on the website.

ii. The personal information is sent as an e-mail to the Public Institutions.

iii. Statement concerning whether cookies, or any other data, are placed on the site visitor's machine, the type of cookies used (session or persistent), a definition of each type and how they are used.

iv. An explanation of any security use of information for purposes such as tracking suspected intrusions or the source of a computer virus, or controlling access to the system.

v.   A description of any privacy-enhancing technologies in use or available for use.

2.6.2 Terms and Conditions

i.   Should be located in the footer and cover all aspects of the scope and operation of the website

ii. Should be available/accessible from all pages of the website

iii. If the content is linked or sourced from other Public Institution website, the Terms and Conditions statement should clearly disclaim the responsibility for its accuracy

iv. If the content is linked or sourced from other non- Public Institution website, the Terms and Conditions statement should clearly state the fact and disclaim the responsibility for its accuracy

2.6.3 Disclaimer

i. To be used on sites where there are users submitted content that it is not moderated by site owners or where there are a large number of links to external pages

ii. The information provided in the website is for reference only

iii. If links to other Public Institutions websites or links to third party websites are present, the respective Institution will not be responsible for the content of such websites

iv. The Public Institution gives no express or implied warranty to the accuracy of information provided in the websites

2.6.4 Copyright

The Copyright statement shall state as follows:

i. The material on the website is protected by copyright.

ii. Anyone can utilize any of the material available on the website free of charge and without permission of the Public Institution provided that the source and copyright status of the material is acknowledged.

2.7. Website Design Guidelines

2.7.1 Usability

Website usability means the extent to which a web page can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of user. ISO 9241-11, a usable website is one that users can easily navigate in such a way that they can find what they are looking for quickly and efficiently.

2.7.2 Web Usability

For Web Usability the following shall be observed:

i. Adopt the Web Content Accessibility Guidelines (WCAG) version 2.1 developed by W3C. The guidelines cover a wide range of recommendations

for making Web Content more accessible to a wider range of users including those with disabilities (the blind, visual impairment, deafness, hearing loss, learning disabilities, cognitive limitations, limited movement, speech difficulties, photosensitivity and combinations or a combination of these). The use of these guidelines shall enhance and promote Website usage.

ii. ii. Ensure that Web pages do not contain any blinking or scrolling text, or flashing objects. Ensure that no items or objects on a page blink or scroll across the screen. People with cognitive or visual disabilities may not be able to read moving text or may be distracted by it. Flashing or blinking can trigger seizures in some people.

iii. Page Headings / title - Each page on a website should have a unique main heading / title that is descriptive and concise. The main page heading should match the navigation item or the link to which it corresponds, as well as effectively corresponding to the information in the sitemap.

iv. Alternative Text / Labels (Symantec Mark-up) – should have textual replacement for pictures to help the visually impaired individuals to use the speech synthesizers to read the text which will be able to describe the picture.

v. Avoid using words such as image or graphic at the beginning of the alt-text. The screen reader user will know it is an image without such prompts.

vi. Distinguish Links and Linked Text - The Webpage often contains clickable areas such as text links, images and buttons. In order to facilitate the user to recognize what is clickable, the text links should be underlined. Underlines are very important for users with low vision and are easier to see when the page is magnified.

vii. Use the different Colours for Visited and Unvisited Links - By changing the color of visited links, users are provided with a visual clue as to where they've already been on the website. If sites use the same color for visited

and unvisited links, this will cause misinterpretation for the users or overlook the difference between two similar links as they are unsure about which one they have already visited. Being able to see if a link leads to a page that the user has already visited can be very valuable for inexperienced users and users with certain types of cognitive disabilities.

viii. Write a clear descriptive text for Links - Providing clear descriptive text for links is highly important to people with cognitive disabilities or blindness. Often visitors look for noticeable highlighted keywords, therefore, texts with keywords are preferable. Screen reader users often tab through links in order to "scan" a page. Unique names facilitate the search. Good Example: More information, Bad Example: Click here for more information.

ix. Fonts - Presentation is crucial to all forms of communication. The selected font for a website should accomplish the following:

   a) Focus attention
   b) Enhance readability
   c) Establish a tone
   d) Project an image
   e) Make the default font size reasonably big
   f) Have font size adjuster prominent on the website

x. Contrast between foreground and background colors - Color contrast between the background and foreground affects the readability of the content. If the contrast is too small, the text and background can flow into one another and so the text disappears or becomes difficult to read for people with different types of color deficits or people who are using monochrome displays.

   a) Ensure that foreground and background color combinations provide sufficient contrast for navigation
   b) Dark and light contrast shall be used on all occasions

2.7.3 Discoverability

Public Institutions websites should be coupled with search engine optimization. In order for the website to be search engine user friendly the elements such as website designs, menus, content management systems, images, videos, titles must be optimized for the purpose of search engine exposure. The higher a website ranks, the greater the chance that the website will be found and visited by a user.

2.7.4 Accessibility

Accessibility issues address the need to make all Public Institutions websites accessible to the following:

    i. People using various technologies (for example, browsers, search engines, operating systems, wireless systems),

    ii. People accessing our pages from other countries. The web pages should be designed to allow consistent viewing across various browsers and multiple platforms.

2.7.5 Compatibility with Browsers

    i. Web pages shall be browser independent to ensure cross-browser compatibility.

    ii. Test the website on each of the most popular browsers

        – Microsoft Internet Explorer, Firefox, Safari, Google Chrome, Opera etc.

    iii. Screen resolutions of the web page display must be consistent across different browsers.

2.7.6 Responsive Design

It is a best practice to design all Public Institutions websites to adopt responsive design feature. This provides an optimal viewing experience i.e. easy reading and navigation with a minimum of resizing, panning, and scrolling across a wide range of devices (from mobile devices to desktop computer monitors).

2.8. Web Content Management Guidelines

2.8.1 Web Content Management

Web Content Management shall adhere with the following:

i.   The website should have a web content management portal/system

ii. Present only Current, Valuable Information - Always keep website information accurate, relevant and up to date;

iii. Archive older material that is still of interest in order to increase the website's depth of content;

iv. Organize large pieces of text into logical, smaller segments of material

v.   Use customer-focused language;

vi. Avoid redundant content;

vii. Avoid using jargon, use words that are frequently seen and heard.

viii.   Avoid exclamation marks;

ix. Compose sentence in active voice rather than passive voice;

x.   While giving instruction, strive to tell users what to do, rather than writing what to avoid doing;

xi. Use consistent capitalization and other style standards;

xii. Use bullets for highlighting information within large blocks of text;

xiii.   Watch your white space; the page containing too little text and too much white space can look visually unappealing;

xiv.   Use headings/subheading to chunk large blocks of text into smaller and more manageable lengths Website standards.

2.9. Website Hosting, Backup and Security Guidelines

2.9.1 Website Hosting

Hosting of Public Institution Websites shall adhere to the following:

i.   Host their website in the Government Approved Hosting Facilities according to Section 25 (b) (ii) of the e-Government Act No. 10 of 2019;

ii. Hosting servers should be secure with all aspects of ICT Security principles i.e. confidentiality, integrity and availability;

iii. High bandwidth, regardless of the website graphics, dozens of pages etc;

iv. High technical specifications to enhance high processing power of the hosting resources i.e. CPU, RAM etc;

v. Professional customer and technical support;

vi. Independent OS platform hosting environment i.e.

vii. Windows and Unix Operating systems;

viii. Reliability in term of server's uptime and offsite backup of the websites;

ix. Reports on access to server logs and other reports regarding website activity; and

x. Secure Control Panel and Website Management Tools.

2.9.2 Website Backup

Having backup offsite is always a good practice that guarantees recovery in case of any incident or disaster. Public Institutions shall:

i. Make sure they have the backup process and procedure to take a backup of their website on time basis and ensure that the copy of up-to-date website is kept offline;

ii. Ensure security precautions are put in place and advised to host their offsite backup in a secondary Government approved Hosting facilities.

2.9.3 Website Security

i. Authentication Mechanism/Remote Website Maintenance

All Public Institutions must ensure the web hosting provider rejects/restricts remote website administration by implementing more than one remote authentication mechanism. For example, the web administrator should be authenticated to the web hosting provider DMZ/VPN then followed by other authenticating processes i.e. cpanel authentication before accessing the website's backend.

ii. Website C-Panel Password

a) The Public Institution Web administrator must ensure the cPanel password is strong, having a mixture of upper and lowercase characters, numbers and special characters;

b) The password should be at least 10 digits long. Strictly, the cPanel password shouldn't use the dictionary or common words;

c) The password must be changed monthly;

d) If the password is documented somewhere, then it should be kept confidential in the safe place where the physical access is restricted;

e) Website administrators are warned not to share these authenticating passwords with vendors, contractors or any other person that is not authorized.

2.9.4 Source Code and Documentation

i. All Public Institution ICT unit must maintain the website source codes as well as its associated documentation. The ICT unit is responsible and accountable to make sure this is put in place.

ii. Site URL without WWW Accessibility

iii. All Public Institutions website should be accessible with or without the use of www.

2.9.5 Web Information Security

i. Security measures shall be taken into account to maintain high customer confidence by ensuring privacy of customer data and protecting the organization's property and reputation.

ii. All Public Institutions Websites should be tested thoroughly taking into consideration every aspect of security including network, databases, servers etc.

Public Institution Websites Guidelines Compliance Checklist System Analysts/Web Administrators must evaluate the newly developed website if the website guidelines were followed according to the following checklist below:

A.	Domain Name Checklists	Yes	No
1.	Does the Public Institution own its website domain names?		
2.	Has the Public Institution registered its relevant domain name ending in .go.tz or .co.tz or .ac.tz or .sc.tz?		
3.	Does the Public Institution set internal procedures to renew its domain name prior to expiration time?		
B.	Design Checklist	Yes	No
1.	Is the website well designed to ensure a maximum of 0-3 clicks to any target in the website in place?		
2.	Does the website design comply with all standard design and layout guidelines?		
3.	Does the masthead of the website follow all standard masthead guidelines?		
4.	Does the website design include global header, masthead, navigation, body and global footer sections?		
5.	Are all headings in the website in sentence format, with the initial letter of the first word capitalized and all remaining letters except for proper nouns in lower case?		
6.	Is the default language Kiswahili with English option at the header?		
7.	Does the website include a physical address, contact info and an online form in the Contact us section?		

8.	Is website navigation easy to use, and does it clearly display where users are and where they can go at all times?		
9.	Does the body of the website include all essential standard elements, including content, body links and breadcrumb trails?		
10.	Does the global footer of the website include at least: Privacy Policy, Terms & Conditions, Disclaimer, Copyright, statement links that are visible on all pages?		
C.	***Browser Compatibility Checklist***	**Yes**	**No**
1.	Is the website browser-independent and cross- browser compatible, and does it clearly communicate both of these facts.		
D.	***Usability Checklist***	**Yes**	**No**
1.	Are all links in the website highlighted, and do they correctly match appropriate destination page headings and avoid ubiquitous naming terms?		
2.	Are the page structure and the location of all standard items consistent throughout the website?		
3.	Are all page titles in the website represent the actual content, arranged according to importance, short, and understandable even when taken out of context?		
4.	Are all pages each page's content, including proper size, color and spacing?		
E.	***Discoverability Checklist***	**Yes**	**No**
1	Can the website be easily found using various search engines?		

F.	*Web Content Management Checklist*	Yes	No
1.	Is the content of the website entirely non-offensive and non-discriminatory?		
2.	Are the requirements of the citizen accounted for in the content of the website?		
3.	Is the default home page of the website Swahili language version?		
G.	*Web Information Security Checklist*	Yes	No
1.	Does a Copyright statement appear on every page of the website?		
2.	Are the Terms and Conditions for use of the website clearly defined and accessible on every page?		
3.	Does the website provide Disclaimer that is accessible from every page?		
4.	Does the website provide Privacy Policy that is accessible from every page?		
5.	If applicable, is all information obtained through user registration like user profiles and accounting info completely secure?		
6.	Is the Website hosted in the Government Approved Hosting Facilities?		
6.	Are the ICT Security measures taken in account?		

3. IMPLEMENTATION, REVIEW, AND ENFORCEMENT

This document shall be:

3.1. Effective upon being signed by Board Chairperson on its first page.

3.2. Subjected to review at least once every three years or whenever necessary changes are needed.

3.3. In case of any exceptions to this document, its application must duly be authorized by the Board chairperson before documentation.

3.4. Public Institutions are required to ensure that all existing publicly accessed websites are assessed for their compliance with these guidelines. Whereas existing websites which do not conform to mandatory requirements indicated in the guidelines, should be updated to fully comply at the earliest possible opportunity.

3.5. Public Institutions are required to ensure that all new publicly accessed websites are assessed for the level of compliance, and ensure that they meet the standard requirements as stated in this document.

4. RELATED DOCUMENTS

4.1. Mwongozo wa Kusimamia na Kuendesha Tovuti za Serikali.

5. DOCUMENT CONTROL

Version	Name	Comment	Date
Ver. 1.0	President's office Public Service Management	Creation of Document	December 2014
Ver. 2.0	e-GA	Aligning with e-Government Act No. 10, 2019	July 2022