

**WII/PurchaseCell/23-24/69****Dated: 1 September, 2023**

To,

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**Sub: Quotations for the redesign, develop, operate, maintenance of multilingual website of WII – regarding.****Sir,**

Wildlife Institute of India wishes to redesign, develop, operate, maintenance of multilingual website of WII ([www.wii.gov.in](http://www.wii.gov.in)). Sealed quotations are invited from the various IT firms for **redesign, develop, operate, maintenance of multilingual website of WII** as per the terms & conditions given below:

**Terms and Conditions:**

1. The firm should be registered for GST and with valid PAN no.
2. The firm should be registered as a company/firm as per Company Act 1956.
3. The firm should be ISO certified.
4. The firm should have valid Capability Maturity Model Integration (CMMI) Level 1 or higher certifications as of the bid's submission date.
5. The firm should have a local office in Dehradun.
6. The firm should have a minimum average annual turnover of over Rs. 70 Lakhs during the last three financial years, as certified by Chartered Accountant with an audited balance sheet.
7. The firm should have an experience of more than 10 years in the field of design, development, and Maintenance of websites in Government/PSU or reputed organizations.
8. Work order for the past 05 years in carrying out the Security Audit Certification and G/GW certification for the website through Cert In Empanelled firms for State/Central Govt organizations.
9. The firm should submit an undertaking that the firm is not blacklisted by any Government/Government agency/PSU.
10. The firm is required to submit a profile of the web development team.
11. The firm must submit a detailed presentation of its technical capabilities, which will include an understanding of the requirement, a demonstration of CMS, etc.
12. The firm will submit signed and stamped documentary proof for the above.
13. The Service Level Agreement (SLA): Re-Design, Develop, Operate, Maintenance of Multilingual website of Wildlife Institute of India <https://wii.gov.in> is attached as Annexure I.

I/52244/2023

14. The Software Requirements Specification (SRS) for Selection of Agency to Re-Design, Develop, Operate, Maintenance of Multilingual website of Wildlife Institute of India is attached as Annexure II.
15. The Institute reserves the right to accept or reject any of the quotation straightway without assigning any reasons.
16. Last Date of Submission of Quotations: Quotations in all respect in a sealed cover superscribing **redesign, develop, operate, maintenance of multilingual website of WII** should reach the Purchase Officer, Wildlife Institute of India, Chandrabani, Dehradun-248001, Uttarakhand on or before 29.09.2023 upto 1700 hrs. Quotations received late will not be accepted by the Institute.

**Yours faithfully,**

**(K K Shrivastava)**  
**Purchase Officer**

**Re-Design, Develop, Operate, Maintenance of  
Multilingual website of  
Wildlife Institute of India  
<https://wii.gov.in>**

**September, 2023**

## 1. Introduction:

### 1.1 Purpose:

Wildlife Institute of India website (<https://wii.gov.in>) is to re-engineer the existing website presently being managed through a *Drupal* Content management system (CMS). The contents of the present website are to be preserved and to be re-engineered in accordance with the “**Guidelines for Indian Government Websites (GIGW) 3.0, updated March, 2023**” complying to Mandatory and Advisory (as applicable to WII) categories.

## 2. Objective

To engage a qualified and experienced agency having experience in the field of design, development and maintenance of government websites. The agency shall be required to re-design, maintain Institute Multilingual website.

Broadly, the agency would be required to study and implement the detailed **Software Requirement Specification (SRS) given in Annexure – II** and provide end-to-end managed service for redesigning and maintenance of website.

## 3. Scope of Work

1. The agency shall be liable to redesign the WII website, build, maintain and continuously improve upon the current set of functionalities in close consultation with personnel of IT RS and GIS Cell. The website should be adaptive for various resolutions and devices viz. desktop, laptop, tablets and mobile.
2. The firm will be required to present minimum 04 (four) designs of Output Templates (Mock-up) on the basis of sample dataset within 7 days from the date of issue of the Letter of award. The final template will then be selected with/ without suggestions for changes which the firm will have to incorporate.
3. The redesigned website must be user friendly and be developed with the latest open source proven technology Content management system Software (CMS) using up-to-date and well-established development tools and software. The development approach should conform to the best practices in the website development and web application maintenance industry in line with Government of India Guidelines for Indian Government Websites (GIGW) prepared by MeitY. It should ensure the following:
  - i) Adherence to commonly accepted standards and practices, including The World Wide Web Consortium (W3C).
  - ii) Using latest website design technologies like HTML5 or higher with acceptability on all current user technology platforms; browsers, operating systems and client systems.

- iii) The agency shall also get the website audited by STQC empanelled firms for *GIGW* compliance.
4. The redesigned website should be secure and allow only secured socket layer interactions. SSL certification needs to be procured and configured with the re-designed website by the firm before deployment.
5. Access to Multilingual Information: Enable users to find link to multilingual website via prominent access on the English site. Access to multilingual websites should be made available on the global navigation on the top right of every English page.
6. Develop a separate and secure admin/user module for updating the contents on the website for different modules of the website.
7. The server and OS required for hosting the website shall be provided by the WII. The bidder has to install OS, security patches, database, scripting language etc. and configure the server as per requirement of the Website.
8. Migration and preserving of existing environment and website content (*viz. configuration, logs, database, files, images etc.*) to the proposed environment with latest application code and database. The agency shall appoint a single point of contact and should be subject matter/ domain experts to interact with the IT Cell.
9. Training: The agency shall provide hands-on training to designated IT personnel in basic website management, so that publishing and editing can be performed independently. User manuals shall be made available in printable format including but not limited to navigation of the application, content update, media upload and menu addition etc. The training manual should be updated each time a new module/functionality/upgrade happens on the system.
10. Security: The agency shall ensure that the WII website is Security Audited as per Cert-In guidelines prior to Go-Live. The agency to provide the following security feature
  - i) Protection against defacement and hacking of the application.
  - ii) Design and updates should incorporate security features to protect the site from Session Hijacking, SQL Injection, Cross Scripting, Denial of Service etc.
11. Helping to change and improve features and website structure on request for the duration of the contract.

12. The redesigned website should have real time integration with all popular Social Media platforms integrated with the existing website. The feed from Social Media handles of Wildlife Institute of India shall be pulled from these platforms and made available on the website.
13. The static as well as the dynamic content on the redesigned website must be auto translated into Multiple Indian languages i.e. supporting multilingual website.
4. **Service Level Agreement (SLA):** The purpose is to define the levels of service provided by the Bidder to the Purchaser for the duration of the contract.
- i) The Service Level parameters defined here shall be monitored on a periodic basis, as per the individual parameter requirements.

#### SLA's for Phase 1- Re-Designing of Website

S.No.	Task	Time-line
1.	Submission of first draft of design of website (four templates)	Within One (1) week
2.	Submission of Final version of template	Within One (1) week of receiving comments
3.	Deployment of fully functional and tested website on test environment	Within Two (2) months after the submission of final version
4.	SSL Certification	Before the process of Security Audit Certification.
5.	Security Audit Certification from Computer Emergency Response Team (CERT-IN) from empanelled firms.	30 Days after the deployment of fully functional tested website.
6.	Go-Live of website	After the award of Security Audit Certification.
7.	Website Quality Certification from Standardisation Testing and Quality Certification STQC (Independent testing and certification organization of the Ministry of Electronics and Information Technology GoI	75 Days after the Security Audit certification
8.	Hand over source code and user manual	Within One (1) weeks of STQC Certification
9.	Maintenance of website	After Cert-IN, STQC and SSL Certification

# **Software Requirements Specification (SRS)**

**for**

**Selection of Agency to  
Re-Design, Develop, Operate, Maintenance  
of Multilingual website of  
Wildlife Institute of India**



**September, 2023**

## 1. Introduction

### 1.1 Purpose

The purpose of SRS is to redesign WII website to be managed through a Content management system (*CMS*) preferably on *Laravel framework* for user-friendly interface that simplifies the process of uploading, updating, and managing web content on the website. The re-designed website should be based on an open source platform to update content by multiple users from anywhere through browser using *WYSIWIG editing tools*.

### 1.2 Document Conventions

This document has been written in a very friendly language. The users can understand all the things very easily. The TIPS are written in Italic font like "*TIPS*". Document is covered with necessary examples as well as the screen shots of the software. Important Keywords are highlighted as **BOLD** font.

### 1.3 Intended Audience and Reading Suggestions

This SRS is developed for all those users who will manage the WII website. The users don't need a solid knowledge of computers to read this SRS, but they do need a basic understanding of computer basics and Internet technologies. Occasional users of previous versions of the website will also find enough information in this portal SRS.

In many cases, a step by step procedure has been provided that will help accomplish a task (for example User to login in the portal for Administration work). Associating new knowledge to something you have mastered already provides positive feedback and a deeper understanding of the software.

### 1.4 Project Scope

The scope and objective of this project is to provide a complete redesigning to the WII website (English and Indian Multilanguage). This will help the work to setup the complete information on the website through this **Content Management System**.

- The website should have the facility to update content by multiple users from anywhere through browser using WYSIWIG editing tools allowing non-technical users to create and edit content.
- The website should have an Admin Dashboard, having graphical control panel (summary of various features for reporting) along with features for granting rights to users, updation of the schema, report generation for user tracking (entries/updation done).
- Provision of sliding images (10 nos.) on the frontpage for showcasing the important days, programmes of MoEFCC and WII with easy management through the framework



- Provision of role based online/offline/hybrid meeting/events scheduler for Institute/project with email notification and automatic display in respective project page and Institute homepage.
- A dedicated module for regular updation of photographs of government heads/officials on the homepage and easy management through the framework.
- Development of user module for data entry, updation and reporting features.
- A frontend is to be developed for data entry/updation of trainee/alumni database (Diploma, Certificate, M.Sc).
- Online forms for the M.Sc. Dissertation, Internship, research seminar abstracts etc.
- Integration of existing Institute software/application.
- Mobile application for Institute website for Android/IOS with real time synchronization.
- Development of customize online forms as and when required.
- The portal should integrate with Google analytics for visitors statistics.
- Role Based Creating, Updating and deleting of web-pages through Content Management System (CMS)
  - a. Admin right to give permission to the operator, and create different operator
  - b. Different rights to Operator to operate the website.
- Access to Multilingual Information: Enable users to find multilingual website via prominent access on the English site. Access to multilingual websites should be made available on the global navigation on the top right of every English page.
- The website shall also have real time integration with all popular Social Media platforms including the social media platforms integrated with the existing website including embedding of YouTube/RTMP server videos live sessions
- **Secure Login:** All modules should be protected by username and password with a strong password policy having one alphabet, one number and one special character and minimum 8 length. There should be mechanism for stopping computer generated logins also (OTP based/ Captcha code based)
- At database level, all user passwords should be stored in encrypted format. After 3 consecutive wrong attempts the system should ask to reset and new password should be sent to the users registered email by forgot password option, which may in turn be authenticated through registered mobile

number/email id. The mail sent to user should have a link to activate the ID which will be time bound

- Separation of Design and Content – All contents to be stored in the database and the front end design of the portal to be controlled by cascading style sheet (CSS)
- The Website is to be hosted on the server provided by WII at the Data Centre, OS, CMS framework, database etc. is to be installed and configured by the firm.
- The firm should provide an operational guarantee on the website re-designed and also provide support for at least 3 years after the launch of website so that modification, addition of modules, menus etc. can be made. All troubleshooting required within this period would be the responsibility of firm.
- **Integrate advanced, easy to use content management system with role based rights for easy management of overall content of the Website.**
  - o The complete content stated above should be managed through a Dynamic Content Management System (CMS) which will work in the backend of the portal which will have the following features:
    - Add pages, edit existing pages and delete pages
    - Add, edit and delete text and images
    - Store files and images in CMS 'libraries'
    - Add, edit and delete links
    - Automated site map of your web pages
    - Add, edit and delete color scheme on your website
    - Meta data management
    - Back Up facility through administration area
    - Advanced editing capabilities with HTML
    - Permission Based Access to Contents
      - Other Features of CMS :
        - Completely database-driven site engines
        - Easy to use graphical administrative interface
        - Text editor similar to WordPad
        - Create, publish, and reorder and edit articles in a click
        - News, services sections fully editable and manageable
        - Built-in site search engine
        - Media (images, documents) upload and management
        - Content display scheduling
        - Search engine friendly (SEF) URL's
        - WYSIWYG content editor support (built into the CMS)
- The website/web portal is to be developed in accordance with the essential Guidelines for Indian Government Websites (G/GW) revised edition, includes Apps (March, 2023).

- The website is to be security audited with SSL certification before going live.
- **Operating Environment** : It must be running over Linux (CentOS, RedHat etc. or as decided by WII). The site design must be cross-browser and cross-OS compatible up to the most recent browser/OS versions. Should support the three platforms: Desktop/Tablet or Notebook and mobile form factors.
- **Programming & Database Features**
  - o MySQL Database with compatible framework.
- 1. **General Front End** : The user Interaction part, to be developed in HTML/DHTML/PHP/ CSS.
- 2. **Admin Back End**: The Administration Control Panel for Addition/Modification/Deletion of the web contents. This part should be Password Protected and hidden from the general users. Admin Panel to be developed in PHP/MySQL/Java Script/CSS/Ajax.
- 3. **Developing Tools** : PHP/MYSQL

#### Project Web- Pages:

- A robust backend dynamic database system that efficiently stores and retrieves data. This would involve optimizing data storage and implementing effective data retrieval mechanisms.
- The provision of a map-based database (also known as a geospatial database) is essential for generating reports that involve point locations on an open-source map with multiple base layer for project webpages.
- **User Authentication and Access Control**: Implement user roles (admin, trainers, Project admin) where project admin role should have levels of access (CRUD operation) to create, read, update, and delete in the project database. Secure login and registration system for authorized users.

#### Quick Response (QR) Code :

- Generation of dynamic QR code is required through project admin page.

#### Dashboard:

- A centralized dashboard displaying an overview of recent activities, events, and key statistics for the projects. A database to create new projects and a separate template for each project are required

#### Training Details:

- Record and manage training sessions, including dates, locations, trainers, participants, topics covered, and materials used., Ability to search, filter, and report on training sessions and generate report in excel and map based support.

#### Bal Ganga Prahari and Ganga Prahari Records:

- Maintain individual profiles for Bal Ganga Prahari and Ganga Prahari personnel. Capture personal details, activities, roles, training history, achievements, and any relevant documents.

**Project Personnel:**

- Database of project personnel including team members, roles, contact details, and responsibilities.

**Component-Based Activity:**

- Categorize activities based on project components (e.g. community engagement, training team). Track progress, outcomes, and associated resources for each activity.

**News and Events:**

- Post news updates and upcoming events related to the project. Display news articles, event schedules, and registration details.

**Knowledge Products, Scientific Publications, and Reports:**

- Upload and categorize documents like reports, publications, knowledge products, and research papers. Provide search and filter options for easy access to documents.

**Microplan Data of Village and District Level:**

- Store and display microplan data, including village-level and district-level plans. Allow for updates, revisions, and tracking of progress against the microplans.

**Search and Reporting:**

- Incorporate advanced search and reporting functionalities for quick data retrieval.
- Generate customizable reports based on specific criteria with map and excel based graph and chart support.

**Data Visualization:**

- Use charts, graphs, and maps to visually represent data and trends.

**Mobile Responsiveness:**

- Ensure the webpage is responsive and accessible across various devices, including smartphones and tablets.

**Notifications and Alerts:**

- Send automated notifications and alerts through email for upcoming events, deadlines, and important updates.

**Feedback and Communication:**

- Allow users to provide feedback and communicate through the platform.

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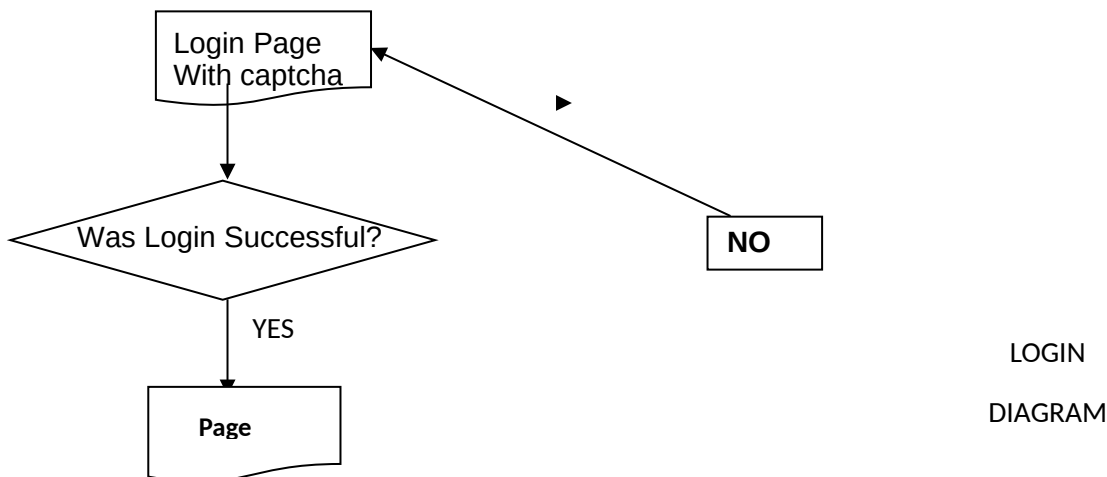
## (Administration Panel)

*The Administration Panel is used to control the flow and contents of the website by the administrators. This panel is to be out of reach of the common users and available only for authorized website administrators to control the website.*

The web portal should have a Administration panel to control the data contents for the portal and shall have important tools to administrate the portal data contents from the panel:

- **Login Panel**

Login panel should be used to log in to the website administration panel by the site administrators. Without entering the login id, password and captcha, it will be impossible for any one to enter into the admin panel. Logged in id's will be saved for tracing the changes in the website data, done by logged in id's.



- **Module Control Panel**

Module control panel is the mandatory part of CMS as it must controls all the rights and tools for the web site for all the its modules. Authorized site administrators can control the data flow of the website in three ways i.e.

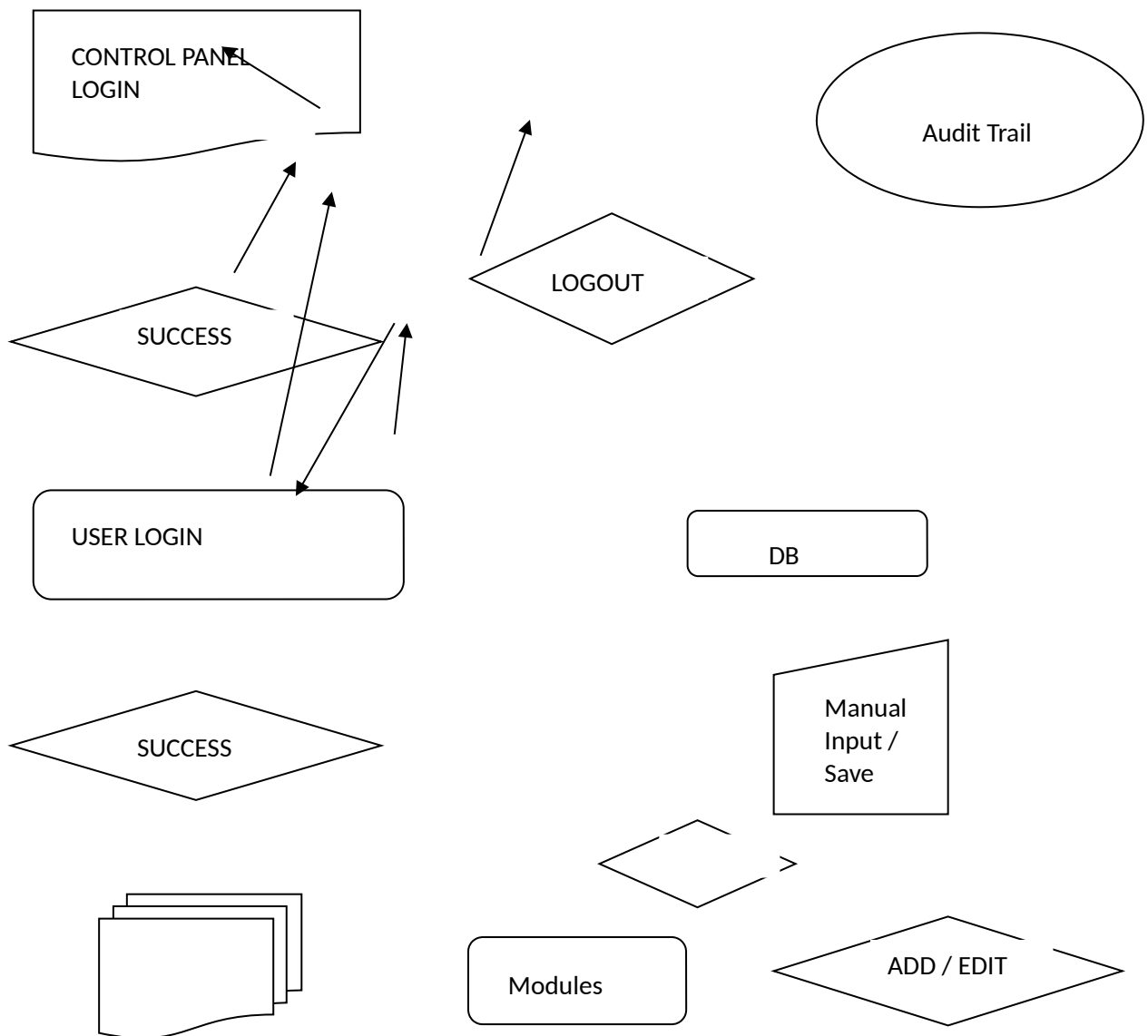
- i. **Add** : For addition of data of each and every module to be displayed at the front end of the portal.
- ii. **Modify** : For modification of data of each and every module to be displayed at the front end of the portal.
- iii. **Delete** : For deletion of data of each and every module from the front end of the portal as well as from the data bank of the project.

- **Audit Trail**

An **audit trail** or *audit log* is a chronological sequence of audit records, each of which contains evidence directly pertaining to and resulting from the execution of a business process or system function.

Audit records typically result from activities by individual people, systems, accounts or other entities. This part of the admin panel will help to view the regions of modification /deletions of contents of portal including the User id's of administrators who have made any changes to the contents.

The control panel will work as following:



## 2. Overall Description

### 2.1 Product Perspective

This website CMS must be a self-contained product. The website must be re-designed to provide the best IT solution for smooth database management to the organization.

### 2.2 Product Features

**View, print, and search** the information, **Complete** tasks more quickly with a streamlined user interface, **Permanently delete** sensitive information, including specific text from control panel, portal supports most fonts shipped with the OS, Improved file management, new data possibilities, and a more intuitive way to create contents for the Web. Data Validation is available.

### 2.3 Operating Environment

The website must be developed environment friendly. This requires optimum hardware and software requirements. It must be running over Linux (CentOS, RedHat etc. or as decided by WII). The site design must be cross-browser and cross-OS compatible up to the most recent browser/OS versions. Should support the three platforms: Desktop/Tablet or Notebook and mobile form factors.

### 2.4 Design and Implementation Constraints

The design, development, implementation of the website will be done as per the SRS defined. Firm will be responsible for the Maintenance of website for the warranty period arrangement of technical staff to upgrade or rectify any issue the website will be provided during the warranty period by the firm.

## 3. System Features

CMS is to be divided into two part for the best working:

- **User Interface:** This is the part of software through which a general user will interact. This part will contain all the information posted by the site administrators including all the graphics. This part will be available for all the users worldwide who will browse the website on their PCs/Laptops/Mobile. The information on this part of the software can only be changed or posted by the administrator only from the Admin Panel.
- **Administration Panel:** This part of the software is password and captcha protected and will be available for the website administrator only. Website administrator can update , add or delete the information form the website from this panel after logged in with their user id's, password and captcha. These User id's will be stored to recognize the changes in the data done by some one. This will help to identify that who has updated/added the information on the website.

### 3.1 User Interfaces

User Interfaces must be user friendly and must provide easy and smooth navigation. Each and every part of the user interface can be easily identified. Buttons and links must be clean. Task can be **completed** more quickly with a streamlined user interfaces. Fonts and text can be read easily.

### 3.2 Hardware Interfaces

Website should be responsive and should be compatible with all computer hardware interfaces and browsers. Users can use any Standard or TFT screen , mouse, keyboard to operate the website on their PC's/Laptops and Mobile.

### 3.3 Software Interfaces

This redesigned website should be self-contained product and does not depends on any third party software component. Only pre requested tools / Browsers are required to run this portal.

## 4. Other Nonfunctional Requirements

### 4.1 Performance Requirements

Website should work under all the circumstances, but some condition can make the performance better. These conditions can be as :

- 1920 X 1080 Screen resolution
- Larger size of system RAM
- Fast Internet Connectivity
- Good Web Browser latest version
- Java scripting Should be enabled on the web browser

### 4.2 Safety Requirements

The code used on the website should not do any loss, damage, or effect the network of the Institute.

### 4.3 Security Requirements

If any third-party software is used on the website then firm should ensure to apply any security patches. The firm should enforce password requirements such as a minimum of around eight characters, including an uppercase letter and number will help to protect their information in the long run. Provision to change the password of admin users should be there.

### 4.4 Software Quality Attributes

All the software and scripts used in the development of the proposed application will be of high quality and all the scripts will be properly checked. Firm must work closely with WII to ensure that all the security policies and procedures are followed.



#### **4.5 Development /Implementation Methodology to Complete the Project**

The Development and implementation methodology is a phased, process oriented methodology, and is the umbrella for firm toolset that streamlines implementation projects and minimizes risk. The Methodology should take a disciplined step-by-step approach to project management, supporting project teams' with templates, tools, questionnaires/checklists, including technical guidebooks and accelerators.

##### **Our methodology includes :**

- Faster implementations
- structured approach
- More efficient use of resources
- Effective project management

##### **Firm should follow following methodology, which sequences the entire project lifecycle into Six key and non-overlapping phases:**

- SRS study and changes if any
- System Design
- Application Development
- Application Implementation
- Preparation for Going Live
- Training of Technical Personnel of WII

##### **Support**

The information would be updated on daily / weekly / monthly basis or as and when required and the support will extended through E-Mail, Phone. The responsibility of the flow of information will be earmarked so that it could go instant and uninterrupted.

##### **Software Change Methodology**

Latest technology Framework with Backend My SQL should be used to develop the complete Application to support scalability and easy customization of the project. The entire customization process should be supported by a back up team of professionals which would help and support for the change in the design of the application. Before any change in the basic structure of the Application, a mutual meeting of the representatives of WII and firm must be done for further methodology options.

##### **Maintenance of the Application**

The complete Application (CMS) must be designed and maintained as per international standards for the warranty period of 3 years. The time of Maintenance will start from the website going live.

## **Backup / Restore**

Website has to be hosted at WII Data Centre Server on the server provided. Provision of Backup/Restore should be as per the policy guidelines of WII - IT Cell.

## **Project Monitoring and Control**

To ensure continuous project monitoring and proper escalation to the parties involved, we propose project monitoring and control approach as follows:

- Routine monitoring and control through regular status meetings
- Apart from discussing specific issues, regular status meetings will also serve as monitoring and control means of the project.

## **Quality**

All the software and scripts used in the development of the proposed application will be of high quality and all the scripts will be properly checked. The relevant Quality Assurance policies and procedures for this project are incorporated under project plan and have been described under corresponding sections earlier in the proposal. Firm must work closely with WII to ensure that such policies and procedures are followed.

***The code/scripts used for the development of the web portal has to be shared by the firm and the code/scripts used would be the property of WII.***

## **Arrangement of Technical Staff during Warranty period & Implementation Support**

To ensure the complete implementation of the project, an software developer has to IT Cell and a back up team will also be appointed at the Office of firm to support the developer for better and effective utilization of resources.

## **Training**

The complete implementation services and training will be provided to the technical person by the developed appointed by firm for implementation. The training and implementation schedule will be intimated later on.

## **Completion of Project**

The project will be completed with in the stipulated period as defined in SLA.