



GOVERNMENT OF INDIA

**Department of  
Administrative Reforms and Public Grievances**

**Policy Guidelines on Web-site  
Development, Hosting and Maintenance**

**July-2003**



This page has been intentionally left blank.

# **POLICY GUIDELINES ON WEB-SITE DEVELOPMENT, HOSTING AND MAINTENANCE**

## **1. INTRODUCTION**

The Government is committed to build an organizational environment in Ministries / Departments that would inspire and facilitate the realisation of an eGovernment, which encompasses, inter alia, the development and deployment of Citizen centric Services through web enabled processes, electronic workflows, eEnabled applications, collaborative partnerships and participation of Citizens, clients and stakeholders.

The Web site of a Ministry / Department or its portal which integrates several websites of its constituent Offices and units, is a speedy and effective means for dissemination of information, interaction with people and for delivery of services to Citizens.

The Portal or Website, is significant in terms of its capability and potential in serving as an important link between the government and the citizens. It presents the face of the Organisation, its mission, vision, functions, activities, performance, etc., It provides features enabling members of the public and stakeholders to give their views / feedback for further improving governance.

It is in keeping with the national agenda and envisaged road map for improving governance and improving the quality of public services that these guidelines are being notified.

## **2. APPLICABILITY**

These guidelines are meant for Ministries / Departments of the Govt. of India and their Subordinate and Attached offices.

## **3. AIMS & OBJECTIVES**

- (i) Making available accurate and reliable information in the public domain which can be of use to Citizens, stakeholders, States, Union Territories, Non-Government Organizations.

- (ii) Pursuit of Excellence and Quality for improved electronic delivery of information and services to citizens / clients.
- (iii) e-interaction and knowledge sharing between Ministries, Departments, States, Union Territories, Non-Government Organizations and people in general through electronic collaborative processes.
- (iv) Increasing efficiency and transparency in Government processes through cost effective means, resource sharing and seamless integration and collaboration among Ministries / Departments.
- (v) Commitment to partnership, networking and value addition through citizen's and stakeholders participation in decision making.
- (vi) Realizing a knowledge based organizational culture focussed on enhancing Citizen, Client and stakeholders satisfaction through innovative and proactive behavioral engineering.

#### **4. CONTENT STRUCTURE**

The features available on the Web-site will facilitate furtherance of the aims and objectives as described above and will include the following contents:-

- |   |   |
|---|---|
| (i) Mission, Vision, Objectives, Client Charter | The Website will clearly indicate the subjects assigned to the Ministry / Department, its Mission, Vision, Objectives, its Citizen's / Client Charter. It will also carry the messages of Minister and Secretary, if any. A road map of how it intends to achieve all its objectives and envisage the desired outcomes may also be indicated.   |
| (ii) Organizational Set-up and Directory        | The website will prominently display the logo of Govt. of India and the name of Ministry / Department alongwith the organizational set up with sufficient clarity, containing the details of functional responsibilities entrusted to various offices within the Departments / Organisations. A comprehensive and complete list of Attached and Subordinate Offices with links to their Websites will also be provided. It will have a complete directory with names, designations, e-mail addresses, telephone numbers and postal addresses of Minister, Secretary, Heads of Departments / Directorates, Divisions, Field Offices, Departmental and Public |

Sector Undertakings, Nodal Officers for Public Grievances, Citizen charters, IT Managers, O & M Officers etc.,

- (iii) Functions  
The Website will contain a comprehensive functional map of the Ministry / Department, subject matters being handled by the Ministry / Department alongwith designation of officers concerned with subjects assigned to them, responsibility of Attached and Subordinate Offices. It will further contain rules, procedures and important studies conducted by Ministries / Departments in different fields concerning its area of interest. Ministry / Department will also enclose the list of achievements and milestones and other important events as it may deem fit. The list of publications brought out by the Ministry / Department will also be displayed with associated links for viewing / downloading such published material. Periodicals, if any, will also be displayed prominently.
- (iv) Constitutional, Legal and Administrative Framework  
Acts, Rules, Gazette Notifications, Statutory Orders, Important Judicial pronouncements, Notifications, Handbooks, Guidelines, Instructions, Compendium of Circulars etc will be displayed .
- (v) Parliament and the Ministry  
All Parliament Questions with their answers, queries / responses and reports of Standing Committees, etc., may be placed on the website.
- (vi) Plan, Schemes, Programmes and Projects  
The Websites will contain information related to the Plans / Annual Plans and Budget of the Ministry / Department or Organisation with details of Schemes, Programmes, Projects, Externally aided projects, Central Schemes, Centrally Sponsored Schemes etc., Brief details of envisaged outcomes, resource allocations, modalities, delivery mechanisms, performance monitoring, ongoing programme evaluation / assessments, Audit reports, Midterm interventions, critical evaluation success factors, involvement of stakeholders, invitation for feedback / suggestions etc., will also be taken into consideration to provide information through the website.
- (vii) Services offered  
Website will clearly show the services offered online or through various Offices / facilitation counters etc., being run by the Ministry / Department,

the target beneficiaries, relevant rules, procedures, eligibility criteria expected of Citizens / Clients and such other relevant information to facilitate the Citizens / Clients to avail of such services.

All application forms will be made available on-line. Ministry / Department will also consider accepting such applications on-line. Facilitation for redress of Grievances with details of Grievance Officers, Redress mechanisms, Grievance hearings etc., need to be an integral part of the services offered.

Discussion forums, theme based chat with Minister / Senior Officers may also be provided.

(viii) Publications and Reports

CAG Reports, Annual Reports, White papers, Plan reviews, Statistical reports will also be placed.

(ix) Feedback Mechanism

Websites will be interactive and will have a mechanism to enable the visitors to give their feedback. The complaints / suggestions / observations received on-line will be treated as 'Receipt' as defined in Central Secretariat Manual of Office Procedure and will be processed accordingly. The Ministry / Department will devise standardized formats to receive and to respond to such comments received on-line.

(x) Notice Board, what is new, Announcements, Press Release, Tenders, Procurement and Disposal

Website will have a Notice Board which will prominently display the latest developments, current events, future programmes, information relating to new publications brought out by the Department etc., It will also contain information about the seminars, workshops, conferences etc., to be held in future and new appointments at senior level. Press releases, Notices for tenders / RFPs, procurement and disposal or vacancy etc., will also be displayed in this section. The Ministry / Department will put up all tender notices, vacancies etc., on the Web-site simultaneously with the normal procedure.

(xi) Advertisement Public Relations and Promotion

Advertisement and promotional messages / literature relating to the Ministry / Department may be provided / published through the web site.

- |   |  |
|---|--|
| (xii) Approved NGOs/<br>Stakeholders  | Details of Collaborating Organisations / Institutions and Stakeholders along with approved NGOs may be displayed.  |
| (xiii) Search Engine  | Website will have Search Engine to enable the users to locate and to access information / contents with ease.  |
| (xiv) Collaborative features<br>for asynchronous<br>information exchange,<br>knowledge sharing /<br>Chat Facility | The Ministry / Department should examine the feasibility of providing features that enable users from other government Ministries / Departments, States, Undertakings and other Govt. as also Non Govt. Organisations to exchange information and experiences in an asynchronous manner. Chat facility for interaction with concerned Officers on fixed days and at fixed timings can also be implemented. |
| (xv) FAQ and Help   | The Ministry / Department will also consider putting up relevant information under an active link titled "Frequently Asked Questions (FAQ)" providing details in significant areas of focus.   |
| (xvi) Current Events<br>Calender  | Details of forthcoming events / meetings, conferences, programmes and other activities scheduled during the quarter / year may be indicated.   |
| (xvii) Archives   | The Web-site will display original contents and their amended version with date of amendment.  |
| (xviii) Personnel   | Details of Cadres, Civil list, Employees Corner and related information will be available.   |
| (xix) Other features  | Any other feature which the Ministry / Department may deem fit and which are specific to the Ministry / Department concerned.  |

## **5. WEBSITE FEATURES**

The website will have the following essential features:

- (i) Bilingual Support                      The content will be both in English and Hindi keeping in view that a large number of people are Hindi speaking.
- (ii) Site Map                                Site Map will be provided for navigation support.
- (iii) Consistency                         Uniform look and feel will be maintained in all web pages.
- (iv) Access                                 Access to contents will be logical and intuitive.
- (v) Layout of Menu, Icons & Hyperlink                      The organisation of hyperlinks on the home page and in the interior pages to intuitively reflect the significance of the information or service associated with the link. Floatable and collapsible menus for effective use of space and icons providing cue to hyperlink contents will be used effectively.
- (vi) Search Engine                        To facilitate the users to locate and to access information / contents with ease.
- (vii) Content Structure                    Contents may be organised meaningfully with appropriate metatag / labeling scheme interfacing with an appropriate uniform electronic record management system adopted in the organisation with features such as version control, information on ownership, storage location, file number, keywords, context description etc.,

Some of the desirable features of the website and guidelines are given below.

- (a) Information is available with minimal number of clicks and the location of the user at any given point while navigating through the site is visually displayed to him.
- (b) Site is stable and reliable with predictable behavior of hyperlinks and menus.
- (c) Site Management / System Administration tasks are facilitated with built in exception reporting, escalation features in the software.
- (d) Website does not enforce client side requirements / efforts other than use of browsers.

- (e) Visual elements are appropriate and enhance the content presentation.
- (f) Site is well organized and navigation is clear and consistent.
- (g) Content is presented in manageable units.
- (h) Advanced security analysis and mechanisms such as port scans, Trojan sweeps, vulnerability profiles, firewall setups, network sniffers, software & application faults, E-mail vulnerabilities, database & human interface weaknesses etc., are incorporated in the standard operating procedures.
- (i) Workflow processes associated with inbound / incoming mails and feedback through the website as also logging of outbound / outgoing responses may be conceptualized and supported.

## **6. ADMINISTRATION / MAINTENANCE / UPDATING**

- (i) The Web Administrator will be responsible for over-all supervision to ensure that authentic and updated information and services are available on the website. Such responsibility will be with a senior official not below the rank of Joint Secretary. He would prescribe all policies, conceptualize and implement processes relating to the development, operation, management and content authoring / updation of the website and applications associated with it.

This would also include leading a technical team of the Ministry / Department for implementing necessary backend computerization, process re-engineering, interfacing with information architectures, security procedures and web based solutions.

- (ii) Officers of the rank of Directors / Deputy Secretaries will be appointed as Content Administrators for earmarked Divisions within the Ministry / Department.
- (iii) The US level officers / Section Heads will be appointed by the Content Administrators as Content Managers. The role of Content Manager will involve content viewing / updation for the earmarked links / sections comprising multiple links in the webpages of the intranet as per access privileges (i.e., read-only OR read-write) decided by the Web Administrator.

In a model design of website, content is updated in the intranet by the content manager add later published in the

internet by Content Administrators for viewing / access by the world at large, after approval of such contents by the web administrator or by such other person entrusted and delegated with such responsibility to approve contents.

- (iv) Content Manager will be responsible for timely updating of the website after approval by Content Administrator. Timely deletion of irrelevant and undesired information will also be ensured by him.
- (v) All Sections / Desks / Divisions will invariably mark important orders, notifications, circulars etc., to Content Administrator / Content Manager authorized by the Web Administrator, provided it is permissible under the security instructions issued by the concerned Ministry / Department or Ministry of Home Affairs from time to time. The orders, notifications etc., would be made available in electronic form to the Content Manager. He will update the content and inform the Content Administrator, who will publish such material in the internet section of the Web-site. This exercise will be completed within five working days of receipt of the content.
- (vi) Content Manager will visit and update the website at least thrice a week. Any form based feedback, electronic application or email received through the website would be treated as receipt as defined in the Central Secretariat Manual of Office Procedure and will be processed as per business rules. Where such feedback, application or email are received through the web, response will be given on-line to the extent possible.

**Note:** The duty assigned to Content Administrator, Content Manager will be carried out by the officers so designated in addition to their normal duties.

## 7. WEBSITE PROMOTION

The Ministry / Department will get its website registered with NIC as well as other popular Search Engines. It will also ensure that stationery items used in the Department like letter heads, visiting cards, press releases, audio and visual advertisements mention the Universal Resource Locator (URL) of the website clearly.

All the press releases messages, audio and visual advertisements should also be put on website simultaneously to promote the concept of the website / portal of the Ministry / Department as the preferred gateway to information and services.

## 8. TECHNICAL ASPECTS

### 8.1. MAINTENANCE AND UPDATING

Ministry / Department will decide the content and design of its website with the approval of Secretary concerned and in consultation with NIC or such other technical agencies and organisations with expertise in web design, development, hosting and management of websites. While deciding the content and design of the website, these guidelines will also be taken into account. The websites will be attractive, interactive, informative and user friendly. It will have adequate security arrangements against hackers, viruses, unauthorized access / intrusions.

In addition, it is desirable that the following features are made available in the software:

- (i) It is essential that the web site and associated application / software systems delivers dynamic, up-to date content to users, offering personalized content where appropriate through a simple but well designed content management process. The software will facilitate dynamic updation of web-pages using asp / jsp, javascript or such other programming languages using database interfaces wherever necessary and capturing records to the extent possible at the stage of their creation.
- (ii) The web application design and its implementation may envisage seamless integration of other legacy applications through web enabled interface modules and appropriate workflow process for seeking content approval through required levels of scrutiny.
- (iii) The website will need to have features that can provide basic statistics of use or to report on errors, set access / privileges and help in maintenance and management of the Web-site.
- (iv) It will also be necessary to conceptualise the manner in which further revision in the software to enable insertion of new features, deletion of unwanted links, reorganizing lay-out, cross referencing content for navigation or other such design aspects and procedures associated with such revision may be carried out easily.
- (v) The categorization of information and the design of the content repository structure associated with the website need to be planned such that, instance entries in the repository can be usefully referenced, searched and selected at random. Content labeling and their organisation may also include appropriate meta-tagging scheme to enable

the organisation to have full control over each content types behaviour, display and security and interface backend processes for their updation.

- (vi) It would be appropriate to conceptualize uniform data definitions and metadata standards in consultation with stakeholders and other Govt. Departments to enable interoperability, content reuse and repurposing through information sharing and collaboration of business processes. Standard Electronic Record Formats such as XML, PDF, may be used for documents and data exchange.

## **8.2 AUTHENTICATION AND SECURITY**

Authentication of users is essential to ensure security of the Web-site. For this purpose, three types of privileges will be provided in the software.

- (i) Accessibility to information, documents, applications, forms etc., for public in general without any password.
- (ii) Accessibility to identified sensitive information for selected and registered users.
- (iii) Accessibility for Web Administrators, Content Administrators and Content Managers for maintaining and updating the Website.

Another aspect, which needs to be taken care of, particularly when the Web is being used for e-commerce, is the provision of mechanism to verify the identity of payers and payees and foolproof security arrangements against frauds and misuse. It will also ensure the confidentiality of the parties concerned, the details of Account Numbers, Amount, Credit / Debit Card Numbers etc.,

## **9. DISCLAIMER AND COPYRIGHTS**

The Website will invariably display the following disclaimer:

“Endeavour has been made to make available updated, correct and accurate information. The errors, if any, whenever brought to the notice will be rectified. But, the Ministry / Department will accept no responsibility and liability, of whatever nature, for the correctness of the material on Website. In this regard, the users are advised to verify, in their own interest, the correctness of the facts from the concerned official or person.”

It will also contain clear claim of Reservation of Copyrights for the material displayed on the Web-site, if the Ministry / Department desires so.

## **10. SECURITY AND SECRECY OF INFORMATION**

Utmost care will be taken to ensure that only those information are kept up on the website which can be made public as per Department's own instructions and security instructions issued by Ministry of Home Affairs from time to time. Care will also be taken to ensure that the sensitive matters are dealt with only on stand alone systems and not on the system integrated with internet.

## **11. INFRASTRUCTURE AND TRAINING**

Ministry / Department will make endeavour to provide infrastructure and training to more and more officials to promote true e-culture which is a pre-requisite for achieving the objectives laid down in para-3 above. All the officials including those of the lowest rungs will be made aware of the benefits of ICT tools.

Organizations may need to unlearn attitudes and tendencies for information hoarding, command and control management styles and turf conflicts between perceived competing functional groups. Changing these entrenched behavioral patterns and reorienting staff to collaborate will require explicit motivation or incentives, particularly in the early stages.

Over time, the need for external motivation or incentives will diminish, especially as the value of sharing and collaborating creates its own intrinsic rewards. Examples include performing a task better and with less effort because of collaboration with colleagues or increasing the quality of deliverables because of knowledge sharing within the division / section or workgroup or between departments.

## **12. PROCESS RE-ENGINEERING AND ELECTRONIC WORKFLOWS**

To support effective publishing of current information and delivery of services through the web, the web site design and applications (which may be written in asp, php, javascript etc., with connections to SQL / Oracle database) may need to be interfaced gradually with intranet web applications and electronic processes at the backend to combine workflows,

business logic and information capture from distributed sources within the Department / Ministry.

Transition to an Integrated web enabled environment based on electronic business processes replacing currently paper based processes will be carried out in a strategic manner in order that the ultimate delivery of information and services through the web-site are of real value to the Citizen / Client.

On a reverse cycle, feedback from clients / citizen through the web interface will enable the organization to operate with a realistic citizen(client)-centric perspective leveraging on the needs / requirements of the citizens and stakeholders.