

## **TENDER NOTICE**

Invitation for Tender to redesign CSIR-Central Building Research Institute, Roorkee Websites and online application modules as per 2<sup>nd</sup> edition of Guidelines for Indian Government Websites (GIGW), its security audit from CERT-In certified third party auditor and quality certification from STQC.

Sealed bids are invited by Director, CSIR-Central Building Research Institute, Roorkee from the Bidders to Redesign the Websites of CSIR-Central Building Research Institute, Roorkee as per Guidelines for Indian Government Websites (GIGW), prepared by National Informatics Centre, Department of Electronics & Information Technology (DeitY) and adopted by Department of Administrative Reforms and Public Grievances (DAR&PG) and its security audit by CERT-In certified third party auditor.

### **General Background**

CSIR-Central Building Research Institute, Roorkee is one of the premier R&D laboratories of Council of Scientific and Industrial Research. The existing website of the institute can be accessed at <http://cbri.res.in> and is based on an open source Content Management System, hosted on a GNU/Linux server in a virtual environment. The website and intranet site is to be recreated and updated in terms of design and content.

### **Procedure for Submission of Bids**

The Bidders interested to redesign the Website of Central Building Research Institute; Roorkee should submit their bids along with their credentials, technical capabilities and financial standings with recent track record in two separate sealed envelopes viz. "Technical Bid" and "Financial Bid".

The FIRST sealed envelope should contain the Technical Bid. The envelope should be super scribed "Technical Bid to redesign CSIR-Central Building Research Institute, Roorkee Website as per GIGW, its Security Audit and Quality Certification".

The SECOND sealed envelope should contain the Financial Bid. The envelope should be super scribed "Financial Bid to redesign CSIR-Central Building Research Institute, Roorkee Website as per GIGW, its Security Audit and Quality Certification".

Both the above envelopes should be enclosed in a sealed envelope super scribed as "Limited Tender to redesign CSIR-Central Building Research Institute, Roorkee Websites and online application modules as per GIGW, its Security Audit and Quality Certification" addressed to "The Director, CSIR-Central Building Research Institute, Roorkee-247 667" .The Technical bids will be opened on next working day of the last date of submission of bids or as per the convenience of Chairman of the Committee in the presence of the Bidders or their authorized representatives who may wish to present.

Late bids, i.e., bids received after the specified date and time for receipt of bids shall not be considered.

## **Qualification and Eligibility Criteria**

Limited Tender to redesign CSIR-Central Building Research Institute, Roorkee Website as per 2<sup>nd</sup> edition of Guidelines for Indian Government Websites (GIGW) are invited from bidders to Redesign the Websites of Central Building Research Institute, Roorkee. The eligibility of the bidder shall be strictly evaluated based on the documents furnished against the criteria as given below:

1. The Bidder should be a company registered in India under Companies act 1956 with their registered office In India.
2. Bidder must have experience of designing, development and maintenance of Central Government/State Government/PSUs websites as per Guidelines for Indian Government Websites (GIGW) during the last 04 years. Certificate from the client and a copy of SLA (Service Level Agreement) signed with the client must be enclosed with the Technical Bid.
3. Bidder must have well-equipped infra-structural facilities including man-power for website development work.
4. No record of having been black listed by any Government/Public sector organization.
5. Bidder must have to produce Experience Certificate for executing similar nature of work/contract as per GIGW standards and with certification from STQC and security audit from CERT-In certified Auditor.
6. Bidder must have an average annual turnover of Rs 02 Crore for the last 03 years.
7. Client will have liberty, during the course of work, to give input (minor only) as per the then needs of Institute.

## **Institute's Right to Accept/Reject any or All Bids**

All the bids in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.

The Director, Central Building Research Institute, Roorkee reserves the right to accept or reject any bids and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders.

Canvassing in any form will be illegal and strictly prohibited and the Tenders submitted by bidder s, who resort to canvassing, will summarily be rejected.

## **Purpose of Bid/Tender**

The institute plans to have a user friendly, vibrant web portal compliant to the 2nd edition of Guidelines for Indian Government Websites (GIGW) issued by Government of India,

World Wide Web (W3C) Standards with the integration of latest technological tools. There are 115 compliance standards as per Guidelines for Indian Government Websites (GIGW) related to the scope of content, quality of content, design and development, hosting promotion and management of website. The compliance matrix is enclosed herewith as Annexure I. The compliance matrix and detailed guidelines can also be accessed from website <http://guidelines.gov.in>. Further, in order to secure the website from hacking and sabotage attempts causing potential disruption of services, the website needs to be armed with latest technological tools, secure environment and effective information dissemination, both in English and Hindi. The developed website would have to be security audited by CERT-In certified third party auditor.

### **Scope of work for website**

In addition to current functionalities, the scope of the work for CMS (Content Management System) based institute website as per the 2nd edition of Guidelines for Indian Government Websites (GIGW) issued by Government of India, World Wide Web (W3C) Standards shall include, but not limited to the following tasks:

1. Development and deployment of the institute website, intranet site and online application modules on the servers installed at CSIR-CBRI, Roorkee.
2. The project implementation will incorporate Systems Analysis, Design, Coding, Implementation and performance tuning, deployment, and testing along with hand-holding. These stages along with the proposed completion time frames need to be clearly projected.
3. Testing, debugging and subsequent modification of the websites based on feedback of stakeholders.
4. Training and handholding for CSIR-CBRI personnel for websites. However, testing and training for application modules will be carried out for two month for stakeholders. Bugs, if any need to be removed before and after deployment of website and application modules.
5. Supply of the complete source code (industry standard) etc. for web sites.

### **Features of CSIR-CBRI Website**

1. Support for visually impaired and other disabled or challenged users which should be easy to navigate.
2. User friendly, elegant design with light colors, a neat uncluttered look with easy to navigate features and easy to use functions.
3. Designer support to provide creation, updating of images, themes and branding during development, during decided maintenance and after maintenance phase with perfect textures, shades and palettes.
4. Load time faster for website with light weight homepage.

5. Contents of the web site of CBRI will have information/data as available in the present web site <http://cbri.res.in>. However, it shall not be limited to it.
6. Support for extensive website analytics and statistics: covering traffic reports, visitor analysis, duration analysis, content wise analysis, top landing and top exit pages along with other statistics and reports.
7. User administration services as part of a comprehensive Content Management System which should be integrated in to the website design.
8. Content management system should have
  - a. An admin user who have privileges to change content of each and every page of the website in addition to administrative control of databases. Admin user will also act as super user to over write content of all the web pages. This user will assign the users as specific page/module editors.
  - b. The page editors will have rights to edit web pages as per their respective roles. Page editors should be able to specify the time period for which item will be displayed/published on the web. After this time period, it should be archived to respective page.
  - c. However, provision for getting the contents of web pages edited or updated by page editors to be approved by the admin or specified person should be provided.
  - d. Page editors should be able to specify the time period for which item will be displayed/published on the web. After this time period, it should be archived and unpublished.
9. Database based content management system should be in place for web pages like bio data of scientists, staff list, alumni, telephone directory, RC & MC committees, research groups, RTI information, tenders, recruitments, notifications etc. The updates or removal of the name from one section will entail to its update or removal from other pages of web site as well.
10. Support to create micro-sites / web portals within the main website using a sub-domain / virtual directory.
11. To provide customizable automated templates. User must be able to have multiple options and customizations to handle their own content at template and component level.
12. Audit Trial
13. Security Clearance Certificate for the website from CERT-In certified third party auditor.
14. Guidelines audit and certification from STQC.
15. Social logins and social page interactions. Link to Facebook, twitter page, G+, CSIR, oneCSIR home page and other GoI sites is to be provided.
16. Features like sending e-mails on server up and down, Mails and Text for authentication.
17. Spam monitoring for user generated content.

18. Search Engine Optimization (SEO) of the website to improve the visibility of the website. The presence of website of CBRI should be brought amongst top ones in world cyber space using search engine optimization etc.
19. Staff listing shall have name, email id [e.g. user(at)cbri(dot)res(dot)in] along with telephone number. Viewer should be able to sort as well as search by name, surname, phone number etc.
20. All copyrights, patents, honours and awards, research grants etc will be organized in database format for better sorting, presentation and editing purposes etc.
21. Home page may have information about events such as workshop/seminars/symposia/ conferences being held in institute, advertisements for recruitment, tender, prestigious award and honours, recent news/highlights, research grants in addition to links to different web pages. All this information is to be archived on respective pages as well after the event. This page should highlight research areas/themes along with research spotlight (current research achievements/papers etc). In addition to this, there should be a provision to display fixed number of information from different pages to home page which may be archived after the event.
22. The dates of opening closing of tenders and advertisement for recruitment need to be displayed along with their names. Provision needs to exist whereby amendment to tenders and recruitment advertisements should be displayed next to these. Further, after date of close of tender/recruitment, it should be archived with an option to hide it. It will not be an online tendering system and this information will be for display purpose only to outside world.
23. A counter for visit on the all the different web pages of web site needs to be provided. Date of modification, creation, enabling/disabling also should be recorded and archived for each page/news etc.
24. Payment Gateways - For micro-sites as training, tenders, recruitment etc. an online portal should be created with provision of integrating service payment gateway.
25. An Online Recruitment dynamic Portal needs to be developed and integrated/linked to this website.
  - a. A modular online application form is required for filling up different positions of permanent nature. Administrator should be able to create a form by choosing different fields depending upon the type of position advertised and requirement of information about the candidates.
  - b. A separate admin user(s) should be able to edit, insert, and delete fields and able to generate reports, download application forms and prepare the system for next advertisement in a parallel manner. Data of filled up application forms should be stored separately and should remain intact for all the advertisements.
  - c. Some of the fields (fees, age, percentage, experience, educational qualification etc.) of these forms may have filters and checks depending upon

- type of information being filled. For example, fees waiver and/or age exemption shall be applicable for female, SC/ST, handicapped etc. categories.
- d. The portal should provide for user registration / management with email communication mode. This registered external user database should be separate from the main site user database.
  - e. Tools with facility of filling different recruitment forms with the provision of integrating service payment gateway.
26. An online SAIF (Sophisticated Analytical Instruments Facility) portal need to be developed and integrated to website for the usage of users interested in availing the facilities at the institute.
- a. The module should provide the details of the facilities available at the institute and provide an interface for registration of the user / organization (availing facility) under any of the 04 different categories. Depending upon the facility to be utilized, an application form for placing the request for carrying out the test should be available.
  - b. Pages such as time slot booking, schedule, status report should be available to the registered users. The facility in-charge (institute staff) should have a provision to update the availability of facility and status of the requests.
  - c. Tools with facility of filling different forms with the provision of integrating service payment gateway.
  - d. The portal should provide for user registration / management with email communication mode. This registered external user database should be separate from the main site user database. The internal CBRI employees should also be able to utilize the facility using their existing main site website credentials.

### **Features of Intranet site**

1. This website will be developed & hosted as a stand alone application in separate OS.
2. The Intranet should be accessible through the main website for exclusive use of the employees.
3. Restricted access based on IP and user credentials shall be provided from outside the institute LAN.
4. Same user credentials shall be used for accessing both the main website and intranet site.
5. Content management system should have similar features as of main website.
6. Contents of the web site of intranet will have information / data as available in the present site. However, it shall not be limited to it.
7. Redesigning and integrating of existing database based module, as per theme of intranet site, for uploading / editing / downloading / searching of internal notices / circulars issued by respective page editors of different departments of institute.

8. Redesigning and integrating of existing database based module with user friendly interface, as per theme of intranet site, for viewing and managing Personal Inventory Records of employees by the Stores section of institute.
9. Development of a project management blog micro-site for interaction and sharing of information among various team members of different ongoing projects in the institute.
  - a. The site should have an administrator which should be able to manage the overall blogs and participants.
  - b. The site should support sharing / uploading of various file formats such as PDF, jpeg, gif etc.
  - c. The site should support and provide tools for interactive content such as infographics.

## **General Requirements**

- CSIR-CBRI websites should be developed in English as well as Hindi separately. Hindi text will be in Unicode fonts and content will be provided by CBRI.
- At least 5 templates of the home page of website of CBRI should be created and presented. Also, at least two sample pages shall be provided of subsequent web pages. A draft structure of home and web pages shall be shown and got approved from the committee before finalizing.
- Menus should be animated, and animations should be non-flash based. All pages subsequent to home page should display the flow of pages visited/hit, at the top of current page. User should be allowed to jump back to the page with a single click.
- The user should be able to reach the required page within 2 to 3 clicks.
- The layout of the redesigned web framework should have highly interactive functionality and be responsive to support dynamic rendering. It must be accessible through all major browsers viz. IE, Mozilla Firefox, Google Chrome, Opera, Safari etc.
- Image gallery containing videos (from YouTube or other local server), images of different news, events etc is to be created on the sites.
- Search facility is required within the websites and the results should show each page with a link to relevant information. GUI based database search with auto complete & instant search features (e.g. Google instant search).
- Websites to be developed on latest LAMP architecture independent of hardware with latest compatible version of CentOS in virtual environment. Database should be latest version of MySQL and APACHE.
- Database Import / Export functionality.
- Latest stable versions of software shall be used as on date of implementation.
- Perform periodic updating of all software including their dependencies.

- Software used should be freeware open source. If any license/paid software is used, it should be licensed in the name of 'Director, CSIR-Central Building Research Institute, Roorkee'. Price of such license of software should be included in the quote.
- The upgradability and compatibility between the CMS version and the plug-in used has to be ensured for a time period of at least 02 years. During the period, in case the software becomes a paid / professional version, it is to be provided to the institute at no extra cost.
- In the event of plug-in used in development of website, being available in free as well as professional version, the decision of the committee of the institute would be final and bounding on the vendor.
- There should be no advertisement by software or by third party used in form of text/pictures etc.
- There must be no violation to any copy rights or licensing with any third party software on any web/software modules. Vendor will have to certify in this regard.
- A Parallel copy of the websites (for both English and Hindi) of CBRI is to be managed in different servers for redundancy purposes.
- There must be provision of periodic backups of websites, database and logs e.g apache etc.
- Both the website and intranet site be integrated with official mail service provided by NIC.
- Admin should be able to view and download data in different formats (csv & pdf).
- Admin should be able to generate reports for all web pages of the site in predefined formats on daily, weekly, monthly, yearly basis.
- SSL security and reliable session management, cookie handling etc. is to be implemented for websites of CBRI. It should be secure from any intrusion, attacks, injections, spam or other possible cyber attacks both at coding and OS level etc.
- The SSL certificate for the domain (cbri.res.in) to be used on the developed websites and online modules shall be provided to CBRI by the vendor. The SSL certificate trusted by major browsers and devices should be provided from a legitimate and trusted certificate authority. The certificate should be valid for at least 03 years and use at least 128-bit encryption. Price of such a certificate should be included in the quote.

## **Terms and Conditions**

1. Comprehensive point wise Compliance sheet based on the requirements from the above sections is to be provided. Compliance can be in the form of YES/NO or any deviations should be mentioned clearly. Bids received without compliance sheet would be disqualified.
2. The total time frame for study, redesign and development of the website including security audit clearance from CERT-In empanelled third party auditor and STQC certification for GIGW compliance will be 08 weeks from the date of award of

the contract. However, the designing of the main website should be completed within 04 weeks of award of contract. The vendor would have to declare delivery schedule of the order.

## **Acceptance Testing**

The redesigned websites and modules will be examined by the empowered committee to inspect, test and evaluate the websites and determine whether they satisfy the acceptance criteria as agreed upon in the work plan. Vendor will rectify the deficiencies and other deviations from work plan, if any, and identified by the empowered committee immediately and not later than 10 days from the date of intimation by the institute. Re-evaluation will be done by empowered committee and if the deficiency is not rectified, the institute will be at liberty to invoke suitable penalty clauses and/or cancel the contract without further notice. Final payment release will be subject to empowered committee conveying acceptance after evaluation.

## **Security**

The vendor will provide and integrate the following security features:

1. Tools for control and monitoring Website security
2. Block unauthenticated access of Intranet.
3. Protection against defacement , hacking
4. Features to protect the site from Session Hijacking, SQL injection, Cross scripting and Denial of Service etc.

Additionally, the vendor shall further specify and recommend suitable systems to ensure complete security and performance of the Website. The proposal should include details as under:

1. Systems and Software required including control and monitoring tools
2. The proposal should include details of security architecture proposed for the Website incorporating various systems required, control and monitoring tools, access control etc.

## **Training**

Vendor will provide training in the usage/maintenance of the Website including all technical aspects and requirements for hosting, submission to search engines and other link sites for a period of at least one week. However, testing and training for application modules will be carried out for two month for stakeholders. Complete Website source code and other technical documents associated with the Website development, administration and usage will be provided to the Institute till satisfaction of the empowered committee.

Vendor will also provide necessary technical details including requirement of software, software tools and systems required for the proper upkeep and maintenance of the website. Vendor will provide technical support to the IT and other staff of the institute to become trained in the organization and administration of the Website.

### **Two Years Free Support**

The vendor will provide two years Maintenance support to analyze and fix any technical glitches within the redesigned websites and online application modules from the date of completion of the project. This shall include minor to moderate modifications in the websites. Additionally, in case of any minor / moderate modifications in GIGW during the support period, the same shall be incorporated by the vendor at no extra cost. A commitment/certificate in this regard is to be provided.