



FEDERAL PUBLIC SERVICE COMMISSION

Aga Khan Road, Sector F-5/1, Islamabad

REQUEST FOR PROPOSAL (RFP)

**FOR HIRING THE SERVICES OF CONSULTANCY FIRM FOR DEVELOPMENT OF
FPSC's COMPUTER BASED TESTING (CBT) SYSTEM**

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1. **Introduction:**

FPSC is the apex constitutional body responsible for selecting civil servants to run public offices of Pakistan. The workload of the Commission has increased manifold over the last few years resulting in prolonged recruitment cycle spreading over years. This is mainly due to manual processes and intensive use of man hours. In order to address the issues FPSC intends to introduce Computer Based Testing (CBT) backed with a well-formed Question Data Bank for speedy machine centric formulation of Question Papers and inter-alia quick disposal of work without compromising quality, security, secrecy and integrity.

Currently, there are three major streams of examinations conducted by FPSC as following:

- a. General Recruitment (GR) - 98 % MCQ based testing
- b. CSS Competitive Examinations (CE) - Descriptive Exam with MCQs as its part
- c. Professional & Promotional Exams - Mainly Descriptive Exams

Appearance of candidates in these examinations/tests is mandatory. In GR both descriptive MCQ based papers are administered while in CSS Competitive Examination (CE) subjective questions along with MCQs as part of the paper are administered.

Proposed CBT will cater for MCQs as well as the descriptive test/examination being conducted by the Commission. Nevertheless, any futuristic schema suiting the requirements while remaining within rules can take the place of hitherto practiced processes.

Innovation, maximum use of technology, automations, digitization with due consideration for Security comprising of all essential parameters to include: Confidentiality, Integrity, Availability (CIA) beside Non-Repudiation, Accuracy and Traceability through logs are envisaged to lead the endeavored project.

Project comprises of following two components;

- i. Development of Question Data Bank (based on prometric testing paradigm)
- ii. Computer Based Testing by establishing computer labs at multiple locations across the Country (using futuristic iBT based testing models)
- iii. Automation of Internal Processes through a component called "Software Upgradation / Integration of Existing Online Recruitment System"

2. **Objectives:**

Services of Consultancy Firm (hereinafter called Firm) are aimed at playing a pivotal role in successful execution of the CBT Project as a whole. It will steer the course of design, development, implementation / integration, quality, testing, user acceptance and likewise. Firm will guide, monitor and manage the project activities and inter alia Developer Firms right from inception to the final closure.

Business Process Re-engineer (BPR) for shifting from paper based examination system to computer based testing mainly paperless and manual paper based internal process to the automated processing.

Firm will complement vision of FPSC regarding efficiency enhancement and transparency through use of latest IT tools and technologies in order to ensure security, scalability and integrity of FPSC examination system.

Firm is expected to lead in an all-encompassing manner till final acceptance and commissioning. In order for the project to become a landmark all possible avenues and state of the art technologies are expected to be made its part. Major objectives are as below;

- i. To propose, after study and evaluation of the existing system, transformation of traditional practices into modern Computer Based Testing (CBT) Systems with futuristic outlook and automations while minimizing human interventions and ensuring transparency.
- ii. To propose and strategize multiple appropriate solutions/models in line with the requirements, identified standards and implementation methodology for final selection of one by the Technical Committee of FPSC. Technology transfer and indigenization of the proposed solution shall be the factors considered towards selection.
- iii. To develop architecture design and project plan of finalized CBT System with their functional/non-functional requirements comprising of hardware, software components with their licensing (if required).
- iv. To Monitor and Evaluate (M&E) all phases of project development in accordance with the international established standards and best practices.
- v. To identify potential risks and suggest mitigation strategies (Project Risk Management).
- vi. To certify attainment of all milestones as per project plan and defined standards.

3. **Receipt of Bids:**

The scope and terms of reference of Consultancy Firm would be further clarified in a pre-bid meeting scheduled to be held on **20-05-2021 at 11:00 AM** at FPSC HQ, Islamabad. Sealed Bids (Technical and Financial) (Both in separate sealed envelope duly marked as such) in duplicate should reach the office of Project Director (CBT) FPSC, Islamabad on or before **31-05-2021 at 11:00 AM**. Technical bids will be opened on the same day at **11:30 AM** in presence of bidders or their representatives, whereas financial bids of qualified firms will be opened on a date to be announced later i.e., post evaluation of Technical Proposals.

i. **Technical Bid**

Technical bids shall consist of all the documents as per required scope of work defined in Section-4. Firm should meet eligibility criteria as set out in Section-5.

Documentary proof of Qualification and Experience would be required and should be made part of Technical Proposals. Deficient or Defective documents reflect lack of competence on the part of the proposer and are not expected form competing firms.

ii. **Financial Bid**

Financial bids may be furnished in Pak Rupees only.

iii. **Technical and Financial Evaluation**

Technical Proposals/Bids of the firms will be evaluated first on the basis of evaluation criteria defined in Section-6. Firms declared qualified in technical bids will be invited for opening of their financial bids and the financial bids of the non-qualified firms will be returned unopened.

iv. **Award of Contract**

Subject to fulfilment of Rule 35 of the Public Procurement Rules, 2004, Lowest Evaluated Bidder (both in terms of Technical and Financial) shall be awarded the contract.

4. **Scope of Work:**

i. **Fundamentals**

Under the supervision of FPSC's Management, Firm will be required,

- a. To study the existing examination system of FPSC and objectives of Computer Based Testing (CBT) project for preparation of roadmap regarding transformation from Paper-Based examination system to Paper-Less Computer Based Examination System.
- b. To Recommend viable solution(s) including design, development methodology, implementation and commissioning by the developer firm in keeping with all the functional and non-functional requirements envisaged from the CBT System.
- c. To develop and define specific, measurable and achievable and time bound project milestones. Devise methodology for achievement of these / project milestones while guiding all stakeholders accordingly.
- d. Monitoring, evaluation and acceptance of each deliverable of the project as provided by the developer firms and vendors.
- e. To ensure setting up of an integrated Computer Based Testing System as per international standards and best practices. This will also involve operational integration of business processes of relevant wings of FPSC.
- f. To provide technical assistance on all aspects of the project right from initiation till commissioning of the systems CBT and Automation of FPSC.
- g. To develop system architecture, detailed design, platform selection criteria and other specifications ensuring smooth development / procurement and final functioning of CBT system.
- h. To develop Security Architecture of the systems and get the same developed and implemented ensuring Confidentiality, Integrity and Availability (CIA) ensuring compliance of all Information Security Standards.
- i. To prepare business, functional, technical specifications/standards for CBT system (General, system software, computing hardware, network, security, data centre architecture, hardware and system software requirements, licenses, intellectual property, implementation plan, etc) with strategies for minimizing human interaction, human errors and other possible shortcomings.

- j. To carryout evaluation of bids/technical specifications for procurement of proposed hardware/software/system(s) in line with the stipulated requirements and other regulatory requirements including PPRA.
- k. To provide Certification to the fact that the procured software/hardware/system(s) is/are fully compliant of recommended specifications.
- l. To monitor and evaluate activities of software and hardware development or procurements during the implementation phase of the project w.e.f award of work to the vendor and to suggest corrective actions as per defined standards/requirements.
- m. To furnish periodic implementation reports to FPSC indicating achievement of milestones, progress by all stakeholders and bottlenecks impeding progress, if any with concrete recommendations for resolution of identified and other issues.
- n. To issue certificate at the time of completion of each milestone of the project based on already defined standards/specifications.
- o. To assists FPSC in preparation of consolidated project completion report on closing of the project.
- p. To assist FPSC on any other matter related to the project, its associated Business Process Re-Engineering and any other matter as considered related or affecting the attainment of overall objectives.

ii. **Envisaged Functionalities of CBT System**

CBT system is aimed to cater for the following essential functionalities:

- i. A Fully Autonomous Testing System for High Stake Recruitment Testing in line with the modern-day best practices and systems available across the globe.
- ii. Question Data Bank System comprising of Question Generation Engine(s) for developing Questions and Question Papers in an autonomous manner with no or least human interaction.
- iii. Utilization of Question Data Bank for generation of computerized MCQ/subjective question papers with defined difficulty levels as required for a particular set of candidates.
- iv. Security mechanisms for the Data Centre (DC).
- v. Transmission of question papers to FPSC Prometric Labs established at multiple stations across the Country in encrypted form using cloud based or any other advanced technology.
- vi. Conduct of computer based examination at designated locations of FPSC
- vii. 100% availability and functioning of the system at the same time across the country.

- viii. Transmission of compiled result in encrypted form to centralized database of FPSC Headquarter
- ix. Instant scoring and automated generation of merit list.
- x. Implementation of the Functionalities as emerged out of design and development process ensuring compliance of all requirements as stipulated above.

5. **Eligibility Requirements**

Firm should have at least 05 years of full time experience of development/design/implementation of computer based examination or similar systems. Firm will be selected through competitive selection process and therefore needs to project its capabilities, experiences, strengths and achievements as related to the project. Necessary documents may be furnished with technical proposal to ascertain following requirements;

- i. Firm is General Sales Tax and National Tax Number Registered.
- ii. Certificate of Company/Firm Registration / Incorporation under the laws of Pakistan i.e. SECP/PEC/PSEB etc.
- iii. Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Pakistan.
- iv. Affidavit on stamp paper (original and latest) of Rs. 100/- showing that bidder is not black listed from any government department and no suit is pending in any court of law against them.
- v. Proven track record/proof of working experience relating to assessment and evaluation of IT System or similar projects.
- vi. Must have experience in business process re-engineering, change management, related to IT solutions, implemented in the largescale organizations functioning at geographically distinct locations across the country.
- vii. Proven experience in the implementation of computer based testing system in the large organization preferably in the public sector.
- viii. Strong financial position
- ix. Must have adequate qualified staff with minimum of 5years' experience in all relevant areas; IT, project management and running of computer based examination system.
- x. List of staff, the consultancy will engage in the project particularly team leader with their CVs

6. **Evaluation Criteria:**

- i. Technical Proposal/Bid carries 70% weightage
- ii. Financial Proposal/Bid carries 30% weightage.
- iii. Qualifying marks in technical evaluation are 50% (i.e. 35 marks out of 70).
- iv. Bids shall be evaluated as per Rule 36(b) "Single Stage Two Envelope Procedure" of Public Procurement Rules, 2004.

Technical Evaluation Criteria

Sr. #	Parameters to Be Assessed on The Basis Of Documents Furnished By The Firm.	Marks
1	<p>Experience in design/development/consultancy relating to Computer Based Testing (CBT) or similar systems for a sizeable/reputed organization. Details of completed projects to include following:</p> <p>1) Number of implemented CBT or similar Projects with cost of the project, client, duration, completion period etc. 10 marks</p> <p>2) Length of experience in CBT or similar infrastructure design/development 07 marks</p> <p>3) Experience in CBT software/databank or similar Development 08 marks</p>	25
2	Experience in providing consultancy services for IT related projects (other than CBT) to national or international organizations. Details of completed projects with requisite information i.e. project description, cost of the project, client, duration etc.	10
3	Requisite technical competence to carry out the intended services in terms of current strength and quality of HR	5
4	Experience of working with public sector organization for medium to large scale IT projects.	5
5	Experience of running of CBT systems	10
6	Presentation	15
	Total Marks	70

7. Duration for Completion:

The time period for provision of services is **21 months** relating to the scope of work defined in section 4. *(On satisfactory performance and extension of project timelines time period of service may be extended depending upon related approvals)*. Timeline of major deliverables are as follows;

Sr #	Major Deliverable	Timeline (After award of contract)
a.	Requirement Engineering	In two months
b.	Development of proposed CBT Model	In three months
c.	Software/System Requirements Specifications for tendering process	In three months
d.	Hardware requirements specifications for tendering process	In three months
e.	Development, Implementation and Procurement Methodology for achievement of all milestones as well as monitoring and evaluation criteria	In three months

f.	Business Process Re-engineering	In five months
g.	Monitoring and Evaluation reports on the project Implementation and resolution of disputes.	Continuous monthly report till end of the project contract
h.	To identify technical trainings for the operational team of FPSC for smooth functioning of the envisaged systems.	In six months

8. **Taxes:**

All the applicable Federal/ Provincial taxes must be considered while preparing the Financial Bids. All these taxes are required to be built in the quoted rates and not be mentioned separately.

9. **Bid Validity Period:**

The bid shall remain valid till **30th June, 2022.**

10. **Bid Security / Performance Guarantee:**

A Bid Security/Bid bond is required and acceptable in the shape of a Bank Draft/Pay Order/Demand Draft/ Banker's cheque/CDR only, issued from any scheduled bank operating in Pakistan, as **3%** of the quoted bid price, in the favor of FPSC.

The bid security of the successful bidder shall be treated as performance Guarantee and retained for the whole period of service

Unsuccessful bidders' bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity

11. **Blacklisting:**

- a. The procuring agency may blacklist a firm found under obligation of the aforementioned wrongdoings who consistently fails to perform satisfactorily.
- b. Before blacklisting of the firm, show cause notice will be issued to the bidder followed by personal hearing, in case of non-resolution of issue. The nature of blacklisting of firm, whether temporary or permanent, will depend upon the gravity of offense.

12. **Address / Location:**

Office of the Project Director, Federal Public Service Commission, Aga Khan Road, Sector F-5/1, Islamabad, Tel # 051-9210702

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