**National Informatics Centre**

**Department of Information Technology**

**Ministry of Communications & Information Technology**

**Government of India**

**Website Management**

**User Relation Management**

**Open Data Platform**

***A Joint Initiative  
 of India & US Government***

ODP Website & URM : Functional Requirements Document

**ODP-Web-URM-FRD**

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# INTRODUCTION

Open Data Platform is envisioned to be a platform for creating and hosting Open Data Websites. The website is intended to be used by Governments and their agencies to publish datasets, documents, services, tools and applications collected by them for public use. It enhances the transparency in the functioning of Government and shall also open avenues for many more innovative uses of Government Data to give different perspective of the situation.

## Purpose

This functional requirements document (FRD) provides functional requirements for the Website Management and the User Relation Management Modules of Open Data Platform. The Program Management Office (PMO) is responsible for the development and implementation of Website to include the process of creating, moderating and publishing content on the website. PMO is also responsible for managing the feedback received through the website.

The requirements described in this FRD shall support the website management as well as automated feedback management through the URM. Website will be available to anyone who has the URL whereas the URM will be available only to authenticated users.

Success is achieved when the content in the website is dynamically published and can continuously evolve when the User Relation Management is in place.

Website will facilitate dissemination of datasets, applications, services and tools which have been contributed by different government organizations. The additional requirements of datasets which are not already available are also captured through the website. All the functional requirements of the website management and URM have been documented in the FRD.

## Scope

This FRD describes the functional characteristics of Website as well as of URM. It documents the dynamic management of the website along with its components following the complete life cycle of content starting from creation to moderation to publishing. Role Management, security compliance as well as accessibility compliance is also addressed.

## Background

During the U.S.-India Open Government Dialogue, Secretary of State Hillary Rodham Clinton and Minister of External Affairs S. M. Krishna announced the U.S.-India Innovation Exchange.

Under the Indo-US collaboration, the two countries had knowledge sharing and technical exchange for a week in which the High Level Functional Requirements of “Data.gov-in-a-Box,” were deliberated and formulated based on the United States’ Data.gov data portal and India’s India.gov.in document portal. Detailed report is enclosed as Appendix A. It will be available for implementation by countries globally, encouraging governments around the world to adopt open data sites.

## References

* US Data.gov – <http://www.data.gov>
* India’s National Portal – <http://india.gov.in>
* National Portal’s Content Management – <http://portalcontent.nic.in> (requires user authentication)

## Assumptions and Constraints

### Assumptions

Following assumptions have been made while documenting the functional requirements.

* All ODP components will be free and open source.
* There is a central PMO responsible for management of the website.
* Website supports 3-tier team for managing whereas URM supports 2-tier team for management apart from administrator.
* PMO of website would be responsible for URM too.
* Dataset Catalog in the Website is populated from the backend by the DMS.
* Feedback related to various catalog will be responded by the respective agency using the URM interface.
* User Authentication would be through LDAP while Role Assignment would be handled by this system.
* ODP should comply to the following standards
  + Guidelines of Indian Government Websites (GIGW)
  + Section 508
  + Open Web Application Security Project (OWASP)
* Operational requirements vary on specifications of the infrastructure ODP is deployed on.

### Constraints

Following constraints have been considered towards the requirements for ODP.

* Website and URM shall have the same system requirements as Drupal 6.x. (see [Drupal’s System Requirements](http://drupal.org/requirements))
* Initially Community module would be running on Drupal Commons and hence would be linked to the existing module.
* A SSL certificate must be installed on web servers for URM.
* Operational requirements are dependent on the actual infrastructure on which the application is deployed.

## Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| **Acronym** | **Full Form** |
| CMS | Content Management System |
| DMS | Dataset Management System |
| IA | Information Architecture |
| LDAP | Lightweight Directory Access Protocol |
| NIC | National Informatics Centre |
| ODP | Open Data Platform |
| PMO | Program Management Office |
| POC | Point of Contact |
| URM | User Relation Management |

# METHODOLOGY

During the week of August 29 – September 2, 2011, a High Level Technical Discussion was held between representatives from the US Government’s GSA team and National Informatics Centre (NIC), Government of India for a knowledge sharing and technical exchange session for the initiative.

High level functional requirements were formulated as given in Appendix A.

There after detailed analysis were carried out respectively by the two teams. A number of best practices followed by other countries were also studied.

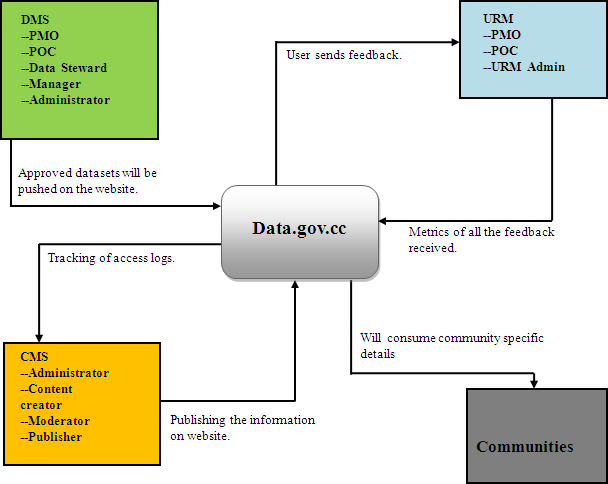
The Open Government Metadata Schema was finalized.

The High level functional requirements were further drilled down and the outcome of which is this functional requirements document of the website management and URM components.

# FUNCTIONAL REQUIREMENTS

# Context

**Functional Blocks**

****

###### Figure 1: Functional Blocks

**User Roles Profile**

**PMO**

Categorize feedback

View Assigned/Forwarded feedback

Assign assigned feedback

Reply assigned feedback

Revert assigned feedback

Forward assigned feedback

Update action status

Print assigned/forwarded feedback

View metrics

**URM admin**

View all Feedbacks

Categorize Feedback

Assign Feedback

Reply Feedback

Revert Feedback

Forward Feedback

Re-assign Feedback

Archive/Close Feedback

Manage Categories

Update action status

Print Feedback

View all Metrics

**POC**

View Assigned/Forwarded feedback

Reply assigned feedback

Revert assigned feedback

Forward assigned feedback

Update assigned action status

Print assigned/forwarded feedback

View Organization metrics

**URM**

###### Figure 2: URM User Roles

**User Roles Profile**

**CMS**

**Content Creator**

Edit Content

Save Content draft

Submit for moderation

Specify expiry date/due days

Receive notification

**Moderator**

Reviews Content

Edit Content

Send to Publisher

Reject Content and send back to content creator

Change Expiry date/due days

**Publisher**

Reviews Moderator Content

Edit Content

Reject Content and send to Moderator

Publishes content

Change Expiry date/due days

**CMS Administrator**

User creation/roles assignment for CMS/URM

Create Content Place holder

No functional role in CMS workflow

###### Figure 3: CMS User Roles

**Architectural Blocks**

DMS/CMS

Drupal-1

URM/CMS  
Drupal-2

Drupal-3 Frontend Installation

DMS

Drupal

DB1

URM/CMS Drupal DB2

Master

URM/CMS Drupal DB3 Slave

###### Figure 4: Architectural Blocks

* System includes three Drupal installations.
* DMS/CMS is the first Drupal installation referred as Drupal-1 in the above diagram. This will be responsible for creation of Dataset Catalogs. This system will be accessible to the administrators within the intranet and will not be accessible over WAN.
* The second Drupal installation referred as Drupal-2 in the above diagram is URM/CMS. This will also have Website functionality. However this installation along with its database instance will only be accessible over the intranet and will not be accessible over WAN.
* DMS/CMS will copy data from its database (DB1) to URM/CMS database (DB2) along with files from the file system. It will use a predefined protocol for carrying out the data transfer.
* URM/CMS will be responsible for managing the content to be published on the Website and the Feedback coming from users of the Website. The database instance for this installation (DB2) will be the master database.
* Master database (DB2) will be selectively replicated to the slave database (DB3). The Website will be accessible over WAN to the www. It will have access to Slave database (DB3) and will read from and write to this database.
* Website will have write access to selected tables on the Master database (DB2). These tables will be related to the feedback workflow where the data entered by the users on the Website needs to be available to the Admin users.
* Limited write access to Master database from the Website ensures data security of the Master data and minimizes the possibility of attacks.

# User Roles

The following basic categories of users are defined as functional, business user roles of CMS (website) and URM.

**Website (CMS)**

* CMS Administrator
* Content Creator
* Moderator
* Publisher/approver

**URM**

* URM Administrator
* PMO
* POC

# CMS Administrator

CMS Administrator is an individual who maintains and administers the CMS of the website. He/she is also responsible to create users and define appropriate roles to the users.

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| U1.1 | Administrator should have the rights to add, edit and delete users |
| U1.2 | Administrator should define roles for all created users. Following roles would be available: Content Creator, Moderator and Approver/Publisher for CMS whereas URM Administrator, PMO, POC for URM. |
| U1.3 | Administrator should be able to assign multiple users with Content creator, Moderator, Approver/Publisher roles. |
| U1.4 | CMS Administrator should not have any functional role in the CMS workflow i.e. Content creation, Moderation and Approval/Publishing. |
| U1.5 | CMS Administrator should be able to create a place holder i.e. any alteration to the IA would be done by the CMS Administrator |

# Content Creator

Content creators are individuals who would be writing/creating and contributing contents to be published on the website.

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| U2.1 | Content creators should be able to access and edit the content in the placeholder specific to IA rights given to them |
| U2.2 | Content creator should be able to write the content and submit for Moderation |
| U2.3 | Content creator should be able to save the content in draft mode before submitting for moderation |
| U2.4 | There should be provision to enter/mention expire date for any content it creates. It would accordingly be moderated, if required, through the workflow |
| U2.4 | Content creator should get notification on expiration of content |
| U2.5 | Expiry of content based on due date. Before **X** number of days (content specific variable to be defined in the workflow) of the validity date ends a notification to be sent to the content creator for review/update and this content to appear on his/her dashboard marking as (due for review) |

# Moderator

Moderators are the individuals whose role is to moderate the content written by content creators and either reject or send it forward for approval/publishing.

| **Req. Id** | **Requirement Definition** |
| --- | --- |
| U3.1 | There could be multiple Moderator roles specific to IA |
| U3.2 | Moderator should be able to moderate contents specific to his/her IA rights |
| U3.3 | When Moderator logs in, user should see contents available specific to its IA for moderation |
| U3.4 | Moderator should be able to moderate (may also edit) the contents written by content creators and be able to reject it |
| U3.5 | Moderator should be able to moderate the contents written by content creators and be able to send it forward for publishing |

# Approver/Publisher

Approver is an individual whose role is of publishing the content moderated by the moderator.

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| U4.1 | All contents due for approval are to be listed under this role |
| U4.1 | Publisher should be able to select the content and approve |
| U4.2 | Publisher should be able to publish ANY content that has undergone moderation |
| U4.3 | Publisher should be able to able to reject the content and send it back to the moderator |

# URM Administrator

URM Administrator is an individual who manages and administrates the feedbacks and its workflow.

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| U5.1 | URM Administrator shall have functionalities to add, edit, rename and delete feedback categories. For example: Content Related, Suggestions etc. Categories will be of one level. |
| U5.2 | URM Administrator should be able to add or edit Preformatted text against each feedback category. |
| U5.3 | URM Administrator should be able to define contact categories which will be displayed in contact us form |
| U5.4 | URM Administrator should have access to all the feedbacks |
| U5.5 | URM Administrator should be able to assign an owner to every feedback. Feedback owners could be self (URM Administrator), PMO or POC user. |
| U5.6 | It should be mandatory for the URM Administrator to select the category for the feedback while saving through the feedback details page form. |
| U5.7 | URM Administrator should be able to respond/reply to the feedback once she/he has been assigned any feedback |
| U5.8 | URM Administrator should be able to forward the feedback to other users from PMO and/or POC or other emails. |
| U5.9 | URM Administrator should be able to add comments/notes to the feedback |
| U5.10 | URM Administrator should be able to view the replied feedbacks and mark it as archived if any action needs to be taken on the feedback at a later point of time or else he/she can close the feedback. |
| U5.11 | URM Administrator should be able to reassign a replied feedback if the URM Administrator is not satisfied with the reply. |
| U5.12 | URM Administrator should be able to define a delay time in system configuration and also modify it at individual feedback level. |
| U5.13 | URM Administrator should be able to select action status for every feedback. Following values would be available in the action status drop down: Already Published, Actionable, Potentially Actionable, Not actionable – Regulatory, Not actionable – Unclear, Not actionable – Other (these are to be dynamically created/modified using an interface) |
| U5.14 | URM Administrator should be able to change category of the feedback which have already been categorized and processed on feedback detail page. |
| U5.15 | URM Administrator should be able to print detailed fact sheet for selected feedbacks. |
| U5.16 | URM Administrator should be able to filer the listed feedback with criteria such as Category of Feedback, Date Wise, Source Wise |
| U5.17 | URM Administrator should be able to see various metrics, charts, statistics providing details on feedback as mentioned in metrics section FR 17.3.5 |

# Program Management Office (PMO)

PMO designated official who is responsible for the taking action and respond/forward the feedback. In order to take action or implement the feedback he/she may take help of the other PMO core group members.

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| U6.1 | PMO should have access to all the feedbacks that has been assigned to him/her |
| U6.2 | PMO should be able to update the category, if needed. Feedback can be linked to multiple categories. |
| U6.3 | PMO should be able to respond/reply to the feedback once user has been assigned with a feedback. |
| U6.4 | PMO should be able to forward the feedback to other users from POC. He/she can take input from any other stakeholders and/or PMO core group members. |
| U6.5 | PMO who has been assigned to the feedback or to whom the feedback has been forwarded, should be able to add comments/notes to the feedback |
| U6.6 | PMO should be able to select response category for the feedbacks assigned to him/her. Following values would be available in the response category drop down: Already Published, Actionable, Potentially Actionable, Not actionable – Regulatory, Not actionable – Unclear, Not actionable – Other |
| U6.7 | PMO should be able to print detailed fact sheet for selected feedbacks from the list of feedbacks assigned to him/her. |
| U6.8 | PMO should be able to filter the listed feedback with criteria such as Category of Feedback, Date Wise, Source Wise |
| U6.9 | PMO should have access to be able to see various metrics, charts, statistics providing details as mentioned in 17.4 |
| U6.10 | PMO should be able to browse across the feedbacks using the previous and next buttons |

# Point of Contact (POC)

POC users are group of individuals from the participating agencies who can respond/forward and/or take action on the feedbacks assigned to them.

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| U7.1 | POC users should have access to all the feedbacks that has been either assigned or forwarded to the concerned user |
| U7.2 | POC user should NOT be able update the category |
| U7.3 | POC user, who has been assigned the feedback, should be able to revert/return the feedback back to the URM Administrator, if the user not concerned with the assigned feedback |
| U7.4 | POC user should be able to respond/reply to the feedback once she/he has been assigned a feedback |
| U7.5 | POC user, who has been assigned to be the owner of the feedback, should be able to forward the feedback to the URM Administrator, other users from the same POC or to other emails. |
| U7.6 | POC users, who has been assigned the feedback should be able to add comments/notes to the feedback |
| U7.7 | POC users should be able to select response category for the feedbacks assigned to him/her. Following values would be available in the response category drop down: Already Published, Actionable, Potentially Actionable, Not actionable – Regulatory, Not actionable – Unclear, Not actionable – Other |
| U7.8 | POC users should be able to print detailed fact sheet for selected feedbacks from the list of feedbacks assigned to him/her. |
| U7.9 | POC users should be able to filter the listed feedback with categories such as Category of Feedback, Date Wise, Source Wise |
| U7.10 | POC users should have access to be able to see various metrics, charts, statistics providing details on his/her feedback |
| U7.11 | POC user should be able to browse across the feedbacks using the previous and next buttons |

# Data Flow Diagrams

**Content Creator**

🡪Writes/Edits Content

🡪Specifies Expiry Date and Days for Notification

**Moderator**

🡪Moderates Content

🡪Can change Expiry Date and/or Days for Notification

**Publisher**

🡪Reviews Content

🡪Can change Expiry Date and/or Days for Notification

Approve Content?

Approve Content?

**Data.gov.cc**

🡪Content appears on website

Alert Date Reached?

🡪Notification is sent to the Content Creator

🡪Appears in Content Creator’s dashboard for review

Action Taken?

**Data.gov.cc**

🡪Content continues to be on the website

No

Yes

No

Yes

No

Yes

No

Yes

### CMS Workflow

###### 

###### Figure 5: CMS Workflow

### Feedback Workflow

User sends feedback

Admin to Categorize and Assign

Assignee reviews the feedback

Belongs to Assignee?

Assignee replies to the end user

Feedback Approved?

Feedback is closed

No

Yes

Admin Reviews the Feedback

Feedback is archived (for further action)

Yes

No

###### Figure 6: Feedback Workflow

# Logical Data Model/Data Dictionary

**Metadata representing Feedback Workflow**

###### Feedback Category

|  |
| --- |
| Feedback\_Category\_Id |
| Category\_Description |
| Preformatted\_Text |
| Feedback\_Type |

###### Feedback Response Category

|  |
| --- |
| Response\_category\_Id |
| Response\_Description |

###### Feedback Status

|  |
| --- |
| Status\_Id |
| Status\_Description |

###### Feedback

|  |
| --- |
| Feedback\_Id |
| Sender\_email |
| Sender\_name |
| Feedback\_text |
| Replied\_by |
| Forwarder by |
| Feedback\_Category\_Id |
| Reponse\_category\_Id |
| Status\_Id |
| Feedback\_date |
| Replied\_date |

###### Feedback Notes

|  |
| --- |
| Feedback\_Notes\_Id |
| Feeback\_Id |
| Note |
| Date\_created |

###### Feedback Forwards

|  |
| --- |
| Forward\_Id |
| Feedback\_Id |
| Forwarded\_user\_Id |
| Forwarded\_email |
| Date\_Created |

# Functional Requirements

# Website

# Home Page

| **Requirement Id** | | | **Requirement Definition** |
| --- | --- | --- | --- |
| FR1 | | | **Header Links (items would be configurable)** |
|  | FR1.1 | | Following links should be part of the header.   * Social plug-ins * RSS * Global search |
| FR1.2 | | Following links should be available in the header for accessibility options.   * Skip to navigation (handled programmatically and not displayed) * Skip to main content (handled programmatically and not displayed) * High and low contrast& Color themes * Customizing font size |
| FR2 | | | **Featured Region**  The featured region on the homepage could be divided into more than one section such as:-   * Rotating panels * Recent Catalogs, Popular Catalogs and Major Events as tabs |
|  | FR 2.1 | | **Rotating Panel**   * CMS * In the CMS, there should be an option to create/suspend/delete panels to be displayed on the homepage. * Each of the panels should have title, content, description and image upload. * Frontend * The panels should have sliding effect. * It should have buttons for previous, play/stop and next that will enable the user to control the behavior of the panels. * The main content for the panel should be an image and the panel title and description should be added as “alt” attribute for the image. * In the JavaScript disabled mode, it should only show the panel title and description. |
| FR 2.2 | | **Recent Catalogs, Popular Catalogs and Major Events**  These options could be displayed as tabs.   * CMS * Admin should be able to define the tabs for this block (max=3 and min=1). * The view section for each tab should be configured by admin.   + Name of each tab   + No. of items to be displayed * Recent and Popular Catalogs should have dataset list and admin should be able to define the number of items required in the dataset list. * Major Events could have static content which should be editable by admin or it should be able to aggregate data from the external RSS link. Link should be defined in admin. * Frontend * Recent and Popular Catalogs should display the items of each type of catalog (Dataset, Apps and Document) in a round robin fashion as a slide show. * Major Events should display the text added in CMS or the Aggregated RSS feeds without any animation effect. |
| FR3 | | | **Navigation Bar**   * CMS * The admin should be able to define the links and link name for the main navigation. * Frontend * Navigation links to enable to access the inner pages within the website. * Following links should be a part of the navigation.   + Data Catalogs   + Metrics   + Communities   + Featured Gallery   + Open Data Sites   + What’s New |
| FR4 | | | **Home Page**   * CMS * Admin should be able to configure the home page components * Admin should also be able to configure layout * Each of the components should have title, image, description and link to the associated page. * Admin should able to customize the visual appearance of the layout in terms of size, background color and the text color. * Frontend * Components added by the admin should be displayed below the navigation bar. |
| FR 5 | | | **Footer** |
|  | | FR5.1 | * CMS * The admin should be able to define links to be displayed in the footer. * Frontend * Following links should be displayed in the footer which should be configurable   + Help   + About us   + FAQ   + Terms of use   + Link to us   + Add to favorites   + Tell a friend   + Contact us   + Accessibility Statement |
| FR5.2 | * Sitemap should be displayed in the expanded format in the footer on the home page * A link to the sitemap should be displayed and sitemap in the expanded format should not be displayed on pages other than home page |

# Header Links

| **Requirement Id** | | **Requirement Definition** |
| --- | --- | --- |
| FR6 | | **Header Links Functionality** |
|  | FR6.1 | **Theme Selector**   * CMS * Information Architecture is configurable through Admin Panel. * Multiple themes should be provided for the admin to select from. * All themes should be based on the information architecture. * There should be a provision for adding new design layout * There should be a provision to edit/update following components of the theme.   + Header image   + Logo image   + Flag image   + CSS: With changes to fonts and colors * Admin should be able to select a design layout and its associated theme from the available pool. * Frontend * The selected layout and theme by the admin should be reflected on the frontend. |
| FR6.2 | **Social Plugins**   * CMS   + The admin user should be able to define the source code (JavaScript and HTML code) for the AddThis social bookmarking plugin. * Frontend   + The source code added by the admin should be displayed in the footer.   **Notes:** When the website is re-distributed to other countries, they should create new AddThis account, which will enable them to keep a track on share statistics. |
| FR6.3 | **RSS**   * CMS:   + Admin should define the different content types that will be exposed as RSS feeds. * Frontend: * In frontend, user should be able to access the different RSS feeds selected through the admin * On the RSS feeds page, there should be a list of feeds exposed in admin. The three different feeds   + Latest data sets,   + Latest Apps/Tools   + Latest document. |
| FR6.4 | **Global Search**   * Frontend   + Form to search the contents within the website and generate the search results.   + The search results page should be able to filter or sort result list as well as display the search results. * CMS   + Provision in CMS to define the position of filtered result as well as displaying the search results. |
| FR 6.4.1 | **Filtering/Sorting**  The following are the options to filter the search results:   * The search result can be **Sorted by**   + Relevancy relevant to search keyword   + Title – alphabetic   + Type Category – alphabetic   + Last Updated – chronological   + Rating – highest to lowest * Filtered by: Filtering the search results with the available catalog type and the content suggested by users.   + Dataset Catalogs (no of results)   + Document Catalogs (x)   + APP/Tool/Service Catalogs (x)   + Data Requests by users (x) * Filter by Available Resource Formats: The resource formats which are associated with each of the datasets.   + [ZIP (68)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AZIP)   + [TXT (45)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3ATXT)   + [NetCDF (13)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AnetCDF)   + [Unverified (8)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AUnverified)   + [CSV (7)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3ACSV)   + [XLS (7)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AXLS)   + [HTML (3)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AHTML)   + [PDF (3)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3APDF)   + [RDF (2)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3ARDF)   + [Csv (2)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3Acsv)   + ZIP/RAR/TAR (x)   + TXT (x)   + CSV (x)   + XLS (x)   + HTML (x)   + PDF (x)   + RDF (x) * Filter by Publisher/Owner Agency/Sub-Agency: Filtering the results based on the different agencies and their sub-agency.   + Agency 1(x)     - Sub agency1(x)     - Sub agency2(x)     - Sub agency3 (x)     - ……     - ……   + Agency 2(x)   + Agency 3(x)   + Agency 4(x)   + …….   + ……. * Filter by States Within the Country: Filtering the results based on the different states of the datasets   + State 1 (x)   + State 2(x)   + State 3(x)   + ……. |
| FR6.4.2 | **Displaying search results**   * Based on the keywords and filters selected the search results would be displayed. * Search results on “xyz” to display the following attributes of the result set: * Title with link to data * Type * Rating * Description * Link to agency/sub-agency * Below the search result list, there should be a pagination option to navigate between different search results lists. It should show the list of pages in with previous and first before the page list and next and last should be appended after the page list. * After the user navigates on the second page, the first and the previous options should be available. * By default it should display total 10 items per search result list. * If the list does not have more than 10 search results, the pagination option should not be shown. |
| FR6.5 | **Advanced Search - Frontend**   * The link for advanced search option should be visible on the search results page. * The advanced search should have similarity to [www.data.gov](http://www.data.gov) page. * It should have the ability to search content across the site. * The following options should be there for advanced search page.   1. All of these words: It should have the ability to search *all the keywords* mentioned in the textbox in any part of the page -meta data or in title of the page. There will be option in dropdown to select ‘any part of page’ or ‘title of page’.   2. Exact phrase: It should have the ability to search *exact matching keywords* mentioned in the textbox in any part of the page – meta data or in title of the page. There will be option in dropdown to select ‘any part of page’ or ‘title of page’.   3. Any of these words: It should have the ability to search *any of available keywords* mentioned in the textbox in any part of the page – meta data or in title of the page. There will be option in dropdown to select ‘any part of page’ or ‘title of page’.   4. None of these words: It should search within the website which does not have the matching keywords. In any part of the page – meta data or in title of the page. There will be option in dropdown to select ‘any part of page’ or ‘title of page’.   5. File type: Ability to search the keywords in the prescribed file format. This search option should be in a drop down format and it should have following options:      + Adobe PDF, Microsoft Excel, Microsoft PowerPoint, Microsoft Word, Text   6. Results per page: User should be able to customize results per page based on the options provided in the drop down. It should have the following options: 10,20,30,40 and 50. * The first 4 advanced search options should have a text field to specify the keywords and drop down box with two options - any part of the page and in title of the page.   Example: <http://search.usa.gov/search/advanced?affiliate=datagov&enable_highlighting=true&locale=en&m=false&page=-1&query=INdia> |
| FR6.6 | **Accessibility Options**.   * Frontend: Following options should be available to the user to change website formatting based on the different accessibility guidelines * Font size: Option for increasing, decreasing and setting back to normal mode option. * Contrast Mode: Option to toggle the website in contrast and normal mode. * Links for skip to main navigation and skip to main content (not to be displayed but handled programmatically ) * Option for different colors and high contrast.   Example: <http://www.mit.gov.in/>, <http://finmin.nic.in/> |

# Main Navigation

|  |  |
| --- | --- |
| **Requirement Id** | **Requirement Definition** |
| FR7 | **Navigation Bar**   * CMS * The admin should be able define the links and link name for the main navigation. * Frontend * Navigation links to enable to access the inner pages within the website. * Following links should be a part of the navigation.   + Catalogs   + (Datasets or Documents or APPs)   + Metrics   + Communities   + Featured Gallery   + Open Data Sites   + What’s New |

# Catalogs

| **Requirement Id** | | **Requirement Definition** |
| --- | --- | --- |
| FR8 | | **Catalogs**   * CMS * The data for the catalog page will be sourced from DMS * Admin should be able to decide the position of the filtered results and the dataset list results. This functionality should work similarly to positioning of search results page. * Frontend * There could be multiple type of catalogs (configurable through Admin) such as   + Raw Data   + App/Tools/Service   + Documents * These type could be part of main menu or sub menu as defined in the IA * All the types of catalog which have been configured should be displayed as submenu if more than one type under the “Data” menu of the main navigation. * Each of the different catalogs page should contain the content. This should be displayed as per content added by the admin in the CMS.   Example: http://explore.data.gov/catalog/raw/ |
|  | FR8.1 | * Search box should appear. It should only have keyword search on specific datasets page. * Links for quick searches should be displayed. The search filters for this will be as per section 8.1.2,8.1.3,8.1.4,8.1.5,8.1.6 and 8.1.7 * Option is to be provisioned to define the number of results which we want to display (refer to 8.2). * On selecting any of the filter options (as mentioned in8.1.2, 8.1.3, 8.1.4, 8.1.5, 8.1.6 and 8.1.7 section), the datasets relevant to the selection should be displayed. |
| FR8.1.1 | **Search Box**  Searching the datasets on specific keywords. Search results needs to be listed. |
| FR8.1.2 | Following options should be provided for sorting the dataset list:   * Relevancy – relevant to search keyword * Title – alphabetic * Type Category – alphabetic * Last Updated – chronological * Rating – highest to lowest |
| FR8.1.3 | Following options should be provided for filtering the dataset list based on different catalogs   * Dataset Catalogs * Document Catalogs * APP/Tool/Service Catalogs * Data Requests by users |
| FR8.1.4 | Following options should be provided for filtering the dataset liston different available resource formats.ZIP (68)TXT (45)NetCDF (13)[Unverified (8)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AUnverified)   * + [CSV (7)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3ACSV) * [XLS (7)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AXLS) * [HTML (3)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3AHTML) * [PDF (3)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3APDF) * [RDF (2)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3ARDF) * [Csv (2)](http://data.gov.uk/search/apachesolr_search/climate?filters=sm_resource_formats%3Acsv) * ZIP/RAR/TAR * TXT * CSV * XLS * HTML * PDF * RDF * Unverified/Unidentified |
| FR 8.1.5 | Filter by Publisher/Owner Agency/Sub-Agency   * Agency1 * Agency2 * Agency3 * ……. |
| FR8.1.6 | Filter by States within the country   * State 1 (x) * State 2(x) * State 3(x) * ……. |
| FR8.1.7 | Filtering the datasets based on cities and local bodies   * Local Body 1(x) * Local Body 2(x) * Local Body 3(x) * ……. * ……. |
|  | FR8.2 | Some of the options to be provisioned to define the number of results which we want to display are given below   * Dropdown to sort the dataset. * Dataset result. * Pagination. * Suggest dataset link. |
| FR8.2.1 | * Dropdown with below options to sort the dataset * Most Relevant * Most Accessed * Most Rated * Most Commented * Alphabetical * Newest * Oldest * By default Most Relevant option should be selected |
| FR8.2.2 | The list of datasets should display attributes like:   * Sl. No. * Name/Title of the Dataset: Hyperlinked Title of the dataset leading to metadata description page, name of agency/sub-agency contributed, category of dataset and brief description on the dataset * Popularity: No of views of the dataset * Rating: Visitor rating in the scale of one to five * File Formats: Small icons, w.r.t. available file formats and the Alt Tag to show ‘Download’. On clicking it should flash browser control of saving the dataset in the client machine. |
| FR8.2.3 | **Pagination**   * Should display 1 of xxx pages (out of y,yy,yyy records) * Along with pagination format “**<<Previous 1 2 3 4 5 6 7 8 9 10 Next>>**” * Option to display no. of entries on a page to be decided by the visitor using a dropdown menu with options viz. 10, 25, 50 and 100 on top as well as on the bottom of the page. |
| FR8.2.4 | **Metadata Description Page**   * On selection of a specific dataset it should display metadata fields with available file formats to download showing file type and file size. * The dataset title and brief description of the dataset should be displayed. * Sharing the data set using Facebook, Twitter, Email, Print (only icons of these options) will be given. In this line specially designed icons on Contact Owner, Rate, Discuss and Embed should be displayed. On selecting any of these options the following should be displayed.   Example:<http://explore.data.gov/Foreign-Commerce-and-Aid/U-S-Overseas-Loans-and-Grants-Greenbook-/5gah-bvex> |
| FR8.2.5 | **Contact Owner**: It should display following parameters to be filled by the user.   * Purpose/Reason of contacting the owner. This should be a drop down with following options * Offensive content * Copyright violation * Spam or Junk * Personal Information * Other – default * Subject: This should be the combination of dataset title and the purpose of contact. * Short Message. * Email Id of the sender * Verification code/text (Captcha for security purpose). |
| FR8.2.6 | **Rate**: Users should be allowed to rate the metadata in the scale of 1 to 5 (in stars). Full or half stars may also be chosen.   * The user will rate a dataset on each of the three aspects viz. Quality, Accessibility and Usability. * Once done from a machine for a given dataset cannot be again rated in next **XX** no. of hours and text inputs/ observations on the dataset/metadata may also be given. The number hours should be configurable by the Administrator. * The overall rating should be displayed wherever Rating is to be shown. |
| FR8.2.7 | **Discuss**   * Threaded discussion component should be called on selection of this option. * The conversations should be around the specific dataset opened. Initially it should display a button showing Add Comments. * The following fields should be opened as the user clicks on Add new comment: Name, Email, Comments and Captcha. |
| FR8.2.8 | **Embed**   * It should provide the code that users can use in their website for displaying this dataset and related activities around this dataset. * This is to consume this dataset without physically owning the same. * It should have option to choose the size of the area (pre-defined as well as custom size) where you want to place this web service. * It should have Done and Preview action buttons. |
| FR8.2.9 | **Download**   * User should be able to download datasets. Following file formats should be available for download viz. * XML, XLS, XLSX, PDF etc. (for datasets) and DOC, DOSX, PDF (for documents) and * Binary file formats, HTML, XHTML, ASPX etc. (for APPs, Tools and Services). * The download datasets option should also capture the number of times users have downloaded the datasets. |
| FR8.2.10 | **Suggest a Dataset**   * Link should call/open the “Suggest Dataset” component and allow user to give suggestions. * The suggested dataset will be listed in the URM Module. * The fields required for suggest dataset form are Name, email and suggest dataset description field.   Example: <http://explore.data.gov/nominate> |

# Metrics

| **Requirement Id** | | **Requirement Definition** |
| --- | --- | --- |
| FR9 | | **Metrics**   * Open source charting tool is to be used to represent the following mentioned metrics/reports and display as charts. * This section should have following Sub-sections for displaying metrics and charts on following classification/sub-classifications.   1. Agency/Sub-Agency Publications      1. Agency Wise      2. Month Wise      3. Category Wise      4. High Value and Featured Datasets   2. Suggested Datasets/Documents/APPs/Tools/Services      1. Already Published (in % terms)      2. Actionable (%)      3. Potentially Actionable (%)      4. Not actionable – Regulatory (%)      5. Not actionable – Unclear (%)      6. Not actionable – Other (%)   3. Visitor and Usage Statistics  1. Day Wise Visitors For Previous Month 2. Month Wise Visitors For Previous Year 3. Country/ State/Province/City Wise Visitors 4. Number Of Downloads By Category/Organization 5. Number Of Downloads For Year And Month Wise 6. Top 10 Datasets    * Highest Rated 10 Datasets    * Most Downloaded 10 Datasets    * Most Recently Added 10 Datasets    * Most Viewed 10 Datasets  * The metrics page should be equivalent to data.gov metrics page   .  Example: <http://www.data.gov/metric> |
|  | FR9.1 | In the URM module, there should be a provision to mark a flag for each suggested feedback. The pie chart needs to be created based on the different flags marked for suggested feedback.  Suggested Datasets/Documents/APPs/Tools/Services   * Already Published (in % terms) * Actionable (%) * Potentially Actionable (%) * Not actionable – Regulatory (%) * Not actionable – Unclear (%) * Not actionable – Other (%)   Example: <http://www.data.gov/suggestdataset> |
|  | FR9.1.1 | **Agency Wise**   * It should display a page with following headings (configurable through the admin). * Agency/Sub-Agency/Organization name * Raw Data Sets (High Value) * Documents (High Value) * APPs/Tools/Services (High Value) * Total (High Value) * Date of Last Submission”. * Along with total datasets, high value datasets should be provided in brackets. * User should be able to sort the list using any of these table headings. * Proper pagination and option to display number of entries per page should be provided. * Page and no. of entries should be shown appropriately. * A Summary should be provided with column and row totals.   On clicking any of these Agency/Sub-Agency/Organization links it should open another page having Tabs on “Raw Dataset Catalogs, Document Catalogs, APP/Tool/Service Catalogs”. Features given below as **Annex-I - http://www.data.gov/list/agency/20/0/catalog/raw/page/1/count/50**  **Annex-I**   * The page under any of these tabs should list down all available entries (with hyperlinked to metadata description page) in a tabular format with columns such as “Name/Title, Rating, Agency/Sub-Agency, Category”. * The brief description of the Catalog entry should be displayed * The list can be sorted using the any of these table headings. * Proper pagination and option to display number of entries per page should be provided. * Page and no. of entries are also to be shown appropriately * Ratings and number of votes should be there in the Ratings column |
|  | FR9.1.2 | **Month Wise**   * It should display a page having a metric of information on month wise datasets published. These should be displayed for last one year. * On selection of Year from the dropdown box data of the selected year (month wise) should display with an additional column for total figures and a row for displaying aggregates. * These numbers/figures should be hyperlinked. * On clicking any of these hyperlinks it should open another page having Tabs on “Raw Dataset Catalogs, Document Catalogs, APP/Tool/Service Catalogs”. Features given below as **Annex-I** above (FRD 9.1.1).   Example:  <http://www.data.gov/metric/federalagency/datasetpublishedpermont> |
|  | FR9.1.3 | **Category Wise**   * It should display a page having a separate charts on different catalogs (Raw Datasets, Documents, * APPs/Tools/Services) and legends on category wise published catalogs. * These categories are defined as controlled vocabulary for meta-tagging catalogs. These should be displayed as on date. * Provision for selection/filtering year wise from use of dropdown box. * The categories can be limited to 10 most contributed datasets and rest to be clubbed into other category. * The charts to be drawn using an Open Source Tool/API/Component most suited for Drupal 6 environment.   Example:  <http://www.data.gov/metric/federalagency/datasetbycategory> |
|  | FR9.1.4 | **High Value and Featured Datasets**   * It should display a page having a separate charts on different catalogs (Raw Datasets, Documents, APPs/Tools/Services) and legends on Total, High value and Featured Datasets published. * These should be displayed for as on date. Provision for selection/filtering agency wise, category wise and year wise from use of dropdown boxes. * The charts to be drawn using an Open Source Tool/API/Component most suited for Drupal 6 environment. |
|  | FR9.2 | **Suggested Datasets/Documents/APPs/Tools/Services:** It should display a page having a pie chart on suggested datasets under classifications mentioned under *xyz*.   * This page should have provision to display some introductory content. * This page should also have provision to receive **“Suggest Datasets”** from the visitors. Following inputs should be taken:   1. input text boxes for email and   2. multiline text box for entering suggestions * Necessary security related issues to be taken care.   Example: <http://www.data.gov/suggestdataset> |
|  | FR9.2.1 | **Day Wise Visitors for Previous Month:** It should display a page having bar charts on each day of the previous month.   * Provision for selection/filtering other month’s visitor data by use of a dropdown box. * The server Access Log may be used to plot this chart * The charts to be drawn using an Open Source Tool/API/Component most suited for Drupal 6 environment.   Example:  <http://www.data.gov/metric/visitorstats/dailyvisitorstatistics/September-2011> |
|  | FR9.2.2 | **Month Wise Visitors for Previous Year:** It should display a page having bar charts on each month of the last one year (starting from just previous month).   * Provision for selection/filtering other calendar year’s visitor data by use of a dropdown box. * The server Access Log may be used to plot this chart * The charts to be drawn using an Open Source Tool/API/Component most suited for Drupal 6 environment.   Example:  <http://www.data.gov/metric/visitorstats/monthvisitorstats> |
|  | FR9.2.3 | **Country/ State/Province/City Wise Visitors:** It should display  separate pages (tabs) having a bar charts on top 10 visiting   * Countries * States/Provinces within the implementing country * Cities within the implementing country * The server Access Log may be used to plot this chart * The charts to be drawn using an Open Source   + Tool/API/Component most suited for Drupal 6 environment.   Example:  <http://www.data.gov/metric/visitorstats/countrystatistics/September-2011> |
|  | FR9.2.4 | **Number Of Downloads By Category/Organization:** It should display separate pages (tabs) having a list on no. of download by   * Category * Agency/Sub-Agency/Organization * The list should be shorted by any of the column headers (Category or Agency and downloads) * The pagination and no. of entries per page could also be decided by the visitor using a dropdown menu with options viz. 25,50,100 * The server/database Access Log may be used to plot this chart   Example:  <http://www.data.gov/metric/visitorstats/monthlyredirectbydatacategory> |
|  | FR9.2.5 | **Number Of Downloads For Year And Month Wise:** It should display a page having bar charts on each month of the last one year (starting from just previous month). Provision for selection/filtering other calendar year’s visitor data by use of a dropdown box.   * The server/database Access Log may be used to plot this chart * The charts to be drawn using an Open Source Tool/API/Component most suited for Drupal 6 environment.   Example:  <http://www.data.gov/metric/visitorstats/monthlyredirecttrend> |
|  | FR9.2.6 | **Top 10 Datasets:** It should display a page having a drop down box containing following options.   * Most Downloaded 10 Datasets (All Time) * Most Downloaded 10 Datasets (Last 30 days) * Most Downloaded 10 Datasets (Last one year) * Most Recently Added 10 Datasets * Highest Rated 10 Datasets * Most Viewed 10 Datasets   The list of the above results should be under column headers viz. Sl. No., Title, Agency/Sub-Agency, Category, No. of Downloads and Avg. Overall Rating.   * The server/database Access Log may be used to plot this chart * The charts to be drawn using an Open Source Tool/API/Component most suited for Drupal 6 environment.   **Ref Link:**  **http://www.data.gov/metric/visitorstats/top10datasetreport** |
|  | FR9.3 | Allow users to download any of these reports in PDF, CSV or  Excel format |

# Communities

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| FR10 | **Communities**  It should link to the existing and operational Communities module developed using Drupal Commons. |

# Featured Gallery

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| FR11 | **Featured Gallery (Datasets, Documents, APPs/ Tools/Services)**   * CMS * Provision in the DMS has been built in to mark a catalog as “Featured” and “High Value”. * Admin should have list of Featured and High value  catalogs in CMS * Admin should be provided with an option to be able to select or deselect from above list and assign to featured gallery * Admin should be able to upload graphic image and add text for each of  catalog assigned to featured gallery * Frontend * This page should display the featured catalogs that have been selected in CMS as mentioned above. The rotating panel should be in line with the one shown in <http://www.data.gov/pastfeatureddatasets>. * These panels should be linked to the specific metadata description page. This page should be similar to the one explained in Metadata Description Page section in Catalogs menu with options to rate or download the dataset, if required and also to suggest a dataset. * There should be an area to display the text entered by the admin from CMS. |

# Open Data Sites

| **Requirement Id** | | **Requirement Definition** |
| --- | --- | --- |
| FR12 | | **Open Data Sites Across the Globe**   * CMS * Admin should be able to add information about Open Data Sites as follows.   + Open Data Site URL   + Country, State within the Country, City/Local Body * Admin should have the facility to map Open Data Sites to the respective region on a graphical map. * Frontend * Number of Open Data Sites published/available under different classifications (configurable through Admin)should be displayed such as:   1. International Sites (nos.)   2. Agencies/Sub-Agencies (nos.)   3. States Within the Country (nos.)   4. Cities/Local Bodies (nos.) * Classifications should be hyper Linked. * Display of “International Open Data Sites” should also be through an interactive Open Source Map and List of countries with their flags. * Clicking on any country should take user to the respective country’s ODP site. User should be alerted while moving away from the the current website. User should be given an option to close this pop up and stop from navigating to the new page.   Example: <http://www.data.gov./opendatasites> |
|  | FR12.1 | **International Sites (nos.)**   * On clicking the hyperlinked “International Sites (nos.)”, the Open Source World Map, with country boundaries should be displayed. * Clicking on any country should take user to respective country site. User should be alerted while moving away from the current website. S/he should be given an option to close this pop up and stop from navigating to the new page. |
|  | FR12.2 | **Agencies/Sub-Agencies (nos.)**   * On clicking hyperlinked “Agencies/Sub-Agencies (nos.)” user should be taken to the metric page displaying data as defined in the metric section above.   Example: <http://www.data.gov/metric> |
|  | FR12.3 | **States Within the Country (nos.)**   * On clicking the hyperlinked “States within the Country (nos.)” user should be taken to another page displaying the Country Map with State boundaries. * Cities should be marked as a bullet. * On clicking any of these state/city should take the user to the state/city specific open data website.   Example: <http://www.data.gov/statedatasites> |
|  | FR12.4 | **Cities/Local Bodies (nos.)**   * On clicking the hyperlinked “Cities/Local Bodies (nos.)” user should be taken to another page displaying the Country Map with State boundaries * Cities should be marked as a bullet. * On clicking any of these state/city should take the user to the state/city specific open data website. * Refer to: <http://www.data.gov/statedatasites> * Clicking on hyperlinked “States within the Country (nos.)” or “Cities/Local Bodies (nos.)” takes the user to the same page. |

# What’s New

| **Requirement Id** | **Requirement Definition** |
| --- | --- |
| FR13 | **What’s New**   * CMS * CMS should have a provision for the admin to add title, image, description and link to the data blocks. * Admin should able to customize the visual appearance of the block like the block size, background color and the text color using css. * Arrangement/layout of the page can be changed as and when desired by the admin. These could be in combination of running text under Heading Level 1, Heading Level 2 and in blocks (containing banners, buttons, etc.) or either of the options * HTML inside the blocks can be changed by admin as per requirement. * There should be section where RSS feeds can be configured by admin, to fetch feeds from various sources. * Layout of this page should be in line with http://www.data.gov/whatsnew * Frontend * Free text content and associated image uploaded by admin from CMS should be displayed as per the page layout. * Provision should be there to display the title, image, description mentioned by the admin from CMS under different captions. * Clicking on the different captions should take the user to the respective links as defined by admin through CMS. * RSS feeds configured by admin should be fetched and displayed. |

# Footer Links

| **Requirement Id** | | **Requirement Definition** |
| --- | --- | --- |
| FR14 | | **Footer Links Functionality – (Footer links to be configurable through the Admin.)** |
|  | FR14.1 | **Help**   * CMS * The help section and associated pages should be editable in the admin. * Frontend * Help section should be a brief tutorial page which should have different sections and associated pages links. * Page link about brief tutorial of how to use the website. * Complete details on the following aspects should given in separate pages as follows * Various Sections and their utility * Accessibility Aspects and Screen Reader Access * Effective use of the Search Facility * Use of Various File Formats * Specification for Promotional Banners * Using Choose Themes for the Website |
| FR14.2 | **About Us**   * CMS * The about us page should be editable in the admin. * Frontend * It should display the content added by the admin. |
| FR14.3 | **FAQ**   * CMS * In admin, user should be able to define the questions and answers related to that. * Answers could be text or streaming media (audio or video file) uploaded in CMS. * Frontend * Page with the list of all possible questions and answers related to that. * Some of the FAQ questions are answerable by audio/video medium**.** It should stream the audio or video in the player. |
| FR 14.4 | **Terms of use:**   * CMS * The Terms of use page should be editable in the admin. * Frontend: * Content added by the admin should be displayed. * This page should typically contain a Disclaimer Statement along with Privacy Policy, Data Policy and Moderation of Policy Statements.   1. Privacy Policy: This should be in the line of <http://www.data.gov/privacypolicy> or <http://www.india.gov.in/termscondtions.php>   2. Data Policy: This should be in the line of <http://www.data.gov/datapolicy>.   3. Moderation Policy: This should be in the line of <http://www.india.gov.in/bottom_pdf/cmap.pdf> |
| FR 14.5 | **Link to Us**   * CMS * The Link to us page should be editable in the admin. * Frontend: * Content added by the admin should be displayed. * The purpose of this page is to encourage the visitor to place the link ofData.Gov.CC on their website. |
|  | FR 14.6 | **Add to Favorites**  This link should open the browser’s “Add a Favorite” dialog box asking to bookmark this website to the visitor’s favorite. |
| FR 14.7 | **Tell a Friend**   * Frontend * Users should be able to recommend the website to their friends. * A form for encouraging the visitors to send email to their friends or inviting them to visit the website.The following fields need to be captured   1. Name & Email of sender   2. Name and Email of receiver   3. Option to enter mulitple receivers   4. Comment box. * It should send an email to the recipients recommending the website. |
| FR 14.8 | **Contact Us**   * Frontend * Based on the contact page configured in admin, it should show that particular type of contact page as listed below:   1. Simple page on contact address of the Website Information Manager.   2. A page with some content, hyperlinked texts and a simple form with input as Name, Email, Subject, Category of message (A drop down box with few options to be decided by the admin) and a textbox for message (expandable box) * CMS * The admin should be able to choose either of the options mentioned in the contact frontend section. * The categories mentioned above (for type 2 contact page) should have configurable parameters and manageable by the backend CMS. |
|  | FR 14.9 | **Accessibility Statement**   * CMS * The Accessibility page should be editable in the admin. * Frontend: * It should display the content added by the admin. * This page should show the accessibility statement. Example: http://www.data.gov/accessibility |

# User Relation Management

# URM Administrator Interface

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement Id** | | | **Requirement Definition** |
| FR16.1 | | | **Manage Feedback Categories**   * Interface to create and manage feedback categories |
|  | | FR16.1.1 | **Create Categories**   * Provision of an interface to create feedback categories viz.   + - Content Related     - Technology Related     - Design Related     - Raw Dataset-Catalog     - Document-Catalog     - APP/Tool/Service-Catalog     - Agency/Sub-Agency     - Suggestions     - Appreciations     - Criticisms     - Others/General     - Un-Categorized * These categories can be increased/decreased/changed by adding/deleting/modifying categories.   **Type of Feedbacks (used under Contact Us form):**   * There should be provision to create type of feedbacks, which should be listed to choose from in the Contact us form. * These should also be displayed in the Source of Feedbacks drop down menu in URM. |
|
| FR16.1.2 | **Change Category Name**   * Change of Category Name can be done without affecting the Feedbacks already categorized |
| FR16.1.3 | **Pre-formatted Text Field**   * Pre-formatted texts against each of these categories can be dynamically created. These preformatted texts/replies should be used while replying to the sender. |
| FR16.1.4 | **Remove Category Name**   * User should be able to Remove Category Name (only if no feedback is assigned to the said category) |
| FR16.2 | | | **Create and Assign User Roles and Workflow**   * Interface to create/select users and assign roles and to manage workflow |
|  | FR16.2.1 | | **Manage Workflow**   * URM Admin should have access to all the feedbacks * URM Admin can assign feedback to PMO, POC users or Self. * Only the assignee/admin of the feedback can reply to the user. * Users to whom a feedback is forwarded can view the feedback and add comments on the feedback. These comments should be internal comments and not seen by the end user.. * On PMO/POC user login a list of feedbacks assigned or forwarded to them should be displayed. Assignee can revert/return the feedback to the admin * Once the feedback is replied, admin can review and mark it as * Closed on satisfaction or * Re-assign a user with open status so that feedback can be re-initiated or * Archived, if action to be taken at a later point of time. * Feedback should have following statuses during the workflow: Open, Assigned, Reverted/ Returned, Replied-Closed, Replied-Archived (action/implementation to be taken up at a later date), Re-initiated. * Provision to define the delay time for the feedback in the configuration should be provided. Delay time can be modified at individual feedback level by admin. * Action status field should be provided to the assignee. Following are the values of the status:   + 1. Already Published     2. Actionable     3. Potentially Actionable     4. Not actionable – Regulatory     5. Not actionable – Unclear     6. Not actionable – Other * Log should be maintained for actions taken on, as below:  1. Owner assignment 2. Forwarded users  * Feedback should be visible only to admin, assignee and the users to whom it has been forwarded. |
| FR16.3 | | | **Manage Feedbacks** |
|
|  | FR16.3.1 | | **Re-assigning a Category**   * URM Admin can open any individual feedback and update category as needed. |
| FR16.3.2 | | **Feedback**   * On clicking the hyper linked “Feedback” the complete feedback should be displayed in a pop up window or on the same window without compromising accessibility. * Admin will read individual feedback and categorize and assign to a responder. Assignee and Category fields will be mandatory for admin to proceed. |
|  | FR16.3.3 | | **Print Detailed Fact Sheet**   * Option to print detailed fact sheet for the selected (Action Tag). This print should be taken in A4 size paper with all details for each feedback. * Print should have comments added by forwarded respondents |
|  | FR16.3.4 | | **Additional Filter Options**   * Additional filter options should be available such as:  1. Category of Feedback (select using check boxes for defined categories) 2. Date Wise (input From Date and To Date) 3. Source Wise (select using check boxes for above known sources) |
|  | FR16.3.5 | | **Archiving one or more Feedbacks**   * Admin should be able to select multiple feedbacks to update status on   1. Replied and close or   2. Replied and archived status |
| FR16.4 | | | **Metrics, Charts and Statistics**   * This interface should display various metrics, charts, statistics and a dashboard. |
|
|  | FR16.4.1 | | **Metrics, Charts and Statistics**   * This section should have following metrics, charts and statistics: * Pie chart for feedback based on status * Table listing which should have categories wise stats of how much feedback received and replied. Input parameter for this listing should be date range. * Owner wise stats of feedback mentioning the number of feedback assigned to owner and its status. * Analyzing Gaps on Feedbacks v/s Responses * Report on delayed responses |
| FR16.4.2 | | **Dashboard**   * Dashboard to provide table listing of feedbacks in tabular format. * Filter with status, date range period should be provided. |

# PMO User Interface

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement Id** | | **Requirement Definition** | |
| FR17.1 | | **Feedback Sources**  There should be appropriate number of tabs provided for Navigation of feedbacks received from various sources:   * 1. Feedbacks through the Website * Home🡪Feedback   1. Suggest datasets through * Home🡪Data Catalogs🡪Suggest a Dataset * Home🡪Data Catalogs🡪Metadata Description Page🡪Suggest a Dataset * Home🡪Metrics🡪Suggested Datasets/Documents/APPs/Tools/Services 🡪 Suggest a Dataset * Home🡪Featured Gallery🡪Panel🡪 Metadata Description Page🡪Suggest a Dataset * Home🡪Featured Gallery🡪Suggest a Dataset   1. Comments while Rating the Datasets/APPs * Home🡪Data Catalogs🡪Metadata Description Page   1. Contact us * Home🡪Contact Us | |
| FR17.2 | | **Feedback Listing**   * Selecting any of the above tabs should display feedback listing having columns as follows   *Sl. No., Received From, Source of Feedback, Sender Email Id., Feedback, Category, Forwarded to, Replied by, Date, Action Tag*  (These should be configurable through the CMS, chosen columns needs to be displayed on the front end)   * PMO user should only see the feedbacks which have been forwarded or assigned to him/her. | |
|  | FR17.2.1 | **Feedback Details**   * On clicking the hyper linked “Feedback” the complete feedback should be displayed in a pop up window or on the same window without compromising accessibility. * PMO should also be able update the category Feedback can be linked to multiple categories. * PMO can reply the feedback. * PMO can revert feedback to admin if not concerned to him/her * PMO can forward the feedback to other users for receiving comments | |
|  | FR17.2.2 | **Print Detailed Fact Sheet**   * Option to print detailed fact sheet for the selected (Action Tag). * This print should be taken in A4 size paper with all the above details for each feedback. * Print should have comments added by forwarded respondents | |
|  | FR17.2.3 | **Additional Filter Options**   * The list can also be filtered using options such as:  1. Category of Feedback (select using check boxes for defined categories) 2. Date Wise (input From Date and To Date) 3. Type field (drop down – with options: Forwarded and assigned). | |
| FR17.3 | | **Feedback Management**   * On selecting a feedback from feedback listing page it should take the user to a page showing the feedback details. | |
|
|  | FR17.3.1 | **Browsing across Feedbacks**   * Option to browse through other feedbacks should be provided using “previous” and “next” buttons. | |
| FR17.3.2 | **Forward or Reply to the Feedback**   * Only the PMO user, who has been assigned to be the feedback should be allowed to reply to the feedback or forward to other PMO user. * Clicking on the Reply button should display following fields: * Mail to (text box) filled with the sender/end user mail Id should be displayed. * There should be a text box to add CC mail Ids * Comments (multi line text box) * Option to pre-fill the response should also be provided through a link text or check box “Pre-Formatted Response”. There should be option to select a single category to be used for pre-formatted text, in case the feedback have multiple categories. * Replied by (to be selected from the drop down box containing PMO users) * Clicking on Forward button should display the following fields * Mail to (text box), as well as to choose from two drop down lists one containing PMO user and other containing Agency/Sub-Agency POC. Choosing options from the drop down box should add to the text box and one can also write known mail Ids. So feedbacks can be sent to multiple Ids in one go. * Comments (multi line text box) * Forwarded by (to be selected from the drop down box containing PMO users) | |
|  | FR17.3.3 | **Revert/Return Back to Admin**   * PMO user (who has been assigned the feedback) can revert back to the admin if the feedback is not concerning to him/her. | |
|  | FR17.3.4 | | **Comments/Note Section**   * PMO core group user, who is the owner or to whom the feedback has been forwarded to, can add a note to the feedback. * These notes should be displayed on the bottom section of the feedback details page. |
| FR17.4 | | **Metrics, Charts and Statistics**   * This interface should display various metrics, charts, statistics and a dashboard. | |
|
|  | FR17.4.1 | **Metrics, Charts and Statistics**   * This section should have following metrics, charts and statistics: * Pie chart for feedback based on status * Table listing should have categories wise stats of how much feedback received and replied. Input parameter for this listing should be date range. * Owner wise stats of feedback mentioning the number of feedback assigned to owner and its status. * Analyzing Gaps on Feedbacks v/s Responses * Report on delayed responses | |
| FR17.4.2 | **Dashboard**   * Dashboard to provide table listing of feedbacks in tabular format. * Filter with status, date range period should be provided. | |

# POC Interface

|  |  |  |
| --- | --- | --- |
| **Requirement Id** | | **Requirement Definition** |
| FR18.1 | | **Feedback Sources**  There should be appropriate umber of tabs provided for Navigation of feedbacks received from various sources:   * 1. Feedbacks through the Website * Home🡪Feedback   1. Suggest datasets through * Home🡪Data Catalogs🡪Suggest a Dataset * Home🡪Data Catalogs🡪Metadata Description Page🡪Suggest a Dataset * Home🡪Metrics🡪Suggested Datasets/Documents/APPs/Tools/Services 🡪 Suggest a Dataset * Home🡪Featured Gallery🡪Panel🡪 Metadata Description Page🡪Suggest a Dataset * Home🡪Featured Gallery🡪Suggest a Dataset   1. Comments while Rating the Datasets/APPs * Home🡪Data Catalogs🡪Metadata Description Page   1. Contact us * Home🡪Contact Us |
| FR18.2 | | **Feedback Listing**   * Selecting any of the above tabs should display feedback listing having columns such as   *“Sl. No., Received From, Source of Feedback, Sender Email Id., Feedback, Category, Forwarded to, Replied by, Date, Action Tag”*  (configurable through the CMS for choosing columns which needs to be displayed on the front end)   * PMO user should only see the feedbacks which have been forwarded or assigned to him/her. |
|  | FR18.2.1 | **Feedback Details**   * On clicking the hyper linked “Feedback” the complete feedback should be displayed in a pop up window or on the same window without compromising accessibility. * POC can reply the feedback. * POC can revert feedback to admin if not concerned to him/her * POC can forward the feedback to other users for receiving comments |
|  | FR18.2.2 | **Print Detailed Fact Sheet**   * Option to print detailed fact sheet for the selected (Action Tag). * This print should be taken in A4 size paper with all the above details for each feedback. * Print should have comments added by forwarded respondents |
|  | FR18.2.3 | **Additional Filter Options**   * The list can also be filtered using options such as:  1. Category of Feedback (select using check boxes for defined categories) 2. Date Wise (input From Date and To Date) 3. Type field (drop down – with options: Forwarded and assigned). |
| FR18.3 | | **Feedback Management**   * On selecting a feedback from feedback listing page it should take the user to a page showing the feedback details. |
|
|  | FR18.3.1 | **Browsing across Feedbacks**   * Option to browse through other feedbacks should be provided using “previous” and “next” buttons. |
| FR18.3.2 | **Forward or Reply to the Feedback**   * Only the POC user, who has been assigned the feedback should be allowed to reply to the feedback or forward to other POC users. * Clicking on the Reply button should display following fields: * Mail to (text box) filled with the sender/end user mail Id should be displayed. * There should be a text box to add CC mail Ids * Comments (multi line text box) * Option to pre-fill the response should also be provided through a link text or check box “Pre-Formatted Response”. There should be option to select a single category to be used for pre-formatted text ,in case the feedback have multiple categories. * Replied by (auto select and display the POC user) * Clicking on Forward button should display the following fields * Mail to (text box), as well as to choose from a drop down list containing Agency/Sub-Agency POC users. Choosing options from the drop down box should add to the text box and one can also write known mail Ids. So feedbacks can be sent to multiple Ids in one go. * Comments (multi line text box) * Forwarded by (auto select and display the POC user) |
|  | FR18.3.3 | **Revert Back to Admin**   * POC user (who has been assigned the feedback) can revert/return back to the admin. |
|  | FR18.3.4 | **Comments/Note Section**   * POC users, to whom the feedback has been forwarded to, can add a note to the feedback. * These notes should be displayed on the bottom section of the feedback details page. |
| FR18.4 | | **Metrics, Charts and Statistics**   * This interface should display various metrics, charts, statistics and a dashboard. |
|
|  | FR18.4.1 | **Metrics, Charts and Statistics**   * This section should have following metrics, charts and statistics: * Pie chart for feedback based on status * Table listing should have categories wise stats of how much feedback received and replied. Input parameter for this listing should be date range. * Owner wise stats of feedback mentioning the number of feedback assigned to owner and its status. * Analyzing Gaps on Feedbacks v/s Responses * Report on delayed responses |
| FR18.4.2 | **Dashboard**   * Dashboard to provide table listing of feedbacks in tabular format. * Filter with status, date range period should be provided. |

# OTHER REQUIREMENTS

# Interface Requirements

The interface for the Website component would largely depend from country to country adopting the Open Data Platform. Provision should be there to choose from the pool of design layouts and color themes. The components and Information Architecture of website are configurable and achieved through the Administrator’s panel of the Website’s CMS. Reference Layout shall be given.

# Hardware Requirements

There are no specific hardware requirements for ODP. It can be deployed on physical servers or virtual servers. For security, it is recommended web and database servers are separated. However, the product should function both in standalone setup and in hosting environment.

# Software Requirements

ODP is built using open source content management software [Drupal](http://drupal.org/), version 6.x. and the system requirements are in line with Drupal’s requirements. Following software packages listed are required for deploying ODP.

* CentOS
* Apache webserver 2.x
* MySQL 5.x
* PHP 5.x
* Apache Solr

# Web Accessibility Requirements

ODP shall be accessible by any generic web browsers. ODP Website should conform to guidelines provided by the [Web Content Accessibility Guidelines 2.0](http://www.w3.org/TR/WCAG20/).

# Operational Requirements

# Security and Privacy

ODP should comply with the Open Web Application Security Project (OWASP) guidelines.

ODP shall not collect any personally Identifiable information.

ODP shall not use any persistent cookies stored in browsers. The URM would be accessible only through SSL.

# Audit Trail

ODP should track the user’s system Id, workflow step, date and time whenever a record is created or updated.

ODP should maintain audit trail of the user’s system Id, date and time whenever a record is approved or rejected in the workflow.

# Reliability

System failure shall be defined as “show-stopper” bugs in ODP, which would prevent users from accessing the Website. Impact of system failure is minimal and does not involve loss of human life, complete or partial loss of the ability to perform a mission critical function, or loss of revenue.

System performance is dependent on the infrastructure ODP application is deployed on.

# Recoverability

Disaster recovery will be implemented at system and database level. Policies of the organization deploying ODP will be followed for achieving the same.

# System Availability

System Availability is dependent on the organization deploying ODP.

# General Performance

System performance is dependent on the infrastructure ODP application is deployed on.

# Capacity

Capacity requirement is dependent on the expected load on the Website.

# Data Retention

ODP will retain application information until the system is retired. ODP is not designed to enforce any specific data retention policy.

# APPENDIX A –Knowledge Exchange Sessions

The five day exchange was held in Washington to study open data platform data.gov set up by US govt. as well as share experiences of developing india.gov.in. Series of discussions , deliberations were held for five days between NIC team, Data.gov team, officers from GSA , US govt. Officers from different agencies of US govt. had also visited us and shared their experiences of opening the data sets & innovative apps developed around open data sets.

Detailed study of the back-end & front end systems for both the Portals   
 (India.gov.in & Data.gov) were carried out and following was worked out jointly by India & US teams.

* Common Metadata specifications to be followed by both the portals
* High Level design of generic Open data Platform
* Implementation architecture of Open Data Platform
* Functional requirements of major components of Open Data Platform

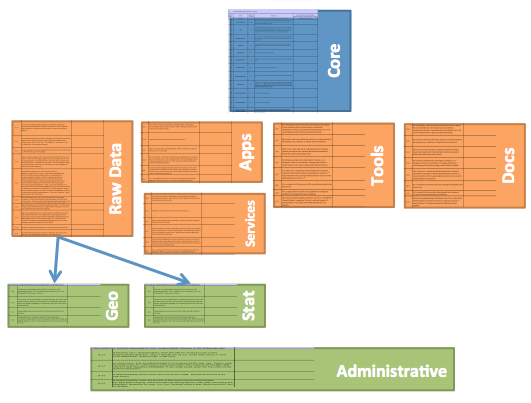
After series of discussions on site and by individual teams the Metadata model was worked out which is logically separated into 4 sections: Core, Access Type Extensions, Data-specific Extensions, and Administrative Extensions. Core is required for all data submissions, and appropriate extensions will be required as users Identify what type of data is being submitted. All extensions shall be customizable by the system administrator.

During the concluding session high level summary of the decisions & deliberations was also presented.



###### 

###### Figure 7: Data.gov in a Box Conceptual Architecture



###### 

###### Figure 8: Open Government Metadata Schema

# APPENDIX B –User Interface for Website



###### Figure 9: OPD Website User Interface