Terms of Reference for Software Development, Operations and Maintenance

Reference number: PSeGS/Soft_Dev_O&M/2020/1

Punjab State e-Governance Society,
O/o Department of Governance Reforms and Public Grievances,
Government of Punjab
Plot D-241, Industrial Area, Phase – 8B,
Sector – 74, Mohali – 160071
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1. Document control sheet

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Particular</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Document reference number</td>
<td>PSeGS/Soft_Dev_O&amp;M/2020/1</td>
</tr>
<tr>
<td>2.</td>
<td>Last date and time for submission of queries through email</td>
<td>14-09-2020 18:00 Hrs</td>
</tr>
<tr>
<td>3.</td>
<td>Date and time for pre-bid meeting</td>
<td>15-09-2020 11:00 Hrs</td>
</tr>
<tr>
<td>4.</td>
<td>Last date and time for submission of bids</td>
<td>22-09-2020 15:00 Hrs</td>
</tr>
<tr>
<td>5.</td>
<td>Date of opening of financial bids</td>
<td>23-09-2020 15:00 aHrs</td>
</tr>
<tr>
<td>7.</td>
<td>Cost of ToR document &amp; mode of payment</td>
<td>Rs. 5,000/- (Rs. Five Thousand Only) through online mode.</td>
</tr>
<tr>
<td>8.</td>
<td>Security Deposit through online mode</td>
<td>Rs. 5,00,000/- (Rs. Five Lakhs Only)</td>
</tr>
</tbody>
</table>
| 9.   | Contact details                                | Mr. Anwar, Assistant Manager  
Mobile : +91 9888819150  
Email: anwar@punjab.gov.in  
Mr. Arvind, Technical Manager  
Mobile: +91 8527748877  
Email: arvind.upadhyaya@punjab.gov.in |
| 10.  | Website for RFP reference                     | https://dgrpg.punjab.gov.in/ and  
https://eproc.punjab.gov.in/                                            |

Reference number: PSeGS/Soft_Dev_O&M/2020/1  

ToR document for software development, operations and maintenance

Note:

1.1.1 In case a holiday is declared on any day, the event will be shifted to the next working day, same time.

1.1.2 All corrigendum / addendums / clarifications regarding this RFP shall be posted on the above-mentioned websites only. No other communication or advertisement will be given.

2. Definitions

2.1.1 Unless the context otherwise requires, the following terms whenever used in this tender and contract have the following meanings:

2.1.1.1 “DGRPG” means Department of Governance Reforms and Public Grievances, Punjab.

2.1.1.2 “PSeGS” means Punjab State e-Governance Society (which is the implementing agency of DGRPG). The contract will be signed through PSeGS.

2.1.1.3 “Client” refers to DGRPG / PSeGS.

2.1.1.4 “Bidder” means firm / company / business entity who submits bid in response to this ToR.

2.1.1.5 “Bid” means proposal submitted by bidders in response to this ToR.

2.1.1.6 “Committee” means the committee constituted by PSeGS for evaluation of bids.

2.1.1.7 “Service Provider” means the firm / company / business entity, selected through competitive tendering process in pursuance of this ToR, for providing software development and maintenance services under the contract.

2.1.1.8 “PBG” means “Performance Bank Guarantee”.

2.1.1.9 “Contract” refers to contract entered between PSeGS and the Service Provider.

3. Instructions to bidders

3.1 Invitation for bid

3.1.1 Punjab State e Governance Society (PSeGS) under the aegis of DGRPG, Govt. of Punjab works with several Govt. departments and provides multiple services to various departments and citizens. DGRPG also interfaces with citizens and department users via various applications like eSewa, mSewa, CaptainApp, COVA, Grievance – Citizen and other applications. Under the ‘Digital Punjab’ initiative of the Govt. of Punjab, it has been decided to take support from the industry to fasten the pace of digital transformation of the State, to expedite the e-governance projects for the overall benefit of the citizens and public by setting up the necessary administrative, financial, legal and technical framework, implementation mechanism and resources in the State of Punjab.
3.1.2 Punjab State e-Governance Society (PSeGS) invites the bids from the empaneled vendors of the DGR, who have accepted the provisional empanelment of Department of Governance Reforms for Software Development and maintenance for the State Govt. Departments/ Boards/Corporations/Societies under Group I, II, IV and others. As per the terms and conditions of the TOR, the “Service Provider” will have to provide requisite manpower resources with relevant experience and qualification as defined in this ToR.

3.2 Security Deposit

3.2.1 The bidder shall furnish Security Deposit through online mode, as part of the Eligibility Criteria, as per detail provided in the Document Control sheet.

3.2.2 Security Deposit of the successful bidder will be released after the successful bidder signs the final agreement and furnishes the Performance Bank Guarantee (PBG) as performance security.

3.2.3 EMD of all unsuccessful bidders would be refunded by PSeGS as promptly as possible after signing of the agreement with the successful bidder.

3.2.4 The EMD submitted shall be interest free and will be refundable to the bidders without any accrued interest on it.

3.2.5 The EMD will be forfeited on account of one or more of the following reasons:

3.2.5.1 Bidder withdraws its bid during the validity period specified in the tender.

3.2.5.2 Bidder fails to provide required information during the evaluation process or is found to be non-responsive.

3.2.5.3 In case of a successful bidder, the said bidder fails to sign the Agreement in time; or furnish Performance Bank Guarantee in time.

3.2.5.4 If a bidder makes misleading or false representations in the forms, statements and attachments submitted in the bid documents.

3.3 Preparation of bid

3.3.1 The bidder is expected & deemed to have carefully examined all the instructions, guidelines, forms, requirements, appendices and other information along with all terms and condition and other formats of the bid. Failure to furnish all the necessary information as required by the bid or submission of a proposal not substantially responsive to all the requirements of the bid shall be at bidder’s own risk and may be liable for rejection.

3.3.2 The bid shall be uploaded on the www.eproc.punjab.gov.in website by the bidder or duly authorized person(s) to bind the bidder to the contract.
3.3.3 The bids submitted by fax / e-mail etc. shall not be accepted. No correspondence will be entertained on this matter.

3.3.4 PSeGS may, at its own discretion, extend the date for submission of proposals or cancel the whole process.

3.4 **Clarification on ToR document**

3.4.1 The bidders requiring any clarification on the bid document may submit his queries by the due date and time as mentioned in the Document Control Sheet in the following format in a MS Excel file:

<table>
<thead>
<tr>
<th>SN</th>
<th>ToR Clause No.</th>
<th>Page No.</th>
<th>ToR Clause detail</th>
<th>Amendment Sought / Suggestion</th>
<th>Justification</th>
</tr>
</thead>
</table>

3.5 **Bid opening**

3.5.1 PSeGS will constitute a committee to evaluate the bids submitted by bidders. No correspondence will be entertained outside the process of evaluation with the Committee.

3.5.2 The bids submitted will be opened at time & date as specified in the document control sheet by Committee or any other officer authorized by Committee, in the presence of bidders or their representatives who may wish to be present at the time of bid opening.

3.5.3 Committee may, at its discretion, call for additional information from the bidder(s) through email / telephone / meeting or any other mode of communication. Such information has to be supplied within the set-out time frame as provided by Committee, otherwise Committee shall make its own reasonable assumptions at the total risk and cost of the bidder and the bid may lead to rejection.

3.6 **Financial bids evaluation**

3.6.1 Financial bids would be opened in the presence of bidder’s representatives, who may wish to be present.

3.6.2 The bidder offering lowest “Grand Total Annual Cost” would be termed as L1 (Least Cost) bidder or the successful bidder.

3.6.3 In case the evaluated bid amount of two or more bidders are the same, then the firm having higher total turnover for the financial year 2018-19 will be declared as L1 bidder or the successful bidder.
3.6.4 Failure to abide the tender conditions may result into forfeiture of Security Deposit & PBG.

3.6.5 Any conditional financial bid will lead to disqualification of the entire bid and forfeiture of the security deposit.

3.6.6 Bidder quoting zero or negative service charges will be treated as non-responsive and will result in forfeiture of the security deposit.

3.6.7 Errors & Rectification:

3.6.7.1 If there is a discrepancy between words and figures of the charges, the amount in figures will prevail.

3.6.7.2 If the bidder doesn’t accept the correction of error(s) as specified, its bid will be rejected.

3.7 Notification of award of contract

PSeGS will notify the successful bidder in writing about acceptance of their bid. The notification of award will constitute the formation of the contract after submission of PBG to PSeGS as performance security by the successful bidder.

3.8 Performance security

3.8.1 As soon as possible, but not more than 15 days following receipt of letter of award of the contract, the successful bidder shall furnish PBG to PSeGS valuing @ 10% of the value of the concerned contract as performance security.

3.8.2 PBG shall remain valid for a period of 180 (one hundred eighty) days beyond the expiry of the contract. Whenever the contract is extended, Service Provider will have to extend the PBG proportionately. If more items are brought under the maintenance contract, the concerned PBG will have to be increased proportionately whenever the increase in required PBG is more than one lakh rupees.

3.8.3 In case the successful bidder fails to submit PBG within the time stipulated, PSeGS at its discretion may cancel the award of contract to the successful bidder without giving any notice and the EMD of the concerned bidder will be forfeited.

3.8.4 The Service Provider will not be entitled for any interest on the PBG submitted.

3.8.5 PSeGS shall forfeit the PBG in full or in part in the following cases:

3.8.5.1 When the terms and conditions of contract are breached/ infringed.
3.8.5.2 When contract is being terminated due to non-performance of the Service Provider.

3.8.5.3 The Clients incur any loss due to Service Provider’s negligence in carrying out the project implementation as per the agreed terms & conditions.

3.9 Signing of contract

3.9.1 The successful bidder will sign the contract with PSeGS within 15 working days of the release of notification and submission of performance security. After signing of the contract, no variation in or modification of the term of the contract shall be made except by mutual written amendment signed by both the parties.

3.10 Fraud and corrupt / malpractices

3.10.1 All the bidders must observe the highest standards of ethics during the process of selection of Service Provider and during the performance and execution of contract.

3.10.2 For this purpose, definitions of the terms are set forth as follows:

3.10.2.1 “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of the Client or its personnel in contract executions.

3.10.2.2 “Fraudulent practice” means a misrepresentation of facts, in order to influence a selection process or the execution of a contract, and includes collusive practice among bidders (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive the Client of the benefits of free and open competition.

3.10.2.3 “Unfair trade practice” means supply of services different from what is ordered, or change in the Scope of Work.

3.10.2.4 “Coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the selection process or execution of contract.

3.10.3 PSeGS will reject a proposal for award, if it determines that the bidder recommended for award, has been determined to having been engaged in corrupt, fraudulent or unfair trade practices.

3.10.4 PSeGS will declare a bidder ineligible, either indefinitely or for a stated period of time, for award of contract, if bidder is found to be engaged in corrupt, fraudulent and unfair trade practice in competing for, or in executing, the contract at any point of time.

4. Scope of Work

4.1 Introduction
4.1.1 The broad scope of services for various types of projects includes web-based/mobile application development and maintenance, to be provided by the manpower deployed by the Service Provider in the office of the Client is as under:

4.1.1.1 Requirements Study/Analysis of processes to be computerized.
4.1.1.2 Preparation of Software Requirement Specifications.
4.1.1.3 Recommendations for Business Process Re-engineering in the Department
4.1.1.4 Report on hardware and network capacity planning & sizing
4.1.1.5 Development & Deployment of various software modules including mobile application development
4.1.1.6 Integration with legacy software, if required
4.1.1.7 Performing all forms of Testing
4.1.1.8 User Acceptance Test of all modules
4.1.1.9 Data Migration including planning
4.1.1.10 Comprehensive Training of Employees for developed software
4.1.1.11 Final User Acceptance Test of integrated Application Software
4.1.1.12 Security Audit of the Software
4.1.1.13 Implementation support tasks
4.1.1.14 Handing over of Project related documents including Source Code with documentation for the software developed, Software executable, Project plans, Project status reports, Test Plans, Test Specifications and results, User Manuals, Training Materials, technical manual etc.
4.1.1.15 Final signoff
4.1.1.16 Change Management/Change Request.
4.1.1.17 Maintenance and Operational support.

4.1.2 In addition to the above-mentioned scope of work, DGRPG has conceived an Enterprise Architecture (EA) platform as a ‘one-stop-shop’ for citizens needing to interact with state government departments. The platform will act as backbone for hosting and delivering integrated data and services to all the government departments and to citizens. By consolidating and digitizing service delivery, the Punjab state government aims to improve the public welfare service delivery. The Client will also be supporting the Client in Migration of citizen services to new EA platform.

4.1.3 Following components have been identified for the Enterprise Architecture:

<table>
<thead>
<tr>
<th>SN</th>
<th>Component</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reference number: PSeGS/Soft_Dev_O&M/2020/1
<table>
<thead>
<tr>
<th></th>
<th>Web Server (Nginx, Apache, Tomcat, Jboss, WebLogic, Kestrel, IIS)</th>
<th>Load balanced web servers that will host multiple web applications of departments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Kafka Server</td>
<td>Central distributed commit log for fast, fault-tolerant communication between producers and consumers using message-based topics.</td>
</tr>
<tr>
<td>3.</td>
<td>Kubernetes Cluster, Service Mesh</td>
<td>Kubernetes will be used for automating deployment, scaling, and management of containerized applications.</td>
</tr>
<tr>
<td>4.</td>
<td>Knox (Key Management Software)</td>
<td>Knox will maintain confidential secrets, keys, and credentials and allows developers and applications to securely access them.</td>
</tr>
<tr>
<td>5.</td>
<td>API Gateway Server</td>
<td>Acts as a reverse proxy, routing requests from clients to services. It will also perform various cross-cutting tasks such as authentication, SSL termination, and rate limiting</td>
</tr>
<tr>
<td>6.</td>
<td>Redis Cache</td>
<td>Provides cache frequently accessed data and serve users without frequently connecting with database</td>
</tr>
<tr>
<td>7.</td>
<td>ELF Stack</td>
<td>Provides logs searching, analysis and reporting</td>
</tr>
<tr>
<td>8.</td>
<td>PostgreSQL/My SQL</td>
<td>Open source enterprise grade SQL based database that will replace all expensive Microsoft SQL instances</td>
</tr>
<tr>
<td>9.</td>
<td>Shared SQL Server (Enterprise Edition)/Oracle</td>
<td>It will be used to port existing applications that require SQL/Oracle database instance. Efforts will be made to redesign the application in PostgreSQL to save the licensing cost.</td>
</tr>
<tr>
<td>10.</td>
<td>DB Proxy</td>
<td>Wrapper around database query for customization. Provides intelligent query routing to the database.</td>
</tr>
<tr>
<td>11.</td>
<td>Workflow Orchestration</td>
<td>It will be used to design and execute cross-microservice workflows reliably. It will also give visibility to workflow status and other statistics</td>
</tr>
<tr>
<td>12.</td>
<td>Document storage + CDN Proxy</td>
<td>Provide storage for various applications. Fault tolerant system providing links for documents to applications</td>
</tr>
</tbody>
</table>
13. **OpenLDAP**
   Provides central LDAP directory for managing server security, policy, authentication and management.

14. **SSO (Key Cloak)**
   Provides single-sign on to various applications and users that gives integrated secure authentication mechanism.

15. **Alerting**
   Provides real time alerts based on defined criteria for server and application health and statistics

4.1.4 Intellectual Property Rights of the source code, database or work done by any of the resource of the Service Provider related to the project will remain with the Client at all times.

**4.2 Additional Requirements**

4.2.1 The Service Provider will also be responsible for complete operations and maintenance support for all the applications of DGRPG / PSeGS. There are multiple channels through which citizens or departments may approach and mechanism will be defined in consultation with the Service Provider. O & M support will require:

4.2.1.1 Taking over from current O & M team.
4.2.1.2 Fixing the customer issues at L1 level e.g. data correction, report generation, sometimes providing training on how to use the system correctly.
4.2.1.3 Bug fixing at L1 level. These can be application bugs or data correction bugs.
4.2.1.4 Application bugs if any needs to be resolved in consultation with the development team.
4.2.1.5 Root Cause Analysis for each issue needs to be documented after fixing the issue.
4.2.1.6 Change request needs to be incorporated
4.2.1.7 Severity of issue needs to be defined and incorporated as per impact.

4.2.2 Note: The premises along with proper seating environment, on premise Internet Connectivity will be provided by the Client; however, Service Provider will have to provide the hardware including laptops, internet dongles to all the resources.

**4.3 Resources to be deployed**
4.3.1 Primary technology stack that is being used by PSeGS for various applications is: Java, Dot Net C#, MSSQL, JavaScript, angular.js, react.js, Postgres, MySQL, ELK, Redis, Kubernetes, Docker, etc.

4.3.2 To execute the tasks / activities a tentative number of 20-member team will be required which includes application dbas, senior developers, and developers as under:

<table>
<thead>
<tr>
<th>SN</th>
<th>Profile</th>
<th>Qty</th>
<th>Qualification</th>
<th>Experience</th>
<th>Skillset</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DBA</td>
<td>2</td>
<td>B.E. / B.Tech. / MCA / M.E. / M.Tech.</td>
<td>3 to 5</td>
<td>Postgress, MS SQL, My SQL, Open Source, NO sql, Mongo DB</td>
</tr>
<tr>
<td>2</td>
<td>Senior Developer</td>
<td>8</td>
<td>B.E. / B.Tech. / MCA / M.E. / M.Tech.</td>
<td>5 to 10</td>
<td>.net, React.js, Spring boot with rest api, NODE JS, AWS/Azure, SVN/git</td>
</tr>
<tr>
<td>3</td>
<td>Developer</td>
<td>10</td>
<td>B.E. / B.Tech. / MCA / M.E. / M.Tech.</td>
<td>2 to 5</td>
<td>.net, React.js, Spring boot with rest api, NODE JS, AWS/Azure, SVN/git</td>
</tr>
</tbody>
</table>

4.3.3 The Client reserves the right to direct the Service Provider to decrease the manpower or increase the manpower with similar skill set at any moment of time.

4.3.4 Service Provider has to submit at least two CVs against each of the above 20 posts within 7 days from the issue of letter of award of contract. Post submission of the CVs, the Client will take the interview of the resources. Only those resources will be allowed to work who have been selected by the Client. In case of rejection of the candidate, Service Provider will have to provide fresh CVs within 3 working days and interviews will be taken again for those candidates.

4.3.5 Service Provider has to ensure that all 20 resources are placed in the office of Client within 30 working days from the date of award; else, penalty will be imposed as per SLA defined in this document.

4.3.6 Service Provider is required to provide these resources full time at the premises of DGRPG, Mohali.

4.3.7 Service Provider and all the deployed resource members will be required to sign the Non-Disclosure Agreement.

4.3.8 Service Provider shall ensure to carry out the due-diligence background check of all the resources deployed during the course of the contract.
4.3.9 Tickets would be assigned to the resources which would fall in any of the following categories:

4.3.9.1 Tasks / Activities: Mainly assigned to developers in relation of software development tasks.

4.3.9.2 Bugs: assigned to resources for fixing of issues discovered in the software applications.

4.3.9.3 Support tickets: L1 support tickets assigned to support engineers for acting as helpdesk and resolving basic queries w.r.t software.

4.3.10 The priorities of the tickets would be assigned by the Client and these would be final and binding on the Service Provider.

4.3.11 Resources will work for 6 days per week. In case of any urgency, they can be called on public holidays or weekends. One day leave per resource per month will be allowed after approval from the Client. In case leave taken is more than one day per month, deductions will apply as per SLA unless a replacement resource is provided.

4.3.12 Deployed resources have to make their own arrangement of transport (including in case of night shift or late sitting in the office) at their own cost.

4.3.13 If any specific work could not be completed due to poor manpower quality, the successful bidder is required to provide a suitable substitute. Any change of resource during the period of contract should be done only with the prior written approval from the Client. Generally, replacement of resource would not be allowed for reasons except in the case of medical issues, retirement, resignation, or termination of the employment of the resource by the Service Provider. One-month notice must be given before replacement of a resource. For whatsoever reason provided, the target for schedule of work should not be suffered.

4.3.14 Project review meeting will be held as and when needed by the Client to review the progress of the tasks previous month and decide on the next course of action / deliverables for prevalent month.

4.3.15 The resources are required to submit a weekly status report. The status report should contain detail activities undertaken in the week: any risk and issues for the progress of the project, key activities to be undertaken in the next week.

4.3.16 The Service Provider shall ensure all statutory and regulatory compliance like ESI, EPF, Minimum Wages Act, etc.

4.4 Skill Set and Job Description of Developer

Reference number: PSeGS/Sof t_Dev_O&M/2020/1
4.4.1 Skill Set

4.4.1.1 Minimum 2+ years of experience in REST api development using Java, DotNet, Spring boot

4.4.1.2 Should have worked on Java Spring web services, DotNet /node.js / react.js, angular.js

4.4.1.3 Basic understanding of front-end technologies, such as HTML5, and CSS3

4.4.1.4 Should have good exposure to RDBMS/NO SQL

4.4.1.5 Good understanding of server-side templating languages

4.4.1.6 Should have good analytical, coding and debugging skills.

4.4.1.7 Proficient understanding of code versioning tools, such as SVN/Git.

4.4.1.8 Good to have Cloud Computing experience using AWS/Azure.

4.4.2 Job Description

4.4.2.1 Analysis of the requirements related to various microservices.

4.4.2.2 Develop bug-free code using TDD approach.

4.4.2.3 Write code considering the User authentication and authorization between multiple systems, servers, and environments

4.4.2.4 Perform the Self/Peer Code reviews.

4.4.2.5 Perform Automated Unit Testing of the developed code

4.4.2.6 Troubleshooting the defect, debug and fix the bugs within defined DTT.

4.4.2.7 Integration of multiple data sources and databases into one system

4.4.2.8 Creating database schemas that represent and support business processes

4.4.2.9 Create a scalable application keeping in mind fundamental design principles

4.4.2.10 Develop applications targeting multiple delivery platforms, such as mobile vs. desktop, and optimizing output to match the specific platform

4.5 Skill Set and Job Description of L1 Support Engineers

4.5.1 Skill Set

4.5.1.1 Excellent verbal and written communication skills to co-ordinate efficiently with client, products, offshore & onshore teams and bridge the communication gaps

4.5.1.2 Customer centric should understand the issue raised by customer

4.5.1.3 Problem solving and debugging skills

4.5.2 Job Description

4.5.2.1 Trouble shooting

4.5.2.2 Customer interaction
4.5.2.3 Data correction in DB
4.5.2.4 RCA document creation
4.5.2.5 Raise bugs as per customer
4.5.2.6 Report generation and submission

4.6 Skill Set and Job Description of QA Engineers

4.6.1 Skill Set
4.6.1.1 Excellent verbal and written communication skills to co-ordinate efficiently with client, products, offshore & onshore teams and bridge the communication gaps
4.6.1.2 Technical background and an understanding of the mobile apps & ecosystem
4.6.1.3 Good experience with different Mobile Operating Systems (iOS & Android)
4.6.1.4 Understanding of software QA methodologies, tools, and processes
4.6.1.5 Knowledge of SQL and scripting
4.6.1.6 Prior experience in Software test automation design, planning, scripting and execution for key customer-facing & other mobile apps.

4.6.2 Job Description
4.6.2.1 Develop standards and procedures to determine product quality and release readiness
4.6.2.2 Perform manual and automated testing
4.6.2.3 Drive innovation and streamline overall testing processes
4.6.2.4 Identify, isolate, and track bugs throughout testing
4.6.2.5 Research new tools, technologies, and testing processes
4.6.2.6 Interact with project management and development teams to develop a strong understanding of the project & testing objectives
4.6.2.7 Participate in troubleshooting and triaging of issues with different teams to drive towards root cause identification and resolution
4.6.2.8 Design and create test conditions, test data and test scripts to address business and technical use cases
4.6.2.9 Use existing tools and techniques to execute test cases and build/script new tools for performing testing/validation function
4.6.2.10 Develop & lead the automation strategy/effort and generate scripts to perform automated testing cycles using Selenium & Appium
4.6.2.11 Design, Execute and analyze automation test scripts & test results for Web applications, iOS & Android Phone apps
4.6.2.12 Document, track and escalate issues as appropriate, using JIRA or any other agile development tool.
4.7 Outsource / subletting

4.7.1 Service Provider shall not outsource any work related to the project or the part thereof to any other associated / franchisee / third party under any circumstances. If it so happens, then it may lead to termination of contract along with forfeiture of PBG.

4.8 SLA and Penalties

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Activity</th>
<th>Deliverable</th>
<th>Target / Service Level</th>
<th>Penalty for delays beyond target level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Submitting of CVs</td>
<td>Two CVs against each of the 20 posts</td>
<td>7 days from the issue of letter of award of contract</td>
<td>Rs. 1,000/- per day per delayed CV</td>
</tr>
<tr>
<td>2.</td>
<td>Submission of fixed PBG</td>
<td>PBG</td>
<td>15 days from the issue of letter of award of contract</td>
<td>Rs. 1,000/- per day</td>
</tr>
<tr>
<td>3.</td>
<td>Signing of contract</td>
<td>Signed contract</td>
<td>15 days from submission of fixed PBG</td>
<td>Rs. 1,000/- per day</td>
</tr>
<tr>
<td>4.</td>
<td>Submitting fresh CVs in case of rejection of a candidate after interview</td>
<td>Two CVs against each rejected candidate</td>
<td>3 days from intimation regarding rejection of a candidate</td>
<td>110% of the man day cost of the concerned post per day</td>
</tr>
<tr>
<td>5.</td>
<td>Deployment of all 20 resources</td>
<td>Deployment of all 20 resources</td>
<td>30 days from the issue of letter of award of contract</td>
<td>110% of the man day cost of the concerned resource per day</td>
</tr>
<tr>
<td>6.</td>
<td>Resolution of high priority (P1) tasks / bugs / tickets</td>
<td>Confirmation of resolution</td>
<td>4 hours from assigning of ticket</td>
<td>0.1% of the total monthly bill per hour</td>
</tr>
<tr>
<td>7.</td>
<td>Resolution of medium priority (P2) tasks / bugs / tickets</td>
<td>Confirmation of resolution</td>
<td>72 hours from assigning of ticket</td>
<td>0.5% of the total monthly bill per 24 hours or part thereof</td>
</tr>
<tr>
<td>8.</td>
<td>Resolution of low priority (P3) tasks / bugs / tickets</td>
<td>Confirmation of resolution</td>
<td>One week from assigning of ticket</td>
<td>1% of the total monthly bill per week or part thereof</td>
</tr>
<tr>
<td>S.N.</td>
<td>Activity</td>
<td>Deliverable</td>
<td>Target / Service Level</td>
<td>Penalty for delays beyond target level</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------</td>
<td>------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9.</td>
<td>Leave of absence without providing replacement</td>
<td>-</td>
<td>Only one leave per month shall be allowed</td>
<td>110% of the man day cost of the concerned resource per day</td>
</tr>
<tr>
<td>10.</td>
<td>Prior written approval from the Client for replacement of resource.</td>
<td>Written one-month notice for replacement of resource</td>
<td>Written one-month notice for replacement of resource</td>
<td>Rs. 50,000 per instance</td>
</tr>
<tr>
<td>11.</td>
<td>Submitting fresh CVs in case of a resource is being replaced</td>
<td>Two CVs against each resource being replaced</td>
<td>Along with letter of intimation of replacement</td>
<td>110% of the man day cost of the concerned post per day</td>
</tr>
<tr>
<td>12.</td>
<td>Replacement of resource</td>
<td>-</td>
<td>Within 2 weeks of relieving of resource being replaced</td>
<td>110% of the man day cost of the concerned post per day</td>
</tr>
<tr>
<td>13.</td>
<td>Handover of complete source code, database backup / schema, creatives, designs or any other material related to the project at the time exit</td>
<td>Source code, database backup / schema, creatives, designs or any other material related to the project</td>
<td>Within 2 weeks of expiry / termination of the tasks defined in the work order</td>
<td>Rs. 1,000 per day. The Service Provider may also be blacklisted if the delay is beyond one month.</td>
</tr>
</tbody>
</table>

5. **General Contract Conditions**

5.1 **Standards of performance**

5.1.1 The Service Provider shall deliver the services and carry out its obligations under the contract with due diligence and efficiency in accordance with generally accepted professional standards and practices. The Service Provider shall always act in respect of any matter relating to this contract as faithful Service Provider to the Client. The Service Provider shall always support and safeguard the legitimate interests of the Client, in any dealings with a third party. The Service Provider shall conform to the standards laid down in the tender in totality.

5.2 **Contract period**
5.2.1 This contract shall be valid for a period of 6 months initially from the date of signing of contract. If the services of the Service Provider are found satisfactory, contract may be extended on the same prices for an additional period (in parts or whole) subsequently by mutual consent on the same terms & conditions.

5.3 Prices

5.3.1 The rates quoted in the financial bid shall be inclusive of all taxes. However, the taxes shall be paid as applicable from time to time.

5.3.2 The prices shall remain fixed for the complete contractual period. No price change request will be accepted after opening of the bids and during the validity of the contract.

5.3.3 In the financial bid format, the bidder must quote prices of all equipments. If the bidder fails to quote price of any of the line item, then the bid of the concerned bidder shall be rejected.

5.4 Payment terms

5.4.1 Payment to the Service Provider shall be made in Indian Rupees through account payee cheque / NEFT / RTGS on monthly basis.

5.4.2 The following documents must be provided along with each invoice:

5.4.2.1 Monthly attendance
5.4.2.2 Monthly progress reports of all resources
5.4.2.3 Monthly project status reports based on the generated tickets

5.4.3 Payments shall be subject to deductions of any amount for which the Service Provider is liable under the contract. Further, all payments shall be made subject to deduction of TDS (Tax Deduction at Source) at the rate applicable from time to time as per the Income-Tax Act, 1961 and any other applicable deductions/ taxes.

5.4.4 The decision of the Client pertaining to the quality and quantity of works / services performed by the Service Provider will be final and acceptable to the Service Provider besides being binding. It shall be the responsibility of the Service Provider to rectify the deficiencies so pointed out without any extra payment. In the event of default by Service Provider, the Client reserves the right to get the concerned work / services fixed at its own level at the cost, risk and responsibility of the Service Provider after giving a notice in regard thereto in writing and expenditure so incurred by the Client will be recovered from the invoices of the Service Provider or from PBG, as it may deem fit.
5.5 **Applicable law**

5.5.1 Applicable Law means the laws and any other instruments having the force of law in India as may be issued and in force from time to time. The contract shall be interpreted in accordance with the laws of the Union of India and the State of Punjab.

5.6 **Governing language**

5.6.1 The Contract shall be written in English language. All correspondences and other documents pertaining to the contract, which are exchanged between the parties, shall be written in the English language.

5.7 **Taxes and duties**

5.7.1 All taxes, duties and any statutory levies etc. payable by the Service Provider during the contract tenure shall be the sole responsibility of the Service Provider.

5.8 **Confidentiality**

5.8.1 Confidential information shall mean and include any and all confidential or proprietary information furnished, in whatever form or medium, or disclosed verbally or otherwise by the Service Provider and/ or the Client to each other including, but not limited to, the services, plans, financial data and personnel statistics, whether or not marked as confidential or proprietary by the parties.

5.8.2 The Service Provider shall ensure that while providing services, all the details and information inside various IT equipment is kept confidential.

5.8.3 During the execution of the project except with the prior written consent of the Client, the Service Provider or its personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the contract.

5.8.4 The Service Provider will maintain the confidentiality of the data stored on the computer systems of end customer. The Service Provider will be required to take appropriate actions with respect to its personnel to ensure that the obligations of non-use & non-disclosure of confidential information are fully satisfied. In case of failure, the Client has right to take legal action against the firm.

5.9 **Termination of contract for default**

5.9.1 The Client can terminate the contract in the event of default of terms and conditions of this tender or the subsequent contract by the other party by giving 1 month written notice. In such case, the provisions under Exit Management clause shall apply.
5.10 Termination of contract for insolvency, dissolution etc.
5.10.1 The Client may at any time terminate the Contract by giving written notice to the Service Provider, if the Service Provider becomes bankrupt or otherwise insolvent or in case of dissolution of firm/company or winding up of firm/company. In this event termination will be without compensation to the Service Provider, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to Client. In such case, the provisions under Exit Management clause shall apply.

5.11 Termination for convenience
5.11.1 The Client reserves the right to terminate, by prior written 1-month notice, the whole or part of the contract, at any time for its convenience. The notice of termination shall specify that termination is for Client’s convenience, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective. In such case, the provisions under Exit Management clause shall apply.

5.12 Recovery management
5.12.1 The Client reserves the right to recover the additional cost incurred to client for non-compliance of timelines due to any reasons. The notice of recovery shall specify the loss incurred to client due to non-compliance of timelines.

5.13 Exit Management
5.13.1 On expiry or premature termination of the contract, the Service Provider shall handover the complete source code, database backup, login credentials, design documents, latest API documents and project technical documentation, etc. to the Client, failing which appropriate action shall be taken against the Service Provider including blacklisting.
5.13.2 The complete knowledge regarding the website shall also be transferred in writing to the Client through appropriate documents as well as in the form training officials designated by the Client.

5.14 Force Majeure
5.14.1 The PBG of the Service Provider shall not be forfeited or the contract shall not be terminated for default if and to the extent that delays in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
5.14.2 For purposes of this clause, “Force Majeure” means an event beyond the control of the Service Provider and not involving the Service Provider’s fault or negligence, and not
foreseeable. Such events may include, but are not restricted to, wars or revolutions, riot or commotion, earthquake, fires, floods, epidemics, and quarantine restrictions.

5.14.3 If a Force Majeure situation arises, the Service Provider shall promptly notify the Client in writing of such condition and the cause thereof. Unless otherwise directed by Client in writing, the Service Provider shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

5.15 Resolution of disputes

5.15.1 If any dispute arises between parties, then these would be resolved in following ways:

5.15.1.1 Amicable Settlement: Performance of the Contract is governed by the terms and conditions of the Contract, however at times dispute may arise about any interpretation of any term or condition of Contract including the scope of work, the clauses of payments etc. In such a situation either party of the contract may send a written notice of dispute to the other party. The party receiving the notice of dispute will consider the Notice and respond to it in writing within 30 days after receipt. If that party fails to respond within 30 days, or the dispute cannot be amicably settled within 60 days following the response of that party, then the second Sub-clause of resolution of disputes shall become applicable.

5.15.1.2 Arbitration: In case dispute arising between the Client and the Service Provider, which has not been settled amicably, the Service Provider can request the Client to refer the dispute for Arbitration under Arbitration and Conciliation Act, 1996 and amendments thereof. Such disputes shall be referred to the Arbitrator which shall be “Vice Chairman-PSeGS”. The Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings. Arbitration proceedings will be held at Chandigarh. The decision of the arbitrator shall be final and binding upon both the parties. All arbitration awards shall be in writing and shall state the reasons for the award. The expenses of the arbitration as determined by the arbitrator shall be borne equally by the client and the Service Provider. However, the expenses incurred by each party in connection with the preparation, presentation and litigation shall be borne by the party itself.

5.16 Legal Jurisdiction

5.16.1 All legal disputes between the parties shall be subject to the jurisdiction of the Courts situated in Mohali, Punjab only.

6. Bid formats

[Note: Italicized comments in rectangular brackets of formats have been provided for the purpose of guidance/ instructions to bidders for preparation of the bid formats. These should not appear in the final bids to be submitted by the bidders]

6.1 Covering letter
ToR Reference No.: PSeGS/Soft_Dev_O&M/2020/1

[Bidders are required to submit the covering letter as given here on their letterhead]

To

Member Secretary,
Punjab State e-Governance Society,
O/o Department of Governance Reforms and Public Grievances,
Plot D-241, Industrial Area, Phase 8B, Sector – 74, Near Quark City,
Mohali-160071

Sub: Bid for Selection as Service Provider for software development, operations and maintenance

Dear Sir,

1. We, the undersigned, have carefully examined the above referenced ToR and offer to propose for the selection as Service Provider for software development, operations and maintenance, in full conformity with the said tender.

2. We have read all the provisions of ToR & corrigendum and confirm that these are acceptable to us.

3. We further declare that additional conditions, variations, if any, found in our proposal shall not be given effect to.

4. We agree to abide by this bid, consisting of this letter and financial bid, and all attachments, till 180 days from the date of submission of bids as stipulated in the tender and modifications resulting from contract negotiations, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

5. Until the formal final contract is prepared and executed between us, this bid, together with your written acceptance of the bid and your notification of award, shall constitute a binding contract between us.

6. We hereby declare that all the information and statements made in this proposal are true and accept that any misrepresentation or misinterpretation contained in it may lead to our disqualification.

7. We understand you are not bound to accept any bid you receive, not to give reason for rejection of any bid and that you will not defray any expenses incurred by us in bidding.

8. We declare that this is our sole participation in this ToR and we are not participating/co-participating through any of other related party or channel.
9. We have not been blacklisted or barred by any State Govt. / Central Govt. / Board, Corporations and Government Societies / PSU for any reason.

10. Security Deposit has been paid online as per details below: -

   [Insert the details as applicable].

11. Tender document cost has also been paid online as per details below: -

   [Insert the details as applicable].

Signature
Full Name
In the capacity of
Duly authorized to sign Proposal for and on behalf of

Date…………………… Place……………………

[*: Strike off whichever is not applicable]

6.2 Financial bid form

[To be submitted by the bidder as per the format provided on the e-procurement website]

<table>
<thead>
<tr>
<th>SN</th>
<th>Profile</th>
<th>Qty (A)</th>
<th>Monthly unit cost excluding taxes in Rs.</th>
<th>Taxes in %</th>
<th>Monthly unit cost including taxes in Rs. (B)</th>
<th>Total Monthly cost including taxes in Rs. (A * B)</th>
<th>Total Annual cost including taxes in Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>DBA</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Senior Developer</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Developer</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Grand Total Annual Cost including taxes (in Rs.)

6.3 Format for Performance Bank Guarantee

Member Secretary
Punjab State e-Governance Society,
O/o Department of Governance Reforms and Public Grievances,
Whereas, <<name of the Service Provider and address>> (hereinafter called “the applicant”) has undertaken, in pursuance of ToR No:<<insert RFP no.>> dated. <<insert date>> to provide consulting services for <<name of the assignment>> to <<Client>> (hereinafter called “the beneficiary”)

And whereas it has been stipulated in the said contract that the applicant shall furnish you with an irrevocable and unconditional bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <<Name of the Bank>> a banking company incorporated and having its head /registered office at <<address of the registered office>> and having one of its office at <<address of the local office>> have agreed to give the Client such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the Service Provider, up to a total of Rs. <<Insert Value>> (Rupees <<insert value in words>> only) and we undertake to pay you, upon your first written demand declaring the Service Provider to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <<Insert Value>> (Rupees <<insert value in words>> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the applicant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Service Provider shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

Notwithstanding anything contained herein:

1. Our liability under this bank guarantee shall not exceed Rs <<Insert Value>> (Rupees <<insert value in words>> only).

2. This bank guarantee shall be valid up to <<insert expiry date>>.

3. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <<insert expiry date>> failing which our liability under the guarantee will automatically cease.