

No.F.53(16)/General//2024
GOVERNMENT OF PAKISTAN
ESTATE OFFICE

UP-GRADATION, EXPENSION AND MAINTENANCE OF I.T SOLUTION FOR
ESTATE OFFICE MANAGEMENT.

Sealed bids (Technical & Financial) are required from interested firms for up-gradation, expansion and maintenance of IT Solutions during the current Financial year 2024-25 which may be further extended subject to allocation of funds:-

1. The terms of reference, scope of works deliverable by the firm and bids documents may be downloaded from PPRA website as uploaded through EPAD.
2. If anyone has any concern they may contact during office hour to the IT Cell, 9th Floor Shaheed-e-Millat Secretariat, Estate Office Management (HQ), Islamabad.
3. The bids will be opened as per PPRA rule 36(b) I, Single Stage - Two Envelop procedure along with the earnest money as per PPRA rule. Sealed Bids in compliance with the details and requirements stated in the bidding documents must be submitted to the following address at or before 11:00 am on **24th December, 2024**. Technical bids/proposal will be opened on the same day publicly at 11:30 am at same address in the presence of tender opening committee and bidders representatives who opt to attend.
4. The competent authority may reject any proposal at any time prior to the acceptance of a proposal as provided under Rule 33 of Public Procurement Rule, 2004.

GOVERNMENT OF PAKISTAN
ESTATE OFFICE MANAGEMENT
8th Floor Shaheed-e-Millat Secretariat
Islamabad
051-9215388

17 eo 612 - 24/12 - P

Maintenance,
Up-gradation
& Expansion
Of
IT Solutions

For Estate Office Management
(Tender Document)

Work Scope

1. **Website Conversion:** Convert static website into a dynamic one with autonomous real-time report publishing. Modernize the design to be user-friendly and intuitive, making the site responsive and easily navigable.
2. **Database Optimization:** Refactor the code to use standard MySQL instead of Sequelize (JS) and optimize query performance. Remove any data redundancy and ensure consistent filtering mechanisms in reports.
3. **Disaster Recovery:** Implement a robust disaster recovery module for both the frontend and backend, including the database, ensuring data security and quick recovery during outages or data loss.
4. **Interactive Dashboard:** Build a dashboard displaying statistical reports like house availability, allotments, cancellations, rent paid, rent offenders, etc. This will give users a comprehensive view of all activities.
5. **Mobile and Web Dashboards:** Enhance user experience by upgrading the web application's interface and creating mobile apps for Android and iOS for easy data access and management.
6. **Mobile App for Lodges:** Develop a mobile application for Android and iOS for lodges, enabling online reservations, rent management, checkouts, and etc.
7. **One-Click Document Tracking:** Enable easy tracking and viewing of scanned documents related to allotments, cancellations, and other administrative processes.
8. **Search Filters:** Enhance the search functionality within the allotment module with filters based on branches, JEOs, and ascending/descending sorting to streamline data retrieval.
9. **Data Validation and Security:** Normalize and validate data across the database to prevent inconsistencies and injection attacks. Ensure the sanitization of all user inputs to avoid security breaches.
10. **Rent and Recovery Reporting Module:** Upgrade rent module to handle reporting of rent and recovery, offering transparency and better management of rent-related data.

11. **Federal Land & Building Data Bank:** Create a data management module for lodges, hostels, rest houses, and other federal properties, covering aspects like rent, physical conditions, and infrastructure management.
12. **2FA and OTP for Security:** Add two-factor authentication (2FA) and one-time password (OTP) functionalities to improve login security.
13. **MAC and IP Binding:** Implement network restrictions by allowing access only to authorized devices and users through MAC and IP binding.
14. **Role-Based Access Control (RBAC):** Restrict access based on user roles, ensuring control over who can read, write, and modify data to prevent unauthorized access.
15. **Activity Logging and Watermarking:** Implement logging for activities such as printing, with watermarks on reports to track usage and prevent leaks.
16. **Software Testing:** Conduct a thorough vulnerability check of the software, ensuring quality assurance with proper testing and reporting.
17. **NADRA and AGPR Integration:** Implement secure identity verification by integrating with NADRA for Family Registration Certificates (FRC). Connect to AGPR data for improved user verification.
18. **Geotagging:** Enable geotagging for federal accommodations, shops, buildings, and land properties for location-based management.
19. **ER/DFD Diagrams:** Develop interactive Entity Relationship (ER) and Data Flow Diagrams (DFD) for better system understanding and visualization.
20. **Documentation and Commenting:** Provide detailed documentation and proper code commenting for ease of future maintenance and updates.
21. **Vacation and Court Case Management:** Implement a module for managing vacation and legal cases efficiently.
22. **Training:** Train master trainers, officers, and staff across all stations to ensure smooth adoption and usage of the new system. Providing comprehensive training on the technology used in the development of the Estate Office portal to the technical staff.

Crucial Note:-

- i. **Bid Security:** A bid security of Rs. 180,000/- must be submitted along with the technical proposal to this office. It should be in the form of a Pay Order, Demand Draft, or an equivalent.

- ii. **Performance Guarantee:** A performance guarantee of Rs. 450,000/- must also be submitted along with the technical proposal to this office. It should be in the form of a Pay Order, Demand Draft, or an equivalent.
- iii. **All firms are advised that, as per PPRA Rules, we cannot proceed with a hard copy alone. In addition, you must apply through EPAD before the tender's closing date.**

REQUISITE INFORMATION
EVALUATION (TECHNICAL BID)

SR. NO.	Bidders Details:
1	Name of Firm:
	Year of Establishment:
	Owner:
	Address:
	Contact No:
	E-mail Address:
	NTN No:
	Sales Tax No:
	Vendor No:
2	Focal Person of Firm:
	Name:
	Qualification:
	Experience:
	Address:
	Contact No:
3	Registration:
a	With Securities & Exchange Commission of Pakistan
	▪ Reference No:
	▪ Date:
	▪ Date of Expiry of Registration:
b	With Federal Board of Revenue (Sale Tax / NTN)
	▪ Reference No:
	▪ Date:
	▪ Date of Expiry of Registration:
c	Affiliation with ISO / CMMI Certification
	▪ Reference No:
	▪ Date:
	▪ Date of Expiry of Registration:

d	Affiliation With NITB / Pakistan Software Export Board
	▪ Reference No:
	▪ Date of Registration:
e	Others (Membership of any IT / Accountancy Consortium)
	▪ Name of Organization with whom Registration has been made:
	▪ Reference No:
	▪ Date:
4	Details of Existing Location:
	▪ Self-Owned:
	▪ Rented:
	▪ Rent per Month:
	▪ Date of Expiry of Lease (if rented):
5	Bank Details of the Firm/Owner:
	▪ Name:
	▪ CNIC No.:
	▪ Bank Account No.:
	▪ Bank Name & Branch Location:
	▪ Existing Worth of Bank Deposits (To be certified by Bank):
	▪ Last Six Months Bank Statement:
6	Details of Projects Completed by Firm Successfully: (Attach Documentary References)
7	Details of Projects Currently Conducted at Presents: (Attach Documentary References)
8	Details of Professional Employees:
	i. Full Stack Developer (Frontend / Backend)
	ii. Database Administrators:
	iii. System Analyst:
	iv. Quality Assurance (QA) Engineer:
	v. Details of Each Official with Experience (Annex):
9	Demonstration:
	Details: Presentation on live to be adopted for smooth and effective Maintenance, Up-gradation and Expansion of existing Software of Estate Office Management.

10. 2 % of the earnest money of the bidding cost as per PPRA Rules.

Note:

- The Purchase committee may physically inspect the detail provide by the bidder
- The contract shall be initially awarded for 6 months and will be renewed annually, subject to availability of fund and satisfactory performance.
- If any document found forged during security, the firm will be disqualified from the process without giving any notice

ROLES AND TECHNOLOGY STACK IN THE EXISTING SOFTWARE PROJECT

ROLE	TECHNOLOGIES
Frontend Developer	JavaScript, TypeScript, Bootstrap, CSS, HTML, React
Backend Developer	JavaScript, Node.js, Express, Sequelize ORM, MySQL
Database Administrator	MySQL, Sequelize ORM
Full-Stack Developer	Full MERN Stack (MongoDB, Express, React, Node.js), MySQL, Sequelize ORM