

Management of Government of India Websites

Guidelines for IT Managers

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Developed by

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For

Department of Administrative Reforms and Public Grievances (DARPG),
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Authorship

This document has been prepared by Web Services and Multimedia Applications Division of National Informatics Centre (NIC) , Department of Information Technology, Ministry of Communications & IT, Government of India at the behest of Department of Administrative Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances and Pensions, Government of India. NIC shall be responsible for Updation & Maintenance of this Document from time to time. Enquiries about any aspect of this document should be directed to wsmad@nic.in.

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This document is also available at:

<http://webservices.nic.in/guidelines>

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Introduction

As the Internet is gradually transforming the social and economic fabric of our communities, Government agencies worldwide are evolving into 'e-governments' to enable a better and broader access to public services. Web Sites and Portals, having the ability to integrate disparate infrastructure and applications, have emerged as the logical front end for government initiatives to deliver a wide variety of information and services to its citizens. A large number of government websites have been set up all across the world over the last few years.

With the increased proliferation of Internet in India, more and more people from different parts of the Country are accessing the Net every day. Internet kiosks, Community Information Centres, Home PCs, Laptops, PDAs, Mobile devices etc are some of the ways being used to access the Internet. New audiences and new platforms are opening up new opportunities for government communications and services. A number of services and information are being made available through the Internet by the private sector. Government is also sensitized to the potential of Internet and is providing a variety of information as well as some of the services through its websites. Hence, more and more members of the general public are visiting government sites and they expect to receive a similar or higher standard of service and care from their Governments, as they do from the private sector.

As of today , there are more than **2,000** Government websites in India. A close look at these websites, belonging to both Central and State government reveals that most of the important government entities have already made a headway in establishing their presence on the Net. Every other day, there is a new Government website, be it of an important Department of a Ministry, Taskforces set-up by the Government, Policies or notifications of the government, State Government Departments or even a remote district of India. Awareness about the fast changing IT world and keenness to keep

pace with the latest has ensured that almost all the State Governments in India already have their websites up and running. Most of these websites are either in the 'Publish' stage or in the 'Interact' stage. Only a small proportion of government websites are in the 'Transact ' stage.

Large amount of government resources are being used in developing, hosting and maintaining these websites. It is therefore vital to ensure that the management of these websites is carried out in a planned manner so that they become an effective means of communication & delivery of services to citizens as well as other visitors right from business, other government departments to government employees. However, it is well understood that this would involve a lot of work and can not be achieved overnight. It is therefore suggested that a 'phased approach' be adopted to achieve the above objectives.

As a first step, we suggest that the Indian Government websites adhere to certain common minimum standards which have been derived, in the form of guidelines discussed in this document, as pre-requisites for a government website to fulfill its primary objective of being a citizen centric source of information & service delivery.

This is a non-technical document and discusses the various policy level issues concerning the management of Government of India websites. The purpose of these guidelines is to assist the IT Managers of Government Departments in managing their websites in an effective and efficient manner. It should be read by all senior managers responsible for ICT (Information & Communication Technology) policies & applications in their respective departments. This document should be circulated as widely as possible.

This document assumes that a department has already set up its website and is dealing with the challenges of its effective management. It attempts to discuss some of the issues/ challenges commonly faced by Government

websites and provides guidelines for the addressing the same. The Issues and concepts discussed in the course of this document include Positioning of Websites, Content Management, Accessibility, Multilingualism, Raising Trust, Hyperlinks Management, Contingency Management, Managing Communication/Interaction, Hosting Service Provider, Visibility and evaluating the Performance of the website for further improvement. Compliance with these guidelines shall ensure a basic minimum standard for the government websites. Hence all possible efforts should be made to comply with these guidelines.

The guidelines that form the foundation of this document are evolving and will continue to be updated over time. Feedback on this document from all interested and concerned is welcome and shall prove helpful in improving the future versions. All suggestions and feedback on this document may be directed to **Web Services & Multimedia Applications Division, National Informatics Centre, A-Block CGO Complex, Lodhi Road, New Delhi – 110003, email : wsmad@nic.in**

Note :

Please note that throughout this document, '**department**' refers to Government Departments, Ministries, State/UT, District Administrations, Organisations, Affiliated Institutions under the purview of Government of India

Guidelines

1. Positioning of the Websites

Since the website of a department is its reflection to the outside world, it ought to be seen as an integral part, rather than an external entity. Hence all facets of the department and its activities should be appropriately reflected on the website. A clear, strategic vision of what the department aims to achieve through its website has to be generated. Organisations should clearly categorize the information generated within the organization as Government to Citizen (G2C), Government to Business (G2B), Government to Government (G2G) and Government to Employee (G2E) and should accordingly define policies to guide what information to publish, where to publish and when to publish. Special policy should be defined to handle (publish / remove/ archive) time sensitive information. Approval processes should be different for different types of information

A high level of awareness should be created in the department/organization about the potential of the Internet as a means of information and service delivery and how the organization intends to leverage upon it so that they can participate in timely generation, publishing and delivery of desired information on the website. All the above mentioned policies should be well publicized within the department. Various Units within an organization should be made responsible for the provision of respective information to be published on the website.

To receive valuable contribution and inputs from the staff in the department, it is desirable that they should be able to view their site, whether on the Internet or via a mirror on the department's intranet. The ability to use the Internet for giving and receiving information should be valued as an important skill.

2. Content Management

The crucial element of an effective presence on the Internet is good content. A website should be oriented towards its prospective audience. Intended audience to the government website could be citizens, businesses, government departments as well as government employees. Hence the content should be written keeping the audience in mind. Apart from the selection of the content, equal emphasis needs to be given to the way it is written and presented on the web. The content aimed at the common Public must be written in simple language so that people with diverse professional, educational and demographic backgrounds can easily comprehend. Presentation of the content on the web should also be looked into. Too long or too short pages should be avoided. Content format should be such that it does not require an extra piece of software to access. Most of the content published on the website is in HTML (Hyper text Markup Language) format which is a *defacto* format used on the web and can be accessed by all browsers. However, at times, it is not feasible to publish a document in HTML format. This is especially true for large documents (with multi-column text, forms, tables, graphs), Application Forms etc. There are a number of formats to prepare these documents for the web. However, one of the most commonly used formats, all over the world is Portable Document Format (PDF) which allows large documents to be published conveniently and in a non-editable form without disturbing the lay-out.

Minimum Required Content

The website of a Government Department / Organisation must include at least the following information and facilities on their websites:

- Complete Identity of the department
- Aims, Objectives & Responsibilities,
- Organisation structure, including Agencies, Directorates etc
- Generic Postal address, fax, phone number & email of the department
- Names and telephone numbers or e-mail addresses of contacts for further information on specific policies or services ¹
- Services offered by the department
- Application Forms dealt by the department and guidance for their completion ²
- Documents published by the department
- Submit a query/grievance
- Legislation for which the department has the lead, or a link to a site which contains it
- Press notices
- Links to customized view of GOI Directory ³
- Search
- Feedback

(Note:

1. The contact details need not be published with the names of the individuals unless mandatory, they should be published as per the designation/ position held.
2. The Application forms provided for a download on the government website should preferably be published in un-editable PDF (Portable Document Format).
3. Official Directory of Indian Government websites available at <http://goidirectory.nic.in>)

It has to be noted that since the web users can directly reach the inside pages of the website using the search engines and there is no guarantee that they shall enter the site through the Home Page, each page in the website must have a self-contained identity and be capable of being seen as the first page. It should contain context oriented data for the user, such as meaningful document headings/ subheadings as well as consistent navigation to the rest of the site. Appropriate disclaimers & date stamp should also be included on the subsequent pages wherever necessary

Content Updation & Maintenance

Businesses world over are leveraging on the potential of Internet as a mass media and are using it to communicate with their clients. These users or citizens are also expecting the governments to perform in a similar fashion and thus expect to get the latest and up-to-date information about the activities, events, schemes, programmes etc. from its web site before they see it in the Press or elsewhere.

However government websites are sometimes riddled with the problems of obsolete and old content as well as the absence of desired content. A closer look at this, reveals the following issues :

- Sensitization of the concerned persons towards the need for timely & up-to-date information on the web is extremely important. Therefore it is suggested that a well defined strategy may be worked out within the Department to ensure timely provision of content to be posted on the website. There should be clear understanding within the organization about where the responsibility lies for providing content for the website, and in what form it should be presented to the web team.

- Second reason is the lack of know-how to convert the information in web enabled format and published. This could be addressed by developing a CONTENT MANAGEMENT SYSTEM for the website which shall facilitate a browser based easy to use updation mechanism for various sections of the website. No special skill is needed to use this system, Staff responsible for generation of content can themselves update using this system. However proper procedure of approvals should be followed to avoid any unwarranted erroneous content getting published. Ideally a group could be formed within the department for the regular updation and maintenance of the information on the website using the content management system. Advanced versions of content management systems can support complete lifecycle of data right from its creation to publishing on the web, incorporating desired flow for approvals. If possible, the agency responsible for the design and development of the website could be hired for the development of the Content Management System since they would be familiar with the information architecture and navigation pattern of the website.

Alternatively, a Maintenance Contract could be given to the Agency responsible for the Design and Development of the website for updation as well as addition of the content as and when needed. Though the first option is preferable.

Further , In case of time sensitive information such as Tender Notices or Press Releases, it has to be made sure that the publication of content on the Web is simultaneous with publication in other media, if not prior to it. Use of automated systems shall facilitate timely publication, removal as well as archival of such information and shall in turn save a lot of time and unnecessary embarrassment for the department for not removing old tenders, notices etc.

3 . Accessibility

Accessibility refers to the extent to which the website and its contents are available to a wide range of users with varied levels of physical capabilities/skills and technologies. A government website being universally accessible would imply that a broad range of software, hardware and audiences, including physically challenged citizens can not only access the online content and services on the website but are also able to actually make use of it. The World Wide Web Consortium's (W3C) Web Accessibility Initiative (WAI) is an internationally agreed recommendation for website accessibility for people with special needs and it is expected of the Government websites to follow these standards. The W3C Guidelines explain how to make the web content accessible to people with disabilities. *W3C Web Content Accessibility Guidelines (WCAG)* are available at

<http://www.w3.org/WAI/Resources>

These guidelines provide a series of checkpoints that can be used to ensure that the websites are accessible. Each checkpoint has a priority level based on its impact. Also, there are free tools available to check the accessibility of a particular web page or site as a whole.

It is suggested that government websites should try to achieve the compliance with W3C WCAG 1.0 guidelines to the Priority 1 Level. However it is not as simple as it appears, particularly if the site is huge in size and no attention was paid towards this aspect during development. Though efforts should be directed towards compliance with accessibility standards, in case it is becoming too difficult, a separate text only version of the all the web pages should be prepared and linked appropriately. Simultaneously, initiatives should be taken to sensitize the developers towards the need for developing universally accessible websites, so that newly developed websites / portals as well as existing sites being redesigned/ redeveloped could be benefited. Many of the latest versions of web developments tools provide an in built option for developing universally accessible websites.

4. Multilingual Versions

India is a country with diverse cultures and as many as 18 official languages. One of the major users of government websites are citizens of India. With increased proliferation of Internet, these websites are accessible in blocks & villages of India too. Due to the various initiatives taken by Centre and State governments, Internet is now accessible even in the remote parts of the nation. For example Community Information Centres (CIC) project of the Ministry of Communications and IT has made Internet reach all over the north eastern states in urban as well as rural parts, despite the difficult terrain. Presently most of the contents in government websites is in English. Thus even though government websites are accessible, they are still not usable. Hence there is a need to put the information in multiple languages. Depending on nature of the content and its prospective usage, contents should be translated in desired languages and should be a part of the same website with prominent links. Technology for publishing the content in Indian languages is already quite developed and a large number of tools are available to support this.

Though ideally all the pages on the website should be translated in Hindi and other regional language, in case it is becoming difficult to do so, one should identify the content which would be widely accessed by the public at large and to begin with that content should be put up in multiple languages. While putting the content in multiple languages, following aspects should be taken care of

- It has to be ensured that the documents/pages in multiple languages are updated simultaneously so that there are no

inconsistencies, at any point, between the various language versions.

- In cases where it is practically difficult to update the versions in all languages simultaneously due to delays on account of translation etc, it is advisable to remove the obsolete information from the site till the latest information is uploaded. In any case, a time stamp indicating the date of uploading the information and its validity ought to be put along with all the time sensitive documents.

5. Raising Trust

Due to the availability of a large amount of information from unlimited sources on the Internet, the citizens look up to a government website as a reliable source for getting up-to-date and authentic information. This trust imposed by the citizens in their government's website makes it necessary for the site to fulfill those expectations by adhering to security and legal requirements.

Therefore, the Government web sites should not only have the most up-to-date information at all times, it also must raise citizens' confidence and trust by abiding with the law and explaining their terms and conditions clearly to the users. The issue assumes more importance when it comes to online transactions as well as making payments through the website. Well worded disclaimers, privacy policies, terms and conditions and copyright information enhance the credibility of the website and help in further building the users' trust.

- **Content Disclaimer**

Content Disclaimers/Ownership Statements are generally included to inform the visitor about the roles and responsibilities of the various entities involved

in developing and maintaining the content on the websites. It is desirable that all the government should have a content disclaimer/ownership statement on their websites. For reference purposes, a sample disclaimer has been worked out and is given below:

" This website has been developed by _____ for (owner department). Content on this website is compiled by _____ and maintained by _____. This website is hosted by _____.

Though all efforts have been made to keep the content on this website accurate and up-to-date, the same should not construed as a statement of law or used for any legal purposes. All queries regarding the content of this website may be directed to _____(the postal as well as email address of the concerned department)."

- **Copyright**

The information, material and documents made available on a government website have to be backed up with proper copyright policies explaining the terms and conditions of their usage and reference by others.

In cases where the document is in public domain and there is no restriction on its reproduction, the copyright statement could be worded as follows:

“Material featured on this site may be reproduced free of charge in any format or media without requiring specific permission. This is subject to the material being reproduced accurately and not being used in a derogatory manner or in a misleading context. Where the material is being published or issued to others, the source must be prominently acknowledged.

However, the permission to reproduce this material does not extend to any material on this site which is identified as being the copyright of a third party. Authorisation to reproduce such material must be obtained from the copyright holders concerned. “

In cases where the nature of information/document calls for a restriction on its reproduction, the copyright statement could indicate the following terms

“Material on this site is subject to copyright protection unless otherwise indicated. The material may be downloaded to file or printer without requiring specific prior permission. Any other proposed use of the material is subject to the approval of _____. Application for obtaining permission should be made to (email and complete postal address of the concerned department)”

The Departments should also be sensitive towards publishing any information having a third party copyright. The Government departments should follow proper procedures to obtain the permission, prior to publishing such information on their websites.

- **Privacy Statement**

All departments that solicit or collect personal information from visitors through their websites must incorporate a prominently displayed **Privacy Statement** which should clearly state the purpose for which the information has been collected and whether the information shall be disclosed and to whom.

It is hoped that whenever a department's website collects personal information from its visitors, it is done through sufficiently secure means to avoid any inconvenience. SSL/SSH/Digital Certificates are some of the instruments which could be used to achieve this. A sample Privacy Statement is given below :

Privacy Statement

As a general rule, this web site does not collect Personal Information about you when you visit the site. You can generally visit the site without revealing Personal Information, unless you choose to provide such information. Any Personal information collected shall be used only for the stated purpose and shall NOT be shared with any other department/ organization (public/private).

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

- **Domain Name**

Another equally important aspect related to raising the trust is the site address or the URL. As per the international naming conventions, each country has reserved certain domain(s) for government websites (e.g USA has '.gov.us', Singapore has '.gov.sg' and India has '.nic.in' & '.gov.in) and such domains are not freely available for registration by anyone as they are allocated to a government department only after due verification. Thus, the presence of such an address further adds to the credibility of the government website. The government departments should avoid registering unsuitable domain names such as '.com'. The procedure and rules to be followed for registering a '.nic.in' domain name for Indian Government Departments could be accessed from **<http://webservices.nic.in>** while the procedure for registering a '.gov.in' domain name is available at **<http://domain.ncst.ernet.in>**.

6. Hyperlink Policy

Generally, there is a lot of inter-relation between the working of different government departments and in many cases, the citizen has to access multiple websites to avail a particular service. Though a lot of initiatives have been taken to introduce the concept of Joint Services, however till it comes in force, for the sake of convenience of the citizens, the government departments provide links to the websites/certain sections of the websites of other departments which are not in their direct control and may even be hosted by different service providers. Such links, known as 'external links' are also sometimes provided to non-government websites for the convenience of the citizens.

Providing a Link to an External website

Due to the high level of trust placed in a Government website by the visitors, it is extremely important for the concerned department to be cautious about providing links to other websites. It is therefore suggested that whenever a link is provided to an external site, a well worded disclaimer appears on the screen which clearly informs the visitor that he/she is moving out of the website to another site and that the information provided therein is the responsibility of that external source and no longer that of the referring site. Also, it is preferable that the linked website opens in a new browser window rather than in a frame or the same window.

A sample of a hyperlink disclaimer which could be provided on the site is given as below:

This Link shall take you outside our web space and you shall be visiting an external website. The _____ Department is not responsible for the contents or reliability of the linked websites and does not necessarily endorse the views expressed within them. Listing shall not be taken as endorsement of any kind. We cannot guarantee that these links will work all of the time and we have no control over availability of the linked pages

It is also desirable that the webmasters of the linked websites be appropriately informed that a link to their website has been provided by the Department and the validity of such links should be tested from time to time.

Your website being linked by Other websites

Since government websites often receive queries and requests from owners of other websites who might want to provide a hyperlink to their webpages, it is important that the concerned Department/Organisation has a clear cut linking policy regarding this and the same should be mentioned at a suitable place on the website itself.

Incase a Government Department has no objection to anyone providing a hyperlink to their website, the policy statement could read as follows :

We do not object to you linking directly to the information that is hosted on our site and no prior permission is required for the same. However, we would like to you inform us about any links provided to our site so that you can be informed of any changes or updation therein. Also, we do not permit our pages to be loaded into frames on your site. The _____Department's pages must load into a newly opened browser window of the user

Incase prior permission is required by anyone who wishes to provide a link to a government website, the policy statement should specify :

*Prior permission is required before hyperlinks are directed from any website to this site. Permission for the same, stating the nature of the content on the pages from where the link has to be given and the exact language of the Hyperlink should be obtained by sending a request at _____
(Complete Postal/ Email address)*

Links to GOI Directory

All Indian Government websites should provide a hyperlink, at a suitable place, to the GOI Directory (<http://goidirectory.nic.in>), the official web directory of the websites/portals belonging to the Ministries/Departments, State/UT Governments, Apex Bodies/Commissions, Organisations, Academic Institutions/ Universities, Banking. The webmaster of the goidirectory may be requested to provide a customized view of the links related to the concerned sector or department.

7. Contingency Management

The website of a government department is its presence on the Internet and it is very important that the site is fully functional at all the times. It is expected of the government websites to deliver information and services on a 24X7 basis. Hence, all efforts should be made to minimize the downtime of the website as far as possible. It is therefore necessary that a proper contingency plan is prepared in advance to handle any eventualities and restore the site in the shortest possible time. The possible contingencies include:

- Defacement of the website
- Data Corruption
- Hardware/Software Crash
- Natural Disasters

Defacement of the website

All possible security measures must be a pre-requisite for a government website to prevent any possible defacement/hacking by unscrupulous elements. However, if despite the security measures in place, such an

eventuality occurs, there should be proper contingency plan which should immediately come into force. If it has been established beyond doubt that the website has been defaced, the site should be immediately blocked. The contingency plan should clearly indicate as to who is the person authorized to decide on the further course of action in such eventualities. The complete contact details of this authorized person should be available at all times with the web management team. Efforts should be made to restore the original site in the shortest possible time. At the same time, regular security reviews and checks have to be conducted in order to plug any loopholes in the security.

Data Corruption

A proper mechanism has to be worked out by the concerned Government Departments, in consultation with their web hosting service provider to ensure that appropriate and regular back-ups of the website data are being taken so as to enable a fast recovery and un-interrupted availability of the information to the citizens in view of any data corruption.

Hardware/Software Crash

Though such an occurrence is a rarity, still in case the server on which the website is being hosted crashes due to some unforeseen reason, the web hosting service provider should have enough alternative infrastructure available to restore the website at the earliest.

Natural Disasters

There could be circumstances whereby due to some natural calamity, the entire data center where the website is being hosted gets destroyed or ceases to exist. A well planned contingency mechanism has to be in place for such eventualities whereby it should be ensured that the Hosting Service Provider has a 'Disaster Recovery Centre (DRC)' set up at a geographically

remote location and the website is switched over to the DRC with minimum delay and restored on the Net.

Apart from the above, in the event of any National Crisis or unforeseen calamity, Government websites are looked upon as a reliable and fastest source of information to the public. A well defined policy for all such eventualities has to be in place within all departments/organizations so that the emergency information/contact help-lines could be displayed on the website without any delay. For this, the concerned person in the department responsible for publishing such emergency information should be identified and his/her complete contact details should be available at all times.

8. Managing Communication & Interaction

Two way communication is one of the unique features of Internet as a mass media and it can act as a useful channel by which citizens can not only interact with the government but also can also participate in the process of governance. The various ways through which interaction and communication can take place on a website include email, feedback forms, discussion forums, online chats, opinion polls etc. The government departments should exploit these features and encourage more and more interaction with the audience (citizens, other government departments, businesses, employees etc) through their websites.

Email

Email is a widely used and easy way of communicating over the Internet and it can be effectively utilised by the visitors to provide their inputs which could be enquiries, feedback, suggestions etc. and the department can easily respond to the queries using email. Also, the government websites can inform the willing regular visitors about the important developments,

forthcoming events and new additions to the website through subscription/prior registration. In case of highly dynamic websites where a lot of information is generated every day, the concept of personalisation can be used, whereby the user can choose to receive the information of his/her interest through email, thus avoiding information overload.

Feedback Forms

Another commonly used method of receiving the feedback from the visitors of the site is through feedback forms of guest books. Feedback forms, with pre-decided fields, to be filled in by the visitors, enable a much more structured way of receiving feedback and hence make it easy to categorise or analyse the same. Forms are also quite useful for receiving grievances/complaints from the users in a structured and formatted manner.

Discussion Forums

Online discussion forums are becoming an increasingly popular tool for sharing viewpoints and information. Discussion Forums could be initiated by a department on any relevant topic of public interest and can prove quite useful in obtaining opinions and viewpoints of the citizens on issues important for policy making. While initiating an online discussion forum on a government department's website, the following has to be kept in mind :

- ❖ The purpose and objectives of the Discussion Forum have to be clearly defined. Preferably, an Initiating Document or Background Paper explaining the theme of the chosen topic for the forum should be provided on the site.
- ❖ Clear-cut Terms and Conditions for participating in the Discussion Forum should be indicated and a Usage Policy (*see box*) should be defined.

- ❖ The discussion forums on a government website should preferably be moderated so that there is enough control over what is being displayed on the website. All the inputs submitted by the users should first be reviewed by the moderator for context and appropriateness of the language and then posted on the website. In case a moderated discussion forum is not feasible, it is advised that all the inputs in the un-moderated discussion forum be carefully reviewed by someone from time and time and all unwarranted/objectionable messages could be effectively removed.

- ❖ The discussion forum should be open for a limited period of time and the validity of the same should be prominently indicated on the site. However, rather than closing the forum abruptly, it is advised that a summary of the inputs received as well as an Action Taken Report, if possible, be provided on the website so that the visitors are assured that their inputs are being seriously considered and valued by the department.

Chatrooms

Chatrooms on a website could be used by citizens to exchange their viewpoints on some common topic amongst each other as well as by the departments to facilitate an online chat between a senior functionary and the common citizens. Like Discussion Forums, Chatrooms should also follow a Usage Policy (see box) and a proper code of conduct. It is desirable that the participants of an online chat through a government department's website be registered before they are allowed to log in and post their messages. Permanent chat rooms must be monitored frequently. In case of temporary or special occasion chat sessions with a senior functionary, it is advised that questions are submitted to the interviewee (either live or in advance), before being published in the chat room.

Usage Policy

A Usage Policy must be established and published alongside all online discussion forums and chatrooms on a government website . This policy should be prominently displayed to any new user who should be made to pass through a page with this information before being able to input data. The usage policy should clearly specify that the following is forbidden :

- Insulting, threatening or provoking language.
- Inciting hatred on the basis of race, religion, gender, nationality or sexuality or other personal characteristics.
- Swearing, using hate-speech or making obscene or vulgar comments.
- Libel, condoning illegal activity, contempt of court, and breach of copyright.
- Spamming, i.e., adding the same comment repeatedly or across different
- Impersonating or falsely claiming to represent a person or organization.
- Posting in a language other than the language of the website
- Invading people's privacy.
- Posting off-topic comments

Some of the common practices must be observed whenever a government department conducts online interaction with citizens as well as other users.

1. Whenever a User submits any input through feedback form, email or discussion forum, a well worded acknowledgement must be displayed on the website. The language of the acknowledgement could vary from thanking the user for submitting the input to indicating a time frame by which an action shall be taken on the feedback.

2. In case the website allows the users to submit complaints or lodge online grievances, a proper complaint number should be provided to the user and a facility for tracking the 'Action Taken' on the same should be provided.
3. Before committing any time targets to the citizens in response to their interaction, all back-end arrangements should be made within the department to support the interaction and give a proper response to all the users.
4. Any communication from the Department to the citizens through email or otherwise should be properly worded and should not have any ambiguity.

9. Hosting Service Provider

Government websites should be well managed and accessible to the public in a fast and secure manner on 24X7 basis. It is important that the web hosting service provider (HSP) for a government department be chosen with extreme caution and care and the following have to be kept in mind

- The HSP should possess state-of-art security infrastructure as well as security policies to ensure the best possible security to the government websites.
- The Web hosting service provider should have a redundant server infrastructure to ensure fastest restoration of the website in the event of any unforeseen hardware/software failure.
- The HSP should perform regular backups of the websites. It is also

advisable to conduct a mock test of restoration of data once in a while to plug any loopholes.

- The HSP should have a Disaster Recovery (DR) Centre in a geographically distant location and a well crafted DR plan for fast restoration of the services during any disaster.
- Provision should be given to the concerned department to remotely update their website in a secured manner.
- The HSP should also provide the facility of staging server in order to facilitate the testing of updates to the website's content prior to installing the changes on the live site.
- HSP must provide the web server statistics required for performance evaluation on a regular basis. If possible, online access to the traffic analysis should be provided so that the department can access the hit analysis at any point of time for the purpose of evaluation.
- Web Hosting Service Provider should provide technical support on 24X7 basis.

10. Visibility

The entire effort of developing and sustaining a web site bears fruit only when it is visited by its target audience in large numbers. And for that, it is extremely important to ensure that the desired audience get to know about the site and are able to find it easily. Since a key word in any of the popular search engines gives millions of results, it is important that the website of a government department has a high visibility and can stand out amongst

them. To improve the likelihood that web pages of a department have a high visibility, the following steps need to be undertaken:

- ❖ The web site should be registered with as many search engines/directories as possible, under appropriate categories.
- ❖ The website should incorporate *internal* descriptive data or metadata comprising relevant keywords and descriptions, intended to be read by search engines/directories.
- ❖ The websites should be registered with GOI Directory (<http://goidirectory.nic.in>), the official directory of Indian Government websites
- ❖ All the advertisements/public messages including Press Releases, Tender Notifications etc issued in the Newspapers/Audio-visual media by the concerned Department should prominently mention the URL of the web site clearly in order to give it due publicity.
- ❖ All the stationery items of the department such as Letterheads, Visiting Cards ; Publicity material such as Brochures, Pamphlets and documents such as the Annual Report etc should display the URL of the web site.
- ❖ Links should be exchanged with other relevant National/ International websites.

11. Performance Evaluation

The dynamic nature of the Internet environment makes it essential for the web team to carry out frequent monitoring of the performance and use of the site to ensure that the sites are actually fulfilling their intended objectives and that the high standards are being maintained.

A variety of qualitative and quantitative evaluation techniques can be appropriately deployed to assess the performance and popularity of the websites.

- **Traffic Analysis**

Traffic Analysis is one of the powerful tools to not only assess the functionality of a website but is also a good measure of its usage by the Internet Audience. While most web servers generally maintain the log of the hits received by a website, some of them also provide a detailed analysis of these log files with respect to different parameters. It is advised that the department should ask the hosting service provider to provide them with the hit analysis of their website on a regular basis, though an online access to the traffic pattern of the site over a period will be a preferred option. Traffic Analysis generally provides information on the following parameters : Total No. of hits, page views, unique visitors, top ten pages, least accessed pages, referring sites, domains, Browsers/Devices used to access the site etc.

- **User Feedback**

The feedback of the visitors to the website received from time to time through guest books, email forms, helpdesk, phone etc. should be carefully analysed to enable improvements in the websites.

Implementation of the guidelines

It is advised that the IT Managers of all the government departments make all possible efforts to comply with these guidelines. While the websites under development should mandatorily follow the guidelines laid down in this document, the existing web sites should try to implement as many guidelines as is immediately possible. At the same time, a plan should be worked out to comply with the remaining guidelines over a defined period of time.

The formulation of such guidelines is an evolving process within itself. With new web standards coming into the fore, these guidelines shall be continually improved and updated and it shall be in the good interest of the IT Managers of the Departments to look-out for the updated versions of the same in future at the following URL

<http://webservices.nic.in/guidelines>

While all possible care has been taken during the preparation of this document, possibility of any inadvertent error having crept in can not be ruled. Any such discrepancy should be communicated at wsmad@nic.in

Your suggestions & feedback for inclusion in the future versions of this document shall be highly appreciated. You may direct all such suggestions & feedback to any of the following addresses:

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