

**GOVERNMENT OF ANDHRA PRADESH  
FOREST DEPARTMENT**

**Tender Document for  
Customization of ArcGIS Server**

**ANDHRA PRADESH FOREST DEPARTMENT**  
**NOTICE INVITING TENDER**

<b>Item No</b>	<b>Item Description</b>	<b>Item Particulars</b>
<b>A.</b>	Department Name	Andhra Pradesh Forest Department
<b>B.</b>	Circle/Division	IT Wing, O/o Principal Chief Conservator of Forests
<b>C.</b>	File / NIT Number	23212/2011/IT
<b>D.</b>	Tender Subject	<b>Customization of ArcGIS Server for APFD</b>
<b>E.</b>	Quantity	
<b>F.</b>	Period of Contract	<b>2 Years</b>
<b>G.</b>	Form of Contract	Product Wise
<b>H.</b>	Tender Type	Open
<b>I.</b>	Tender Category	Products/Services
<b>J.</b>	EMD Amount (INR)*	<b>Rs. 50,000.00</b> (Rupees Fifty Thousand only)
<b>K.</b>	EMD payable:	Demand Draft drawn in favour of <b>Divisional Forest Officer, Hyderabad</b> payable at <b>Hyderabad</b> from any scheduled Bank.
<b>L.</b>	Bid Document Obtaining/ downloading Start Date	<b>02.03.2012 from 5:00 p.m.</b>
<b>M.</b>	Pre-bid Conference	<b>12.03.2012 at 11.30 a.m.</b>
<b>N.</b>	Bid Document Obtaining/ downloading End Date	<b>29.03.2012 - 03:00 p.m.</b>
<b>O.</b>	Last Date & Time for Receipt of Bids	<b>29.03.2012 - 05:00 p.m.</b>
<b>P.</b>	Bid Validity Period	<b>60 Days</b>
<b>Q.</b>	Technical Bid Opening Date and Time (Qualification and Eligibility Stage)	<b>30.03.2012 - 11:30 a.m.</b>
<b>R.</b>	Price Bid Opening Date and Time (Financial Bid Stage)	<b>04.04.2012 - 03:30 p.m.</b>
<b>S.</b>	Place of Tender Opening	Chambers of Addl. Prl. Chief Conservator of Forests(IT), Room No 563, Aranya Bhavan, Saifabad, Hyderabad.
<b>T.</b>	Tender Inviting / Opening Authority	Addl. Prl. Chief Conservator of Forests (IT), 9440810015 Phone No: 0402321538, Fax No.04023240541
<b>U.</b>	Address/ E-mail id	O/o Principal Chief Conservator of Forests, Aranya Bhavan, Saifabad, Hyderabad.
<b>V.</b>	Contact Details/ Telephone, Fax	1. Sri P. Sreenivasa Rao, ACF(GIS), Room No:327, 9440810176, <a href="mailto:acf_gis1_apfd@ap.gov.in">acf_gis1_apfd@ap.gov.in</a> 2. Dr HC Mishra, IFS, APCCF(GIS), Room No. 571, 9440815455,

		<p><a href="mailto:apccf_gis_apfd@ap.gov.in">apccf_gis_apfd@ap.gov.in</a>, Fax 040-23232054</p> <p>3. Sri PK Sharma, IFS (IT), APCCF(GIS), Room No. 563, 9440810015, <a href="mailto:apccf_it_apfd@ap.gov.in">apccf_it_apfd@ap.gov.in</a>, Fax No.040-23240541</p> <p>O/o Prl. Chief Conservator of Forests, Aranya Bhavan, Saifabad, Hyderabad.</p>
<b>W.</b>	<b>Eligibility Criterion</b>	<ol style="list-style-type: none"> <li>1. The Tenderer should possess all requisite licenses, registrations etc., and the same should be obtained invariably before transacting business with Andhra Pradesh Forest Department (APFD).</li> <li>2. The Tenderer should possess an experience certificate and other Certificates like Registration of Firm if applicable, CST, VAT, registration, Latest Income Tax Assessment order, should be enclosed invariably along with the tender schedule. In case of non-submission of these certificates, the APFD authorities reserve the right to take any appropriate action including the cancellation of tender of the respective Tenderer. <b>In this regard the decision of the Tender Opening Authority / Additional Principal Chief Conservator of Forests (IT) is final and binding on all the Tenderers without any recourse.</b></li> <li>3. The Agency should be in the latest Panel list of APTS or IT&amp;C or equivalent Central/State Government organization/department as Software developing agency for IT Projects</li> <li>4. The Firm must be an ISO certified organisation.</li> <li>5. The Agency should have sufficient Geomatics domain knowledge and well equipped with 3-5 qualified personnel.</li> <li>6. The Agency should have experience of customizing Geomatics related software for 3 State/ Central Government Organisations / any other Reputed organizations.</li> <li>7. Preference shall be given to the firms owning licensed software.</li> </ol>

**\* Not applicable in case of Government Organisations**

<b>X.</b>	<b>Procedure for Bid Submission</b>	<ol style="list-style-type: none"> <li>1. <b>Bids shall be submitted online.</b> If there is congestion in the web portal of e-procurement, some of the documents that could not be uploaded can be submitted offline. <b>However the financial bid must be submitted online.</b></li> <li>2. The participating bidders in the tender should register themselves free of cost on e-procurement platform in the website <a href="http://www.eprocurement.gov.in">www.eprocurement.gov.in</a> (OR) <a href="https://tender.eprocurement.gov.in">https://tender.eprocurement.gov.in</a></li> <li>3. The bidders who are desirous of participating in e-procurement shall submit their technical bids, financial bids online as per the standard formats available at the e-market place. The bidders should submit scan and upload the below mentioned documents; and submit all the attested hard copies in sealed covers to APCCF (IT), O/o PCCF, Room No:563, Aranya Bhavan, Saifabad, Hyderabad on or before opening of technical bids, failing which their tender will be rejected. <ol style="list-style-type: none"> <li>a) <b>EMD</b> (Original) in the form of Demand Draft payable in favour of the Divisional Forest Officer, Hyderabad, <b>payable at Hyderabad</b> of any of the scheduled bank branches for the amount indicated in Item No. J.</li> <li>b) Copy of <b>ISO</b> Certification</li> <li>c) Copy of <b>empanelment</b> with APTS or IT&amp;C or equivalent Central/State Government organization/department as Software developing agency for IT Projects</li> <li>d) <b>Technical expertise, support &amp; experience:</b></li> </ol> </li> </ol>
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		<ul style="list-style-type: none"> <li>i. <b>Gist</b> of providing services of customization of Geomatics related software for Government / Reputed Organisations.</li> <li>ii. List of the qualified personnel along with <b>pay slips</b>.</li> <li>iii. List of the Software owned along with Purchase Orders</li> <li>e) Copy of the <b>Registration</b> of the firm.</li> <li>f) Copy of <b>PAN Card</b></li> <li>g) Copy of latest <b>Income Tax return</b></li> <li>h) Copy of <b>Service Tax Registration</b> and up to date Return</li> <li>i) Copy of up to date <b>VAT clearance Certificate</b></li> <li>j) Declaration that they have not been black listed anywhere.</li> <li>k) Copy of <b>Auditor Sheet</b> for the last 3 years</li> <li>l) <b>Clientele list</b> of minimum 5, of which at least 2 should be Govt. Organizations in the same field along with all details.</li> <li>m) Copies of the <ul style="list-style-type: none"> <li>i. <b>Latest purchase orders</b> pertaining to the Software Customization quoted to other clients.</li> <li>ii. <b>Customer satisfactory reports</b> form the concerned Organizations</li> </ul> </li> </ul> <p>The Technical, Commercial Bids and the EMD shall be sealed separately in covers and all the covers shall be sealed in a bigger cover and be submitted to APFD, duly writing the tender subject and the other important events</p> <p><b>NOTE:</b>  <u>After Tendering all Bidders should submit the attested copies of the uploaded certificates along with original EMD and samples as specified above to the Asst. Conservator Forests (GIS), O/o Principal Chief Conservator of Forests, Room No: 327, Aranya Bhavan, Saifabad, Hyderabad, on or before the scheduled date and time of opening of Technical Bids failing which their tender will be rejected.</u> In this regard the decision of the Tender Opening Authority / Additional Principal Chief Conservator of Forests (IT) is final and binding on all the Tenderers without any recourse.</p> <p>4. <b>Transaction fee on e-Procurement Platform:</b> All the participating bidders shall pay a transaction fee (non-refundable) as mentioned in the NIT payable to M/s Vayam Technologies Limited, Hyderabad through on line. (0.03% of estimate contract value + 10.30% service tax). It is mandatory for all the participant bidders from 1<sup>st</sup> January 2006 to pay a Non-refundable Transaction fee electronically to M/s Vayam Technologies Limited, the service provider through "Payment Gateway Service on E-Procurement platform". The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any bank and Direct Debit facility/Net Banking of ICICI Bank, HDFC, Axis Bank to facilitate the transaction. This is in compliance as per G.O.Ms. 13 dated 07.05.2006. A service tax of 10.30% + Bank Charges for Credit Card Transaction of 2.09% (inclusive of service tax) on the transaction amount payable to M/s Vayam Technologies Limited shall be applicable.</p> <p>5. <b>Corpus Fund:</b> As per GO MS No.4, User departments shall collect 0.04% of ECV (estimated contract value) <b>with a cap of Rs.10,000</b> (Rupees ten thousand only) for all works with ECV up to Rs.50 crores and Rs.25,000/- (Rupees twenty five thousand only) for works with ECV above Rs.50 crores, from successful bidders on e-Procurement platform before entering into agreement / issue of purchase orders, towards e-procurement fund in favour of Managing Director, A.P.T.S, HYDERABAD.</p> <p><b>NOTE:</b> There shall not be any charge towards e-Procurement fund in case of works, goods and services with ECV less than and up to Rs. 10 Lakhs.</p>
Y.	Transaction Fee Payable To	M/s Vayam Technologies Limited , Hyderabad. (ON LINE)
Z.	General Terms and Conditions	<p><b><u>TENDER CONDITIONS FOR ‘Customization of ArcGIS Server for APFD’</u></b></p> <p>1) Online tenders are invited for Customization of ArcGIS Server and its maintenance for 2 years. The APFD is desirous to have this tender in two bids i.e., (1) Technical bid and (2) Financial bid. The Tenderer should have been in this trade for not less than three years and should have customizaed Geomatics related Software to any reputed institution or institutions as the case may be. The Tenderer shall possess all requisite qualifications as mentioned and submit the documents as mentioned in <b>Item No. W and X</b> including ORIGINAL EMD to the Tender Inviting Authority on or before scheduled date and time of opening of the Technical bid as mentioned in Tender. In case of a Government Organisation or Institution or Public</p>

Sector undertaking, the qualifications are relaxed except the technical expertise and experience and they are also exempted from furnishing of deposits like EMD etc. The financial bids of those Tenderers who are technically qualified only, will be opened on the date & time as mentioned in the Tender by the PCCF or any other officer authorised by PCCF. The APFD may extend the last date by issuing an amendment in which case all rights & obligations of the APFD and the Tenderers previously subject to the original deadline will then be subjected to new deadline.

- 2) Incomplete, ineligible and unused tenders will be rejected. Telegraphic tenders will not be accepted and no correspondence will be made in this regard.
- 3) All offers shall be made in English. Conditional offers and offers qualified by such vague and indefinite expression such as “subject to immediate acceptance”, “subject to prior sale” etc will not be considered.
- 4) Adoption of unfair means to influence the authority offer may be lead to summarily disqualification.
- 5) An amount of **Rs.50,000/-** (Rupees Fifty Thousand only) is to be remitted as EMD by way of an Account payee Demand draft drawn in favour of the DFO Hyderabad, payable at Hyderabad on any scheduled bank and should submit at the time of tendering.
  - a. The EMD of unsuccessful bidders will be returned on finalization of tender process.
  - b. The EMD will not carry any interest.
  - c. EMD is liable to be forfeited if the successful Tenderer fails to accept the Work Order and enter into Agreement within the time specified.
  - d. EMD is liable to be forfeited, if the Tenderer asks for withdrawing his bid once the financial bid is opened.
  - e. The EMD will be released to THE FIRM (successful bidder) after successful completion of the Customization and installation of the ArcGIS Server.
- 6) **The commercial bid will be in two parts viz., (i) customization of the ArcGIS Server and (ii) its maintenance for 2 years. The rate should be quoted separately for customization of the ArcGIS Server and its maintenance for 2 years. However both the quotes will summed up for arriving at lowest and both the works will be awarded to a single Firm.** The rate quoted should be inclusive of all taxes like CST/VAT, Service Tax, Educational Cess etc, charges etc. The rate should be valid for acceptance for a period of 30 days from the date of opening.
  - a. APFD cannot issue statutory forms like Form C or Form D etc and this should be taken into account by the firm while quoting the rates to APFD.
  - b. Since rate quoted is inclusive of VAT/CST payable. No claim for VAT/CST payable will be admitted at a later stage & on any ground whatsoever, irrespective of the firm mentioning and recording any thing contrary to the above in the Quotation. After the implementation of VAT and even after any changes contemplated in the tax structure and the rate of taxes to be levied by the State Government the rates Quoted to APFD should be constant and it should be applicable to all work orders placed by APFD.
- 7) Negotiations will not be made with all Tenderers. In case of necessity, negotiations will be made only with lowest selected Tenderer(s) and in this regard the decision of the PCCF or APCCF (IT) shall be final and binding on the firm without any recourse.
- 8) APFD reserves the right either to reject any or all tenders without assigning any reason. In this regard the decision of APFD is final and binding on the Tenderer without any recourse. Further, it is understood by both the parties to the tender and is specifically accepted by the Tenderer when the Tenderer files the tender before APFD, the acceptance or rejection of the tender by APFD, or methodology adopted by APFD, in short listing the companies for the Customization and Installation of ArcGIS Server etc, shall not become a cause of action or ground to initiate any legal action before any Court or Courts of Law for obtaining any order, Injection, Direction etc., from the Hon’ble court or Courts to stall the proceedings in APFD.

- 9) The APFD reserves the right to accept or reject any tender and to cancel the tender process and reject all tenders at anytime prior to the award of contract without thereby incurring any liability to the affected Tenderer or any obligations to inform the affected Tenderers, the grounds of acceptance or rejection.
- 10) **Detailed Specifications of Goods and Services desired (Customization of ArcGIS Server and its maintenance) are given as Request for Proposal in this document.**
- 11) The Tenderer whose tender has been accepted will be informed about the award of the contract by the authorities prior to the expiration of the validity period by a registered letter.
- 12) The successful bidder (THE FIRM) has to enter into an agreement agreeing to all the conditions of the contract with the APFD on Non-judicial stamp paper of value of Rs.100/- within 15 days from the date of receipt of the intimation to him that his TENDER has been accepted. The format of agreement shall be supplied to THE FIRM along with communication of accepting the rates quoted.
- 13) If the successful Tenderer fails to execute the agreement within the time specified or withdraw the tender after the intimation of the acceptance of his tender by APFD or he is unable to undertake the contract due to any other reason, his contract will be cancelled and his EMD shall be forfeited and he will also be liable for all damages sustained by the APFD, by reason of breach such as failure to customize/delayed customization of the ArcGIS Server including the liabilities to pay differences between the prices accepted by him and those ultimately paid for the Customization of the ArcGIS Server. Such damages shall be assessed by the, PCCF or any other Officer authorised by PCCF whose decision shall be final and shall be binding on the FIRM.
- 14) **Time Schedule:** THE FIRM shall deliver Goods & Services within a **period of 20-24 weeks** from the date of issue of Purchase Order. Details of time schedule are given in RFP.
- 15) THE FIRM shall provide complete & legal documentation of Goods & Services along with SRS, POC demonstration, Design (DFDs & ERDs), Coding. THE FIRM shall carry out Testing, Installation and User Acceptance Testing, Training to the officers of the department (3 no's for a period of one week each) before Final Deployment and Acceptance by the user. The FIRM shall customize the ArcGIS Server using licensed version. THE FIRM shall also indemnify APFD against any levies/penalties on account of any default in this regard.
- 16) **Comprehensive Warranty/Maintenance:** The Goods and Services will be covered by onsite warranty for a period of 3 year from the date of commissioning. The problems arising thereof during the period of warranty shall be attended to and rectified by THE FIRM, within 48 hours of lodging the complaint by APFD. Otherwise the FIRM is liable to be levied the penalty as follows:
- a. Delay up to one week - **1%** of the Project Cost
  - b. Delay up to two weeks - **2%** of the Project Cost
  - c. Delay up to three weeks - **1%** of the Project Cost
- 17) **Performance-cum-Security Deposit:** The Successful bidder has to furnish Performance-cum-Security Deposit for an amount of 10% of the contract value in favour of DFO, Hyderabad with a validity period up to Warranty Period (from the date of commissioning) + 3 months. It shall be released to THE FIRM after completion of THE Firm's performance obligations under the contract. It shall be in one of the following forms
- i. **A Bank Guarantee** or
  - ii. An irrecoverable **Letter of Credit** or
  - iii. A cashier's certified Cheque,
- issued by a reputed Indian Nationalized or private Bank located in the limits of Greater Hyderabad The work should be affected strictly as per time schedule.
- 18) **REJECTION OF GOODS & Services:** The APFD reserves the right to either reject the entire Goods and Services or impose cut or forfeit the EMD at its discretion if the Goods and Services is not in accordance with the specifications (those specified or if any given by the FIRM). In this regard the decision of PCCF or any officer authorized by the PCCF shall be final and binding on the FIRM.

19) **OF PENALTIES:** APFD reserves the right to levy penalty or withhold part or full payment payable to the Firm for delay in the supply of Goods and Services, supply of Goods and Services not conforming to the specifications. In this regard, the decision of the PCCF or any officer authorized by the PCCF shall be final.

- a. **DELAY IN THE DEVELOPMENT:** In the event of delay or default in supply & installation of Goods and Services and the supply & installation is not adhering to the schedule given, the APFD reserves the right to entrust the work to the other companies and recover the excess cost, if any incurred by APFD, from THE FIRM. However, if the rate is cheaper, the benefit will not accrue to the FIRM. If the FIRM fails to deliver the Software as per schedule, the APFD reserves the right to levy a penalty of 3% on the value of Contract. Imposition of penalty on contract value is as follows:
  - i. Delay up to one fourth period of the prescribed period / completion of work - **1%**
  - ii. Delay exceeding one fourth but not exceeding half of the prescribed period / completion of work - **2%**
  - iii. Delay exceeding half but not exceeding three fourth of the prescribed period / completion of work - **3%**
- b. The FIRM is further liable to reimburse / compensate the APFD or to third party for cost of any loss, damage etc., caused or arising out of the negligence in supply of Goods & Services, or any other act or breach of contract, in addition to imposing penalty @ 3% of the Agreement Value, forfeiture of Performance-cum-Security Deposit & EMD, besides being blacklisted for a period of 5 years.
- c. For infringement of the stipulations of the contract, the contract would be terminated by the PCCF or any other Officer authorised by PCCF, and the FIRM shall be liable to pay for all losses sustained by the APFD.
  - i. In the consequence of the termination, the loss would be recovered personally from the FIRM or other money due or may become due to him. In the event of such amounts being insufficient the balance would be recovered personally from the FIRM or from his properties.
- d. The amount to be recovered, if not paid by the FIRM will be liable to be recovered under LRR Act.
- e. THE FIRM shall be liable for criminal proceedings under the appropriate Section/s of the Cr.P.C. for adulteration of the Goods & Services, if any, besides blacklisting and forfeiture of the Performance-cum-Security Deposit.

20) Supply should be accompanied by a bill, advance stamped receipt and warranty certificate if applicable for arranging payment.

21) THE FIRM shall not be allowed at any time on any ground what so ever to claim revision or modification in the rates quoted by him.

22) **Payment Schedule: No advance payment will be made.** The standard payment terms of APFD are applicable. The payment to FIRM shall be made by APFD only through cheques. The payment will be made only after successful supply & installation of Goods & Services; and on production of performance-cum-security deposit. The Schedule is as follows:

Sl. No.	Event	Time span	Schedule of Payments
<b>I. Customization of ArcGIS Sever</b>			
1	Customization of ArcGIS Server as per RFP including SRS, POC documentation, Design and Coding	14 weeks of entering into agreement	40% of agreed cost
2	Testing and pilot study of the software, training to the GIS staff (1 for a period of one week)	After 7 weeks of delivery of software.	30% of agreed cost

3	Final Deployment and Acceptance	3 weeks after final approval of the software	30% of agreed cost
<b>II. Maintenance of the Software for 2 years</b>			
1.	Maintenance of the Software	50 % of agreed cost will be paid per year.	

- 23) THE FIRM should furnish copies of registration of firm, CST/VAT registration, Sales Tax registration and Latest Income Tax Assessment order etc, along with the Agreement, if not enclosed along with the tender and if APFD has consciously accepted the non-submission of documents along with the tender.
- 24) Penal clauses of THE FIRM whatsoever like payment of interest on late payment of bills etc shall not be acceptable to APFD.
- 25) The APFD reserves the right to add/delete/change/modify any or all the conditions mentioned in the tender schedule and the said addition/deletion/changes/ modifications can be incorporated in the agreement to be entered into with the FIRM irrespective of tender conditions mentioned in the notice inviting tender or in the tender schedule or the same can be incorporated in a form of codicil as the case may be and the same will be binding on the FIRM without any recourse.
- 26) If evidences are found that THE FIRM fails or neglects to be complied with any of the terms and conditions of the contract or with any order issued there under then, in such a case, the APFD shall without prejudice to any other right or remedies under this contract as a right and be entitled to cancel the contract by giving a notice in writing to the FIRM without being liable to pay any compensation for such cancellation.
- 27) THE FIRM has to furnish the declaration that they have not been black listed in any of the organizations. Any wrong declaration in this regard which comes to the notice at a later date will disqualify them from tendering in future in APFD and the tenders so received and the contracts so awarded shall be automatically rejected.
- 28) **INDEMNITY:** THE FIRM shall at all times indemnify APFD, against all claims, which may arise in respect of supply of low quality Software, not conforming to the specifications. THE FIRM shall also indemnify APFD against all third party claims of infringement of patent, trademark, or industrial design rights arising from use of Software or any part thereof.
- 29) **Force Majeure:** If any time, during the continuance of this contract, the performance in whole or in part by either party or any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of the public enemy, civil commotion sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or act of God provided notice of happenings, of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by any reason of such event be entitled to terminate this contract nor shall either party have any such claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist, and the decision of the APFD as to whether the delivery have been so resumed or not shall be final and conclusive, provided further that if the performance, in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days either party may, at his option terminate the contract. The event of delay caused shall not be counted towards time schedule.
- 30) **Settlement of Disputes or Differences:** If the dispute or the difference of any kind whatsoever shall arise between THE FIRM and APFD in connection or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation. If the parties failed to resolve their dispute or difference by such mutual consultation, it shall be settled through arbitration provided either of them gives notice to the other party of its intention to commence arbitration. The dispute or difference arising would be subject to the jurisdiction of the civil courts at Hyderabad, A.P., only.
- 31) **Miscellaneous:** Headings used in this document are for convenience and ease of reference only, and shall not be relevant to or affect the meaning or interpretation of this document.



## ANDHRA PRADESH FOREST DEPARTMENT

### **PROCEDURE FOR BID SUBMISSION ON E-procurement PLATFORM (e-Tendering)**

The bidder shall submit his response through Bid submission to the tender on e-Procurement platform at **www.eprocurement.gov.in** by following the procedure given below.

1. The bidder would be required to register on the e-procurement market place [www.eprocurement.gov.in](http://www.eprocurement.gov.in) or <https://tender.eprocurement.gov.in> and submit their bids online. Offline bids shall not be entertained by the Tender Inviting Authority for the tenders published in e-procurement platform.
2. The bidders shall submit their eligibility and qualification details, Technical bid, Financial bid etc., in the online standard formats displayed in e-Procurement web site. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their eligibility criteria/technical bids and other certificate/documents in the e-Procurement web site. The bidder shall sign on the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity. The bidder shall attach all the required documents for the specific tender after uploading the same during the bid submission as per the tender notice and bid document. If there is congestion in web portal of the e-procurement, some of the technical documents may be submitted offline. The Technical Bids, the commercial bids and the EMD shall be sealed in separate covers and finally sealed in a large cover and shall be submitted to APCCF(IT).
3. **Registration with e-Procurement platform:** For registration and online bid submission bidders may contact HELP DESK of M/s Vayam technology Ltd., [www.eprocurement.gov.in](http://www.eprocurement.gov.in) or <https://tender.eprocurement.gov.in>.
4. **Digital Certificate authentication:** The bidder shall authenticate the bid with his Digital Certificate for submitting the bid electronically on e-Procurement platform and the bids not authenticated by digital certificate of the bidder will not be accepted on the e-Procurement platform.
5. **For obtaining Digital Signature Certificate, you may please Contact:**

Andhra Pradesh Technology Services Limited, BRKR Bhavan, B-Block, Tank bund Road,  
Hyderabad-500022, Phone: +91-40-23220305, Fax: +91-40-23228057

(OR)

Any other Registration Authority of TCS-CA in India. The city-wise list of RAs is available by clicking the link "Apply for a Class-2 Certificate" under "Enroll" section in the website "<https://www.tcs-ca.tcs.co.in/mca21/index.jsp>"

6. **Hard copies:**
  - i. Attested copies of all original hard copies of the uploaded scanned copies of DD towards EMD by participating bidders must submit to the tender inviting authority before scheduled date and time of the opening of the Technical bid, otherwise the tender will be rejected on online. If there is congestion in web portal of the e-procurement, some of the technical documents may be submitted offline.
  - ii. All the bidders shall invariably upload the scanned copies of DD in e-Procurement system and this will be the primary requirement to consider the bid responsive.
  - iii. The department shall carry out the technical evaluation solely based on the uploaded/offline submitted certificates/documents, DD towards EMD in the e-Procurement system; and open the price bids of the responsive bidders after evaluation of technical bids and results of the samples.

- iv. The department will notify the successful bidder for submission of original hardcopies of all the uploaded documents DD towards EMD prior to entering into agreement.
  - v. The successful bidder shall invariably furnish the original DD towards EMD; Certificates/Documents of the uploaded scan copies to the Tender Inviting Authority before entering into agreement, either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The department will not take any responsibility for any delay in receipt/non-receipt of original DD/BG towards EMD, Certificates/Documents from the successful bidder before the stipulated time. On receipt of documents, the department shall ensure the genuineness of the DD/BG towards EMD and all other certificates/documents uploaded by the bidder in e-Procurement system in support of the qualification criteria before concluding the agreement.
7. The G.O. Ms. No. 174 –I & CAD dated: 1-9-2008- “**Deactivation of Bidders**”: If any successful bidder fails to submit the original hard copies of uploaded certificates/documents, DD towards EMD within stipulated time or if any variation is noticed between the uploaded documents and the hardcopies submitted by the bidder, the successful bidder will be suspended from participating in the tenders on e-Procurement platform for a period of 3 years. The e-Procurement system would deactivate the user ID of such defaulting bidder based on the trigger/recommendation by the Tender Inviting Authority in the system. Besides this, the department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the government. Other conditions as per tender document are applicable.
  8. The bidder is requested to get a confirmed acknowledgement from the Tender Inviting Authority a proof of Hardcopies submission to avoid any discrepancy.
  9. **Payment of Transaction Fee:** All the participating bidders shall pay a transaction fee (non-refundable) as mentioned in the NIT payable to M/s Vayam Technologies Limited, Hyderabad through on line. (0.03% of estimate contract value + 10.30% service tax). It is mandatory for all the participant bidders from 1st January 2006 to electronically pay a Non-refundable Transaction fee to M/s. M/s Vayam Technologies Limited, the service provider through "Payment Gateway Service on E-Procurement platform". The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any bank and Direct Debit facility/Net Banking of ICICI Bank, HDFC, Axis Bank to facilitate the transaction. This is in compliance as per G.O.Ms. 13 dated 07.05.2006. A service tax of 10.30% + Bank Charges for Credit Card Transaction of 2.09%(inclusive of service tax) on the transaction amount payable to M/s Vayam Technologies Limited shall be applicable.
  10. **Corpus Fund:** As per GO MS No.4 User departments shall collect 0.04% of ECV (estimated contract value) with a cap of Rs.10,000 (Rupees ten thousand only) for all works with ECV up to Rs.50 crores and Rs.25,000/- (Rupees twenty five thousand only) for works with ECV above Rs.50 crores, from successful bidders on e-Procurement platform before entering into agreement / issue of purchase orders, towards e-procurement fund in favour of Managing Director, APTS. There shall not be any charge towards e-Procurement fund in case of works, goods and services with ECV less than and up to Rs. 10 Lakhs.
  11. **Tender Document:** The bidder is requested to download the tender document and read all the terms & conditions mentioned in the tender Document and seek clarification if any from the Tender Inviting Authority. Any offline bid submission clause in the tender document could be neglected. The bidder has to keep track of any changes by viewing the Addendum/Corrigenda issued by the Tender Inviting Authority on time-to- time basis in the E-Procurement platform. The Department calling for tenders shall not be responsible for any claims/problems arising out of this.

12. **Bid Submission Acknowledgement:** The bidder shall complete all the processes and steps required for Bid submission. The system will generate an acknowledgement with a unique bid submission number after completing all the prescribed steps and processes by the bidder. Users may also note that the bids for which an acknowledgement is not generated by the e-procurement system are treated as invalid or not saved in the system. Such invalid bids are not made available to the Tender Inviting Authority for processing the bids. The APFD and M/s Vayam Technologies Limited are not responsible for incomplete bid submission by users.

**13. For assistance on e-tendering please contact**

Vayam Technologies Limited  
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**Registered office**

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New Delhi - 110001  
Tel: +91-11- 4710 1200-201

**Help Desk**

Land Line: 040-44426253 / 54 / 55 / 56  
Mobiles: 93938-97936, 93938-97965  
Fax: 040-44426252  
e-Mail: [helpdesk.eproc@vayamtech.com](mailto:helpdesk.eproc@vayamtech.com)

**For further clarification please contact:**

1. Sri P. Sreenivasa Rao, ACF(GIS), Room No:327, 9440810176,  
[acf\\_gis\\_apfd@ap.gov.in](mailto:acf_gis_apfd@ap.gov.in)
2. Dr H.C. Mishra, IFS, APCCF(GIS), Room No. 571, 9440815455,  
[apccf\\_gis\\_apfd@ap.gov.in](mailto:apccf_gis_apfd@ap.gov.in), Fax 040-23232054

O/o PCCF Aranya Bhavan, Saifabad, Hyderabad.

# **Request for Proposal**

## **Customization of ArcGIS Server for AP Forest Department**

### **(1) Background:**

Natural resource management in India aimed at longer-term, sustainable use of public land requires communication and interaction between natural resource agency personnel, researchers, developers, and other land users. Bridging the knowledge gap between these groups in terms of new tools and technologies is key to effective communication and management. Efficient Forest Resource Management requires rapid, reliable and accurate information regarding the status of Forest. It is imperative to strengthen the current forest planning and management systems through latest technology.

The Forest Department of Andhra Pradesh is the custodian of 63814 km<sup>2</sup> area which forms 23% of geographical area of the state. The total notified forest area is divided into forest blocks and compartments for management of forests and wildlife. There are more than 10000 employees (protection, executive, ministerial, administrative, controlling etc) working in the department who are responsible for the protection of Forest and Environment in addition to implementation of various plans and schemes of the Government.

The smallest unit of forest administration is a Beat which is manned by the Forest Beat Officer, followed by Forest Section Officers, Forest Range Officers, Assistant Conservator of Forests, Divisional Forest Officers manning Territorial Forest, Wildlife and functional divisions (Social Forestry, Research, Wildlife, Vigilance and training wings) and supervised by the Conservators of Forests at Regional level under overall control and supervision of the PCCF assisted by CCFs, Addl.PCCF, Spl.PCCF at Aranya Bhawan. The heads of functional and territorial units are managing their respective units using the available government and contract employees to perform various duties and tasks assigned to them. The ministerial cadre include attenders, Junior Assistants, Senior Assistants, Superintendants, Managers, Accounts Officers, Gazatted Assistants, Draughtsman etc.

The APFD had taken initiatives in implementation of modern tools like IT and Geomatics over last 18 years; realizing that the for management of Natural resources the KEY is bridging of gap between natural resource agency personnel, researchers, developers, and other land users in terms of new tools and technologies for effective communication and management. This also provided the rapid, reliable and accurate information regarding the status of Forest for Efficient Forest Resource Management. APFD had developed several spatial & non-spatial databases and applications which are vital for planning, implementation and monitoring of forestry and other related operations through systemic collection, storage and retrieval of MIS and Geo-spatial data. It had procured the sophisticated software and hardware in due course of time including ArcGIS Server. However it had to be customized for enabling various levels of officers to use.

The APFD had started development of a modular based web-enabled APFMIS including various modules like Offence, TOF, Beedileaf, Sawmill, TOF, Vegetation Cover Monitoring, 62nd Vana Mahotsava, CAMPA, HRM, Nursery Monitoring, Plantation Monitoring etc. The APFD had also digitized/created/generated a rich voluminous geo-spatial database (about 250 different layers) on various scales for the purpose of its forests and wildlife planning, management, monitoring and evaluation.

It is in this backdrop that the present project has been conceived to customize the ArcGIS software in phased manner and to hoist the same on the official website of the department along with the spatial and non-spatial database.

## **(2) Objective of the Customization of ArcGIS Server:**

To develop multilevel user friendly interface for various levels offices (Beat, Section, Range, Division, Circle, and Head Office level) for quick accessing & analysis of data and also for generating various reports & graphs essential for day-to-day administration, planning, management and monitoring of the forests.

## **(3) Scope of Work:**

The scope of work is as below

- Customization of ArcGIS Server leading to Development of Decision Support System – Stand alone, online and mobile.
- Preparation of Detailed System Requirement Specifications for Software Application development
- Development and implementation of the application
- Training Department Officials
- Delivery of Manuals – User, Installation and Training
- Warranty support
- Annual Maintenance

The FIRM shall develop the solution using the standard Iterative and Incremental Development Model (IIDM) for full lifecycle software development with following features:

- Risks are to be addressed much earlier in the project life cycle.
- To deliver complete functionality in slices (in some complete intermediate form)
- Complete Testing to be done at the end of every slice.
- Must Deliver Higher Client Satisfaction/Project Output Visibility. The client shall get to know the look and feel of the product for enabling the client to suggest changes earlier than at the time of final delivery.
- Accurate Schedules to deliver complex functionalities.

## **(4) The task of the Agency selected for the above work are as under:**

### **a. Functional Requirements:**

- i. **Area of Interest Task:** - The user shall be able to select the area of interest based on his jurisdiction. Interface shall provide to select Circle-District-Division-Range-Section-Beat. The areas selected shall be displayed for the themes selected and other areas shall be masked. The AOI shall be capable of being printed.
- ii. **KML, Shape and Area Task:** - Calculate area for given surveyed points. It has to take Excel file or dbase File formats with at least 3 fields i.e., S.No, Longitude, Latitude (Eight digits after Decimal to accept for Latitude and Longitude). Clicking on a button it has to show a dialog box with browse option to select the .xls and .dbf file. Once Submit Button pressed it has to validate the file and do the required processes. The Result has a shape file with attributes including area & perimeter in a table. In addition to this the lat-long/ shapefile shall be converted to KML file.
- iii. **Calculate area for a given bearings and distances of a Surveyed Plot:** with inputting one latitude and longitude for initial point of a Surveyed Plot, from the measured bearings (1 sec) and distances (cm) of the plot, or (X,Y) coordinates of the plot (cm), it shall be able to generate the latitude

- and longitude of other points and also the area, perimeter. In addition to this the output shall be converted into shapefile and KML file.
- iv. **Attribute Data Entry:** for authenticated users, it shall provide facility to add or edit the attribute table. Unlimited number of fields with Length up to 32 shall be kept. This shall also have commands like undo, save...etc. To edit the tables the user have to login with User Name and Password.
  - v. **Query Builder:** - The task is to perform selection (**Query**) based on available themes and Corresponding Fields. The task should be capable of doing complex queries with existing layers and fields. The select features and selected records to be highlighted in chosen color.
  - vi. **Locating Task:** It shall provide interface to Enter X and Y. On submit it has to point the position where given point falls and get active theme information, if exists, like division, range, etc in case of admin and back layers and so on..... The entered location shall be shown by a symbol (with properties to change like text, color, symbol etc) and it has an option to save as shape file with given values.
  - vii. **Get Co-ordinates Task:** This task is to return latitude and longitude of selected or pointed location. The task shall open dialog window with mouse clicked location coordinates in different Units like Geographic Coordinates, UTM etc.
  - viii. **Drawing a feature on the map Task:** It has to perform a drawing point / line/ polygon on a Map and possible to save as a layer or theme. It has to create a new line/polygon/point theme on existing Layers as per user requirements.
  - ix. **Buffer Task:** Create a **buffer** as multiple rings for a selected or queried feature (Point, Line and Poly) for a given distance inside/ outside/ both options. It shall have option of dissolving or without dissolving of buffers so created. The buffer created shall either be stored as graphics in view or in existing theme or as a new theme.
  - x. **Operations on Data Task:** View the Data and to Add, Edit, Delete fields, to make Charts like Pie,...etc, and to save the results and outputs as file.
  - xi. **Labelling Task:** placing labels on the layers or for selected portion with Table field or Entered texts. It shall have capability to place the labels using theme's text label placement property or by finding best label placement. It shall also have capability to allow overlapping labels, removing duplicates, scaling labels.
  - xii. **Generate/ Ungenerate Task:** for Converting the coverage into co-ordinate text file and Converting co-ordinate text format files into layers. It should accept 8 decimal places for lat/long and 3 decimal places for UTM meters.
  - xiii. **Save or download task:** for uploading and downloading of files for authorized users only through a user friendly interface.
  - xiv. **Add & View Client Layers Task:** for adding and viewing Client side layers temporarily by user. This shall be helpful whether the layers are falling at correct Location, and to return the other attribute information.
  - xv. **GPS Data Download and Upload Task:** this task should be capable of downloading and GPS data and uploading of selected locations (point/line/polygon) to GPS.
  - xvi. **Export or Import Task:** to Export the layout/view to jpg, tiff, bmp, emf, png, or other formats as it exists in ArcMap.

- xvii. **Printing Map Task:** It shall have capability of printing the layouts with functionality to perform all layout Operations like Size, Scale, Color, Style, Legend, Heading, etc.
- xviii. **Print of Table Task:** Capable of Printing the required layers attribute Tables in required Format. (Mostly .xls /.dbf)
- xix. **Map Calculator:** Capable of showing Distance in select units between 2 spatial Points of Different Projection/Datum Values.
- xx. **MIS Integration to GIS Data:** Integration of MIS data to GIS Maps through SQL Server on ArcGIS Server latest version.
- xxi. **Conversion Format Task:** Capable of converting one format of geo data to another format. Ex: Layer/Coverage/kml/gdb to Shape and vice versa; Coverage to e00 and vice versa.
- xxii. **Multi view of windows:** - Capable of viewing all open windows of server in a selected windows style. Ex: cascade.
- xxiii. **Online link Task:** to show the selected Portion of theme or layers on Google Maps/ Bing Maps/ Bhuvan Maps/ temporal data of APFD.
- xxiv. **Generation of Statistics:** For the given Raster and Vector data, the task shall generate the Statistics (Area, Perimeter) for each class of the Raster for each parcel of the vector layer.

**b. Non-Functional Requirements:** The proposed customization shall be integrated with existing APFMIS. The proposed solution shall be based on .NET and XML technologies and follows an object-oriented approach. The system shall be highly scalable and any new business component shall be plugged into the system without any design changes. In addition, shall have provision for interfaces to external application through web interface, and XML that gives a flexibility of integrating new applications as and when required. The system shall be scalable to the future needs of the Department and no modifications to code shall be required to increase the capacity of the system. The solution shall be able to easily increase capacity by adding more hardware or more bandwidth. The proposed technical architecture for the development of application shall be n-tier architecture Other requirements are as follows:

#### **Environment**

- Graphical User Interfaces (GUI) for all systems used by Department Staff
- Online help facilities
- Relational Database architecture (preferably SQL Server 2008)
- Intranet portal - for collaborating with internal stakeholders
- Internet portal for departmental staff

#### **Processing Strategy**

- Each administrative unit will run from the same centralized database
- Each Administrative level applications will be seamlessly interfaced over the intranet and internet
- Community services will be provided on a portal in the intranet and over internet

**Performance and availability:** The system will be fault tolerant, and capable of operating under extreme loads in order to support its entire population of users. All major system

backups and maintenance should be done outside specific working hours as per the Department’s suggestion.

**Modifiability and Scalability:** The entire solution must be highly scalable and be modifiable to allow addition of services and features.

**Security:** Logical Security - limits access to data and software based on the need for each individual to know the item of data or software. This should be applied on an individual basis i.e. every user has their own user id and password.

- Input controls on the screen to detect errors.
- Roles will be defined for each user based on their position in the department for accessing and updating the database, based on the versioning. Public will have viewing & printing permission only.

**Data Volumes**

- During the database design process for all divisions, data volumes/traffic need to be estimated accurately.
- The RDBMS should be scalable.

**Usability:** The system will be extremely easy to use, which may not have anything more than just minimal training. Users within the Department will experience the same look and feel across all the divisions.

**High Availability:** shall be installed at two different locations using Two servers, storage sub system, firewall and web servers. Both servers shall make up the live environment for the application. Should one of the live servers, storage sub system, firewall, web server fail for any reason, the other server shall take over the functions of failed node with the last backed up data (Last day’s data).

**Consistency (standards):** Data consistency within the Department database must be maintained at all times. Each unit must maintain high standards of metadata collection and must always adhere to the relevant data standards set by the Department. Data standards (geographical area coding, land use coding, geology coding, baseline data standards, geodesy, map scales, data interchange formats and metadata, to name but a few) must be made easily accessible to data capturers through the system interface.

5) **Time Schedule:** the following are the milestones in the delivery of the Solution, which are to be scrupulously followed.

Tasks	Weeks																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
<b>Software Delivery and Installation</b>	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
SRS	█	█																					
POC demonstration			█	█																			
Design					█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Coding							█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Testing																█	█	█	█	█	█	█	█
Installation and User Acceptance Testing																		█	█	█	█	█	█
Training																						█	█
Final Deployment and Acceptance																						█	█

6) **Review:** The project will be reviewed by APCCF (IT), APCCF GIS, ACF GIS & other officers of IT Wing. The agency has to discuss the proposed work plan with the members of the review committee before commencing the actual work.



7) **Key Issues and Assumptions:** Assumptions, Constraints and Dependencies that have been identified for the proposed solution is provided as specified below:

- Department assign an adequate number of appropriate users to this project. These personnel are expected to be fully conversant with the required functionality for these new applications. In order to deliver on schedule, these personnel shall be made available to Firm team for discussions as and when required.
- Department will provide technical & functional clarifications to Firm within set timeframe.
- The Department will conduct parallel reviews as and when Firm submits sections/modules of various deliverables to Department for approvals.
- Department will provide resources for each of the tasks identified as their responsibilities. It will also be their responsibility to make decisions promptly and turnaround documents in a timely fashion.
- Department will provide a single point of contact and other resources as outlined in the proposal.
- Department will provide access to any or all documents of the existing manual system.
- Department and Firm shall prepare jointly Acceptance Test Plan, Test Cases/Scripts.
- Department will provide Test Data to Firm before start of the Development Phase
- Any changes in functional requirements or enhancements will be handled as per the Requirement Change Control Procedure (RCCP) mentioned in this proposal.
- Any change to the scope of work - resulting due to modifications to other applications by Department - will be addressed through the Requirement Change Control Procedure (RCCP)
- Before the commencement of the next phase, Department should review and approve the System Requirements document in a timely manner. Modifications to the requirements once frozen in consultation with Department will be handled via Change Control Procedure.