



VIJAYAWADA MUNICIPAL CORPORATION (VMC)
NOTIFICATION FOR INVITATION OF TENDERS FOR
IMPLEMENTATION OF GEO - ENABLED SOLUTION FOR PROPERTY
TAX DIGITALIZATION PLATFORM

Re. AcP/101424/17

DI./8-01-2017

VMC proposes to "Implement Geo-Enabled Solution for property Tax Digitalization platform in the City". Therefore, VMC invites Expression Of Interest (EOI) for implementation of Geo-Enabled Solution for property Tax Digitalization platform in SAAS model from the reputed consulting firms / Companies / Engineering Colleges having experience in this sector.

Interested agencies/ firms who are having financial capability and technical competency to perform this assignment can obtain the details and the Request For Proposal (RFP) documents from the office of the Additional Commissioner (Projects), VMC, Vijayawada by paying Rs.5,000/- (Rupees Five thousand only) + Rs.750/- (Seven Hundred and Fifty only) Non-refundable in the form of D.Ds drawn in favour of the Commissioner, Municipal Corporation, Vijayawada and Commercial Tax Officer, Vijayawada respectively payable at any nationalized bank in Vijayawada. The RFP can also be downloaded from the VMC website i.e., <https://www.ourvmc.org/engg/gentenders.asp> and payment of Rs.5000/- & Rs.750/- can be made through DDs while submission of RFP.

- | | | |
|-------------------------------|-----|---------------------------|
| ➤ Issue of Tender Schedules | ... | 19-01-2017 to 01-02-2017 |
| ➤ Receipt of Bids | ... | 02-02-2017 up to 3.00 P.M |
| ➤ Opening of Bids (Technical) | ... | 02-02-2017 at 4.00 P.M |

The Commissioner, VMC reserves the right to reject or cancel any or all the bids without assigning any reason thereof.

18/1

18/01/2017
COMMISSIONER

Vijayawada Municipal Corporation

**REQUEST FOR PROPOSAL
FOR
IMPLEMENTATION OF GEO-ENABLED PROPERTY TAX DIGITALIZATION
PLATFORM IN SAAS MODEL**

RFP No: VIJAYAWADA MUNICIPAL CORPORATION /AC (Projects)/101424/2017

Dated: 18-01-2017

Office Address: Commissioner
Municipal Corporation,
Jawaharlal Nehru Buildings,
Canal Road, Vijayawada 520001.
Andhra Pradesh

Index

Invitation for Proposal.....	3
1 Prequalification /Eligibility Criteria for Vendors	4
2 Evaluation of bids.....	6
2.1 Technical Bid Evaluation	6
2.2 Technical Proposals Evaluation Approach	6
2.3 Technical Evaluation Methodology	6
2.4 Evaluation of Commercial Bid.....	8
2.5 Final Evaluation.....	9
3 General Terms & Conditions	10
3.1 Proposal details:	10
3.2 Proposal Rejection:.....	10
3.3 Prices and Validity of Proposal:	10
3.4 Cost Details and Validity:	10
3.5 Delivery:.....	10
3.6 Payment Terms:.....	10
3.7 Liquidated damages:.....	11
3.8 Indemnity:.....	11
3.9 Arbitration:	11
3.10 Notices:	12
3.11 Applicable Law:	12
3.12 Insolvency:	12
3.13 Confidentiality:	12
3.14 Compliance with rules and regulations:	12
3.15 Project Duration	12
4 License Requirements	13
4.1 Geo-enabled Solution for Property Tax Digitalization	13
4.2 Requirements:	13
4.2.1 Property Tax Digitalization Platform for VMC	14
4.2.1.1 Surveyor Mobile Application	14
4.2.1.2 Property Assessment Module	15
4.2.1.3 Property Tax Collection Module.....	16
4.2.1.4 Property Tax Analytics Module	16
4.2.1.5 Citizen Services Module	17
4.2.2 Outputs and Deliverable	17
4.2.3 Latest Map Service for VMC	17
4.2.3.1 Post Processing of Aerial Imagery	18
4.2.3.2 Digitization	18
4.2.3.3 Final Base Map	19
4.2.4 Providing Cloud Infrastructure	20
5 Commercial Proposal	22
5.1 Commercial Proposal Format	22
5.2 Vendor Profile Form:	23
5.3 Proposal Validity	24
5.4 Liability of VMC.....	24
5.5 Envelope Format:.....	24
5.6 Prequalification checklist:.....	24
5.7 Deviation from RFP Terms and Conditions	25

Chief Engineering - Department

Invitation for Proposal

Vijayawada Municipal Corporation (VMC) invites commercially competitive and complete proposal from the agencies/ Firms/ Companies (also referred to as 'bidder') for the implementation of a Geo-enabled solution for Property Tax Digitalization for the City of Vijayawada in a Software as a Service (SaaS) format. The purpose of this project is to implement completely digitalized and geo-enabled property tax management infrastructure with automated workflows for to enable efficient management of the City's Property Taxation process.

You are requested to submit your proposal as per the format given:

- ❖ **Section 1: Prequalification/Eligibility Criteria for vendors**
- ❖ **Section 2: Evaluation of Bids**
- ❖ **Section 3: General Terms and Conditions**
- ❖ **Section 4: License Requirement**
- ❖ **Section 5: Proposal Format**

Your sealed proposal should be complete in all respects should reach Vijayawada Municipal Corporation on or before

02-02-2017 till 3.00 Pm addressed to:

Commissioner
Municipal Corporation
Jawaharlal Nehru Buildings,
Canal Road ,
Vijayawada-520001,
Andhra Pradesh.

Contact No: 9866514143

Information on important dates and time related to this RFP is given below:

Sr.	Description	Date	Time
1	Issue of RFP	19-01-2017 to 01-02-2017	
2	Last date for Receipt of Bids	02-02-2017	Up to 03:00 PM
3	Opening of Bids	02-02-2017	At 04.00 Pm

Proposals received after the due date and time specified will not be considered.

1 Prequalification /Eligibility Criteria for Vendors

To be eligible for participation in the bidding process, interested bidders should have to fulfil the following eligibility conditions and has to submit proof documents along with the technical bid. The bids not fulfilling eligibility criteria will be summarily rejected. While preparing the Technical Proposal bidder must bear in mind that Consortium is not allowed.

Sr. No.	Prequalification Criteria	Documents to Be attached
1	The Bidder should be a company registered under the Companies Act, 1956.	Certificate of Incorporation
2	Bidder must offer Property Tax Digitalization platform available in a SaaS model	Copy of trade mark Registration in the name of Bidder
3	The Bidder must be certified ISO 9001-2008 and CMMi Level 3 or above certification	Copy of ISO & CMMi Certificates
4	The Bidder should have a minimum average annual turnover of Rs. 50 Crores (Rs. Fifty Crores only) during last three financial years ending March 31, 2016 i.e. year 13-14, 14-15, 15-16. The bidder should also have a positive net worth for over the last three financial years.	Audited Balance Sheets and CA Certificate for Positive Net Worth
5	Bidder should be reputed software development company having at least 10 years of experience in software development on Geospatial technology for ULBs in India.	Self-Certification of being in Software development business for the last 10 years should be attached.
6	Bidder should have market presence in India of minimum 10 years	Self-Certification of market presence in India of minimum 10 years
7	The bidder should have been awarded at least two(2) projects of geo-enabled Property Tax Management which includes web based GIS application and geo-enabled property tax survey of value more than INR 2 Crore from any ULB in India in the past Five(5) financial Years	Copy of Completion Certificates.

Sr. No.	Prequalification Criteria	Documents to Be attached
8	The Bidder should have supplied or implemented at least one Web-based geospatial application of cost more than INR 1 Crore in any State / Central Government (s), PSU in India during the last Five (5) years	Copy of work order(s)
9	The Bidder must have surveyed at least 3 Lacs Properties of a single ULB or 5 Lakhs Properties from two ULBs in India by using GIS/GPS based property tax survey methodology in last five (5) Years. Non GIS/GPS based property survey will NOT be considered.	Completion Certificate
10	The Bidder should operate a 24x7 call center to support the proposed property tax digitalization platform	Self-Certification for having 24x7 call center support available for geo-enabled property tax digitalization platform in India
11	The Bidder should have their own data center setup in India and have experience in running at least one data centre for any ULB in India	Self-Certification for having Bidder's own data center setup in India and have experience in running at least one data center for any ULB in India
12	The Bidder should have completed at least one work order for GIS/GPS/Android based mobile application for any ULBs. Non GIS/GPS/Android mobile application order will NOT be considered.	Completion Certificate
13	The Bidder should have minimum 100 nos. of GIS Professionals on their permanent payroll	Self-Certification for having Minimum 100 nos. of GIS Professionals on their permanent payroll
14	Bidders should not have been blacklisted in any Government Department/ULB or other international agencies like ADB, The World bank etc.	Self-Declaration in this regard by the authorized signatory of the bidder
<p>Note:</p> <ol style="list-style-type: none"> 1. The criteria mentioned above will constitute the preliminary scrutiny and only those bidders complying with them will be eligible for technical evaluation. 2. All the document should be placed only in this (as listed in this clause) order and an index be provided separately. 3. The bid will be summarily rejected if all the documents mentioned above are not enclosed in technical bid. All supporting documents must be clearly visible and readable. 		

2 Evaluation of bids

2.1 Technical Bid Evaluation

The Technical Committee shall evaluate the excellence of the proposed solution on various parameters and functionalities proposed to be provided through solution. This will include technicality of solution and efficiency of proposal; schedule proposed; manpower strength; experience of company for such tasks, etc. Weightages will be assigned for each category and a technical score will be determined.

2.2 Technical Proposals Evaluation Approach

The evaluation of the Technical Proposals will be carried out in the following manner:

Proposal Presentations: The Tender Evaluation Committee may invite each qualified Bidder to make a presentation to the VMC as per their discretion.

Any time during the bid evaluation process, the Committee may seek oral / written clarifications from the Bidders. The Committee may seek inputs from their professional and technical experts in the evaluation process.

2.3 Technical Evaluation Methodology

- Each Technical Proposal shall be assigned a technical score out of a maximum of 100 points.
- In order to qualify for the opening of Commercial proposal, the Bidder must get a minimum overall technical score of 75 (Seventy Five).
- The Commercial Proposals of Bidders who do not qualify technically shall be kept unopened in the e-Tendering system.
- VMC shall indicate to all the Bidders about the results of the technical evaluation through a written communication.
- VMC reserves the right to accept or reject any or all bids without giving any reasons thereof.
- VMC will inform to the technically shortlisted Bidders about the date and venue of the opening of the Financial Proposals through a written communication.
- Each eligible bidder would be given Technical Score (Tb) based on above evaluation.
- All bidders would be ranked T1, T2..... Based on the Technical Marks (TM) scored by them.
- Companies obtaining 75% technical score will qualify for next phase of tendering.
- Those proposals that do not qualify on technical score will be treated as Technically Rejected and will not be taken up for further process of evaluation and selection. The relevant companies will be informed accordingly.
- The VMC would evaluate the bids received on the following broad parameters. This is a parameterization as of date and VMC reserves the right to add, delete, or modify these parameters at any time during the bid process without assigning any reason whatsoever and without intimating the Bidders of any such changes.

Sr. No.	Evaluation Parameters	Total Points	Marks Allocation
1	Bidder's ISO 9001-2008 and CMMi Level 3 or higher certification with average Turnover of minimum Rs. 50 crore per year in the last three financial years (2013-14, 2014-15, 2015-16)	20	<p>1) A) CMMi Level 3 Certification and ISO 9001-2008 certification in "Spatial Technology Solutions and Services" OR "GIS Solutions and Services"- 10 marks</p> <p>B) CMMi Level 3 Certification and ISO 9001-2008 certification in Others- 5 marks</p> <p>2) A) Minimum 50% Turnover from Geospatial Projects per year and having positive net worth– 7 Marks</p> <p>B) Additional 1 Mark on every additional 10% of Revenue from Geospatial Projects, Subject to Total of 20 marks Overall</p>
2	Bidder's SaaS Platform which is fully configurable with VMC requirements and which can be ready for the demonstration before the committee. The bidder should also offer Geo-enabled Property Tax digitalization methodology.	15	<p>1) SaaS Platform which is fully configurable with VMC requirements** -5 Marks</p> <p>2) Offered Product should have trade mark registration** -5 Marks</p> <p>3) The Product should offer complete Geo-enablement & digitalization of Property Taxation**- 5 Marks</p> <p>** the marks should be either zero or 5</p>
3	Bidder having two(2) projects of Geo-enabled Property Tax Management which includes a Web GIS application and geo-enabled property tax survey of more than value of INR 2 Crore from any ULB in past Five(5) financial Years	15	<p>1) Two(2) projects of Geo-enabled Property Tax Management in hand which includes a Web based GIS application and geo-enabled property tax survey of more than value of INR 2 Crore– 10 Marks</p> <p>2) Every Additional Geo-enabled Property Tax Management with the project cost not less than Rs. 2 Crore – 1 Mark each Project</p> <p>Subject to Total of 15 marks Overall</p>
4	Bidder must have surveyed at least 3 Lacs Properties of a single city or 5 Lakhs Properties from two cities in India by using GIS/GPS based property tax survey methodology in last five Years	15	<p>1) Completed survey of at least 3 Lacs Properties of a single ULB or 5 Lakhs Properties from two ULBs in India by using GIS/GPS based property tax survey methodology in last five Years - 12 Marks</p> <p>3) Every Additional projects in hand that involves Geo enablement of property tax</p>

			survey for the city having household at least 1Lakh Properties through GIS / GPS based mobile App– 1 Mark each Project, Subject to Total of 15 marks Overall
5	Bidder's support mechanism & Experience in providing 24x7 GIS Technical support or Running One data Center and also dedicated technically qualified manpower in the field of GIS on its payroll.	15	1) Bidder's support mechanism & Experience in providing 24x7 GIS Technical support for Property Tax management and also having experience of running one data center for any ULB in India - 5 Marks 2) Experience in Hosting of Web GIS application on cloud or in their own data center- 5 Marks 3) 100 Technically qualified manpower in the field of GIS on its payroll- 3 Marks Every additional 50 GIS qualified manpower on Its payroll- 1 Mark Subject to Total of 15 marks Overall
6	Presentations / Demo to VMC	20	1) Live Demo of the SaaS Platform - 10 Marks , PowerPoint Presentation will not score any marks 2) SaaS functionalities matching with VMC requirement - 5 Marks 3) Availability of all Modules for end-to-end digitalization of Property Taxation- 5 Marks

2.4 Evaluation of Commercial Bid

- Commercial Proposals of only those bidders would be opened who qualify the technical evaluation, as per technical evaluation process described above. The commercial proposals of all unqualified vendors would be returned to them unopened.
- Bidder has to quote for all the components in the commercial bid. Partially quoted bid will be summarily rejected.

The commercial scores for each of the bidder will be calculated as follows:

$$C_n = C_{min}/C_{bid} * 100$$

C_n = Normalized commercial score of the bidder under consideration

C_{min} = Minimum evaluated price for any bidder

C_{bid} = Price proposed by the bidder under consideration

2.5 **Final Evaluation**

Final evaluation would be done using Quality and Cost Based Selection (QCBS). An overall score will be calculated based on the technical and financial scores of each bidder as detailed below.

$$B_n = (W\text{-Tech} * T_b) + (W\text{-Com} * C_n)$$

B_n = Overall score of bidder under consideration

T_b = Absolute Technical score for the bidder under consideration

C_n = Normalized Commercial score of the bidder under consideration

W-Tech = 0.75 and W-Com = 0.25

The bid obtaining highest overall score shall be declared as the most responsive bid and will be invited for negotiations.

3 General Terms & Conditions

3.1 Proposal details:

Detailed literature of the platform offered should be furnished. Important features of the same should be explained.

3.2 Proposal Rejection:

- VMC reserves the rights to reject the proposals which are incomplete and / or received after the due date.
- VMC shall not be responsible for non-receipt of proposals by the specified date and time for any reason, including postal holidays or delays.
- VMC reserve the right to accept or reject any proposal in full or part, and to suspend this process and reject all quotations or part at any time prior to the award of contract, without thereby incurring any liability to the affected vendors on the grounds of the purchaser's inaction.
- VMC reserves the rights to reject the proposals if it finds that any unfair business practices being resorted to by the bidders.

3.3 Prices and Validity of Proposal:

You are requested to offer your best prices. The proposal against this RFP should be valid till **180 days** from the last date of submission.

3.4 Cost Details and Validity:

The quoted Rate / Cost should be inclusive of all levies/ taxes if any. The prices must be submitted in the format prescribed in the RFP.

3.5 Delivery:

The contracted vendor shall ensure to deliver the electronic or paper licenses within **five weeks** from the date of award of contract [issue of PO].

3.6 Payment Terms:

75% Payment against delivery of electronic or paper licenses.
Balance 25% will be made payment on satisfaction of work.

Vendors are requested to ensure that, the invoices issued for payment shall comply with the following requirements:

- Invoice should be serially numbered, duly signed (if the invoice is computer system generated, and then it should specifically mention that "The invoice is computer generated and requires no signature").
- Invoice should contain PO (Purchase Order) reference number.
- Invoice should contain the Name, Address, PAN Number.
- Invoice should contain the Name and Address of the recipient i.e. The Vijayawada Municipal Corporation (short forms like VMC are not acceptable)
- The amount in figures should match the amount in words.

3.7 Liquidated damages:

In case Vendor is not able to deliver the required platform, Vendor shall pay, at VMC's discretion, liquidated damages at the rate of 0.1% of the order value per day. However, this amount shall not exceed 10% of the order value. The levy of liquidated damages shall not relieve Vendor from Vendor's obligation to supply the software licenses under this Purchase Order. In case the delay exceeds 5 weeks, VMC reserves the right to cancel the order unconditionally.

3.8 Indemnity:

The Vendor shall fully indemnify VMC against the action, claim or demand, costs and expenses arising from or incurred by reasons of any infringement or alleged infringement of any letters patent, registered design, trademark or name, copy right or any other protected rights in respect of Microsoft Product Licenses supplied.

3.9 Arbitration:

In case of any dispute or any difference between the parties arising out of or in relation to this contract including disputes or differences as to the validity of this contract or interpretation of any of the provisions of this contract, the same shall be resolved by mutual discussion. If the parties fail to settle the dispute or difference mutually, then the same shall be resolved in accordance with and subject to the provisions of the Arbitration and Conciliation Act, 1996 or any modifications or amendments thereto, or any re-enactment for the time being in force. The venue of Arbitration shall be Vijayawada and only courts at Vijayawada shall have exclusive jurisdiction in all such matters

3.10 Notices:

Any declaration or any other notice given by one party to the other shall be sent by registered letter, to the address specified for this purpose in the contract; such declaration or notice shall be legally effective. VMC's decision in respect of all or any of the above matter shall be final and binding.

3.11 Applicable Law:

The supply under this contract will be governed by and construed and interpreted in accordance with the laws of India.

3.12 Insolvency:

VMC may terminate the contract by giving written notice to without compensation, if the vendors becomes bankrupt, goes in liquidation or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue to VIJAYAWADA MUNICIPAL CORPORATION.

3.13 Confidentiality:

The existence of the contract and/or any contents thereof shall be kept confidential and shall not be disclosed / used in any form by either party without the written consent of the other party to the contract.

3.14 Compliance with rules and regulations:

The Vendor shall at all times during the currency of contract conform to and comply with all the regulations and by the laws of the State or Central Government or of VMC and of all other local authorities

3.15 Project Duration

- The total duration of the project contract is 5 years
- Bidder should complete the entire implementation of Property Tax Digitalization Platform in 4 (four) months from the date of work order

Activity	Duration
Situation Analysis and Migration of existing Property Tax data available with VMC	1 month
Implementation and configuration of Geo-Enabled SaaS Property Tax Digitalization Platform and Go Live	3 months

4 **License Requirements**

4.1 **Geo-enabled Solution for Property Tax Digitalization**

S.N	Software / Solution Description	Qty
1	Geo-enabled Solution for Property Tax Digitalization in SaaS model	1

4.2 **Requirements:**

This RFP is for providing Cloud based Geo-enabled Property Tax Digitalization Platform to VMC for a period of five years. The platform will allow VMC to perform different functions related to Property Tax Management. This platform will be used by VMC appointed surveyors, collection agents and VMC staff. The overall scope of work for the Tender is listed as below. The proposed Property Tax Digitalization Platform will be used for all Taxation operations from day 1 of the project go-live and any dependency on VMC's legacy Property Taxation system will be removed –

- Implementation of Property Tax Digitalization Platform consisting of
 - Latest map service for VMC
 - Geo-enabled survey module
 - Tax assessment module
 - Collection module
 - Property Tax Analytics module
 - Citizen Services
1. Bidder should provide mobile based Surveyor module which will help in effective property tax survey completion and near to real time updating in centralize Geo-database
 2. Bidder should provide entire property tax assessment module which will support VMC specific approval workflows for property assessment. Automate entire property tax assessment processes so that minimum manual intervention will be necessary to handle functions like Assessment, Special Notice Generation, Demand, Billing, Collection, etc.
 3. Bidder should provide Agent Mobile module for field level property tax collection which will help in tax collection from citizen by visiting the properties
 4. Bidder should provide Citizen Services Module which will be a single window dashboard for providing access to citizen to various property details and to avail online services
 5. Bidder should provide Analytics module which can help VMC administrators at different levels to generate reports as per their needs. This module should generate user friendly and advanced geo-spatial reports / dashboards for administrators to keep track of Survey Completion, Assessment progress and Tax collection details
 6. Bidder should provide latest map service for VMC created using cloud free High Resolution Imagery.
 7. Provide single window access to citizen of Vijayawada to view their property details anytime and from any device. Also, enable them to pay property tax online , self-assessment and avail other property tax assessment related facilities online
 8. Improve tax assessment process by surveyor mobile app which can be used by the surveyors appointed by VMC to capture every property information from the field in a geo-enabled environment and generate special notice in near to real time.

9. Improve tax collection process by adding agent mobile app which can be used by the agents appointed by VMC to visit every property and collect tax on the field and generate tax collection receipt on the spot.
10. Improve transparency, efficiency and operational capabilities of Property Tax Department of VMC
11. Training of VMC staff
12. Documentation

4.2.1 Property Tax Digitalization Platform for VMC

Functional Requirements of various Modules of Property Tax Digitalization Solution are as follows –

4.2.1.1 Surveyor Mobile Application

The Selected bidder shall provide android based surveyor mobile application module which can be installed on any GPS enabled handheld device with good accuracy for effective and real time geo-enabled property ground-truth survey. This surveyor application will be used by surveyors assigned by VMC for geo-enabled survey of properties.

- Surveyor application should be a geo-enabled mobile application with a Map interface and should access the geo-spatial maps and available property tax data in the field.
- Surveyor application should have provision for data entry in the survey form (As specified by VMC) for every property by clicking it on the map.
- In case of Multi story properties and Apartments, surveyor application should create parent and child relationship for entering survey information for each unit in a separate survey form.
- Surveyor application should generate a unique property identification number (UPIN) for every property captured from Survey. This number will be updated against all the property data in other available municipal data sources. All transactions and municipal services against the property will be carried out through this UPIN. The UPIN shall be designed in a way so that the previous PIN is maintained in case of property subdivision/consolidation.
- Surveyor application should have ability to attach photograph which should be geo-tagged and geo-controlled with timestamp. The photograph capture should not be allowed beyond particular distance (in Mtrs) and this distance should be configurable as VMC will decide it later
- Application should restrict upload photograph facility from gallery so that Surveyor has to click the property photograph on the field within allowed proximity from the property.
- Surveyor should be provided very user friendly map based dashboard which can directly take surveyor to its current location as soon as logs in. The surrounding buildings should provide clear distinction on map between works done, work not done and work in progress for his benefit.
- The distinction of properties should be configurable which can be decided by VMC about indicators like outlines and color

- As surveyor completes field level data entry he should be able to submit details from field which can be updated in near to real time in centralized geo-database of property tax assessment Software.
- Surveyor should be able to work on properties only within its specified and allocated area and not on the properties outside the specified area. Surveyor should be able get intimation of rejected properties (by office users in the workflow) through map based interface and should be able to re-survey those properties.
- Surveyor should also be able to search properties by giving property number
- Provision for new property addition spatially and non-spatially.
- Provision for Property Ground Truthing
- Provision for other Asset layers Ground Truthing
- Map Navigation facilities

4.2.1.2 Property Assessment Module

The Selected bidder shall provide web based geo-enabled Property Assessment Module which will have following functionalities and workflows:

- It should provide Configurable Approval Workflow – It should be multi-level, configurable and sequential approval workflow which will be finalized by VMC. The property tax assessment should not complete before completing these approvals at all levels.
- Provision for viewing photo and property details on map
- It should allow Office level data entry to complete assessment form. The field level property details should be configurable as VMC will decide which fields should be captured by surveyor and which fields should be provided by office user.
- Different levels in hierarchy should be able to do specific activities which should be configurable
- It should provide Configurable automated RV calculation engine, without manual intervention and also should have ability to do property taxation on capital value basis.
- Provision for tax bill calculation for assessed properties
- Provision of automatic Special notice generation
- It should have workflows for activities like Objection and Hearing for citizen complaints
- It should capture historical data log for any changes done in case of properties. In case of work in progress, the user should get option to view WIP property assessment details or earlier version of property assessment details.
- It should provide Dashboards for all the users with provision for Alerts and configurable monitoring of all levels in hierarchy
- It should support Bilingual data capturing. It should provide configurable language selection as primary language as Marathi and secondary as English or vice versa.
- It should support Property Deactivation service
- Data entry forms for property addition, modification, and reassessment and transfer which are connected to unique spatial IDs.

- Workflows to approve and reject the property assessment by various users in the workflow
- Bill Generation & Batch Printing
- Maintaining Tax Demand Register
- Automatic Special Notice Generation for properties for which assessment is completed and approved at all levels of hierarchy.
- Historical data log of all properties

4.2.1.3 Property Tax Collection Module

Collection module should provide three independent applications for maximum tax collection. It should offer following functionalities

- Web based Counter Collection – Used by collection counter personnel (staff appointed by VMC) when citizens visit the counter for tax payment
- Mobile Agent App – Used by Collection Agents (appointed by VMC) by visiting citizens for tax collection
- Online payment facility for citizen – Used by citizens to pay tax online

Collection Module should provide the following functionalities:

- Provision for tax payment through Tax Collection counter
- Provision for Agents to collect tax by visiting citizens
- Citizens can view property online and verify by visualizing property photo and can also check property tax
- Daily collection reports for Counter collection, Agent Collection and Online collection
- Cheque reconciliations reports
- Tax Payment Receipt Generation
- Provision for Rebate calculations, Penalties
- Facility to cancel receipt for failed online payments or reposting of receipts after validation of payments
- Accept payment through for multiple modes of payment including Credit/Debit Cards, Internet Banking, Cash, Cheque, Demand Drafts and selected Mobile Wallets.

4.2.1.4 Property Tax Analytics Module

The Selected bidder shall provide advanced analytics modules which can help administrators at City, Zone and Division Level. Following is the indicative list of the analytics reports which administrator can generate. There should also be a user defined analytics report generation tool which should be very user friendly. This should be a self-responsive, device independent application and can be used on any devices like tablets, i-pads, laptop, desktops etc. and have real time access to centralized geo-database of property tax assessment Software for analytics reports generation.

- Assessment Register
- Tax Collection Report
- Property Type

- Property Age
- Property Usage
- Property Construction Type
- Property Authorization status
- Property Assessment Details
- Property Tax Demand, Collection and Outstanding
- Property Tax Defaulters

4.2.1.5 Citizen Services Module

The Selected bidder shall provide web based geo-enabled Citizen Module which will provide various online facilities to the citizens

- Citizen Services module should provide a dashboard which will help the citizen to perform different activities
- Provision for paying property tax online
- Provision for downloading Special Notice until its relevance ends
- Provision for downloading historical Property Tax Bills
- Provision for Raising Objection
- Provision for getting Hearing details
- Ability to view assessment record and self-assessment
- Provision for raising request for property ownership transfer
- Map Navigation facilities
- Search Tool

4.2.2 Outputs and Deliverable

The bidder shall deliver following deliverables to VMC:

- Situation Analysis Report
- Surveyor Mobile Module for Android survey devices
- Property Assessment Module
- Analytics module for Administration
- Counter Collection Module
- Agent Mobile Module
- Citizen Services Module
- User Manual for all systems

4.2.3 Latest Map Service for VMC

Bidder should provide latest map service for VMC created using cloud free High Resolution Aerial photographs. The permission for conducting aerial photography using drones will be

provided by VMC; the Bidder should verify the correctness of the imagery and do the post-processing.

Use of alternative online sources such as Google Earth / Google Maps is strictly prohibited as this is strictly against the usage policies of the respective services. The Bidder will be solely liable for any legality and any such deviations will lead to disqualification of the Bidder.

4.2.3.1 Post Processing of Aerial Imagery

To correct various geometric anomalies in raw aerial imagery, Ground Control Points (GCP) collected through Differential Global Positioning System (DGPS) survey should be used for Geo referencing of the imagery.

- The Bidder shall carry out Geo Referencing of the Imageries
- For the DGPS Survey, the Bidder should select the Ground Control Points (GCPs) at well-defined sharp points both on the ground and on imagery. The Ground Control Points (GCPs) should be located at nearly desired locations and should be clearly visible on the imagery. Sketch, coordinate both in latitude, longitude and Easting, Northing of GCP's including GPS observation and adjustment data should be provided to VMC for necessary approval
- The Bidder shall make sure that while taking DGPS survey all positions fixes must use at least four satellites
- The horizontal accuracy of the GCPs should be 0.3– 0.5 meters.
- During static point-mode surveys, the minimum recording duration at each survey point shall be 60 seconds with at least 30 individual position fixes during that period
- The Bidder shall make sure that the pair of GCP's to be established is collected at every 2 km (depending upon the size and shape of the Municipal Corporation Boundary) and these should be evenly distributed over the VMC City area
- The Bidder shall also ortho-correct the geo-referenced imageries by creating DEMs from contours (if required)
- The Bidder shall also do a mosaicking of the image tiles which are geo-referenced and ortho-rectified (if required). The mosaics shall be verified once by the GIS representatives from VMC before proceeding for base map creation
- The 10% of GCPs will be randomly selected as sample for the accuracy. If the incorrectness in accuracy found in any sample, the entire work of GCPs shall be rejected and shall be required to rework
- In case of already rectified geo referenced aerial photograph this process may not be required

4.2.3.2 Digitization

- Post the processing of the aerial photograph by removing the geometric anomalies (if any), the Bidder shall prepare a Grid of 1Km x 1Km for positioning VMC with respect to its Geographic Location.
- The Bidder shall prepare an up-to-date large-scale base map (Scale 1:2000 or higher) of all the wards/zones of Vijayawada City using aerial photographs. The Bidder shall then prepare a new database using the existing database available with VMC, as unified Geo-spatial data with infrastructure details

- Using the heads on digitization technique, the aerial photograph is to be digitized to prepare a base map by digitizing all the features available in the imagery like Buildings, Vacant Plots, Roads, Bridges, Railway Tracks, Parks, Gardens, Stadiums, Slums, Traffic Squares, Water Bodies (River, Lake, Pond, Drainage, Canal etc), OverHead Tanks, etc. While doing the digitization, a special care of data correctness to be taken like no overshoots / undershoots, proper layering, proper symbology etc.
- The digital map data should be GIS compatible. Each map object should be defined uniquely by its feature code and symbology (point, line, and polygon) and should be approved by VMC. Demonstration on digital map production line, producing digital base map using any of the digital mapping system should be made to the VMC

4.2.3.3 Final Base Map

- The bidder shall prepare a final base map and make available a map service incorporating the data collected, processed and digitized in through the proposed Property Tax digitalization Platform. The base maps should be prepared in various layers for ease of operation in geo-enabled application. The details of the various layers (indicative not exhaustive) to be part of the final base map are given as below:

Map	Layers
City Base Map	<ul style="list-style-type: none"> • Main Roads • Other important roads • Railways • Airport • Cantonment • Important landmarks • Water bodies • Drains • Canals • Rivers • Municipal area boundary • Zone boundary • Ward boundary • Tax zones
Property	<ul style="list-style-type: none"> • Building footprint • Municipal area boundary • Zone boundary • Ward boundary • Tax zones
Administrative Jurisdiction	<ul style="list-style-type: none"> • Municipal area boundary • Zone boundary • Ward boundary

- Basemap shall have proper topology created and maintained for all layers
- Maps of other layer like Administrative boundaries, Roads network etc. shall be duly geo-referenced with respect to the above geo referenced aerial photograph to make all the data having common base and projection system for spatial analysis
- All the respective attribute information for different layers shall be formatted to make it spatially ready
- The attribute database shall be attached to the respective spatial layers based on common Unique-id
- Proper QC/QA process shall be followed at each step of Geo-referencing of aerial photograph, Interpretation of imagery and during finalization of different layers

4.2.4 Providing Cloud Infrastructure

The bidder will be responsible to provide the cloud Infrastructure with all required software, hardware, spatial server software, database software and manage it for 5 Years after go-Live. The bidder may choose a commercial cloud services provider or host the system on its own data center. Bidder should size the required hardware & software on its own & make it available for VMC. No additional hardware & software will be provided by VMC for hosting, Although VMC will use its own setup for day to day operations.

After the duration i.e., 5 Years from the date of setting up the cloud Infrastructure, VMC can decide to Host the application in VMC data center or on continue on Bidder's Cloud. Incase if VMC decides to Host the application on Bidder's Cloud or data center, VMC will continue the cloud services for next 3 Years. If VMC decides to host the platform in its own data center then bidder shall transfer the platform to VMC's data center.

Proposal Letter

(To be submitted on company's letter head)

To,
Commissioner,
Jawaharlal Nehru Buildings,
Canal Road,
Vijayawada-520001
Andhra Pradesh

Sub: "Request for Proposal – Geo-Enabled Property Tax Digitalization Platform in SaaS Model"

Sir,

We, the Vendor, having read and examined in detail all the RFP documents in respect of the subject work, do hereby agree to provide services as specified in the RFP documents number **VIJAYAWADA MUNICIPAL CORPORATION/A. C (Projects) /101424/2017** dated-18-01-2017.
Under:

Price and Validity

All the prices mentioned in our RFP are in accordance with the terms as specified in the tendered documents. All the prices and other terms and conditions of this RFP are valid for a period of 180 days from the date of opening of the RFP.

We hereby confirm that our RFP prices are in accordance to clause 3.4.

We hereby agree that if any income tax, surcharge on Income Tax, Professional and any other corporate Tax is altered under the law, we shall pay the same.

Pricing

We further confirm that the prices stated in our proposal are in accordance with your Instruction to Vendor included in RFP documents

Qualifying Data

We confirm having submitted the information as required by you in your Instruction to Vendor. In case you require any other further information/ documentary proof in this regard before evaluation of our RFP, we agree to furnish the same in time to your satisfaction.

We understand that our RFP is binding on us and that you are not bound to accept a RFP you receive.

Thanking you,

Yours faithfully,

(Signature of the Vendor)

Printed Name

Designation Seal

5 Commercial Proposal

The Commercial Proposal, besides the other requirements of the RFP, shall comprise of Commercial Proposal as detailed in Section 5.1.

The vendor shall indicate in the template prescribed, the unit rates it proposes to provide under the Contract. In absence of said information, a proposal may be considered incomplete and be summarily rejected.

Prices quoted in the proposal must be firm and final and shall not be subject to any upward revisions. VMC reserves the right to negotiate the prices quoted in the proposal to effect downward modification. The Proposal Prices shall be indicated in Indian Rupees (INR) only.

Prices in any form or by any reason should not be revealed before opening the Commercial Proposal, failing which the offer shall be liable to be rejected.

5.1 Commercial Proposal Format

(To be submitted on company letterhead)

Sr. No.	Description	Unit Rate (INR) Per Transaction
1	Cost of Bill Generation Transaction per Property	

Note: 1) The Rate should be inclusive of all taxes and should be fixed for five years.

2) Payment should be made for the total numbers of transactions in that quarter

5.2 Vendor Profile Form:

Vendors should be meeting all the requisite prequalification criteria as detailed in section 1 and furnish the requisite details as per the following format:

1	Name of the Company	
2	Registered office	(Address)
3	Products / Services offered	
4	Area of expertise	
5	Skill sets & competencies	
6	Credentials / Major Clientele List	
7	Additional copies if any	
8	Contact details	
9	Have you been black listed any time by any	

5.3 Proposal Validity

Proposals shall remain valid for 180 days from the last date of submission. A proposal valid for a shorter period may be rejected as non-responsive. VMC reserves the right to request the Vendor to extend the validity of the proposal through official correspondences.

5.4 Liability of VMC

VMC will not be liable to pay expenses or losses which may be incurred by any Vendor direct or indirect in preparing and or submitting this RFP. No responsibility will be attached to any officer of VMC for premature opening or the failure to open a RFP not properly addressed and identified.

The Vendors are required to submit the Prequalification and Commercial Proposal as per the prescribed formats. This section provides the outline, content and the formats that the Vendors are required to submit in their proposals.

5.5 Envelope Format:

- Pre-qualification Eligibility Criteria, Technical Proposal, Vendor profile along with the supporting documents (1 copy) in one sealed cover super-scribing "Technical Proposal - VMC".
- Commercial Proposal (1 copy - VMC) in one sealed cover super-scribing "Commercial Proposal - VMC".

The covers containing Technical Proposal and Commercial Proposals should be put in another single sealed envelope super-scribed "PROPOSAL - IMPLEMENTATION OF GEO-ENABLED PROPERTY TAX DIGITALIZATION PLATFORM IN SAAS MODEL".

Each copy of the Proposal should be a complete document and should be bound as a volume. The document should be page numbered and appropriately flagged and must contain the list of contents with page numbers. Different copies must be bound separately. Any deficiency in the documentation may result in the rejection of the proposal.

The Vendor is expected to examine all instructions, forms, terms & conditions in the RFP Document and furnish all requisite information as stipulated herein.

5.6 Prequalification checklist:

Sr. No	Description	Document Attached (Yes/No)
1	Company Registration document	
2	Year of Incorporation Certificate	
5	Vendor Profile Form	

5.7 Deviation from RFP Terms and Conditions

Sr. No	Section	Clause No	Page No	Deviation and Variation	Remark

Note:

If any deviations are warranted, reasons for such variation should be specified.
