

कार्यालय आयुक्त भू-अभिलेख छत्तीसगढ़

इन्द्रावती भवन, प्रथम तल, ब्लॉक नं02-. अटल नगर रायपुर

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क्र/351/UPAHAR योजना /2026 नवा रायपुर अटल नगर दिनांक 22.04.2026

NOTICE FOR INVITING TENDER (NIT)

“Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)”
Director of Land Record, Chhattisgarh Government invites bids from qualified and experienced companies for the selection of System Integrator to study, design, development, integration, implementation, execution, migration, operation, and maintenance of **“Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)”** with the use of Geo-spatial, Remote Sensing and new emerging technologies for the Director of Land Record, Government of Chhattisgarh. Bidders qualifying as per the criteria defined in the RFP are encouraged to participate in the selection process.

Interested bidders should submit their bids online only in response to this NIT latest by 17:30 hrs on 13/05/2026 through the online tender portal. The detailed RFP document can be downloaded from the e-tender portal <http://www.eproc.cgstate.gov.in> and departmental portal <http://revenue.cg.nic.in>

Digitally signed by

Vinit Nandanwar

Date: 22-04-2026

14:05 Director,

Land Record, Chhattisgarh

Nava Raipur Atal Nagar,

पृ.क्र/2150/UPAHAR योजना /2026 नवा रायपुर अटल नगर दिनांक 22.04.2026

प्रतिलिपि :-

वरिष्ठ तकनीकी निदेशक, राष्ट्रीय सूचना विज्ञान केंद्र (NIC), मंत्रालय महानदी भवन, नवा रायपुर अटल नगर को सूचनार्थ, कृपया NOTICE FOR INVITING TENDER (NIT) एवं RFP (Request for Proposal) को विभाग की वेबसाइट में प्रकाशन किया जाकर की गई कार्यवाही से इस कार्यालय को सूचित करने का कष्ट करे।

Director,

Land Record, Chhattisgarh

Nava Raipur Atal Nagar,



Request for Proposal for Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)

RFP No. 350

Raipur Dated 22/04/2026



Invited by
Director of Land Record,
Block – 2, First Floor, Indravati Bhawan,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002



NOTICE FOR INVITING TENDER (NIT)

“Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)”

Ref No: - 351

Raipur, Date: 22/04/2026

Director of Land Record Chhattisgarh Government invites Bids from qualified and experienced companies for the selection of System Integrator to study, design, development, integration, implementation, execution, migration, operation, and maintenance of **“Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)”** with the use of Geo spatial, Remote Sensing and new emerging technologies for the Director of Land Record Govt. of Chhattisgarh. Bidders qualifying as per the criteria defined in the RFP are encouraged to participate in the selection process.

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**Director,
Director of Land Record,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002**



DISCLAIMER

All information contained in this Request for Proposal (RFP) provided/ clarified is in good faith. This is not an agreement, and this is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the presentation of this RFP document, the interested bidders shall satisfy themselves that the document is complete in all respects. The information published in this document is not intended to be exhaustive.

Intimation of a discrepancy, if any, should be immediately given to the specified office. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the RFP document is complete in all respects, and firms submitting their bids are satisfied that the RFP document is complete in all respects.

Director Land Records Chhattisgarh reserves the right to reject any or all of the applications submitted in response to this RFP document at any stage without assigning any reasons whatsoever. Director Land Records Chhattisgarh also reserves the right to withhold or withdraw the process at any stage with intimation to all who have submitted their bids in response to this RFP. Director Land Records Chhattisgarh reserves the right to change/ modify/ amend any or all the provisions of this RFP document without assigning any reason. Any such change would be communicated to the bidders by posting it on the official eProcurement Website (<http://www.eproc.cgstate.gov.in/> and <http://revenue.cg.nic.in>).

Neither Director Land Records Chhattisgarh nor its employees, associates, and consultants will have any liability to any prospective bidder interested to bid or any other person under the law of contract to the principles of resolution or unjust enrichment or otherwise for any loss, expense, or damage which may arise from or be incurred or suffered in connection with anything contained in this RFP document, any matter deemed to form part of this RFP document, the award of the Project, the information and any other information supplied by or on behalf of Director Land Records Chhattisgarh or their employees and bidders or otherwise arising in any way from the selection process for the Project.

Information provided in this document or imparted to any respondent as part of the RFP process is confidential to Director Land Records Chhattisgarh and shall not be used by the respondent for any other purpose, distributed to, or shared with any other person or organization without the written permission of Director Land Records Chhattisgarh.



Data Sheet - Key Activities and Dates

Competitive bidding for Study, Design, Development, Implementation, Execution, Migration & Maintenance of “Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)” for the Director of Land Records Chhattisgarh Government.

S. No	Key Activities	Details
1	Client	Commissioner Land Record Chhattisgarh Raipur
2	Address and Concerned Person for Correspondence	Block – 2, First Floor, Indravati Bhawan, Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002
3	Cost of Bid Document	INR 20000.00 (Rs. Twenty Thousand Only)
4	Point of Contact related to this Bid Document	Mr. Rakesh Sahu – Deputy Commissioner Directorate of Land Records, Government of Chhattisgarh, Indravati Bhawan, Nava Raipur, Raipur, Chhattisgarh rakesh.sahu257@cg.gov.in
5	Earnest Money Deposit (EMD) / Bid Security Amount	INR: 2,50,00,000 (Rupees Two Crores Fifty lacs Only)
6	Mode of deposit of EMD	Online on http://www.eproc.cgstate.gov.in/ valid for 180 days from the date of bid submission
7	Bid Validity period	180 Days from the date of bid submission
8	Selection Method	QCBS (70:30)
9	Assignment Phases	As per scope of work mentioned in the RFP
10	Joint Venture/ Consortium	Allowed (One Lead and One partner Allow only)
11	Availability of Bid Documents	http://www.eproc.cgstate.gov.in/ http://revenue.cg.nic.in
12	Language for Communication	English
13	Purchase of Bid Document Start Date & Time	From 22/04/2026 at 1800 hours
14	Pre-Bid queries/suggestions Last date and time	Up to 1730 hours on 27/04/2026
15	E-mail address for Pre-bid Queries	clr-cg@nic.in
16	Pre-Bid Meeting Date and Time	29/04/2026 at 1200 hours (12 PM)
17	Mode of Pre-bid Meeting	Pre bid meeting shall be conducted in hybrid mode. Physical Presence at Office of Commissioner of Land Records – Meeting Hall at Indravati Bhawan, Nava Raipur, Raipur, Chhattisgarh along with online video conferencing. Online link will be available on specific request to official email id clr-cg@nic.in
18	Bid Submission Start Date	22/04/2026
19	Last Date and Time for Bid Submission	Upto 1730 hours on 13/05/2026
20	Bid Opening Date and Time	After 1800 hours on 13/05/2026
21	Technical Presentation Date, Time, and Venue	Would be communicated later to qualified bidders.
22	Financial Bids Opening Date and Time	Would be communicated later to shortlisted bidders.



S. No	Key Activities	Details
23	Performance Bank Guarantee	An amount equivalent to 10% of the total contract amount within 15 days of the LOI issue. The PBG should be issued by a Scheduled / Nationalized Bank in India, in the favor of Director Land Records, Chhattisgarh, Indravati Bhawan, Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Note: This Bid Document is not transferable.

1. Prospective Bidders are encouraged to undertake a preliminary study of the Directorate of Land Records Chhattisgarh it's, Functions, regional office and branch office, etc. at their own cost.
2. Directorate of Land Records Chhattisgarh reserves the right to reject any or all the bids in whole or in part at any time without mentioning any reasons thereof.
3. Prospective Bidders are encouraged to undertake a preliminary study of the existing applications/systems of CLR, Food, Agriculture and MARKFED and any other relevant departments for integration with the new proposed system requirement of integrated command and control center at their own cost.



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Abbreviations

Abbreviations	Details
DLR/Department	Directorate of Land Records, Government of Chhattisgarh
UPAHAR	Unified Platform for Agriculture and Holistic Assessment with Records
DAC/ICCC	Data Analytics Center/ Integrated Command and Control Center
MSP	Minimum Support Price
SLA	Service Level Agreement
INR	Indian National Rupees
EMD	Earnest Money Deposit
GST	Goods and Services Tax
RFP	Request for Proposal
IPR	Intellectual Property Rights
MeitY	Ministry of Electronics and Information Technology, Government of India
NDVI	Normalized Difference Vegetation Index
EVI	Enhanced Vegetation Index
SAVI	Soil Adjusted Vegetation Index
NDWI	Normalized Difference Water Index
GP	Gram Panchayat
CCE	Crop Cutting Experiment
KPI	Key Performance Indicator
LMS	Learning Management System
RS	Remote Sensing
API	Application Programming Interface
GPS	Global Positioning System
RBAC	Role-Based Access Control
CSP	Cloud Service Provider
SPOC	Single Point of Contact
SI	System Integrator
O&M	Operation and Maintenance
OGC	Open Geospatial Consortium
BIS	Bureau of Indian Standards
CERT-In	Indian Computer Emergency Response Team
UAT	User Acceptance Testing
SPDI	Sensitive Personal Data Rules
FRS	Functional Requirement Specification
EAI	Enterprise Application Integration
MoA	Memorandum of Association
EPF	Employees' Provident Fund
PAN	Permanent Account Number
MAAT	Minimum Average Annual Turnover
WAN	Wide Area Network



1. About Chhattisgarh

Chhattisgarh is a state in central India, known for its rich tribal culture, abundant natural resources, and historical sites. It was formed on November 1, 2000, by separating from Madhya Pradesh. The state is often called the "Rice Bowl of India" due to its high rice production.

The Geography and Location: Chhattisgarh is located in the east-central part of the country and is surrounded by Uttar Pradesh and Jharkhand to the north and northeast, Odisha to the east, Telangana to the south, and Maharashtra and Madhya Pradesh to the west.

Economy: Chhattisgarh is rich in natural resources, particularly coal, iron ore, and bauxite, making it a key player in the power, steel, and cement industries. It's also a major producer of rice, hence the nickname "Rice Bowl of India".

2. About Land Record Department

The Directorate of Land Records, Chhattisgarh, functioning under the Revenue and Disaster Management Department, is responsible for the maintenance, updation, and digitization of land records in the state. The Director Land Records is the custodian of both government lands and private lands. The Directorate manages land records such as Khasra, B-1 Khatauni, and land parcel maps, while registration-related documents like sale deeds are handled by separate Registration Department. Citizens can access and verify land records online through the official 'Bhuiyan' portal. The following related information (indicative) as follows:

- i. District of Chhattisgarh – 33
- ii. Number of Blocks in Chhattisgarh – 146
- iii. Number of Tahsil in Chhattisgarh – 252
- iv. Number of Villages in Chhattisgarh – 20289
- v. The total Number of Khasra available in Chhattisgarh state – 25298568
- vi. The total Number of Government Khasra available in Chhattisgarh state – 2870612
- vii. The total Number of Khasra available with Digital Signature – 24044189
- viii. The total Number of available Nazul Khasra/ Plot– 125958
- ix. The total Number of Diversion Khasara – 239633

2.1. About Project

The primary goal of this project is to undertake the study, design, development, implementation, execution, migration, operation, and maintenance of an integrated system/application focused on Paddy Procurement, crop acreage estimation, yield estimation, disaster management and monitoring, pest and disease identification, weather advisories, and other related functionalities using Geospatial, GIS, Remote Sensing, other frontier technologies as applicable and as required and AI/ML technologies—supported through a Data Analytics Centre (DAC) and help desk support.



The objective of this project is to establish a digitally enabled ecosystem for the monitoring, analysis, and forecasting of agricultural and other allied activities as required by the department across the state using Geospatial, GIS, Remote Sensing, other frontier technologies as applicable and as required and AI/ML technologies along with allied application of paddy procurement module. The platform and its paddy procurement module will serve to both government stakeholders - including MSP procurement entities - and farmers, by delivering actionable, data-driven insights across agriculture value chain. It will support crop management, acreage estimation, disaster monitoring and assessment and real-time advisory services for informed decision making. The platform will also enable seamless integration with other departmental (inter and intra) applications/systems/apps, facilitating bi-directional data exchange (data pull and push) to ensure interoperability, data consistency, and a unified view across systems covering both central/state government and private sector applications as per the requirement.

3. Instructions to Bidder

3.1. Definitions

- 1 **'System Integrator'** means the person(s), partnership(s) or company(ies) with whom this Contract is placed.
- 2 **'The System integrator's Representative'** means the person named who is responsible for all contractual aspects of the contract on behalf of the SI.
- 3 **'The system integrator's Personnel'** means any person instructed pursuant to this Contract to undertake any of the system integrator's obligations under this contract, including the system integrator's employees, agents, and sub- system integrator.
- 4 **'Joint Venture'** means a system integrator which comprises two or more partners each of whom will be jointly and severally liable to the Client for all the system integrator's obligations under the contract.
- 5 **'The Client's Representative'** means any entity appointed by the client to act on the client's behalf about procurement and/or management of this contract.
- 6 **'The PMU's'** means and refers to the project management unit of SI, a separate vertical formulated under Director Land Records Chhattisgarh for project management, implementation, execution and monitoring of the scope mentioned in the RFP.
- 7 **'The Services'** means the services delivered to the stakeholders of the project using the tangible and intangible assets created, procured, installed, managed, implemented and operated by the system integrator.
- 8 **'Service Level'** means the level of service and other performance criteria that will apply to the set services as published in this RFP.
- 9 **'The Software/Online application solution'** means the study for software designed and developed/ customization and implemented by the system integrator or the system integrator's personnel and software, hardware, antiviruses, licenses, tools, other accessories and includes the study, plan, design, develop, procure, customize, install, configure, integrate, execute, migrate and maintain entire software with source code and object code along with associated documentation, which is the work product of the development efforts envisaged in the terms of reference.



- 10 **'The Program Manager'** for the head of project management unit for the project means the person named who is responsible for issuing instructions and dealing with all correspondence in connection with the technical aspects of the contract.
- 11 **'Contract Documents'** means the documents listed in the contract agreement, including any amendments thereto.
- 12 **'Contract Price'** means the price payable to the system integrator as specified in the contract agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the contract.
- 13 **'Contract'** means the contract agreement entered between the client and the system integrator, together with the contract documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- 14 **'Application'** means the Application developed or Solution customized, tested, deployed and changed/improved during project duration by the Implementing Agency for the purposes of rendering services to the stakeholders of the Project as per agreed performance standards and levels.
- 15 **'Bidders'** means the agencies participating and submitting their bids as per the bid time schedule.
- 16 **'Lead Bidder'** means the person(s) or company(ies) with whom this Contract is placed.
- 17 **'Confidential Information'** means all information including Project Data (whether in written, oral, electronic, or other format) which relates to the technical, financial and business affairs, customers, bidders, products, developments, operations, processes, data, trade secrets, design rights, know-how and personnel in connection with this Bid Document.
- 18 **'Contract Value'** is the bid value which means the price accepted by the Director Land Records Chhattisgarh as per Price Schedule.
- 19 **'Competent Authority'** is the official within Director Land Records Chhattisgarh legally authorized to perform all the necessary roles and functions pertaining to this Bid Document.
- 20 **'Deliverables'** means the products and services agreed to be delivered by the Successful Bidder in pursuance of the agreement as elaborated in Scope of Work.
- 21 **'Go-Live'** means the date of issuance of Certificate of Completion by Director Land Records Chhattisgarh.
- 22 **'Purchaser'** or **'Authority'** refers to the Director Land Records Chhattisgarh of Chhattisgarh, Raipur.
- 23 **'Project Data'** means all proprietary data of project generated out of project operations and transactions, documents, code, database, queries and related information including but not restricted to user data which the Bidder obtains, possesses or processes in the context of providing the services it should be property and all rights including copy rights of Director Land Records Chhattisgarh of Chhattisgarh Raipur.
- 24 **'Project Duration'** refers to the period of this project for which this RFP is being issued.
- 25 **'Selection Committee'** means the committee constituted Director Land Records Chhattisgarh level for bid evaluation and selection of most appropriate bidder as per procedures and provisions articulated in this RFP document.
- 26 **'Service Level Agreement (SLA)'** means the study, design, supply, development, installation, implementation, migration and maintenance SLA, to be executed within time by the SI, in terms of the service level requirements project deliverables, uptime of application, software, hardware, support mechanism etc. as set out in the contract.



- 27 **Data Analytics Center (DAC)** – The data analytics center act as Integrated Command and Control Center a centralized hub in Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR) initiatives that monitors, review and implement ground level operations, data, and security in real-time for data assisted timely decision making.
- 28 **‘Similar type of services’** means study, design, supply, development, installation, implementation, integration, migration and operation & maintenance of software/applications/platforms.
- 29 **“Acceptance”** means the Department’s written certification that following installation, the system(s) (or specific part thereof) has been tested and verified as complete and/or fully operational, in accordance with the acceptance test defined in the Acceptance Test Documents.
- 30 **“Acceptance Test Documents”** means a mutually agreed document which defines procedures for testing the functioning of the Proposed Application, against requirements laid down in the agreement. It should define tests to be carried out, test equipment and expected test results.
- 31 **“Documentary evidence”** means any matter expressed or described upon any substance by means of letters, figures or marks intended to be used for the recording of that matter and produced before a court.

4. RFP Document Cost

The RFP document cost is Non-refundable **INR. 20,000/-** is to be submitted along with the bid towards the cost of the tender paper on online on the e-Tendering portal <http://www.eproc.cgstate.gov.in/>. Bids received without or with inadequate RFP Document fees will be rejected.

5. Preparation of Bid/Tender Document

5.1. Cost Incurred for Preparation of Bid/Tender Document

Bidder shall bear all costs associated with the preparation and submission of the tender including surveys and Director Land Records Chhattisgarh will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tender process.

5.2. Bid Security/ Earnest Money Deposit

1. The Bidder shall furnish as part of its bid, a bid security of the amount as mentioned in datasheet above (the "Bid Security"), online on the e-Tendering portal <http://www.eproc.cgstate.gov.in/> valid for 180 days from the date of bid submission. In the absence of Bid Security, a bid shall be considered non-responsive and shall not be considered for selection.
2. The Bidder shall furnish, as part of its bid, a bid security (EMD) of INR 2,50,00,000 (Rupees Two Crores and Fifty lacs only), submitted online via the Chhattisgarh e-Procurement Portal ([eproc.cgstate.gov.in](http://www.eproc.cgstate.gov.in/)), valid for 180 days from the date of bid submission. Unsuccessful bidders' EMD will be returned within 90 days from contract signing. The successful bidder's EMD will be discharged upon furnishing the performance security. The EMD may be forfeited if the bidder withdraws its bid during validity, fails to sign the contract, or fails to furnish performance security. No interest shall be payable on EMD.



5.3. The Bid security may be forfeited:

1. If a bidder withdraws its bid during the period of bid validity specified in this bid document
2. In case the successful bidder fails to sign the contract as specified in this bid document or fails to furnish performance security as specified in this bid document.
3. No interest shall be payable on bid security under any circumstances.
4. In the event that Purchaser terminates the Agreement pursuant to failure on the part of the system integrator to comply with the conditions as contained in this Clause and depending on the event of default, Performance Guarantee furnished by system integrator may be forfeited.
5. **Fraud and Corrupt Practices:** The Bidders/Bidders and their respective officers, employees, and advisers shall observe the highest standard of ethics during the selection process. Notwithstanding of anything to the contrary contained in this RFP, the purchaser shall reject a proposal without being liable in any manner whatever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, inexpedient practice or restrictive practice (collectively the "Prohibited Practices") in the selection process. In such an event, the purchaser shall, without prejudice to its any other rights or remedies, forfeit and appropriate the bid security or performance security, as the case may be, as pre-estimated compensation and damages payable to the authority for, inter alia, time, cost and effort of the authority, in regard to the RFP, including consideration and evaluation of such bidder's proposal.

5.4. Language of Proposal

The proposal prepared by the bidder, as well as all correspondence and documents relating to the tender exchanged between the bidder and Director Land Records Chhattisgarh shall be in English. Information supplied in other languages shall be rejected.

5.5. Pre-bid meeting

1. Pre-bid meeting shall be conducted either through physical meetings at Director Land Records Chhattisgarh or as per the decided by department HO or Video Conferencing on the date and time mentioned in the datasheet. Potential bidders interested in joining the Pre-bid meeting, must share their Company Name, Authorized Person's name, Email and Contact No. at the email address mentioned in the data sheet latest by one day before the pre-bid conference. Director Land Records Chhattisgarh shall invite them formally through email.
2. Bidders are required to submit the queries/clarifications/suggestions in writing (editable MS Word/ Excel format) to specified e-mail address mentioned in the data sheet in given format (Annexure- 14) Format for Pre-Bid Queries latest by one day in advance from the date of pre-bid meeting. Bidders note that queries not submitted in the prescribed format may not be addressed at all. Department shall not be responsible for ensuring that the Bidders' queries have been received by them. Any requests for clarification post the indicated date and time may not be entertained by the Purchaser.
3. In the pre-bid meeting, Departmental technical committee representatives would address clarifications sought by bidders with respect to the RFP document and the proposed project scope



defined in the RFP. Clarifications that require internal consultation would be addressed in written form and uploaded on the e-Tender portal <http://www.eproc.cgstate.gov.in/> and Departmental Portal <http://revenue.cg.nic.in>

4. Director Land Records Chhattisgarh reserves the right not to respond to any/all queries raised or clarifications sought if, in their opinion and at their sole discretion, they consider that it would be inappropriate to do so or do not find any merit in it.
5. All responses to the Pre-bid queries and amendments/corrigendum's (if any) would be uploaded only on <http://www.eproc.cgstate.gov.in/> and <http://revenue.cg.nic.in> Bidders are advised to regularly visit the e-Tender portal for updates.

5.6. Amendment of bid document

1. At any time prior to the deadline for the submission of bids, the Director Land Records Chhattisgarh may, for any reason, whether on its own or in response to a clarification requested by any prospective bidder, modify the bid document by way of issuing corrigendum(s).
2. To allow reasonable time to the prospective bidders for considering such amendment(s), in the preparation of their Bids, the Director Land Records Chhattisgarh, at its discretion, may extend the deadline for the submission of bids, any time.
3. All the amendments/corrigendum/addendum (if any) would be uploaded on **portal <http://www.eproc.cgstate.gov.in/> and departmental portal <http://revenue.cg.nic.in>.**

5.7. Bid Currency

Prices for services offered shall be quoted in Indian National Rupees (INR) only.

5.8. Correction of Errors

The person signing the bid must initial erasures or other corrections. The Bidder further agrees that in the event of any obvious errors, Director Land Records Chhattisgarh reserves the right to waive such errors in its sole discretion. However, Director Land Records Chhattisgarh has no obligation under any circumstances to waive such errors.

5.9. Proposal Validity

1. The bid shall remain valid for 180 days from the actual date of Technical Bid Opening. Bidder should ensure that in all circumstances, its Bid fulfills the validity condition. Any bid valid for a shorter period shall be rejected as non-responsive.
2. In exceptional circumstances, Director Land Records Chhattisgarh may solicit bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing or by mail. Bid Security/EMD shall also be suitably extended. A bidder granting the request is neither required nor permitted to modify the bid.

5.10. Lack of Information to bidder

The bidder shall be deemed to have carefully examined RFP document to his entire satisfaction. Any lack of information shall not in any way relieve the bidder of his responsibility to fulfill his obligation under the tender.



5.11. Application and interpretation of clauses

For interpretation of any clause in the bid document or contract agreement, the interpretation of the Director Land Records, Chhattisgarh of Government of Chhattisgarh and associate organization level technical committee shall be final and binding on the Bidder.

5.12. Completeness of bid document

Bidders are advised to study all instructions, forms, terms, condition, requirements, and other information in the RFP document carefully. Submission of bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications. The response to this RFP should be full and complete in all respects. Failure to furnish the information required by the RFP documents or submission of a proposal not substantially responsive to the RFP documents in every aspect will be at the bidder's risk and may result in rejection of its proposal. The RFP document is not transferable to any other bidder.

The bidders are expected to examine all instructions, forms, terms, conditions, project requirements and other information provided in the bid document, corrigendum/s, if any, pre-bid responses etc. if any. Failure to furnish any information required by the bid or submission of a bid not substantially responsive in every respect will be at the bidder's risk and may result in rejection of the bid and forfeiture of the bid security. The documents comprising the bid to be mandatorily submitted by the bidder.

5.13. Code of integrity

- 1 No official of the purchaser or any Bidder shall act in contravention of the codes which include:
 - i. Prohibition of:
 - a. Making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process.
 - b. Any omission, or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained, or an obligation avoided.
 - c. Any collusion or bid rigging or anticompetitive behavior that may impair the transparency, fairness and the progress of the procurement process.
 - d. Improper use of information provided by the procuring entity to the bidder with an intent
 - e. Any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract, which can affect the decision of the procuring entity directly or indirectly.
 - f. Any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
 - g. Obstruction of any investigation or auditing of a procurement process.
 - h. Making false declaration or providing false information for participation in a tender process or to secure a contract.
 - ii. Disclosure of conflict of interest.



- 2 In case of any reported violations, if the Purchaser, after giving a reasonable opportunity of being heard, concludes that a bidder or prospective bidder, as the case may be, has contravened the code of integrity, may take appropriate measures.

6. Intellectual Property Rights

For the customized solution developed for the project, IPR of the solution would belong exclusively to Director Land Records Chhattisgarh, Government of Chhattisgarh. The agency shall also submit all the necessary instructions for incorporating any modification/changes in the software and its compilation into executable/installable product.

Deliverables provided to Director Land Records Chhattisgarh by Agency during its performance under this project, in which subject to the foregoing provisions of this Article, all right, title and interest in and to such deliverables, shall, as between agency and Director Land Records Chhattisgarh, immediately upon creation, vest with Director Land Records Chhattisgarh. To the extent that the agency's Proprietary Information is incorporated within the deliverables, agency and its employees engaged hereby grant to Director Land Records Chhattisgarh a perpetual, irrevocable, non-exclusive, transferable, paid-up right and license to use, copy, modify (or have modified), transport to Director Land Records Chhattisgarh facilities, and prepare from them, use and copy derivative works for the benefit of and internal use of Director Land Records Chhattisgarh, of such agency's Proprietary Information, Department's rights pursuant to the preceding sentence include the right to disclose such agency's Proprietary Information to third party contractors solely for use on the project provided that all such third party contractors execute, deliver and comply with any customary confidentiality and non-disclosure agreements reasonably required by Director Land Records Chhattisgarh.

7. Contract Period

The project duration is 5 years - (16 weeks for study, design, development and implementation and remaining duration for Operations & Maintenance, or O&M), with phased deliverables from the Date of Agreement and which may be extendable for maximum period of 24 months based on performance and with the consent of competent authority.

8. Contract Agreement

- a) This Bid Document, in totality, will be constituted as part of the Contract Agreement between department and Successful Bidder.
- b) Successful Bidder shall bear the cost of procuring stamp paper of an amount as specified by Registration and Stamps, Commercial Taxes Department, GoCG.

9. Performance Bank Guarantee (PBG)

1. The Bidder shall be required to submit PBG as specified in Bid Data Sheet within 15 working days of issue of LOI/LOA in the format detailed in annexures.
2. The PBG shall be denominated in the currency of the contract and will be for an amount as mentioned in Bid Data Sheet. All charges with respect to the PBG shall be borne by the Bidder.
3. The PBG shall remain valid six months beyond the life of the contract including extensions, if any.



4. The PBG will be discharged/returned only after issuance of 'No-Demand Certificate' by the department upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the performance bank guarantee.
5. In the event of the Bidder being unable to service the contract for whatever reason, Department will invoke the PBG. Department shall notify the Bidder in writing of the exercise of its right to receive such compensation within 10 days, indicating the contractual obligation(s) for which the Bidder is in default.

10. Recovery of Dues

1. Any sum of money due and payable to the Service Provider under this contract may be appropriated by the Department and set off against any claim of the Department for the payment of any sum of money arising out of this contract or under any other contract made by SI with the Department.
2. In case of any recovery arising due to non-conformity to the agreement with its terms and conditions, they will be recovered from deposited amounts (in form of EMD/PBG), any service charges payable to SI and if required by invoking the Performance Bank Guarantee. If the recoverable amount still remains due, it shall be recovered from Service provider as land revenue.

11. Transfer /Sub-Contracting/Subletting

The bidder has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.

12. Scope of work

12.1. Brief of Scope of Work

#	Scope Heads	Description (But not limited to)
1.	Design, Development, Testing, Configuration, Integration of System/Application/s and Implementation for Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)	<ol style="list-style-type: none"> a. Design and Development of the Project Implementation plan b. Business Requirements, FRS, SRS, System Design & Application Development, HLD, LLD and other required documentation as per stakeholder's requirement (but not limited to) c. Design, Supply, Installation, Configuration, Integration & Customization of System/Applications, tools, licenses, mobile apps etc. as required to implement the overall system to achieve its desired objectives. d. Development and Implementation of a System Security Plan (SSP) framework tailored to project requirements, including configuration, integration, and customization. e. Data/Images procurement/Acquisition, its assessment, benchmarking, meaningful assisted decision-making support, advisory services, and Reporting Services



		<ul style="list-style-type: none">f. Project Governance and Program Management, including project planning, milestone tracking, issue and risk management, stakeholder coordination, reporting, change control, and compliance monitoring.g. Data Management Service with open-source applications or open-source database services.h. Application Testingi. Quality Reviewj. Project and Product Documentation
2.	Establishment and Maintenance of DAC	<ul style="list-style-type: none">a. Establishment of the Data Analytics Centre (DAC) and its operation and maintenance for the entire project duration, including execution of civil works, interior works, electrical installations, and provision of seating and workstation arrangements, in accordance with the designs approved by the Department. The Department shall provide the requisite built-up space with roof and walls, while all remaining activities required to make the DAC fully functional shall be within the scope of the project.
2.	Application Hosting, Collaboration and Networking on cloud service provider empaneled by MeitY/CHiPS for Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)	<ul style="list-style-type: none">a. Cloud based hosting at Data Centre, Disaster Recovery Centre and backup infrastructure as per the requirementb. Redundant Network connectivity from Data Centre to DR and Purchaser officesc. Provision of security infrastructure including IDS / IPS / Antivirus etc.d. Provision of Enterprise Asset Management including help desk softwaree. Backup Restore and Archival Servicesf. Storage Administration Servicesg. Data Centre and Data Recovery Centre
3.	Training and Capacity Building	<ul style="list-style-type: none">a. Training and Capacity Building requirement assessment.b. Change Managementc. Preparation of Comprehensive training program.d. Implementation of Train the Trainer Module.e. Preparation of Online and offline training modulesf. Conducting regular/periodic/ad-hoc trainings online and offline of all the stakeholders as required by the department during the project duration.g. Imparting of regular refresher trainings
4.	User Support, Operation and Maintenance of the Integrated IT application and Infrastructure for 4 years Regular Security Audit as per the requirement.	<ul style="list-style-type: none">a. Application monitoring and Compliance to Service Level Agreementsb. Application support including modifications and integration with future systems



		<ul style="list-style-type: none">c. Data/Images procurement/Acquisition, its assessment, benchmarking, meaningful assisted decision-making support, advisory services, and Reporting Servicesd. Data Management Service with open-source applications or open-source database services.e. Application Testingf. Quality Reviewg. Project and Product Documentationh. Bugs / Fixes Managementi. Software Change and Version Controlj. Maintenance of Configuration Information & System documentationk. Licenses and warranties for all the off-the-shelf products/applicationsl. Help Desk Software Implementation and Servicesm. Database Administrationn. User Administrationo. Security Administration and Conducting regular security audits as per guidelines.
5.	Paddy Procurement Module	The module shall serve as a unified interface for onboarding, farmers, procurement tracking, and managing society-level activities, enabling the Department of Food, Department of Agriculture and the Director Land Records to monitor institutional agricultural support delivery across the state.
6.	Mobile App for Digital Tokens	The application must operate effectively across Android and iOS platforms, supporting offline-first functionality for field use in low-connectivity rural areas, while synchronizing seamlessly when connectivity is restored.
7.	Integration	To enable seamless integration with the satellite imagery verification system and Digital Crop Survey (DCS) and any other system, applications etc. as per the requirement and the Farmer Database for the Paddy Procurement Module shall be developed exclusively from the AgriStack Farmer Registry and as per requirement of departments/stakeholders. SI shall be responsible for developing APIs and facilitate any future integration requirement with any state central, state government, private sector application/ module.
8.	Data migration / Data Storage/Data Management	Data Migration, if required, refers to the systematic, secure, and verifiable process of transferring data from existing legacy systems, registers, databases, applications, or manual records to the new UPAHAR application/platform, while ensuring data



		integrity, accuracy, completeness, confidentiality, and compliance with applicable Government of Chhattisgarh and Government of India standards. Data management is systematic collection, processing, storage, securing, and using data to achieve better business outcomes from UPAHAR thereby ensuring data is accurate, accessible, secure, and usable for decision-making, analytics
9.	Farmer Registration and Integration with AgriStack	The Paddy Procurement Module shall source farmer data exclusively from AgriStack. No separate farmer registration shall be permitted within the UPAHAR system. All farmer data creation, modification, and validation shall be governed solely through AgriStack integration.

Note: SI shall be responsible to design, develop, integrate and implement, operate and maintain any other allied application/system which is related to UPAHAR system for the smooth development and functioning of the proposed system.

12.2. The indicative scope of work defined to deliver the following applications/ modules/system (but not limited to):

12.2.1. Satellite Imagery Procurement and Specification

1. The selected agency shall be responsible for procuring the required satellite imagery for the project. To facilitate this process, the department will issue a formal letter to NRSC (National Remote Sensing Centre), if necessary. The satellite imagery must have a spatial resolution of at least 3 meters or < 3m for agricultural analysis and the temporal resolution for optical data should not exceed 5 to 7 days.
2. The multispectral satellite data must include a minimum of four spectral bands—Blue, Green, Red, and Near Infrared (NIR) with a spatial resolution of 3 meters or < 3m. In cases where cloud-free optical data is unavailable, alternative spectral bands may be utilized.
3. Additionally, subject to prior approval from the competent authority, very high-resolution satellite imagery may be used to support data processing requirements. The selected agency must procure imagery for per season at least four distinct dates during each crop growing season, covering both pre-harvest and post-harvest phases. The selected agency must procure a minimum of FOUR (04) multi-date satellite imagery sets during each crop growing season, covering key crop growth stages, including early season, mid-season, peak season (pre-harvest), and late season (post-harvest).
4. The project area for satellite-based monitoring will encompass agricultural land, including all cultivated fields to support comprehensive crop analysis and mapping requirements. The selected agency will be responsible for procuring and processing satellite imagery for two (02) crop seasons each year, ensuring complete spatial and temporal coverage across the entire cultivated landscape.



5. For each crop season, the selected system integrator shall acquire a minimum of four (04) multi-date satellite imagery sets capturing the key crop growth stages. Accordingly, a minimum of Four (04) for Kharif Season and Four (04) for Rabi Season, total eight (08) imagery sets must be delivered annually. The required imagery epochs for each season shall include early-season, mid-season, peak-season, and late-season stages.
6. All procured imagery must provide complete coverage of the entire agricultural area (parcel wise define parcel wise) without any gaps, ensuring reliable, consistent, and repeatable multi-temporal agricultural monitoring across all districts.
7. Imagery procurement shall specifically target the entire cultivated area, accounting for seasonal variations in sown extent, fallow land conversion, intercropping patterns, and expansion of agricultural boundaries.
8. In addition, the SI must ensure that satellite scenes include a buffer zone (2 km) beyond cultivated boundaries to avoid edge distortion and ensure seamless mosaicking of satellite tiles.
9. During cloudy periods and extreme weather conditions, the agency shall incorporate microwave/SAR data to support monitoring during monsoon, flood events, and other critical windows where optical data is unavailable.
10. All imagery must be delivered after standard pre-processing, including radiometric correction, atmospheric correction, geometric correction, cloud/shadow masking, mosaicking, and georeferencing as per project specifications.
11. Any additional imagery procurement requirement by any other government department or body for example - disaster management etc. in any region or district, proposed DAC shall help the concern department with the data analysis/ data reports analysis along with help desk support as per the requirement post cost approval of the concern authority. This will help in assessing the ground level impact caused to various departments during the specific event, such as the Agriculture Department, Disaster Management Department, Food Department, Irrigation Department, etc. (but not limited to). The cost for such imagery procurement will be additional and separate from the project cost, calculated on a pro-rata basis depending on the time and extent of imagery procurement. No other cost apart from imagery procurement shall be payable to SI for the additional requirement, if any.

12.2.2. Field Survey for Ground Truth Data Collection

1. Field surveys are a critical component of crop classification using remote sensing data. The selected agency shall conduct ground truth (GT) surveys covering at least 1%, up-to 2% maximum of the total sown area during each season, across various crop growth stages or as per the requirements specified by the authority.
2. Surveys must be well-distributed geographically, ensuring representation across different crop types and cultivation areas within the study region. Field personnel will collect both primary and secondary crop-related information, recording latitude and longitude coordinates along with key attributes such as crop type and variety, sowing date, and growth stage, Irrigation status, Field condition, Intercropping (if any), Farmer details (optional) using a mobile application.
3. The collected ground truth data must be integrated into the crop classification map to enhance accuracy. Additionally, the selected agency is required to submit a detailed field survey plan to the authority prior to the commencement of each season.



4. GT sampling must follow a stratified random sampling approach, ensuring adequate coverage of crop type, soil type, landholding size, and landscape variability.
5. Collected GT datasets shall undergo strict quality control checks, including spatial accuracy verification, attribute completeness, duplicate removal, and photo-location match.
6. The agency must recollect or rectify any faulty GT records within five (05) working days of identification.
7. At least 30% of GT points shall be reserved for independent accuracy assessment, separate from training datasets.
8. All validated GT data shall be used for classification model training, accuracy improvement, and refinement of crop maps.
9. The GT dataset (points, attributes, photos, timestamps, QC reports) must be submitted in prescribed formats and integrated into the project's Web-GIS platform for transparency and audit
10. The selected agency must deploy trained field personnel, familiar with crop identification, mobile GT tools, and data quality compliance. Training details must be submitted to the Authority
11. A detailed GT survey plan including methodology, sampling distribution, manpower deployment, schedule, logistics, and mobile app design and workflow must be submitted and approved prior to commencement of each season.
12. All GT activities and datasets shall be treated as project assets and must be handed over to the Authority at the end of each season
13. Through the proposed portal, geo-tagged photographs should be captured, which can also be verified by the farmer. The farmer's photograph should also be included, and the survey work should be carried out based on the prior information available.

12.2.3. Georeferencing of Cadastral Maps

1. The selected Implementing Agency shall be responsible for acquiring cadastral maps from the Department of Land Records (DLR), Chhattisgarh, in geo-referenced vector formats (e.g., shapefiles). The implementing agency will utilize these datasets in the available form, without performing any additional digitization, geo-referencing, or spatial processing.

12.2.4. Crop Acreage & Production Monitoring System

Timely information on crop acreage is vital for effective resource planning and allocation. The selected agency shall continuously map and monitor cultivated areas, producing consolidated, crop-wise acreage estimates and summary reports.

12.2.5. Crop Identification:

1. The selected agency shall be responsible for developing robust crop identification algorithms, leveraging remote sensing and machine learning techniques.
2. The system should achieve parcel-level crop classification accuracy $\geq 85\%$. (minimum 85%) Accuracy shall be computed through independent validation datasets and confusion matrices.
3. The crop identification workflow must utilize multirate imagery representing key crop growth stages (early, mid, peak, late season) to strengthen the phenological signature analysis.



4. The classification workflow shall utilize multi-temporal satellite imagery covering early-season, mid-season, peak-season, and late-season stages for reliable crop phenology extraction.
5. The agency shall incorporate spectral vegetation indices including NDVI, EVI, SAVI, NDWI, and Red-Edge indices to improve crop separability.
6. A hybrid classification approach (supervised classification + machine learning + rule-based refinement) must be applied to handle agro-ecological variability.
7. The agency shall implement phenology-based consistency checks using time-series NDVI/EVI curves to validate classification stability across dates.
8. The system must identify multi-cropping and intercropping situations, producing primary and secondary crop layers where feasible.
9. Classification models must be iteratively improved each season using updated GT samples and spectral profiles.
10. The classification output must include a confidence score for each parcel, reflecting classification certainty.
11. The agency is responsible for acquiring or generating the necessary crop data at the parcel/village/GP level. In cases where cadastral data is unavailable, the agency must delineate farm boundaries independently. If parcel-level data is not accessible, the village shall serve as the reporting unit.
12. Parcel boundaries generated must be topologically clean, with no overlaps or gaps, ensuring accurate spatial area aggregation.
13. A minimum of 30% of Ground Truth (GT) data must be reserved exclusively for independent accuracy validation (not used in training).
14. Additionally, the agency must conduct an independent accuracy assessment of the classification output by generating a confusion matrix using the remaining 30% of the GT data.
15. Accuracy reporting must include Overall accuracy, Producer accuracy, User accuracy, Class-wise accuracy. Parcel-level accuracy must meet or exceed $\geq 70\%$ for major crops and Any classification failing to meet accuracy targets must be refined and resubmitted.
16. The classification output shall include Crop-wise maps (parcel, village, block levels), Crop acreage estimates, Crop dominance maps, Confidence score for each classified parcel.
17. Machine learning models shall be iteratively improved every season, incorporating updated GT data, spectral profiles, and field feedback to enhance accuracy.
18. All classification layers must be delivered in GIS-compatible formats and integrated into the project's Web-GIS platform for visualization, validation, and decision-making.
19. The agency shall document the complete classification methodology, including algorithms used, training samples, parameters, accuracy report, error matrix, and model performance summary.

12.2.6. Crop Health Monitoring

1. The selected agency shall implement a satellite-based Crop Health Monitoring System to track crop condition, detect stress, and support timely interventions during each cropping season.



2. Crop health monitoring must utilize multi-temporal satellite imagery, including early, mid, peak, and late-season observations to monitor crop growth patterns
3. The agency shall compute and analyze key vegetation indices (VIs) such as: NDVI (Normalized Difference Vegetation Index), EVI (Enhanced Vegetation Index), SAVI (Soil Adjusted Vegetation Index), **NDWI** (Normalized Difference Water Index)
These indicators must be used to detect crop stress, vigour, and moisture conditions (SWIR Band).
4. The system shall generate pixel-level and parcel-level crop health maps, updated for each satellite acquisition date.
5. The agency must implement change detection analysis to identify areas affected by: moisture stress, nutrient deficiency, pest/disease attacks, flood or waterlogging, drought conditions
6. Identified stress zones must be mapped at parcel, village, block, and district levels, along with severity categorization (low, moderate, high).
7. The system shall generate seasonal crop health reports and geo-spatial layers that can be accessed through the project's Web-GIS platform.
8. The agency must provide alerts/notifications for significant crop stress events, enabling timely decision-making for field inspections and interventions.
9. Crop health monitoring outputs must be integrated with Ground Truth (GT) observations, Weather data, Yield estimation, Soil data workflows for improved accuracy and decision-support.
10. Crop health monitoring outputs must be integrated with Ground Truth (GT) observations, Weather data, Soil data workflows for improved accuracy and decision-support.
11. All crop health layers must be delivered in GIS-compatible formats, including metadata, processing methodology, and accuracy summary.
12. The agency shall ensure that crop health outputs are consistent across seasons and validated using available GT data and field feedback.

12.2.7. Crop acreage estimation:

1. Real-time crop area statistics are crucial for effective planning and resource allocation. The selected agency shall be responsible for mapping all cultivated crops and generating comprehensive, crop-wise and area-wise acreage estimation reports. This activity must be continuous throughout the year, as sowing dates vary, and certain crops are cultivated irrespective of the season. The scope of the project will cover all districts within the state of Chhattisgarh. The selected agency must ensure comprehensive coverage of all crops cultivated within the village during both the Kharif and Rabi seasons.
2. Acreage estimation must be continuous, leveraging multi-date imagery to capture staggered sowing patterns and dynamic crop spread.
3. The system shall detect fallow-to-crop transitions, newly cultivated plots, and abandoned or failed crop patches.
4. Acreage outputs must identify re-sown areas following rainfall damage, pest attack, or flood events.
5. Acreage maps must differentiate between the sown area vs. harvested area at village/block/district levels.
6. The system must generate multirate crop extent change detection layers, identifying area increase or reduction between acquisition dates.



7. Acreage estimation must include off-season, short-cycle, and perennial crops. Acreage validation shall use GT data, historical crop statistics, and phenology profiles for cross-verification.
8. Acreage deliverables must include: - Village-wise acreage maps, Block and district summaries, Acreage heatmaps & density maps and Year-on-year acreage comparison

Final outputs shall be provided in GIS-compatible formats (SHP, GeoJSON, GeoTIFF or as per the requirement of Department) and integrated into the project's Web-GIS dashboard.

12.2.8. Crop Yield Modeling and Production Estimation

1. Estimating crop yield with reasonable accuracy ahead of harvest is essential for ensuring food security and facilitating responsive policy measures. Crop production estimation is typically derived from a combination of crop yield data and acreage assessments. Timely forecasting of crop production is essential for the department to effectively plan activities related to agricultural marketing and resource allocation.
2. The selected agency shall integrate crop yield predictions—generated through data analytics and crop modeling techniques—with satellite-based crop acreage estimations. This integration will enable accurate forecasting of expected crop production across the designated area and help determine the total output for crops.
3. Ideally, the crop production estimation report should be submitted after the finalization of the crop acreage report, ensuring consistency and reliability in the forecasting process.
4. Accurate crop yield estimation is a critical component in ensuring food security and supporting economic planning. Predicting crop yields with reasonable accuracy prior to harvest enables timely interventions, particularly in cases where low yields are anticipated.
5. For crop production estimation, the selected agency shall develop robust crop yield models using a combination of spectral data, weather information, land and soil parameters, and agronomic inputs at the parcel, village, or Gram Panchayat level. These models should be developed for all major crops, as notified by the authority before the start of each season.
6. Yield models must incorporate multi-temporal vegetation index trends (NDVI, EVI, SAVI, NDWI) derived from satellite imagery to capture crop vigor, biomass accumulation, and stress variations throughout the season.
7. The selected agency shall integrate weather parameters (rainfall, temperature, humidity, evapotranspiration) and soil moisture indicators to strengthen the accuracy of yield prediction models.
8. Yield forecasts must account for anomaly factors, including drought stress, flood/waterlogging, pest/disease impacts, and nutrient deficiency indicators identified during crop health monitoring.
9. Yield estimation must include both mid-season forecast (based on spectral and agro-climatic indicators) and end-season final estimates, calibrated using ground data and field observations.
10. The yield estimation framework must support village-level, block-level, district-level, and state-level aggregation, aligning with departmental reporting hierarchies.
11. The selected agency is required to submit two yield reports per season:
 - i. One month before harvest, based on predictive modeling.
 - ii. One month after harvest, incorporating Crop Cutting Experiment (CCE) data for validation.
12. Following validation, a final yield report must be submitted to the authority, ensuring accuracy and reliability in crop production forecasting.



12.2.9. Support for MSP Procurement Planning

1. To support data-driven governance in agricultural procurement, the selected agency shall operationalize its satellite-derived outputs to facilitate Minimum Support Price (MSP) procurement planning and validation. This functionality is envisioned as a value-added layer that leverages existing classification, acreage data without duplicating those workflows- to enable transparency and precision in procurement processes.
2. The system must provide actionable insights on crop presence and extent at village and block levels, indicative availability patterns for procurement planning, identification of areas with comparatively lower crop coverage or delayed crop development, and early identification of regions requiring proactive procurement and logistical interventions.
3. MSP support outputs must be integrated into the Web-GIS platform and exported in GIS-compatible formats for use by procurement and food supply chain departments.

12.2.10. Drought and Dry Spell Monitoring

1. Monitoring weather conditions and drought trends is essential for informed decision-making and policy planning by the Commissioner of Chhattisgarh Land Records. The selected agency shall conduct multi-year analysis of weather data in conjunction with satellite-based remote sensing to assess drought patterns using geostatistical methods and advanced data analytics techniques.
2. The selected agency shall provide predictive insights into rainfall patterns for the target area, including the estimated time interval between the current rainfall event and the next expected occurrence.
3. The agency shall utilize satellite-derived vegetation indices (NDVI, EVI, SAVI, NDWI) to detect vegetation stress and moisture loss, enabling early identification of drought onset.
4. Multi-temporal analysis of vegetation and soil moisture conditions must be carried out to classify drought severity at parcel, village, block, and district levels.
5. The agency shall incorporate microwave/SAR data for assessing drought conditions during cloudy or monsoon periods when optical imagery is unavailable.
6. The drought monitoring system shall generate anomaly maps by comparing the current season's vegetation and soil moisture conditions with long-term historical averages.
7. Dry spell assessment shall include analysis of consecutive rainless days, crop water-stress risk, and deviation from normal monsoon behavior across the project area.
8. The agency must prepare village-level drought severity layers categorized as: No Stress, Mild Stress, Moderate Stress, Severe Stress.
9. The system must generate early-warning alerts for severe vegetation stress zones, enabling field verification and timely intervention by the department.
10. All drought-related outputs including stress maps, anomaly layers, rainfall deviation maps, and predictive dry-spell indicators must be integrated into the project's Web-GIS platform.
11. The agency must submit seasonal drought assessment reports, including spatial statistics, drought evolution trends, and crop-specific impacts for each district.

12.3. Drone-Satellite Imagery based (hybrid) disaster monitoring

12.3.1. Flood Mapping and Monitoring (In case of requirement)

1. The agriculture sector is highly susceptible to flood events, which can severely damage crops, particularly during critical phases such as planting or harvesting. In the event of a natural or localized flooding incident, the selected agency shall utilize real-time remote sensing data to identify, and map submerged or inundated agricultural areas.



2. The selected agency shall provide detailed information on crop acreage within the designated area, along with the current crop situation. Additionally, the agency must identify and map regions that are likely to be flood-prone or suffer from inadequate drainage infrastructure.
3. Flood mapping shall utilize both optical and microwave/SAR data, ensuring reliable detection even during cloud cover.
4. Flood impact must be assessed using multi-temporal change detection, comparing pre-flood and post-flood imagery to quantify damage intensity.
5. The agency shall generate flood severity classification layers (e.g., shallow, moderate, deep inundation) at parcel, village, and block levels.
6. UAV (drone) flights may be deployed for high-resolution validation, subject to approval by the competent authority.

12.3.2. Crop Loss Assessment (In case of requirement)

1. Precise estimation of crop loss at the parcel level is critical for implementing crop insurance schemes and compensation programs. In the event of crop damage resulting from natural disasters, local calamities, or disease and pest outbreaks, the selected agency shall provide both an overall assessment and detailed parcel-wise data, indicating the extent and severity of damage for each affected crop.
2. Crop loss assessment should encompass damages occurring at various stages of the cropping cycle, including sowing, mid-season, and harvesting phases. The assessment must be conducted using satellite remote sensing data and should be validated through field surveys to ensure accuracy and reliability.
3. Loss estimation shall use: NDVI/EVI reductions, Change detection between seasonal time-steps, Moisture anomaly mapping, Flood/water-logging signatures and Pest/disease indicators derived from spectral deviation
4. Damage classification must include categories such as: No Damage, Partial Damage, Severe Damage, Crop Failure
5. This categorization must be generated at parcel, village, block, and district levels for administrative decision-making.
6. SI shall have to provide the analytics as per the insurance requirement, if required by the department.

12.4. Advisories

The selected SI shall be responsible for establishing a robust and scalable advisory framework and system designed to support multiple stakeholders, namely the Department of Agriculture, extension functionaries, and registered farmers. This advisory system will leverage data from satellite imagery, weather sources, field surveys, and predictive models to generate timely, actionable guidance. Advisories shall be disseminated through web platforms and mobile applications, with appropriate role-based access and multilingual capabilities.

12.4.1. Advisory to department

The selected SI should provide advisory to the department for the stress identification, weather pattern, cropping pattern with the area to be approach for solution with crop acreage and crop situation of the particular area. Advisory should be accessible through web platform as well as mobile application.



12.4.2. Advisory to extension functionaries

The selected SI should provide selective area information to the concerned extension functionaries for the subject narrated in the document. These advisories should be available to the field functionaries through mobile application. Field functionaries will be extension officers and other officials as deemed necessary by the authority.

12.4.3. Advisory to farmers:

a. Generalized advisory to all farmers:

Advisory which are general in nature should be disseminated to all the farmers of the given area through SMS Or Whats app Or IVRS. Generalized advisories should be at Tehsil level and it should highlight specific region if any concerns are there. Separate validation mechanisms shall be finalized once the project is operational. Farmer mobile application should have the facility for:

- To integrate the weather data from Automatic weather stations, IMD and any other reliable weather data sources. Weather forecast should include forecasted rainfall, temperature, humidity, wind speed and cloudiness.
- To provide soil preparation advisory services at beginning of the cropping season.
- To provide crop management practice to the farmers at each crop growth stage.
- Backend platform of the mobile app should have the facility to maintain crop knowledge database which includes recent best package of practices for individual crops.

b. Personalized advisory

The selected SI should provide mobile based facilities for registered farmers, where farmers can pin their farm to get crop situation and personalized advisory. Selected SI should provide farm specific personalized advisory. Personalized advisories should be at parcel level. Personalized advisories are to be generated using satellite data however the mobile application should have the provision for farmers to upload image and comment text through their application. Department will help bidder for the registration of farmers or on boarding them to the platform.

12.4.4. Subject for advisory:

a) Advisories on sowing and harvesting time:

Information on best time for sowing will help farmers to plan their sowing related activities in advance. Also, Identification of crop wise planting dates spatially will identify areas which are behind in sowing, which will help department analyse reason and implement the contingency measures. Selected SI should create advisories for farmers on best possible sowing date based on weather prediction. Also, the selected SI should create additional reports at the end of season analyzing the sowing pattern for the identified crops based on planting date by using multi temporal satellite data on basis or the time period given by department. Selected SI should also identify the probable harvesting date by using satellite data integrated crop models and submit the report to department.

b) Advisories on crop stress:

Crop condition and stress identification at early stages of the crop is essential for farmers to do necessary action in time and also agriculture department to better monitoring of crop health. Selected SI should assess the crop health condition of each crop periodically through remote sensing and field visits. On abrupt change of crop health or such anomalies in any area of the state, should be detected and provide advisories to farmers. Selected bidder should also provide the department with detailing of the area, crop situation, acreage and cause of stress as an additional report as well.



c) Advisories on pest and disease infestation

Early identification of a crop disease or pest can lead to faster interventions with resulting reduced impacts on food supply chains. Selected SI should develop algorithms for pest and diseases symptoms identification which is integrated with mobile applications. The mobile application will provide advisories to farmers in order to prevent the possible outbreak especially an epidemic situation. Also, bidder should submit an additional report to agriculture department which should include the disease/ pests in area, extent of damage. Pest & disease spread analysis should be done by satellite data and it should be supported by the field survey.

d) Advisories on soil moisture stress and Irrigation Application

Sufficient levels of soil moisture are essential for optimum plant growth and high crop yields. To determine the quantity of moisture in the soil is crucial importance for crop production to avoid water stress, but also for the mitigation of adverse environmental impacts due to over-irrigation as well as for the conservation of water resources. Thus, selected bidder should develop an indirect method for estimating soil moisture data where soil data, remotely sensed data like microwave data can be utilized.

Derived soil moisture should be used to provide personalized irrigation advisory to farmers to advice on irrigation requirement and application. Selected SI should to also provide additional reports and maps to department on estimated soil moisture and irrigation requirement at village level.

e) Advisories on weather pattern

Selected SI should provide analysis with past and current weather data and forecast the weather pattern. Selected SI should analyse the inputs/ dataset on weather situation provided by the department and generate forecast and advisory accordingly.

12.4.5. Integration with Farmer Registration Module and allied services

The selected System Integrator must provide seamless integration with the satellite imagery verification system, the Farmer Database for the Paddy Procurement Module shall be developed exclusively from the AgriStack Farmer Registry. The Farmer Registration Module serves as the foundational data layer of the entire Agriculture Platform. Every service advisory delivery, subsidy targeting, crop insurance, MSP procurement validation, and disaster compensation is anchored to a verified farmer identity and land parcel record. This module shall establish and maintain a comprehensive, de-duplicated, and constantly updated digital registry of farmers in Chhattisgarh.

The module shall be fully aligned with the National Farmer Registry (NFR) schema under the AgriStack initiative of the Ministry of Agriculture & Farmers Welfare and shall map to a Unified Farmer ID (UFID) for every registered farmer. Some of the indicative functional requirements are as follows (but not limited to):

- a) Capture of complete farmer demographic data i.e. name, gender, category mobile number, category (SC/ST/OBC/General if applicable), Aadhaar number, bank account details etc.
- b) Linkage with Aadhaar e-KYC/ AgriStack records for identity de-duplication
- c) Digital capture of all land parcels (Khasra) associated with a farmer, linked to Land Records Management System as per AgriStack (LRMS / Bhuiyan portal)
- d) Geo-spatial mapping of individual farm parcels boundary walk-in via GPS on mobile app, or polygon import from cadastral.
- e) Recording of land attributes: survey number, area (in hectares), ownership type (own / leased / shared), soil type etc.
- f) Historical crop record maintenance with cumulative season-wise data per parcel
- g) Application and approval workflow for scheme enrollment via web portal and mobile app.



- h) Co-ordination with all the relevant department for all active Chhattisgarh schemes mapped to state/ national Schemes Registry
- i) Mapping of each farmer to their respective Cooperative committee / procurement committee
- j) Bank details shall be mandatory for benefit payment eligibility which will be fetched from CCB module
- k) All new registrations and modifications shall require Aadhaar based e-verification
- l) Duplicate account linkage across multiple farmers shall be restricted or flagged
- m) Mapping of each farmer to their respective relevant administrative unit (Village/Tehsil / District) etc.

12.5. Paddy Procurement Module:

SI shall be responsible to undertake the study, design, development, implementation, execution, migration, operation, and maintenance of an integrated system/application focused on Paddy Procurement module. The selected system Integrator must provide but not limited to:-

- a) The module shall serve as a unified interface for onboarding farmers, tracking procurement, and managing society-level activities, enabling the Department, other cross functional department and the Director Land Records to monitor institutional agricultural support delivery across the state
- b) Digital onboarding of all types of primary agricultural societies PACS
- c) Farmer-level membership enrollment linked to Unified Farmer ID (UFID) etc.
- d) Tracking of membership additions, exits, and transfers across societies
- e) Integration with CCB (Cooperative Credit Bank) module for seamless loan disbursement and recovery workflows
- f) Management of fertilizer, seed, and pesticide distribution by society to registered member farmers
- g) MSP procurement support linking society-level procurement operations with satellite-derived crop maps for area.

Department officials at all required levels shall have access to society-level performance dashboards showing member count, active borrowers, loan portfolio, input distribution volume, and procurement activity.

The SI shall also ensure that the designed solution is **highly dynamic, configurable, and administrator-friendly**, incorporating low-code/no-code capabilities such as **drag-and-drop configuration tools**. Authorized officials shall be able to enable, disable, or modify specific services, business rules, workflows, user roles, deduction logic, approval chains, and reports without requiring code-level changes. This dynamically configurable framework shall support faster rollout of policy changes, seasonal updates, and operational adjustments.

All modules and architectural components delivered by the SI shall maintain strict standards of **security, privacy, auditability, performance, and compliance**. The SI shall provide end-to-end documentation, APIs, dashboards, training, and operational support required for the smooth functioning and long-term sustainability of the system.

12.5.1. Mobile App for digital tokens

The mobile application shall serve as an accessible and user-friendly platform enabling farmers to seamlessly participate in the digital procurement ecosystem. Through the mobile app, farmers shall be able to securely register themselves by providing essential personal details and Aadhaar-based



verification. Once registered, the farmer shall be able to view the list of assigned Procurement Centers (PCs) based on jurisdiction, availability, and operational schedules. The application shall allow farmers to generate digital **procurement tokens for selling their paddy** at the designated Procurement Center, ensuring systematic crowd management, avoiding long queues, and enabling transparent and fair allocation of procurement slots. The token shall include details such as date, time, PC location, allowable quantity, for use at the procurement center. The system shall sync in real time with the central portal, ensuring accurate data flow, improved planning, and efficient procurement operations.

12.5.2. Block Chain

The Selected System Integrator (SI) shall undertake a comprehensive review of the existing Paddy Procurement processes, understand the functional, technical, and operational requirements of all stakeholders, and conduct detailed system studies to map current workflows and data flows. Based on this assessment, the SI shall design, develop, and implement microservice-based, scalable, and modular system architecture for the above-mentioned modules, capable of supporting a minimum of 8,000 concurrent users at any given point of time without degradation of performance. Portal shall leverage Blockchain technology to ensure end to end transparency, traceability, security, and immutability of transactions throughout the procurement lifecycle. The SI shall further ensure seamless integration of the proposed system with relevant departmental databases and external systems to enable real time data exchange, automated verification, and comprehensive reporting. The scope shall also include development, testing, deployment, user training, preparation of technical and user documentation, and ongoing technical support to ensure smooth adoption, secure operations, and effective functioning of the portal.

12.5.3. Reports Requirement

The department may require a comprehensive set of **daily and periodic reports** on paddy procurement or farmer registration to ensure effective monitoring, transparency, and operational control. The reports mentioned are **indicative in nature**, and the department may seek **any additional or specific reports** as required from time to time based on operational, administrative, or policy needs. These may include daily procurement reports capturing center-wise quantities procured and farmer participation, periodic progress reports summarizing cumulative procurement against targets, stock and storage status reports reflecting availability and movement, farmer payment and MSP disbursement reports to ensure timely and accurate payments, transportation and delivery reports tracking movement to mills or godowns, and reconciliation reports aligning physical stocks with records. Collectively, such reports enable the department to assess procurement performance, promptly address operational gaps, safeguard farmer interests, and support informed decision-making throughout the procurement season.

12.6. Database Management

Selected SI should procure satellite imageries specified in the tender document, analysed with different techniques for the scope of work narrated in the document. For on-going data analysis during the season data processing shall be done on cloud servers by the selected SI and after the completion of each season/ year (whichever is feasible) all the generated data shall be deployed / stored at Chhattisgarh State Data Centre (CGSDC) server along with security certificate and credentials. Data can be archived post 180 days. All raw and processed data should be available as per the department norms or instructions or as per departments requirement.



12.7. Establishment of Data Analytics Center (Command and Control Unit)

12.7.1. Facilities

12.7.1.1. Design Considerations:

1. The project includes designing, engineering, supply & installation of Project Operations & Data Analytics Centre (DAC) and other office set up pertaining to the center.
2. Satisfactory environmental conditions for operator personnel - including noise, air flow, temperature and humidity should be ensured. Adequate space for personnel and equipment for the movements and activities they are required to perform during operation and maintenance, under both normal and emergency conditions.
3. In broad, the scope of work and supply shall consist of the following parts:
 - a) Interior design, engineering for the operation center.
 - b) All related services for supply, installation, testing.
 - c) Maintenance and warranty throughout project duration
4. General Considerations
 - a) The tentative control room area shall be approximate 2000 square feet, and within this area the control room (provisioned for 30 personnel), conference room (provisioned for 20 personnel), team room, waiting area, and 2 offices for project in-charge officials will have to be constructed. This will include raised flooring, carpeting, glass wall, video wall, false ceiling, electrical cabling, network cabling, minor civil works to create partitions for offices and remove existing partitions/walls, if any, based on acceptable civil engineering practices, provisioning of all furniture, installation of furniture, non-IT and IT infrastructure.
 - b) Selected SI shall be responsible for safety and security of the installed item still commissioning and final acceptance by selected SI or committee appointed by selected bidder.
 - c) Quality assurance & commissioning of the complete system at site to the complete satisfaction of the selected SI or committee appointed by selected bidder.
5. Ergonomic Design: DAC site should be ergonomically designed and should follow Control Centre Ergonomics Standards and other applicable standards.
6. Cabling at Site: Entire cabling at DAC shall be rat protective and insulated. The selected bidder shall ensure that proper earthing and cooling requirements are met at control center during the contract period.
7. Network Connectivity: The DAC shall have dedicated connectivity for display/monitoring of agriculture insights and also have provision to interface with external systems such as weather stations, news feeds. The selected SI should also provision for redundant internet connectivity for failover situations. The expenses related to band width/lease line for internet connectivity shall be borne by department.
8. Physical Security at DAC: Physical security at Data Analytics Centre shall be maintained using access control device / biometric based authentication. The entire physical security system will be set up based on user authentication and room wise security provisions.
9. The Data Analytics Centre should be equipped with relevant signage. The signage should be easy to read and highlighted in case of any disaster to guide control room staff to safety.



12.7.2. Overview of Requirements: (But not limited to)

S. No.	Particular	Approx. Dimensions (in feet)	Seating Capacity (Persons)	Scope Inclusions (But not limited to)
1	Control Room or Data Analytics Center	50 X 20	30	Civil Works, Raised Floor, False Ceiling, Electrical and Network Cabling, Video wall setup, Furniture Setup, Non-IT infrastructure set-up, IT infrastructure and systems set-up
2	Conference Room (With glass panels facing operations control rooms)	20 X 20	20	Civil Works, False Ceiling, Electrical and Network Cabling, Video Screens setup, Furniture Setup, Non-IT infrastructure set-up, IT infrastructure and systems setup
3	In-Charge Officials Room (Cabin)	10 X 10	1 + 4	Civil Works, False Ceiling, Electrical and Network Cabling, Furniture Setup, Non-IT infrastructure set-up, IT infrastructure and systems set-up

12.7.3. Data Analysis Center (But not limited to)

S. No.	Particular	Quantity
1	Workstations (Minimum specifications are mentioned as per Annexure)	30
2	Multi-Function Printer (Heavy Duty) color	01
3	Indoor Wi-Fi Access Points	05
4	Video Wall (Minimum specifications are mentioned as per Annexure)	01
5	Network based Video Wall Controller	01
6	Video Wall Monitoring Software	01
7	Managed Switch	02
8	NVR based cameras	06
9	Fire Panels	02
10	Furniture, Cooling, Electrical and Networking Cabling (Quantity based on number of personnel occupying the room)	30
11	UPS with Minimum 05 hours back	01

12.7.4. Conference Room:

S. No.	Particular	Quantity
1	Workstations (Minimum specifications are mentioned as per Annexure)	01
2	Indoor Wi-Fi Access Points	05
3	Video Screen	02
4	Furniture, Cooling, Electrical and Networking Cabling (Quantity based on number of personnel occupying the room)	20
5	Video conference solution license with 50 concurrent users	01



12.7.5. In-Charge Officials Rooms:

S. No.	Particular	Quantity
1	Desktop	02
2	Color Laser Printer	02
3	Furniture, Cooling, Electrical and Networking Cabling (Quantity based on number of personnel occupying the room – include 4 visitors)	02
4	Video Screen (56 inches)	02

12.8. Data Analytics Centre (DAC)

1. The selected SI shall be responsible for the Integrated Data Analytics Centre (DAC). This facility will function as the central data hub for the Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR), enabling real-time agricultural monitoring, advanced data analytics, visualization, and coordination across the Chhattisgarh.
2. The DAC shall provide a unified platform to visualize and manage multi-source data streams, including GIS/Geospatial, remote sensing outputs, drone-based observations, crop cutting estimation, yield estimation, parcel wise crop, crop insights, and ground survey information. It must also enable seamless communication with field teams and the Department of Agriculture or as per requirement of government of Chhattisgarh.
3. The DAC will function as a knowledge hub for policy formulation, analysis, performance monitoring, and proactive interventions, supporting features like predictive analytics for crop yields, disaster impact assessments, and customized dashboards. It must handle high-volume data processing (e.g., analytical dashboard, queries-based analysis etc.) with minimum 97% uptime, real-time data ingestion, and AI/ML-driven insights, while facilitating seamless communication via APIs and role-based access. Additionally, the DAC shall house a dedicated helpdesk team of executives stationed on-site to assist farmers through tele consultations, query resolution, and advisory support, enhancing farmer outreach and engagement and other management enabled by with the help of help desk software.

12.8.1. Functional Requirements

1. The DAC shall support the following core functionalities, drawing from multi-source data aggregation and analytics, with extended support for helpdesk operations:
2. **Data Ingestion and Management:** Real-time/batch ingestion from UPAHAR modules (e.g., satellite data, ground truthing etc.) and external sources. Perform data cleaning, transformation, and enrichment using automated pipelines, with metadata catalogs for searchability.
3. **Advanced Analytics and AI/ML:** Develop models for predictive tasks (e.g., drought risk assessment, crop loss prediction etc.) using time-series analysis, machine learning algorithms (e.g., regression, clustering), and anomaly detection. Enable ad-hoc querying, statistical testing, and scenario simulations for policy insights.
4. **Visualization and Dashboards:** Create interactive, role-based dashboards (e.g., executive summaries for officials, operational views for field staff) with charts, heatmaps, GIS overlays, and drill-down capabilities. Support real-time alerts for events like flood risks or pest outbreaks.



5. **Reporting and Decision Support:** Generate automated reports (e.g., fortnightly crop health summaries, annual production forecasts) with export options (PDF, CSV, .xlsx etc.). Include a Decision Support System (DSS) for what-if analysis, predictions and recommendations.
6. **Collaboration and Communication:** Facilitate secure data sharing, video conferencing, and task assignment for field teams. Integrate with web/mobile apps for push notifications and feedback loops. For helpdesk executives, enable tele consultations via integrated video/audio tools, allowing them to assist farmers with queries on crop advisories, loss assessments, or platform usage in real-time.
7. **Monitoring and Optimization:** Track system performance KPIs (e.g., query response time <5 seconds, data accuracy >95%) and provide optimization tools for resource scaling.

12.8.2. Core Responsibilities of the System Integrator for DAC (but not limited to)

The SI shall establish a state-of-the-art Data Analytics Centre (DAC), the key components of the Command Centre will be as follows:

- a. Design of Data Analytics Centre (DAC) and related Civil Work
- b. Video Walls
- c. Operator workstations
- d. Design/establish DAC and required storage infrastructure in the same premises for meeting DLR data needs and solution needs
- e. Procure and deploy the required software solutions like Video Management System (VMS) and other required software at its own cost for successful functioning of DAC
- f. Design and establish all information security measures/systems including Physical, Network, Information security aspects to safeguard the infrastructure, applications and data
- g. Establish a Disaster Recovery Center hosted by using Meghraj, GoI cloud with prior approval from DLR or nominated representative by DLR/PMC
- h. Develop standard operating procedures (SOPs) and SLAs for all procedures related to operating various applications, devices and business processes related to successful functioning of DAC.
- i. Conduct a need assessment and design the DAC architecture, including hardware/software sizing and integration plans.
- j. Procure, install, and configure all components, ensuring compatibility with existing systems, if any, including set up for the helpdesk executives' infrastructure.
- k. Migrate historical data and validate data integrity.
- l. Ensure inclusivity (e.g., multi-lingual interfaces, accessibility for low-bandwidth areas).
- m. Manage risks (e.g., data silos via governance policies) and provide scalability for future expansions.
- n. Design, Supply, Installation testing and commissioning of IT Infrastructure including site preparation of DAC, DR center.
- o. Establishment of LAN and WAN connectivity at DAC, and connectivity of field devices and solutions with DAC.
- p. Integration Services as per the scope documented in the RFP.
- q. Should have provision for Data Analytics Centre (DAC) over a Mobile platform. SI should provision for Mobile Client application. Number of Mobile users accessing the DAC application will be provided during requirement phase.
- r. All the hardware and software issues will be the responsibility of SI.
- s. Networking & Security Infrastructure and other associated IT Components.
- t. 24x 7 monitoring and management services and technical support.



- u. Procurement and supply of all the IT Infrastructure components such as Servers, Databases, System Software, Networking & Security components, Storage Solution, Software and other IT components required for the DAC.
- v. No Products supplied under this bid shall be nearing their date of “end of life”.
- w. Procurement and supply of requisite licenses, Installation and implementation (including configuration /customization and Testing) of proposed DAC.
- x. All documentation generated inclusive of IT architecture, functional specifications, design and user manuals of the IT solution and documentation of non-IT components during design, installation and commissioning phase shall always be submitted and approved by DLR.
- y. Standard business process management framework shall be followed for workflow management with capabilities of configurability at user level in consultation and approval form DLR.
- z. Shall also provide chatting tool/software for communication.
- aa. Shall provide system integration services to customize and integrate the applications provided and also integrate with existing application installed in other agencies. The DAC application proposed by the SI shall have open API and API management and shall be able to integrate and fetch the data from other third-party systems already available or coming up in the near future in consultation and approval by DLR.
- bb. As part of preparing the final bill of material for the physical hardware, the successful bidder will be required to list all passive & active components required in the command-and-control center and get it approved by the DLR.
- cc. All IT equipment models offered shall be latest released with bundled version update and not nearing end of life.
- dd. Assessment of the business requirements and IT Solution requirements for the DAC.
- ee. Design and build the solution of DAC as per the design considerations.
- ff. Plan for development, configuration and customization of software products.
- gg. The above are only indicative requirements of IT & Non-IT Infrastructure requirements at DAC. The exact quantity and requirement shall be proposed as part of the technical proposal of the SI.
- hh. The SI shall prepare the overall Command and Control Centre Operational plan for this project. The plan shall comprise of deployment of all the equipment required under the project. The implementation roll-out plan for setting up the Data Analytics Centre (DAC) shall be approved by DLR. The detailed plan shall also be comprising of the scalability, expandability and security under this project.
- ii. The SI is required to size and provide IT infra to meet the project functional requirements and Service Level Agreements (SLAs).
- jj. The SI shall be required to submit a detailed installation report and have it approved by DLR before proceeding and installation as per approved design.
- kk. Post installation of all the equipment at approved locations. The report shall be utilized during the acceptance testing period of the project to verify the actual quantity of the equipment supplied and commissioned under the project.
- ll. After completion of installation, SI shall submit a detail report and take approval from the DLR.

12.8.3. Geospatial Infrastructure Layer (GIS Server + OGC Services)

1. DAC must include a dedicated GIS Server Stack supporting OGC services (WMS/WFS/WCS) for all Remote Sensing (RS) outputs.
2. DAC shall maintain a geospatial metadata catalog (CSW) with lineage, accuracy metrics, and dataset versioning.
3. Real-Time GIS Layer Pipeline (Remote Sensing - Processing - DAC)



4. DAC must host automated pipelines for ingestion and transformation of RS layers, including Satellite mosaic updates, Index roasters (NDVI/EVI/SAVI/NDWI), Flood, drought, crop-stress masks, Crop classification layers and Acreage geospatial layers.

12.8.4. Integration with Web-GIS Portal

1. DAC must integrate with the Web-GIS platform so that all analytical results (classification, acreage, health, flood, drought, yield) appear as map layers in dashboards.
2. DAC must expose APIs for GIS viewers (Web + Mobile) to fetch: Layers, Legends, Map tiles, and Filtered parcel-statistics

12.8.5. Spatial Indexing, Tiling & High-Performance Map Rendering

1. DAC must perform tiling, caching, and spatial indexing for fast rendering of high-volume RS datasets.
2. Must support 5-second max response time for map layer queries during peak load

12.8.6. Digital Web Platform

1. The System Integrator (SI) shall be responsible for the **end-to-end development, deployment, and maintenance** including integration with state level available applications of a comprehensive **web-based platform** as a core component of the solution as per the MeitY guideline.
2. The System Integrator (SI) will be responsible for the end-to-end development, deployment, and maintenance including integration with state level available applications of a comprehensive web-based platform as a core component of the solution, adhering to the following key features and requirements (but not to limited):
3. Secure, multi-level authentication for all users.
4. Role-based dashboards tailored to individual stakeholder needs (e.g., farmers can access crop calendars, subsidy application statuses, etc.).
5. The web portal and mobile applications must be hosted on a MeitY - empaneled cloud service provider to support ongoing data processing.
6. Pre-filled forms should be available by fetching beneficiary data from the database.
7. Strong authentication and security features, with rights and privileges managed through an Integrated Management Solution.
8. Support for HTTPS protocol (SSL) and comprehensive audit trails.
9. No concurrent sessions allowed for the same user.
10. Preference for development using open-source technologies.
11. Support for all major browsers (Internet Explorer, Chrome, Firefox) and both Android and iOS mobile operating systems.
12. Multi-lingual capabilities (Hindi, English and Chhattisgarhi).
13. Interoperability with industry-standard databases.
14. Support for web services/APIs and integration with common business applications/ with state level available applications as per requirement of departments.
15. Integration with standard email and instant messaging services.
16. Compatibility with other platform components via open standards.
17. Support for virtualization, encryption and compression.
18. Integrated workflow management system for all departmental activities.
19. Advanced search engine with full-text search capabilities.
20. Department officials can upload reports in specified formats.
21. Facilities for storing, tracking, and monitoring data at various administrative levels.



22. Field officer can report pest or disease incidences and record at the village level using provided formats.
23. District/Block/Tehsil Officers can view aggregated pest and disease information and make strategic decisions at the district level.
24. Facility to record disaster events and crop damage, including estimation data, evidence, and audit records.
25. Capability to estimate and record crop production losses for each crop.
26. Visualization of potential threat areas, vulnerability profiles, and occurrence frequencies for natural calamities.
27. Database backups must be maintained throughout the project duration and maintenance period.
28. The platform must include an integrated Web-GIS Map Viewer supporting OGC standards: WMS, WFS, WCS for all geospatial layers (crop classification, acreage, crop health, flood/drought, yield, GT points, UAV/VHR layers) and CSW Metadata Catalog for dataset discovery, lineage, sensor info, dates, and accuracy metadata.
29. The Web Platform must provide: Time-slider to view NDVI/EVI time-series, flood pre/post maps, and crop growth stages, Side-by-side ("swipe"/comparison) tool for multi-date imagery analysis, Parcel-level query tools: click a parcel - show crop, acreage, stress, yield, advisory history and Layer filtering (season, crop, date, district/block/village, severity).
30. The web platform must fetch analytics output from DAC APIs: Crop classification layers, Acreage summaries, Crop health/stress rasters, Flood/drought masks and Advisories (geo-linked)
31. Geospatial Search & Administrative Navigation: Search by parcel ID, village, block, district, crop, incident type and Map navigation synced with analytical dashboards.
32. For all advisories, crop-loss assessments yield estimates the platform must allow "View on Map" linking the record to its source GIS layers (raster/vector).
33. Real-Time Map Performance & Caching: Spatial indexing & caching for handling large RS imagery datasets and Target map response time: <5 seconds under peak load.
34. Secure, multi-level authentication for all users

12.8.7. Mobile Platform

The Mobile Platform is an integral component of the solution. The Mobile Application should meet the following key specifications (but not limited to):

1. Provide an intuitive, user-friendly graphical interface (GUI) that allows users to navigate and perform actions effortlessly.
2. Ensure the GUI is highly responsive, with minimal or no delays during launch or while navigating between screens.
3. Include pre-filled data and forms for user convenience based on user credential.
4. Ensure compatibility with both Android and iOS platforms.
5. Incorporate analytics to monitor and improve user experience patterns.
6. Optimize memory usage.
7. Implement strict authentication, privacy, and security measures.
8. Enable fast page loading and refreshing.
9. Offer real-time GPS information capture.
10. Allow easy configuration and modification of existing GUIs and support the addition of new screens.
11. Design screens to be resolution-independent for consistent display across devices.
12. Facility to register farm boundaries through GIS map tools where Farmer can digitize the farm boundaries by walk or draw a polygon on the high-resolution satellite image.



13. Facility to record cropping season, crop details and irrigation facility details of each survey number.
14. Provide contextual crop advisories to individual farmers based on the crop type and phenological stage of the crop sown.
15. Have option to view and analyze the optimum sowing date based on the weather data.
16. To generate Crop Activity Calendar for the entire crop lifecycle automatically based on the sowing date input from farmer registration.
17. To provide Irrigation management advisories based on the WRD data, Crop data, Soil data and rainfall data.
18. Should be providing advisory on best possible time for harvesting based on the forecasted weather and crop calendar so the farmer can plan the activity well in advance.
19. Backend platform of the mobile app should have the capability to predict pest and diseases using crop models and should provide controls advisories as preventive action.
20. Backend platform of the mobile app should have the capability to predict the expected harvesting date for each crop based on the sowing date and varying weather parameters in season.
21. To disseminate disaster forecast, context specific damage mitigation advisory to respective farmers based on the age and stage of the crop.
22. The mobile app shall support offline map tiles and cached parcel boundaries for low-network or no-network geographies, enabling uninterrupted field data collection.
23. The app must contain a lightweight GIS viewer to display parcel maps, crop layers, flood masks, NDVI/EVI rasters, and advisory zones pulled from backend OGC services.
24. All field observations, photos, pest/disease reports, and damage records must be geo-tagged, and farmer advisories must be geo-fenced to the farmer's parcel boundaries.
25. All mobile-captured data (GT, losses, pest/disease, field inspections) must immediately sync with: DAC (analytics engine) and Web-GIS (parcel-level visualization)
26. The app must support GNSS/GPS-based farm boundary capture, with accuracy checks and topology cleaning.
27. Field officers/farmers must upload: Geotagged photos, Short video evidence, and Notes linked to parcel polygons. All mapped to Web-GIS for audit and validation.

12.8.7.1. Mobile Application

The System Integrator (SI) shall be responsible for the design, development, deployment, and maintenance of a robust mobile application to enable field-level data capture, monitoring, and interaction with the core system as well as the farmer mobile application. The features (but not limited to) of the farmer mobile application are outlined below:

1. Enable farmers to zoom, pin location and view the farm boundaries using GIS mapping tools for indicative eligibility of Scheme Benefits/MSP benefits. Boundaries can be digitized either by walking the perimeter or by drawing polygons on high-resolution satellite imagery. Allow farmers to view and verify cropping season details, crop type, and irrigation facilities for each survey number. Also enabling farmers' to raise grievances in case of any discrepancies.
2. Deliver personalized crop advisories based on crop type and its phenological stage.
3. Provide insights into optimal sowing dates using historical and forecasted weather data.
4. Generate a crop lifecycle calendar automatically based on the sowing date entered during farmer registration.
5. Advise farmers on the best possible time for harvesting based on weather forecasts and crop calendar to enable proactive planning.



6. Backend system should predict potential pest and disease outbreaks using crop models and provide preventive control advisories.
7. Estimate expected harvest dates for each crop based on sowing date and in-season weather variations.
8. Disseminate disaster alerts and context-specific damage mitigation advisories tailored to the crop's age and growth stage.
9. Farmers should be able to see their parcel polygon, crop type, crop health status, rainfall deviations, advisory layers, and flood/drought alerts on a GIS map within the app.
10. All advisories (crop health, drought, flood, pest, nutrient) must be linked to the farmer's parcel geometry through Web-GIS API.
11. Farmer-submitted crop information must be validated using satellite-derived classification & NDVI returned by the backend system

12.9. Integrations

13. The system should be equipped for secure and seamless API-level integration with key government platforms to enable real-time data exchange and enhanced functionality. Some of the key integrations include **(but not limited to)**:
 - i. **Land Records Management Systems** – For accessing land parcel details and ownership for field validation and beneficiary mapping.
 - ii. **Soil Health Card Database** – To fetch soil parameters and support personalized crop and nutrient advisories.
 - iii. **Agriculture market data** – To provide market-related data such as mandi prices and arrivals for farmer decision support.
 - iv. **Weather data:** To integrate weather data into AgriStack ecosystem for better analysis and decision-making.
 - v. **Other Platform Integration** – To provide the integration functionality if state government department based on requirement.
 - vi. **Integration with Food Department and Markfed** : - The application/module/system shall integrate various existing and upcoming systems, applications, and databases. It should have an adaptable architecture capable of supporting evolving business needs and end-user requirements.
 - vii. **AgriStack Integration and Implementation Module** - To align with the digital public infrastructure goals under the AgriStack initiative launched by the Ministry of Agriculture & Farmers Welfare, Government of India, the proposed solution must support integration with the federated data architecture, registries, and APIs prescribed under the AgriStack framework. The module shall ensure Chhattisgarh's seamless onboarding onto the national AgriStack ecosystem and enable data exchange for enhanced service delivery, transparency, and interoperability.
 - viii. **Any other state/department level or central level portal integration** - The application shall integrate various existing and upcoming systems, applications, and databases. It shall have an adaptable architecture capable of supporting evolving business needs and end-user requirements.
 - ix. At the time of requirement discovery and gathering, there may be requirements of more integrations. The SI shall be responsible for integrating all the systems/ softwares/ portals/ tools etc. as per the requirements.
 - x. **Integration with Web-GIS and OGC Services**- The system must integrate with the UPAHAR Web-GIS platform using OGC-compliant services (WMS/WFS/WCS) to fetch and publish



- geospatial layers such as classification maps, acreage layers, crop health indices, flood/drought masks, UAV/VHR outputs and yield rasters.
- xi. **Integration with DAC for Geospatial Analytics-** The integration layer shall support bi-directional exchange between the Data Analytics Centre (DAC) and the Web-GIS system to synchronize map layers, dashboard data, and analytics outputs (NDVI/EVI time-series, stress layers, flood detection).
 - xii. **Integration of UAV/VHR/SAR Data Pipelines-** The solution must support ingestion and integration of drone, VHR, and SAR-based geospatial datasets into the GIS engine and DAC workflows for crop-loss assessment, flood mapping, and field verification.
 - xiii. **API-First Spatial Querying (Parcel/Village/Block)-** The SI shall expose REST/JSON APIs enabling external systems to retrieve parcel-level and village-level geospatial outputs (crop ID, acreage, stress, yield, flood/drought, advisories).
 - xiv. **Integration with Disaster Management Systems-** The platform must integrate with disaster management authorities to exchange flood maps, drought/stress layers, crop damage assessments, and UAV evidence maps in near-real time.
 - xv. **Farmer/Extension Mobile App-GIS Integration-** All mobile-captured data (pest/disease reports, crop condition photos, GT points, boundary corrections) must integrate with GIS backend layers in real time.
 - xvi. **Integration with Central Agri Geo-Portals -** The system should be capable of consuming external RS-based products such as NDVI composites, rainfall/soil moisture maps, crop watch layers etc.

Note: The above-mentioned integration points are suggestive and indicative only and may be expanded, modified, or reduced during the project lifecycle based on functional, technical, or departmental requirements.

12.10. Post Award of work to Selected bidder

Following are the activities, documentation but not limited to, the selected bidder needs to undertake before starting the implementation plan. Submit survey reports, design, layouts, (in both AutoCAD & pdf), SLDs and other related documentation within given time schedule with complete required details such that the related information shall covered in total and maximum revisions shall not cross more than three (03) times for each document:

12.10.1. Preparation of Inception Report

The SI needs to prepare and submit an Inception Report of the project, which will serve as the foundation document for all the activities related to the project. Additionally, the Inception Report must cover the risks that SI anticipates and the plans they propose towards Risk mitigation. Major roles and responsibilities of the project team along with support arrangements that are expected from the Department, other Department and stakeholders will be an essential part of the inception report. The SI will also describe the Project Team with individual roles and responsibilities in the Inception Report. The acceptance of the Inception Report by Department/authorized Project implementation committee is necessary before proceeding to the next stage of the project.

12.10.2. Deployment of Resources

SI shall deploy a full-time Project Manager and adequate competent team for the entire duration of project at Department HO at Raipur and at other related organizations (i.e., MarkFed, Department of Land Records



etc.). SI shall share profile/CV of proposed personnel with Department before deployment. Project Manager shall be overall responsible for all the project implementation activities and coordination with the PMU of other Stakeholders. Department may ask for replacement if the profile of Project Manager/Other resources is not found suitable after signing of contract agreement. The deployment of resources at all three HOD's shall be finalized by Department/ Project implementation committee nominated by the department.

12.10.3. Preparation of Detailed Project Plan

The SI shall prepare and submit an Integrated Project Plan along with bid document for the entire project that covers detailed tasks with work breakdown structure which are intended to be performed, as part of the project.

The SI shall conduct requirements gathering exercise and prepare a Functional Requirement Specification (FRS) with process maps, Software Requirement Specifications (SRS) document, for which the SI shall have a comprehensive discussion with all stakeholders, and other stakeholders related with this project to ensure that each of the requirements mentioned in this scope of work or identified during study is covered.

Activities conducted as part of this task will result in the project deliverable FRS/SRS document, which shall detail the requirements of the complete solution up to the last detail. The FRS/SRS document shall comply with the latest and applicable standards.

12.10.4. Design of System Architecture

The selected SI must review the current processes of the system and after conducting a comprehensive analysis of the requirements for the Project, the system integrator will prepare system architecture and design documents and submit the solution design along with bid document for proposed project. The Architecture document will give the complete architecture of the proposed systems. The corresponding architecture will also be identified for customization requirements. The following documents, including, but not limited to, will be submitted for a sign-off of application architecture and development methodology:

1. Application Architecture with all relevant design patterns identified.
2. All Database structure and detailed description of tables and fields.
3. Naming conventions followed for the tables and fields.
2. Data Flow Diagrams (DFD) & Entity-Relationship (ER) diagrams.
3. Details of validation rules and constraints like Integrity Checks etc. to be applied.
4. Format of all input screens including data entry requirements.
5. Format of all reports that would be generated by the system.
6. Integration with another application through API layer data flow to and from level at centralized database.
7. Business logic is used for all reports and functions.
8. Access control mechanisms, data security and audit trails to ensure that databases are not tampered or modified by unauthorized users. The following guidelines need to be observed for security:
 - a. Build a complete audit trail of all transactions (add, update and delete) using transaction log reports, so that errors in data, intentional or otherwise, can be traced and reversed.
 - b. The most appropriate level of security commensurate with the value to that function for which it is deployed must be chosen.



- c. Access Controls must be provided to ensure that the databases are not tampered or modified by the system operators.
 - d. Implement data security to allow for changes in technology and business needs.
9. Hardware Deployment Architecture, Network Design, Security Architecture etc. for the Project.
10. Plans for User Acceptance Tests and System Integration Tests including Stress Tests and plans.
11. Detailed Project Implementation Plan, Operations & Maintenance Plan, component-wise activity schedule, etc.
12. The Implementation Plan shall be comprehensive including, but not limited to:
 - a. Process, methodology, Make, Model, Version of hardware, software etc. to be used in the Project (exactly as submitted by the Bidder during Technical Evaluation) along with corresponding documents, user manuals, system administration manual, SOPs, repair and maintenance manuals, including details of the IA.
 - b. Software Licenses details for system and other software, proposed application architecture document.
 - c. Data modelling document, approach and methodology and plan for master data creation.
 - d. Detailed description of the technology to be used for each system modules (exactly as submitted by the Bidder during Technical Evaluation)
 - e. Training and Capacity Building Material, Content and Plan
 - f. Detailed timelines for implementation as per defined requirements.
 - g. SLA and Performance monitoring Plan
 - h. Exit Management Plan
13. The Operations and Maintenance Plan shall be comprehensive, including, but not limited to:
 - a. Resource deployment plan with qualification, experience and Escalation Chart.
 - b. Operations management plan
 - c. Repair and Maintenance plan
 - d. Data Backup Plan
 - e. Information Security
 - f. Risk management plan
 - g. Standard Operating Procedures for various system modules
 - h. SLA adherence plan
 - i. Detailed security policy and recommendation updated from time.
14. The system integrator shall be entirely responsible for the architecture of the system as per the scope mentioned in this RFP. The system architecture description provided in this document is for reference only. The System Integrator should ensure all possible and required improvements.
15. The System architecture shall be designed in such a way that all futuristic requirements of the department will have minimal impact on the Department system and all-customization requirement will be incorporated by SI are in the scope of existing project of Department.
16. The suggested integrated system shall include the functional landscape, phasing options for the different modules and the API Enabled deployment architecture which should be customized and configured thereby ensuring interoperability.
17. The application design will be such as to require minimal installation, if at all, at the user's end, besides the Internet Browser and will be able to support all common browsers (like Internet Explorer, Mozilla, Google Chrome and mobile based browsers etc.). System Integrator shall also design the Frontend and Backend portals for the Project.
18. User involvement will also be ensured during finalization of user interfaces, the mode of data entry, storage and retrieval, outputs report, queries, and the application design as a whole.



19. Indicative solution architecture of the envisaged New Proposed system is shown below. The schematic diagram represents the overall solution architecture of the Project. The SI shall propose a relevant solution in his proposal that best suits the required functionality.

12.11. Cloud Hosting Requirement

The SI should provide the cloud platform for “Unified Platform for Agriculture and Holistic Assessment with Records (UPAHAR)” encompasses the study, design, development, implementation, integration, testing, deployment, operations, maintenance, and capacity building of an integrated digital ecosystem for agricultural monitoring, planning, and farmer support in Chhattisgarh. The SI shall leverage advanced technologies including satellite imagery, remote sensing, GIS, AI/ML, drones, mobile/web applications, and cloud computing to deliver near real-time insights on crop acreage, health, yield, disasters, procurement, and advisories. The entire solution must be hosted by a MeitY-empaneled Cloud Service Provider (CSP) to ensure data sovereignty, security, scalability, and compliance with MeitY guidelines. The SI shall select and manage a MeitY-empaneled CSP, with all data residing in Indian data centers to comply with data localization requirements.

The project duration is 5 years (16 weeks for study, design, development and implementation and remaining period for Operations & Maintenance, or O&M), with phased deliverables. The SI is responsible for all aspects, including risk mitigation, adherence to standards (e.g., BIS/OGC geospatial, MeitY security), and integration with systems like Bhuiyan, AgriStack, PMFBY, and MSP portals (but not limited to). Non-compliance may result in penalties as per SLAs/applicability.

12.11.1. Cloud Hosting Requirements

The SI shall host the UPAHAR solution on a MeitY-empaneled CSP, ensuring high availability (97% uptime), scalability, and security.

1. **CSP Selection and Compliance:** Select a CSP empaneled by MeitY. Provide proof of empanelment and audit status (e.g., STQC certification). Comply with MeitY guidelines on data residency, prohibiting data storage outside India.
2. **Infrastructure Specifications:** Provision virtual machines, storage, databases, networking, and compute resources scalable to handle state-wide data processing. Use encrypted data-at-rest and in-transit.
3. **Security and Compliance:** Implement role-based access control (RBAC), audit logging, intrusion detection, and annual STQC audits. Ensure certifications like ISO 27001/27017/27018 and compliance with India's IT Act 2000 and DPDP Act 2023.
4. **Backup and Disaster Recovery:** Automated daily backups with 7-day retention, geo-redundant storage across at least two Indian regions, and RPO/RTO of <1 hour/<4 hours.
5. **Monitoring and Management:** Deploy cloud-native tools for real-time monitoring (e.g., resource utilization, performance metrics) and automated scaling.
6. **Deliverables:** Cloud architecture diagram, CSP contract details, compliance certificates, deployment plan, and quarterly audit reports.
7. **Responsibilities:** SI shall handle procurement, configuration, migration, and costs, if any.

12.12. Help Desk

The help desk service will serve as a single point of contact for all ICT-related incidents and service requests. The SI will provide a Single Point of Contact (SPOC) and resolution of incidents. The helpdesk services should include:



1. SI shall be required to set up centralized Helpdesk for the period of Operation and Maintenance to provide uninterrupted technological support to all the department provided location. The helpdesk will serve as a single point of contact for all incidents and service requests for the system, providing real-time Incident management services.
2. Help Desk facility for reporting issues/problems with the software application.
3. All complaints related to online applications will be handled/resolved/responded within decided timeline. If not, it will be considered as a down time and penalty will be imposed accordingly.
4. To provide a service desk facility and set up all necessary channels for reporting issues to helpdesk. The incident reporting channels will be the following:
 - i. Single Contact No.
 - ii. Specific E-Mail account
 - iii. Ticket Portal
5. The Help desk services should be in operation from the date of operationalization of state wise rollout of the solution.
6. The helpdesk shall have adequate number of manpower resources trained in all the application operation for technical support to the users.
7. Resolution mechanism should be managed through Ticket Handling System/Module in the SI scope.
8. SI shall have the capability to guide the application users for the application related issues.
9. Helpdesk executives should also have provision for screen sharing options for remote operational support.
10. Computers, Printer, telephone connectivity, UPS and other electronic devices needed for helpdesk support such as LAN networking (Switch and cables), Headphones etc. shall be arranged by SI itself.
11. The SI shall arrange the telephone system in such a way that multiple calls are handled by the Help Desk team simultaneously on the given Help line number. All the necessary equipment/ hardware arrangement will be managed by the SI for the same.
12. The warranty shall cover all materials and workmanship for the complete operational and maintenance period of 05 years as mentioned in the RFP after delivery of the items, components, and equipment and after its installation & functioning. During the maintenance period, it is the SI responsibility to ensure that the manufacturer shall furnish replacements for each failed component/accessories at no cost to the Department.
13. After completion of O&M phase the SI will hand over all the assets of the support center (Application, software, Computer, Printer, licenses etc.) and data etc. to Department.

Note: The selected System Integrator shall mandatorily submit a detailed Help Desk escalation matrix, including roles, responsibilities, and response timelines, along with the bid submission.

12.13. Standards & Interoperability

The proposed solution must ensure full compliance with relevant national and international standards to facilitate interoperability, data exchange, and long-term sustainability. Specifically:

1. The system shall adhere to applicable standards issued by MeitY, Bureau of Indian Standards (BIS), and Open Geospatial Consortium (OGC), wherever relevant.
2. **Ministry of Electronics and Information Technology (MeitY):** including but not limited to the e-Governance Standards, Open API Policy, Cloud Adoption Framework, and Policy on Open-Source Software.



3. **Bureau of Indian Standards (BIS):** compliance with relevant IS codes under the Electronics and IT Goods (Compulsory Registration) Order, 2012, and subsequent notifications for hardware, software, and data formats.
4. **Open Geospatial Consortium (OGC):** adherence to geospatial data standards such as WMS (Web Map Service), WFS (Web Feature Service), WCS (Web Coverage Service), GML (Geography Markup Language), and GeoTIFF for spatial data interoperability.
5. All data formats, APIs, and metadata structures must be designed to support open standards, enabling seamless integration with existing and future government platforms.
6. Preference shall be given to solutions that utilize open-source or equivalent technologies, ensuring transparency, auditability, and system integrator neutrality.
7. Require all deliverables in standard formats (GeoTIFF, shapefiles, JSON, APIs) to ensure future migration to other systems is possible.

12.14. API Approach

1. The platform should be based on open API approach as multiple channels like web portal, mobile applications and other interfaces should access the platform
2. Adaptable architecture should be supported for changing business needs and end user requirements.
3. It would have integrated various systems, applications, databases already being used or to be built for future.
4. SI has to set up and maintain systems and processes for following APIs. The authority does not have any available APIs.
 - a) Authorization and license key management
 - b) Standardization
 - c) Authentication
 - d) Version Control
 - e) Environmental management
 - f) Security Governance
 - g) Audit Trail

12.14.1. Post Award of Work to Selected Bidder

1. Overview

After award of work, the selected bidder must prepare and submit key documents required for design, implementation, and commissioning of the DAC system.

- All documents must be submitted in **editable + PDF format**.
- Maximum **3 review cycles** per document (unless otherwise required).
- Work execution can start **only after approval** by the Department.

2. Key Deliverables

a. Requirement & Design

1. Requirement & Gap Assessment

- a. Site study, stakeholder inputs, existing systems review
- b. Identification of integration needs

2. Solution Design Document

- a. Overall concept, workflows, modules, user roles
- b. Incident management and alerting logic



3. Architecture Document

- a. Application, infrastructure, network, and security architecture
- b. Sizing, deployment model (cloud/on-prem), HA/DR

4. Layout & Infrastructure

- a. **Control Room Layout:** Seating, video wall, consoles, server room, cabling
- b. **AV & Video Wall Design:** Display setup, control system, content flow

5. Functional & Integration Design

- a. **Functional Specification (FSD):** Modules like dashboards, workflows, reporting, alerts
- b. **Integration Plan**
 1. Systems to integrate (CCTV, GIS, apps, APIs)
 2. Data flow and interface details
- c. **Integration Matrix:** Source systems, data types, protocols, responsibilities

6. Technology & Security

- a. **Network & Cybersecurity Plan**
 1. Network design, access control, logging, backups
 2. Security policies and monitoring
- b. **Bill of Materials (BOM)**
 1. Hardware, software, licenses, specifications

7. Execution Planning

- a. **Project Plan**
 1. Timeline from start to go-live
 2. Milestones and dependencies

8. Configuration & Development Plan

- a. Customization approach, dashboards, alerts, workflows

9. Use Cases & SOPs

- a. Events, alerts, response workflows, escalation

10. Testing & Go-Live

- a. **Testing Plan**
 1. FAT, SIT, UAT, performance & security testing
- b. **Training & O&M Documents**
 1. Training plan, manuals, SOPs, support structure

11. Governance

- a. **Project Monitoring**
 1. Weekly reviews
 2. Progress reports, issue tracking, risk logs



12. Timelines

S. No.	Deliverables Type	Timeline
1.	Requirement Study	T + 7 days
2.	Design & Architecture	T + 10–12 days
3.	Layout & AV Design	T + 15 days
4.	Functional & Integration Docs	T + 18–21 days
5.	Security, BOM	T + 21 days
6.	Project & Development Plan	T + 25 days
7.	Testing Plan	T + 30 days
8.	Training & Go-Live Docs	T + 35 days
9.	Reviews	Ongoing

13. Key Conditions

- 1 Documents must be **complete, version-controlled, and clearly structured.**
- 2 Must define:
 - a. Bidder scope
 - b. Department responsibilities
 - c. Dependencies & assumptions
- 3 Approval is **mandatory before execution.**

12.15. Testing

Testing should be initiated by the selected SI along with the requirement finalization where test cases and test plans should be designed simultaneously. The selected SI should submit the test cases and test plan and it should be approved by the authority. Standard best testing practices should be followed throughout the testing phase.

Testing should be performed in spring manner and the identified bugs / issues should be resolved in the respective spring only. The SI should maintain the record of bug / issues with their status, and it should be submitted to the authority after each testing phase. The SI should perform following testing (but not limited to):

12.15.1. Unit Testing

Once the customization and configuration phase is over, each module of the application should be tested end to end. The selected SI has to demonstrate the system is a controlled production environment where the data which is being utilized in a multiple module are managed efficiently.

12.15.2. Performance and Load Testing:

The SI would develop performance scenarios of performance conditions of the application which should be reviewed and approved by the department. The application along with its infrastructure should successfully meet the criteria for the response time. The SI should gather run analytics to understand realistic usage and setting up the infrastructure to meet the performance. Selected SI should submit required reports to the authority.



12.15.3. User Acceptance Testing (UAT):

The SI should submit UAT test plan and it should be reviewed and approved by the authority. The application would go for UATs when the test results of unit testing and performance testing are submitted to the authority. UAT will be performed as per the test plans and the team performing UAT would categorize the defects in critical, high, medium and low priority. The critical defects identified should be fixed and retested before go-live whereas 90% of high priority should be fixed before go-live. The medium and low priorities defects should be fixed within before the go-live.

12.15.4. Security Testing:

The selected SI should perform security testing before hosting the application. In the security testing should be performed by CERT-in empaneled selected SI. In the security testing, web application, mobile application, external threat testing, system vulnerabilities etc. should be tested.

The findings of security testing should be resolved, and the certificate should be submitted to the authority before hosting of the application.

Note: The selected System Integrator shall perform STQC testing for the complete solution. However, considering the criticality of the project and the defined timelines, the SI shall first obtain CERT-In certification and host the solution on the cloud. Subsequently, STQC certification shall also be mandatorily obtained. The entire cost of both CERT-In and STQC certifications shall be borne solely by the SI.

12.15.5. Detailed Types of Testing within the scope of SI

Type	Responsibility	No	Scope of Work
System Testing	SI	1.	System testing.
		2.	Prepare test plan and test cases and maintain it. DLR may request the SI to share the test cases and results.
		3.	Shall be performed through manual as well as automated methods.
		4.	Automation testing tools to be provided. DLR doesn't intend to own these tools.
Integration Testing	SI	1.	Perform Integration testing.
		2.	Prepare and share with DLR the Integration test plans and test cases.
		3.	Perform Integration testing as per the approved plan.
		4.	Integration testing to be performed through manual as well as automated methods.
		5	Automation testing tools to be provided DLR doesn't intend to own these tools.
Interoperability Testing	SI	1	Prepare interoperability traceability matrix with third party systems (existing legacy/being developed systems with Data Analytics Centre (DAC)) in consultation with DLR and other relevant stakeholders (of external systems). Interoperability is an ability of one system to interact with another system. This matrix will cover all the use cases of system interaction



Type	Responsibility	No	Scope of Work
			and data movement.
	SI	2	Perform Interoperability testing.
	SI	3	Prepare and share with DLR the Interoperable test plans and test cases with scenarios.
	SI	4	Perform Interoperable testing as per the approved plan.
	SI	5	Interoperability testing all the functions / components will be tested of a particular third party system which is integrated with DAC.
Performance and load Testing	SI	1	Performance and load testing.
	SI	2	Various performance parameters such as transaction response time, throughput, and page loading time shall be taken into account.
	SI / Third Party Auditor (to monitor the performance testing)		Load and stress testing of the ICCC and other field equipment Components
	SI	3	System to be performed on business transaction volume
			Test cases and test results to be shared with DLR.
	SI	4	Performance testing to be carried out in the exact same architecture that would be set up for production.
	SI	5	Use performance and load testing tool for testing. DLR doesn't intend to own these tools.
	SI	6	DLR, if required, could ask SI to appoint third party auditors to monitor/validate the performance testing. Cost for such audits to be paid by SI.
Security Testing (including Penetration and Vulnerability testing)	SI	1	The solution shall demonstrate the compliance with security requirements as mentioned in the Bid document including but not limited to security controls in the application, at the network layer, network, data Centre(s), security monitoring system deployed by the SI.
	SI / Third Party Auditor to monitor the security testing)	2	The solution shall pass vulnerability and penetration testing. The solution shall pass web application security testing for the portal, mobile app and other systems and Security configuration review of the infrastructure if applicable.
	SI	3	SI shall carry out security and vulnerability testing on the developed solution.
	SI	4	Security testing to be carried out in the exact same environment/architecture that would be set up for production.



Type	Responsibility	No	Scope of Work
User Acceptance Testing (UAT)	SI/appointed third party auditor	1	DLR, shall ask SI to appoint third party auditors to perform User Acceptance Testing. The cost for the same shall be in the SI's scope
	SI	2	SI to prepare User Acceptance Testing test cases.
	SI/DLR/PMU	3	UAT to be carried out in the exact same environment/architecture that would be set up for production.
	SI	4	SI shall fix bugs and issues raised during UAT and get approval on the fixes from DLR /third party auditor before production deployment.
	SI	5	Changes in the application as an outcome of UAT shall not be considered as Change Request. SI has to rectify the observations.

Note:

- a) SI needs to provide details of the testing strategy and approach including details of intended tools/environment to be used by for testing in its technical proposal. DLR does not intend to own the tools.
- b) The SI shall work in a manner to satisfy all the testing requirements and adhere to the testing strategy outlined. The SI shall ensure deployment of necessary resources and tools during the testing phases. The SI shall perform the testing of the solution based on the approved test plan, document the results and fix the bugs found during the testing and report to DLR. It is the responsibility of SI to ensure that the product delivered by SI meets all the requirements specified in the Bid document. The SI shall take remedial action based on outcome of the tests.
- c) The SI shall arrange for environments and tools for testing and for training as envisaged. Post Go live; the production environment shall not be used for testing and training purposes.
- d) The cost of rectification of non-compliances shall be borne by SI.
- e) STQC/Other agencies appointed by SI with the consent of Department/DLR shall perform the role of TPA. SI need to engage with the TPA at the requirement formulation stage itself. This is important so that unnecessary rework is avoided and the audit is completed in time. The audit needs to be completed before Go Live. SI needs to prepare and provide all requisite information/documents to third party auditor and ensure that there is no delay in overall schedule.

12.16. Change orders/ Alterations/ Variations

1. SI agrees that the requirements given in the Bidding Documents are minimum requirements and are only indicative. The vendor would need to etch out the details at the time of preparing the design document prior to actual implementation. It shall be the responsibility of SI to meet all the requirements of technical specifications contained in the RFP and any upward revisions and/or additions of quantities, specifications sizes given in the Bidding Documents required to be made during execution of the works, shall not constitute a change order and shall be carried out without a change order and shall be carried out without any time and cost effect to Purchaser.
2. Further upward revisions and or additions required to make SI's selected equipment and installation procedures to meet Bidding Documents requirements expressed and to make entire facilities safe,



operable and as per specified codes and standards shall not constitute a change order and shall be carried out without any time and cost effect to Purchaser.

3. Any upward revision and/or additions consequent to errors, omissions, ambiguities, discrepancies in the Bidding Documents which SI had not brought out to the Purchaser's notice in his bid shall not constitute a change order and such upward revisions and/or addition shall be carried out by SI without any time and cost effect to Purchaser.

12.16.1. Change orders

The Change Order will be initiated only in case

- (i) the department directs in writing SI to include any addition to the scope of work covered under this Contract or delete any part of the scope of the work under the Contract,
 - (ii) SI requests to delete any part of the work which will not adversely affect the operational capabilities of the facilities and if the deletions proposed are agreed to by the department and for which cost and time benefits shall be passed on to the Department, (iii) the department directs in writing SI to incorporate changes or additions to the technical specifications already covered in the Contract.
1. Any changes required by the Department over and above the minimum requirements given in the specifications and drawings etc. included in the Bidding Documents before giving its approval to detailed design or Engineering requirements for complying with technical specifications and changes required to ensure systems compatibility and reliability for safe operation (As per codes, standards and recommended practices referred in the Bidding Documents) and trouble free operation shall not be construed to be change in the Scope of work under the Contract.
 2. Any change order comprising an alteration which involves change in the cost of the works (which sort of alteration is hereinafter called a "Variation") shall be the Subject of an amendment to the Contract by way of an increase or decrease in the schedule of Contract Prices and adjustment of the implementation schedule if any.
 3. If parties agree that the Contract does not contain applicable rates or that the said rates are inappropriate or the said rates are not precisely applicable to the variation in question, then the parties shall negotiate a revision of the Contract Price which shall represent the change in cost of the works caused by the Variations. Any change order shall be duly approved by the Purchaser in writing.
 4. Within ten (10) working days of receiving the comments from the Department or the drawings, specification, purchase requisitions and other documents submitted by SI for approval, SI shall respond in writing, which item(s) of the Comments is/are potential changes(s) in the Scope of work of the RFP document covered in the Contract and shall advise a date by which change order (if applicable) will be submitted to the Department.

12.17. Deployment of the Application

The selected SI should deploy the successfully tested application on the cloud. The cloud service provided should be MeitY empaneled. The selected SI has to bear the cost of cloud infrastructure and necessary access of the applications and data should be provided to the authority. The cloud service should be procured in the name of SI.

The selected SI should maintain following environments on cloud.

- Development environment
- Testing environment
- Staging environment



- Production environment
- Disaster recovery

After go-live any change requests should be made in the development environment and thorough testing should be performed. The bugs should be fixed before moving to staging and subsequently production environment. Disaster recovery should replicate the production environment, and the backup should be taken at the regular interval. Recovery Point of Object is expected as 8 hours. Recovery Time of Object is expected as 12 hours.

12.18. Application Testing and Certification

SI will perform the Testing of the software application before the application is made ready for acceptance and rolling out in the region. The primary goal of Testing is to ensure that all the functional requirements and integration components or data exchange interfaces of the developed application are working as per the FRS/SRS prepared by SI and user expectations.

Additionally, SI requires the software application to be audited and certified by a cert-in empaneled third-party agency to ensure that the application meets the security and performance standards, while complying with the recommended infrastructure, future scalability, and manageability. The Audit will have to be arranged and done by the SI for the following aspects:

1. Safety & Security
2. Performance

Department will also conduct a User Acceptance Testing (UAT) to ensure satisfactory completion of the application development as per the functional requirement specification. The SI has to provide the test cases/scenarios for such testing along with test data and also facilitate hand hold Director Land Records Chhattisgarh/Agriculture/Food department and other related internal and external stakeholders to carry out the UAT. SI should also continue to fix any issues processes identified during the testing before the final acceptance of the application.

It is to be noted that Director Land Records Chhattisgarh may also get the solution audited through a Third Party periodically after Go-Live to ensure the success of the project as per the requirement. Such third-party agency for carrying out the periodic audit and certification of the entire solution will be nominated by Director Land Records Chhattisgarh. All costs will be borne by SI.

12.19. Security and Performance Testing

The software developed/customized shall be audited by third party from a security and controls perspective. Such audit shall also include the IT infrastructure deployed for the project. Following are the broad activities to be performed as part of Security Review for the solution.

1. Assessment of authentication mechanism provided in the application /components/modules.
2. Assessment of data encryption mechanisms implemented for the solution.
3. Assessment of data access privileges, retention periods and archival mechanisms
4. Server and application security features incorporated.
5. Application Security mechanisms should be accessed in compliance with the IT Act 2000, 2008 Amendment and IT rules 2011, such that it maintains data/information Integrity, Confidentiality, Non-repudiation. Any new acts and rules brought by the Government of India, Govt. of CG, the compliance and regulatory requirements if any needs to be implemented by the SI.
6. Audit of Security mechanisms so that they follow the latest Guidelines by Controller of Certifying authority (CCA), IT Act, ISO27001 etc. or as applicable updated guidelines.



7. Gap assessment of certain controls like ISO 27001, IT ACT amendment 2008 etc. as applicable and decide how the sensitive data from a data centric standpoint is to be protected.
8. The SI shall ensure all security measures comply with the Information Technology (IT) Act 2000 and SPDI (Sensitive Personal Data Rules) Rules 2011, including reasonable security practices such as ISO 27001 certification, end-to-end encryption with Advanced Encryption Standard (AES-256), and audit trails for data access. Annual security audits shall be conducted, with reports submitted to the Department. In the event of a data breach, the SI shall notify the Department and relevant authorities immediately, bearing all liabilities under IT Act.

12.20. Change Management and Capacity Building

The SI will impart training to all stakeholder's staff and other key stakeholders on the usage and maintenance of the project application. SI shall perform following activities as part of Capacity Building and Change Management initiatives:

1. Prepare detailed training plan and training manuals to impart trainings to All departmental stakeholders and Staff and other stakeholders. Plan will include appropriate training model, modules, curriculum, schedule along with detailed methodology on how the training would be conducted.
2. Provide additional trainings as they deem necessary to ensure that the training imparted is comprehensive and complete.
3. Provide Computer Based Training Modules (LMS) prepared by SI to enable the users for self-learning and provide content to Govt. LMS system in coordination with the departments.
4. Training material with user manual (Hindi/English), online and soft copy/ hard copy/ kits should be arranged by the SI during training program.
5. SI should ensure that the knowledge is transferred to the Department of Land Record, Agriculture and Food Director officials effectively.

12.21. Go-live of the Application

The selected SI should submit following before Go-live to the authority:

1. Final Go-live and UAT certificate from the authority
2. Proofs of trainings conducted
3. User manual bilingual
4. Security certificates
5. All necessary software documents of delivered product (SRS, FRS, design document, test plans, test cases, test results, as-built drawings, etc.)

The committee will decide the Go-live exit criteria such as software rights and other related clauses and it will be shared with selected SI during the execution of project.

12.21.1. Partial Go-Live

There may be situations where final acceptance testing and Go-Live are being delayed due to technical complications or operational issues with some modules/functionalities. In such case, SI may request Department and other associated departments to allow Partial Go-Live, however, Department/authorized Project implementation committee will not be bound to accept such request. After necessary consultation with SI and authorized Project implementation committee, Department will decide on such request. Department may reject such request without assigning any reason whatsoever it is. Objective of partial Go-live is only to expedite implementation without compromising quality of the deliverables.



Partial Go-Live is not the end of implementation phase partially. It is just a declaration on such part of the solution as ready for production. Operation and Maintenance phase will start only after complete/final Go-Live with due acceptance of the Department nominated officials in writing.

12.21.2. Project Go-Live

After statewide roll-out of proposed project and its integration with associated departments and integrated command and control center, SI shall formally request Department /authorized Project implementation committee to issue Go-live certification. Department Authorized Project implementation Committee will evaluate all the deliverables in terms of proposed project based on scope of work with end-to-end digital integration with other departmental services and integrated command and control center. Provisional and written instructions will be given to SI from time to time. The Project implementation committee shall perform necessary due diligence and make necessary recommendations to the competent authority. Based on the recommendations of the Project implementation Committee, the competent authority shall issue Go-live Certificate. From date of the issue of Go-live certificate, the project shall enter Operation & Maintenance Phase.

12.22. Training & Handholding

1. The system integrator would be responsible for training and hand holding across all the relevant stakeholders in the respective responsible departments. The training shall be carried out on periodic/regular basis by the System Integrator.
2. To ensure smooth system adoption and capacity-building across user groups, the selected agency will implement a detailed Training and Handholding Program tailored to different user roles.
3. SI and its team are responsible for conducting Regular Trainings, Periodic, Ad hoc trainings of all the stakeholders, farmers and their representatives, Digital Class rooms, offline and online trainings, Train the trainers program implementation etc. but not limited to, as per the requirement of the department.

12.23. Operation and Maintenance for 4 years

The selected bidder shall be responsible for after the successful Go-live date providing comprehensive Operations and Maintenance including the technical support (O&M) services for all applications developed and deployed under this engagement. The O&M phase shall commence from the Go-Live date and shall continue for a period of four years, unless otherwise specified by the Department. The tenure of the O&M period may be revised by the Department based on the SI's performance and service delivery. The SI has to carry out following activities during O&M period (but not to limited):

- i. Maintain the implemented applications as per agreement terms mentioned in RFP
- ii. Implement changes as per terms and conditions of RFP
- iii. Training/s to be conducted for government officials as and when required
- iv. All the SRS, FRS and other concerned documents with updated/modified changes during the O&M phase need to be updated regularly and submitted to the department.

12.24. Exit Management

Successful Bidder shall provide an Exit Management Plan within 60 days of contract agreement date that shall outline overall process that shall be followed post completion of contract period or on termination of contract. At the time of handing over of the system per site by bidder within five (05) days, complete set of OEM documents, warranty certificates, installation, testing, commissioning, and maintenance



manuals, as built drawings and documents, cable and termination schedule, shop drawings shall be handed over to the Department's authorized personal and acknowledgment of submission shall be provided for full and final completion certificate from Department. This handing over shall be in digital form in pen drive and as well as in five (05) sets of hard copy duly signed and stamped by bidder.

As Built Drawings preparation & its compilation shall be done by the bidder and shall constitute a permanent record of the works as executed. These shall include all such drawings, schedules, documentation and designs as necessary for a complete understanding of the works and maintenance. The As-Built Drawings shall consist of the fully up-dated versions of the approved numbered with titled construction documents incorporating any additional information which will assist the Department in maintaining the system and if necessary, modifying or extending the works at a later date. These drawings should extend and supplement the information collected and generated during the tenure of the project.

As-Built Drawings shall be provided on durable paper Four (04) sets for reproduction by photocopier. In addition, drawings shall be provided in latest version of AutoCAD software and copy in editable form in solid state device (SSD) reputed make pendrive/s. Other related information such as progress reports, field instruction notes, log-books, completion report etc., but not limited to, shall be provided in hardcopy as well as editable softcopy format (Microsoft Word, Excel, Access, or MS Project).

All assets including software, hardware, licenses, tools, accessories etc. defined under the scope of this RFP shall be sole property of Department irrespective of the termination or exit of the bidder at any point of time.

In case of any kind of exit pre or post competition or termination, the bidder will be entitled payment on the pro-rata basis, as per the decision of department competent authority.

12.25. Others

1. Equipment from vendors will be considered only when their OEM's have requisite service centers in India as defined in the RFP. Requisite proof to be provided.
2. **Support from OEM / Technology Partner:** Bidder should provide an undertaking from OEM / Technology Partner as per format attached in Annexure confirming service support including spares, software upgrades, etc. shall be made available during warranty period. Bidder should also be responsible for maintaining sufficient spare parts and associate equipment and hardware, licenses, inverter and UPS type etc. with 100% redundancy type with dual power, inbuilt all protection boosts and float charger with batteries, softwares, tools, stocks up to safety level to ensure the defined service levels during the contract period.
 - a. The bidder shall ensure to provide the continuous operation for at least 3 hours for UPS type. Its batteries, accessories, and wiring should be capable of functioning to meet the requirements. Any intermediate maintenance, replacement, change as required during the complete contract period shall be in scope of bidder.

12.26. Functional Requirement Specification (FRS) – Indicative

The selected SI should prepare the Functional Requirement Specification (FRS) once the requirement study with all stakeholders has been finalized and approved by the concern department authority. In



the FRS, the selected SI should mention each and every requirement in a detailed way and with all the necessary features and integration for the centralized dashboard.

The selected SI has to submit the FRS to the authority for their reference and note any suggestions received in any stage from the authority before/after the customization process starts. The SI should have following points (but not limited to) in the proposed software for the project SI shall provide compliance for all the points in technical response document.:

1. Should have provision to maintain/refer all farmer data as per National Farmer Registry data requirements and any other data as required by the Department of Agriculture, Department of Land Records, Department of Food etc.
2. Should have the facility to record all welfare schemes and scheme wise, subsidies, benefits and any other support the respective farmers are receiving.
3. Identification of planting & harvesting dates
4. Crop condition assessment & stress identification.
5. Soil moisture estimation & irrigation monitoring
6. In addition to crop-related information, information pertaining to crop diversification, crop advisory services, and disaster management will also be collected.
7. Farmland Registration
8. Geo-mapping of Farmlands
9. Farmland ownership data
10. Should be able to record crop details season after season and maintain the complete history of Crop details including soil testing data and other agro-climatic conditions.
11. Should be integrated to all current systems with all required application of the State.
12. Registration of Farmers Organizations
13. Should have provision to Register and Maintain FPOs, Joint Liability Groups, Common Interest Groups, Self Help Groups, Cooperatives Department, PACS and Communities centers etc. with a provision for intragroup communication and collaboration.
14. Stakeholder registration
15. Should have provision to register all Stakeholders.
16. Should have provision to map operational processes of all stakeholder
17. Should have provision to record all stakeholder interactions and actions to bring in accountability and responsibility across the spectrum. Should have a provision for Department of Agriculture, Department of Land Records, Department of Food etc. to analyze the performance of various stakeholders.
18. Farm Data Management
19. Integration with Land Records and ownership data from Agriculture, Department of Land Records, Department of Food etc. Specified sources
20. Maintain Land owners and Crop cultivators distinctly along with soil preparation data, Crop data and Soil testing data.
21. Provision to integrate and maintain Historical Market data against each crop.
22. Govt schemes and benefits
23. Facility to publish and maintain various departments schemes, subsidies, benefits, etc. of the Government of Chhattisgarh.
24. Crop Husbandry Module
25. Should have best Agricultural practices framework and knowledge base for all crops.
26. Should generate Crop Activity Calendar automatically so that the farmers are hand holed throughout from sowing to marketing.



27. Should have the facility to analyze the impact of all forces of nature and advise the farmer with context specific recommendations without having to trouble the customer with micro-level technical details.
28. Should have a framework for recording all advisory points against each and every crop with recommendation-action-response feedback loop.
29. Should facilitate introduction of new methodologies and farming techniques through digital facilities rather than having to conduct expensive physical training of farmers and Agriculture, Department of Land Records, Department of Food etc. staff.
30. Crop Insurance
31. Should facilitate on-line Crop insurance application process and Crop data verification process including claim verification.
32. Should have the provision to Integrate with insurance claims process with approval notifications.
33. Village Agriculture Assistant (VAAs) and Department of Agriculture, Department of Land Records, Department of Food etc. Staff should have the facility to manage, facilitate and support the Crop Insurance Process.
34. Disaster Management
35. Should have the framework to disseminate disaster forecast, context specific damage mitigation advisory to respective farmers based on the age and stage of their crop.
36. Facility to record the disaster and crop damage against each crop along with damage estimation data, evidence and damage audits.
37. Crop Advisory Framework
38. Crop Advisory Framework to manage and maintain Package of Practices for respective crops with respect to different agro-climatic conditions.
39. Facility to manage and disseminate different farming practices such as Natural Farming, Organic Farming etc.,
40. Framework to disseminate context specific crop advisory to farmers
41. Crop Health Management (CHM)
42. Should have a built-in Crop health Management Framework and Knowledge Repository
43. Should have a provision to manage and maintain crop specific Weed, Pest, Disease and Deficiency repository along with images
44. Should have provision for the farmer to record the voice, and video of the diseased crop, and should generate an incident automatically and have the facility to route the incident to designated panelists for resolution.
45. Agriculture Extension and Knowledge Management Module
46. Should have built-in Knowledge repositories to support the field-level extension staff
47. Should facilitate context specific Crop Advisory dissemination directly to the farmers mobiles
48. Should facilitate Department of Agriculture staff extension efforts through context specific content dissemination to targeted audience by crop or region
49. Should have facility for Department of Agriculture to publish all schemes/ subsidies/ latest farming techniques/ Crop management practices/ Notifications/ context specific advisory, etc. to all farmers or specific target groups.
50. Satellite (Remote Sensing) data integration
51. Should have the ability to integrate and analyze Remote Sensing data with AI/ML based image analytics to facilitate context specific forecast and advisory.
52. Should have the ability to integrate and analyze Remote Sensing data with AI/ML based image analytics to facilitate context specific forecast and advisory with centralized real-time dashboard.
53. Marketing Department
54. Facility to analyze market forecast.



55. Should have facility to record historical market prices data for farm produce.
56. should have the facility to display context specific market prices for farmers' crops with in their vicinity.
57. Providing Purchasing Centers information to farmers
58. Should have the facility to report the incident through Images, Voice/Video Messages
59. Should have a facility to receive various notifications broadcast from the Department Agriculture, Department of Land Records, Department of Food etc.
60. Show market prices of farm produce across Mandis within their vicinity.
61. Village Agriculture Assistant Mobile App/Tablet App
62. Should have the functionality to register Farmers, Farmland identification, Distributor and other stakeholders that operate at the village level.
63. Crop registration feature to register the crops and capture farm visuals.
64. Should have the facility to view and act on the assigned incidents or Service requests.
65. Should display Farmer and Farm details for respective Incidents/SRs
66. Should display the prescribed Crop Husbandry practices, diseases, Insect, Deficiencies, Package of Practices and Weed management specific to the Crop in question so that the VAA can have ready access to all farm data and history.
67. Should have the provision to maintain and record daily activities.
68. Reports & Dashboards Agriculture Dept
69. Cropping details report - at all levels such as Village, Vikash Khand, Taluk, District, Division and State.
70. Cropping Details report -Crop-wise across State level, Division level, Tehsil level, Vikas Khand Level etc.
71. Disease incidence report.
72. Pest, Weed, Insect Incidence Report.

The above-mentioned requirements are not exhaustive, and RFP owner can update the overall requirements related to the required modules during the time of functional study, development of system and implementation of system.

12.27. Summary Reports of Deliverables

12.27.1. Design & Development of Web & Mobile Applications (but not limited to)

1. System Requirements Specification (SRS)
2. Development of the Project Implementation plan
3. Business Requirements, FRS, SRS, System Design & Application Development, HLD, LLD
4. Supply, Installation, Configuration & Customization of SSP 2.0 (Functional & Non-Functional Requirements)
5. Data Acquisition and Reporting Services
6. Data Management Service
7. Enterprise Application Integration (EAI)
8. Application Testing
9. Quality Review
10. Project and Product Documentation
11. Customization of Applications
 - a. Mobile Application Android and iOS
 - b. Web Application
12. CERT-in security certification and STQC Certification



13. User documentation
14. Training
15. For the design and development solution developed for the UPAHAR project, IPR of the customized solution with editable rights including all the license/ Certificates would belong exclusively to the Director of Land Records, Government of Chhattisgarh.
16. All License copies (if any) with named of Director of Land Records, Government of Chhattisgarh
17. All The data collected with functionalities of sharing through API/Excel etc. format for extension, research, and education purpose.

12.27.2. Data processing service on the remote sensing applications

During the development and maintenance period of the proposed system, various required reports—based on ground truthing and imagery—shall be generated for Kharif, Rabi, and summer seasons using actual data. These reports shall be prepared on a per-hectare basis, at the tehsil level, for specific regions, and for different crop types. The necessary data shall be provided by the SI from time to time, or the system shall enable users/stakeholders to generate the required data reports based on their needs. This data and the corresponding reports shall also remain available on the proposed portal for future analysis and for use in the Decision Support System (DSS). (but not limited to)

The proposed reports shall be based on real-time data and must maintain an accuracy level of minimum 70%. Payments linked to deliverables shall be made based on the accuracy of the submitted reports. For this purpose, the SI shall submit invoices from time to time as per the approved process.

12.27.3. Report and Advisory

S. No.	Indicative Reports requirement (But not limited to)	Approx. Estimated Area for Kharif Season	Approx. Estimated Area for Rabi Season	Approx. Estimated Area for Summer Season
1	Crop acreage estimation and final	40 L. Hac.	20 L. Hac.	5 L. Hac.
2	Crop diversification Season wise final	40 L. Hac.	20 L. Hac.	5 L. Hac.
3	Crop Loss and crop identification report	40 L. Hac.	20 L. Hac.	5 L. Hac.
4	Cropping Pattern Analysis per hac.	40 L. Hac.	20 L. Hac.	5 L. Hac.
5	Crop Identification & Acreage Estimation and final	40 L. Hac.	20 L. Hac.	5 L. Hac.
6	Identification of pest and disease infestation	40 L. Hac.	20 L. Hac.	5 L. Hac.
7	Droughts Monitoring as per the requirements	40 L. Hac.	20 L. Hac.	5 L. Hac.
8	Flood mapping & monitoring as per requirement	40 L. Hac.	20 L. Hac.	5 L. Hac.
9	Accurate parcel boundaries	40 L. Hac.	20 L. Hac.	5 L. Hac.
10	Linking each parcel with ownership details, land use, crop type, and taxation records	40 L. Hac.	20 L. Hac.	5 L. Hac.
11	Drought or flood impacts	40 L. Hac.	20 L. Hac.	5 L. Hac.
12	Compensation assessment	40 L. Hac.	20 L. Hac.	5 L. Hac.



13	Assess damage to crops, roads and other as per requirement	40 L. Hac.	20 L. Hac.	5 L. Hac.
14	Land use/land cover mapping	40 L. Hac.	20 L. Hac.	5 L. Hac.
15	Identification of planting & harvesting dates	40 L. Hac.	20 L. Hac.	5 L. Hac.
16	Crop condition assessment & stress identification	40 L. Hac.	20 L. Hac.	5 L. Hac.
17	Soil moisture estimation & irrigation monitoring	40 L. Hac.	20 L. Hac.	5 L. Hac.
Advisories				
1.	Generalize Advisory			
2.	Sowing and harvesting time			
3.	Crop stress			
4.	Pest and disease infestation			
5.	Soil moisture stress and irrigation Application			
6.	On weather pattern			

12.27.4. Submission Timelines

S. No.	Requirement	Timeline
1	Crop Acreage Estimation	Two times in a Season
2	Crop Yield Estimation	Two times in a Season
3	Crop Loss Assessment	On Event Occurrence
4	Drought Monitoring	On Event Occurrence
5	Flood Mapping and Monitoring	On Event Occurrence
6	Pest and Disease Identification	On Event Occurrence
7	Planting and Harvesting Dates Identification	Once in a Season
8	Crop Condition Assessment and Stress Identification	Once in a Season
9	Soil Moisture Estimation and Irrigation Monitoring	Once in a Season
10	Generalized Advisories	Every Week
11	Sowing and Harvesting Time	Every Fortnight
12	Crop Health Assessment	Every Week
13	Crop Stress	Every Fortnight/Event Occurrence
14	Pest and Disease Infestation	Every Fortnight/Event Occurrence
15	Soil Moisture Stress and Irrigation Application	Every Fortnight/Event Occurrence
16	Weather Pattern	Every Fortnight

Note: The above-mentioned data processing services and reports are suggestive and indicative only and may be expanded, modified, during the project lifecycle based on functional, technical, stakeholders and departmental requirements.



13. Qualification Criteria and Bid Evaluation

The Bids will be evaluated on QCBS Basis with Scores of Technical Evaluation and then Financial Bid in the following manner:

S.No	Criteria	Details
1	Minimum Eligibility Criteria	Bids meeting minimum eligibility criteria will only be shortlisted for technical evaluation
2	Technical & Financial Evaluation	<ul style="list-style-type: none"> Bidder's work experience shall be reviewed & analysed based on their Customer Order / Purchase Order and Successful Completion Certificates/Go Live certificate in case of ongoing project/Sign-off document clearly mentioning the scope, issued by officer not below the rank of Head of Department/ Nodal officer shall be considered as completion certificate., similar nature with the scope of work mentioned in the Bid Document. For all projects, wherein Bidder is/was a Consortium partner, only credentials/project experience of Lead Bidder shall be considered where in Lead Bidder either shall be acting as a sole bidder or as a Lead Bidder.
3	Financial Bid	<ul style="list-style-type: none"> Financial Bids of only those Bidders shall be opened who score minimum of 70% in Technical Evaluation
4	Award of the Tender	<ul style="list-style-type: none"> Highest Score – H1 Bidder post QCBS evaluation

13.1. Evaluation Criteria (QCBS):

Only those bidders scoring more than 70% marks will be considered for financial bid/proposal. Bidders scoring less than 70 % marks will be considered disqualified at technical evaluation stage. The cost indicated in the Financial Proposal shall be deemed as final and reflect the total cost of services and should be stated in INR only. Omissions, if any, in costing of any item shall not entitle the Bidder to be compensated and the liability to fulfil its obligations as per the Terms of Reference within the total quoted price shall be that of the Bidder. The Bidder shall bear all taxes, duties, fees, levies and other charges imposed under the Applicable Law as applicable. The lowest Financial Proposal (Fm) will be given a financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be determined using the following formula:

$$Sf = 100 \times Fm/F$$

In which Sf is the financial score, Fm is the lowest Financial Proposal, and F is the Financial Proposal (in INR) under consideration. Proposals will be finally be ranked in accordance with their combined technical (St) and financial (Sf) scores:

$$S = St \times Tw + Sf \times Fw;$$



Where S is the combined score, and Tw and Fw are weights assigned to Technical and Financial Proposal that will be 70:30 respectively.

The bidder with highest value of “St x Tw + Sf x Fw” will be the preferred bidder and will be invited for further proceeding for contract award and execution.

13.2. Bid Opening

1. Bid Opening shall take place through the e-Procurement Portal.
2. A maximum of one representative from each participating organization would be allowed to attend the tender opening. The Bidder’s representative, who may choose to attend the session, should attend the tender opening on the date and time mentioned in the bid data sheet or as per the date and time revised in the subsequent communication given through the e-procurement portal.
3. To assist in the scrutiny, evaluation, and comparison of offers, the bidders may be asked for clarification of their offers on any of the points mentioned therein and the same may be sent through email. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered in the evaluation of the bids.

13.3. Rejection and Return of Tender

1. Director of Land Records, Government of Chhattisgarh reserves the right to reject any or part of tender or all without assigning any reason. The documentation submitted by tenderers shall not be returned in case the technical offer is not acceptable unless the tenderer expressly states his request at the time of submission of their tender that tender documentation be returned. The cost for returning the document shall be borne by the tenderer. Director of Land Records, Government of Chhattisgarh also reserves the right at its sole discretion not to award any order under the tender call. This decision does not commit Director of Land Records, Government of Chhattisgarh to pay any costs or loss incurred in the preparation and submission of any requisite tender or technical proposal or to procure or contract for any of the items described herein.
2. If the tenderer deliberately gives wrong information in his tender, Director of Land Records, Government of Chhattisgarh reserves the right to reject such tender at any stage or to cancel the contract, if awarded, and to forfeit the earnest money and invoke performance guarantee.
3. Canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing are liable for rejection.
4. Tender in which any of the particulars and prescribed information are missing or are incomplete, in any respect and /or prescribed conditions are not fulfilled, shall be considered non-responsive and is liable to be rejected.
5. Any condition put forth by the bidder non-conforming the tender requirements shall not be entertained at all and such Tender shall be rejected. The Technical tender shall be submitted in the form of printed document and bid must be uploaded online through <http://www.eproc.cgstate.gov.in/>. Tender submitted by Telex, fax or email will not be entertained. Any tender not authenticated or not secured will be rejected straightaway by Department without any further correspondence, as non-responsive. A tender that does not meet any qualification criteria or is not responsive or not fulfilling technical evaluation will be disqualified and rejected



by Director of Land Records, Government of Chhattisgarh, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation by the bidder.

13.4. Department Rights to Terminate the Process

Director Land Records Chhattisgarh may terminate the tender process at any time and without assigning any reason. Director Land Records Chhattisgarh makes no commitments, express or implied, that this process will result in a business transaction with anyone. This tender does not constitute an offer by Director Land Records Chhattisgarh. The bidder's participation in this process may result in Director Land Records Chhattisgarh selecting the bidder to engage in further discussions and negotiations toward execution of a contract. The commencement of such negotiations does not, however, signify a commitment by the Director Land Records Chhattisgarh to execute a contract or to continue negotiations. Director Land Records Chhattisgarh may terminate negotiations at any time without assigning any reason.

13.5. Minimum Eligibility Criteria

Documents submitted by Bidder shall be evaluated against stipulated requirements of Minimum Eligibility Criteria. Bids not substantially responsive or having incomplete information shall be rejected.

1. The Bidder(s) must meet the Pre-Qualification Criteria. In case of a consortium the Pre- Qualification Criteria must be met jointly by the consortium members unless mentioned in the specific criteria.
2. The value of the Contract/ Work Orders uploaded as part of the credentials by the Bidder(s) will be considered with the Conversion value to INR as on the Contract order date.
3. During evaluation of tender response, the Purchaser reserves right to contact/visit the location of clients for whom the Contract Orders are uploaded by bidders as part of the bid submission.
4. Any bid not found to be in conformance with any of the pre-qualifying conditions may be summarily rejected and not considered for further evaluation.
5. Bidders shall submit only the relevant credentials against the Pre-Qualification and Technical Evaluation Criteria with experiences of projects along with a ready reckoner as part of their respective bids.

S. No.	Requirement	Description	Single/ Lead Bidder	All	Any One	Documentary Evidence
1.	Legal Entity	The bidder must be a Company incorporated in India under the Companies Act 1956/ 2013/ Limited Liability Partnership Act 2008/ Partnership act 1932 for at least 15 (fifteen) years		Yes		Certificate of incorporation and MoA/ Partnership Deeds as applicable



S. No.	Requirement	Description	Single/ Lead Bidder	All	Any One	Documentary Evidence
		with their registered offices in India				
2.	Consortium Partner	Must be registered under Indian Companies Act (1956/2013) or LLP Act (2008) with Consortium size limited to 2 (Two) members only.		Yes		Certificate of incorporation and MoA of all the consortium partners. Consortium Agreement with shareholding details.
3.	Company Documents	The Bidder should be registered under EPF, GST, PAN		Yes		Duly attested copies of certificate by the authorized signatory should be submitted
4.	Consortium Member/ Partners Roles and Responsibilities	Consortium Agreement must be signed by all members, detailing roles, responsibilities, and equity participation.		Yes		<ul style="list-style-type: none">• A Consortium Agreement must be signed by all members, detailing roles, responsibilities, and equity participation.• A Power of Attorney from each member authorizing the lead Member/Lead Bidder is required.• The Lead Member/Lead Bidder must be clearly designated and cannot be changed during the project lifecycle.
5.	Turnover	The Bidder/Lead bidder in case of consortium should have minimum average annual turnover (MAAT) of at least INR 400 (Four Hundred crores) in the last three financial years (i.e. FY 2022-23,	Yes			CA/ Statutory auditor certified turnover certificate for the last three financial years 31 March, 2025 (i.e. 2022-23, 2023-24 and 2024-25) are to be submitted.



S. No.	Requirement	Description	Single/ Lead Bidder	All	Any One	Documentary Evidence
		FY2023-24 and FY2024-25).				
6.	Net Worth	The Bidder/ All Consortium members should have positive Net Worth for each of the last three (3) Financial Years, (i.e. FY 2022-23, 2023-24 and 2024-25).		Yes		The audited balance sheet and Profit & loss statement for last three financial years (i.e. FY 2022-23, 2023-24 and 2024-25) are to be submitted along with CA certificate as documentary evidence.
7.	Certification	The Bidder/ Lead bidder in case of consortium, should have following certification as on bid submission date: Mandatory Certifications a. ISO 27001 b. ISO 9001:2015 c. Minimum CMMI Level 3 d. GIS / Remote sensing credentials Desirable Certifications e. ISO 22301 / 27701 f. Cloud security certifications	Yes			Copy certificate from authorized certification body and in the name of the bidder/lead bidder should be submitted. The certifications should be kept valid throughout the duration of contract period.
8.	Blacklisting	The Bidder and all the consortium partners should not be under a declaration of ineligibility / banned / blacklisted for any of Government Authority/ Public Sector Banks/ Public Sector undertaking (PSU)/Centre		Yes		Bidder /all consortium partners to provide affidavit on a Rs. 500 notarized stamp paper as documentary support.



S. No.	Requirement	Description	Single/ Lead Bidder	All	Any One	Documentary Evidence
		Govt./State Govt./ State PSUs and/or performance reasons, as on last date of submission of the Bid.				
9.	Experience	<p>a) The bidder/Lead Bidder consortium/OEM must have experience in successful execution of similar projects i.e. Projects comprising of High resolution satellite images, drones, Crop mapping, Crop Acreage Estimation, Crop Yield Estimation, Crop Loss Assessment as well as Agriculture Web and Mobile Application (Only Agriculture Web and Mobile Application will not be considered) for central/ state government or any government enterprise in India during last seven years from the date of bid submission. With value listed below.</p> <p>1) One project of similar nature with the value of at least 100 crores or</p> <p>2) Two projects of similar nature with the value of at least 60 crores each</p>	Yes			Customer Order / Purchase Order and Successful Completion Certificates/Go Live certificate in case of ongoing project/Sign-off document clearly mentioning the scope, issued by officer not below the rank of Head of Department/ Nodal officer shall be considered as completion certificate.



S. No.	Requirement	Description	Single/ Lead Bidder	All	Any One	Documentary Evidence
		or 3) Three projects of similar nature with the value of at least 50 crores. b) The bidder/ OEM/ Lead bidder or Consortium Partner in case of consortium must have experience in successful execution of at least one Data Analytics Center (DAC) or Integrated Command and Control Centre (ICCC) project for central, state government or any government enterprise in India during last seven years from the date of bid submission				
10.	Local Presence	Bidder/Lead bidder in case of consortium should have office in Raipur Or provide self-declaration for establishment of local registered office within 30 days after award of the contract.	Yes			Relevant Proof document / self-Declaration for opening of local office at Raipur.

13.6. Eligibility for a Consortium

In case of consortium, it should have maximum two members only. In the event of a Consortium, one of the partners shall be designated as a “lead Bidder” who shall be responsible and liable for the successful completion of the entire project along with responsible and liable for any communication, service levels and penalties, payment, billing, issues, and issue resolution in accordance with the terms and conditions of this tender/contract.



- i. Lead Bidder must have a minimum of 51% participation in the Consortium and 26% minimum for the other Consortium member.
- ii. In case of Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive.

13.6.1. Bid by a Consortium of Firms

Bids submitted by the Consortium must comply with the following requirements:

- i. In case of a Consortium, the members shall submit a Memorandum of Agreement (MOA) conveying their intent to jointly Bid for the Project, The MOA shall also include the nomination of the Lead Bidder/Member in the Consortium and clearly outline the proposed shareholding. Members of the consortium authorize the Lead Partner to bid, negotiate and execute all technical, financial and commercial matters on their behalf and that shall be final and binding on the Lead Partner and the Consortium members.
- ii. The MOA should also clearly indicate that all the Consortium Members shall be jointly & severally responsible for execution of the Project & subsequent operationalization of this tender Contract during entire contract Period in accordance with the terms and conditions of this tender/contract.
- iii. One of the members of Consortium, holding at least 51% of the equity / ownership stake shall be authorized and nominated as the 'Lead Bidder/member' ("Lead Bidder") to act and represent all the members of the Consortium for bidding and implementation of the Project. A copy of this MOA shall be enclosed with the Bid.
- iv. A Bidder or a member of a Consortium can be a member in only one Consortium. If a Bidder / member participates in more than one Bid for the same site / site, all Bids of which it is a part shall be summarily rejected. No Bidder shall submit more than one Bid for the Project. A Bidder bidding individually or as a member of a Consortium shall not be entitled to submit another bid either individually or as a member of any Consortium, as the case may be.
- v. The RFP shall include all the information required for each member of Consortium separately and should be signed all the members of the Consortium.
- vi. If the Selected Bidder is a Consortium, the Agreement shall be signed with the lead member, however, all members of the Consortium shall be liable jointly and severally, for the execution of the Project in accordance with the terms of the Agreement.
- vii. After receipt of the Bid, there shall be no change in composition of Consortium (either inclusion of a new member or exclusion of a member) or proposed shareholding structure as mentioned in the submitted Bid which affects the minimum shareholding requirement of members of the Consortium to decline below the required percentage as mentioned hereinabove till the completion of the contract Period and any extension thereof.
- viii. Any change proposed in the equity shareholding pattern of the Consortium during the Contract Period, shall require prior written approval of DLR.
- ix. A Lead Bidder/Bidder or JV/Consortium member/associate/partner or any shall not have a conflict of interest (the "Conflict of Interest") that affects the bidding process. Any Bidder/member of the



consortium found to have such a Conflict of Interest shall be disqualified. In the event of disqualification, DLR shall forfeit and appropriate the EMD.

- x. In case of Consortium, Bank Guarantee or FDR for EMD/PBG shall be in the name of Lead bidder/Consortium.
- xi. In case of a Consortium, the proposal shall be signed by the duly Authorized Signatory of the Lead Member. The Bidders/consortium member shall submit a supporting Power of Attorney (POA) authorizing the Signatory of the Proposal, to commit the Bidder/Lead Member and agreeing to ratify all acts, deeds, communications and things lawfully done by the said attorney and such POA shall be signed by all members of the Consortium and shall be legally binding on all of them.
- xii. If it is discovered at any point of time that any Bidder/consortium member/s has suppressed any facts or has given a false statement or has made any misrepresentation or has committed a fraud or has violated any of the terms of this Bid, the Bid shall be disqualified by DLR. If the Bidder is a Consortium, then the entire Consortium and each Member shall be disqualified/ rejected. In such an event, the Bidder shall not be entitled to any compensation whatsoever, or refund of any EMD/amount/s deposited / paid by it.

In case of a Bidder being a consortium, all the consortium members are required to provide the following details:

1. Copy of registration certificate of Bidder/each member of the consortium, in case of the Bidder being a consortium.
2. Consortium Agreement signed by all the members of consortium.
3. Memorandum of Understanding and Articles of Association of Bidder/ each member of the consortium in case of the Bidder being a consortium.
4. The particulars of our organization, in case of Consortium, for all the members of consortium like Name of the Company, Official Address with Phone No., Fax No., E-Mail id, Corporate Headquarters Address with Phone No., Fax No., E-Mail id, Website Address, GST registration Number., Permanent Account Number (PAN) etc.

In the event of the Consortium, after the award of contract, the parties shall enter into the separate agreement mutually, specifically defining the terms and conditions of the contract and furnish a copy of the same to the DLR.

Upon award of the Contract to the Consortium by the DLR, successful bidder/s shall not sub- contract any portion of the Work to any third parties without the written consent of the other party and the DLR.

14. Technical Evaluation

The Evaluation criteria shall be Quality cum Cost Based Selection (QCBS) where Technical Bid Score will get a weightage of 70% and Financial Bid Score a weightage of 30%.

Evaluation criteria shall be as follows:

Technical Evaluation – Summary of Marks



S. No.	Evaluation Criteria	Max Marks	Documentary Evidence
1	<p>The Bidder/Lead Bidder (in case of consortium) should have achieved average annual turnover of at least INR. 400 Crores in last three financial years (i.e. FY 2022-23, 2023-24 and 2024-25).</p> <p>Turnover:-</p> <p>(1) >=400 &< 550 Cr- 05 Marks</p> <p>(2) >=550 and <700 Cr – 10 Marks</p> <p>(3) >= 700 Cr- 15 Marks</p>	15	The audited balance sheet and audited Profit and Loss Statement for the last three financial years (i.e. FY 2022-23, 2023-24 and 2024-25) are to be submitted along with certificate from CA/ statutory auditor.
2	<p>The Bidder/Lead Bidder (in case of consortium), experience of executing large scale IT projects in India for central/ state government or any government enterprise in India.</p> <p>(1) =>INR 20 Cr and <= INR 35 Cr – 5 Marks</p> <p>(2) =>INR 35 Cr and <= INR 50 Cr – 7.5 Marks</p> <p>(3) =>INR 50 Cr – 10 Marks</p>	10	Customer Order / Purchase Order and Successful Completion Certificates/Go Live certificate in case of ongoing project/Sign-off document clearly mentioning the scope, issued by officer not below the rank of Head of Department/ Nodal officer shall be considered as completion certificate.
3	<p>Certifications</p> <p>a) ISO 27001 – 01 Marks</p> <p>b) Cloud security certifications: 01 Marks</p> <p>c) Above CMMI Level 3 – 02 Marks</p> <p>d) GIS / Remote sensing credentials – 01 Marks</p>	05	Lead bidder or single bidder should have valid certifications and GIS/ Remote Sensing Credentials.
4	<p>The bidder/consortium partner/OEM should have experience in Development of Web as well as Mobile Application in Agriculture Domain for central/state government or any government enterprise in India in last Seven (7) years from the date of bid submission.</p> <p>(1) 1 Project: 1 Marks</p> <p>(2) 2 Projects: 2 Marks</p> <p>(3) 3 Projects: 3 Marks</p> <p>(4) 4 Projects: 4 Marks</p> <p>(5) 5 Projects: 5 Marks</p> <p>Additional 5 marks would be given if any one of the projects comprises of Web and Mobile Application development in line with Central/State Government's AgriStack initiative.</p>	10	Customer Order / Purchase Order and Successful Completion Certificates/Go Live certificate in case of ongoing project/Sign-off document clearly mentioning the scope, issued by officer not below the rank of Head of Department/ Nodal officer shall be considered as completion certificate.
5	<p>The bidder/Lead Bidder/OEM (in case of consortium) should have an experience of successful execution of at least one similar large scale project i.e. Projects comprising of High resolution satellite images, drones, Crop mapping, Crop Acreage Estimation, Crop Yield Estimation, Crop Loss Assessment as well as Agriculture Web and Mobile Application (Only Agriculture Web and Mobile Application will not be</p>	20	Customer Order / Purchase Order and Successful Completion Certificates/Go Live certificate in case of ongoing project/Sign-off document clearly mentioning the scope, issued by officer not below the rank of Head of Department/



	considered) for central/ state government or any government enterprise in India during last seven years from the last date of bid submission (1) Project Value > INR 50 Crore: 10 Marks (2) Project Value > INR 60 Crore: 15 Marks (3) Project Value > INR 100 Crore: 20 Marks		Nodal officer shall be considered as completion certificate.
6	The bidder/Lead Bidder/OEM should have an experience of successful execution of project in Agriculture domain where various Agriculture insights are derived using high resolution satellite images and AI/ML technology covering atleast 40,000 Sq Km classifying at least two (02) crops in a single cropping season. (1) >= 40,000 Sq Km and < 80,000 Sq Km: 05 Marks (2) >= 80,000 Sq km and < 1,20,000 Sq Km: 10 Marks (3) > 1,20,000 Sq Km: 15 Marks (4) Additional 05 Marks would be given if atleast 5 crops are classified covering the area of 1,00,000 Sq Km in more than one cropping season	20	Customer Order / Purchase Order and Successful Completion Certificates/Go Live certificate in case of ongoing project/Sign-off document clearly mentioning the scope, issued by officer not below the rank of Head of Department/ Nodal officer shall be considered as completion certificate.
7	Technical Presentation: 15 Marks (each point equal) 1. Understanding of the Project 2. Approach and Methodology - Solution proposed & its components 3. Ground Truth Planning 4. Use of AI / ML in overall solution 5. Quality assessment methodology for GIS/remote sensing & Machine Learning derived output 6. Proposed DAC dash boards demo Online Demonstration: 5 Marks Web as well as Mobile Application deployed for any of the client showcasing live the following modules: - 1 Crop Acreage 2 Crop Health 3 Crop Yield 4 Ground Truth 5 Crop Loss 6 AI/ML based Satellite derived classification 7 Advisories 8 Chat bot for Farmers	20	Presentation to be delivered by the Project Manager who has similar project experience of the business/functional requirements of department, proposed solution and implementation approach.

15. Documents Comprising the bidder's Proposal

15.1. Technical Proposal

The technical proposal of the bidder (**WITH PROPER PAGE NUMBER OF PREPARED BID**) shall contain detailed description on the approach and methodology on the system developments to achieve the desired objectives as specified in this document wherein the bidder shall describe in detail, the required



services and articulate how the technical solution shall meet the requirements within the scheduled timeline as specified in this tender document. The technical proposal shall also include the following: -

- 1 Detailed Project Plan, Approach & Methodology
- 2 Project governance structure describing project management processes, methodologies and procedures, risk and issue management, escalation mechanism, including team structure, capability and resource deployment plan.
- 3 Detailed quality assurance processes, procedures, formal review to be adopted.
- 4 Proposed solution that meets the requirements as per the RFP.
- 5 Security capabilities of proposed solution architecture covering authentication, authorization, audit trail, intrusion prevention and overall alignment to the Govt. of India and Govt. of Chhattisgarh's security policies and best practices.
- 6 Proposed solution addressing scalability, availability, performance, security & manageability.
- 7 Strategy for executing Annual Maintenance.
- 8 Approach for business continuity & disaster recovery.
- 9 Bidder's experience provided in the format specified in the RFP.
- 10 Profiles of resources proposed for the project. All the CVs of proposed team should be given in the format provided in the RFP.
- 11 Proposed solution on monitoring resource utilization in real time.
- 12 Proposed solution on automated configuration management with effective build and release process.
- 13 Proposed Backup Recovery Strategy defining back-up window, periodicity and incidence response and recovery-restoration and disk management.
- 14 Proposed data retention and archiving policy.
- 15 Risk management strategy on backup and recovery, network and security infrastructure.
- 16 Any other documentary evidence/supporting document asked/mentioned in the RFP.

15.2. Financial Proposal

1. The Bidder shall indicate prices on the prescribed Financial Bid Price Schedule (Annexure 21 and 22) in Indian Rupees only.
2. The Bidder is required to ensure that the products/Services quoted are as per prescribed specification, industry standard and is compatible with latest hardware, system software, application software, networking equipment, licenses, tools, database etc.
3. The Bidders are required to quote their best prices, inclusive of all applicable taxes, levies, excluding GST, freight, forwarding, handling, insurance, inland transportation, local costs, installation, commissioning, configuration, license cost, data migration etc. incidental to the delivery of products/goods/services to their final destination at all project sites and for its installation, configuration, tuning, testing, integration, commissioning, migration, integration and maintenance charges after "Go-Live" and training of personnel required. In addition, establishment of DAC and its maintenance during project duration along with its civil and interior work, electric installation, sitting and working stations arrangements as per the design approved by the department and as per the requirement shall also be the part of scope. GST will be paid extra as applicable.



4. Financial bid format will consist of Project Design, Development, Configure, Testing, Implementation Cost and Operation & Maintenance Cost etc.
5. During the contract period, the bidder, with the consent of Director Land Records Chhattisgarh, may supply a superior compatible version, or higher configuration, meeting or exceeding technical specifications of the contract without any extra cost payable by Director Land Records Chhattisgarh.
6. The rates offered by the bidder should be firm and free from all escalations during the entire duration of the project. Prices quoted by the bidder shall be fixed during bidder's performance of the contract and shall not be subject to variation on any account. A Bid submitted with a price adjustment/variation provision will be treated as non-responsive and rejected, pursuant to the Preliminary Examination clause mentioned in this bid document.

15.3. Financial Bid / Commercial Proposal

- 1 Unless expressly indicated, bidder shall not include any technical information regarding the services in the commercial proposal.
- 2 Prices shall be quoted entirely in Indian Rupees (INR) and must be arrived at after including all expenses, rates, and taxes.
- 3 The commercial Proposal must include the total price for all services scoped in the Proposal. To be deemed responsive to this Tender Document, bidders must complete in detail all the Commercial Proposal Forms provided in the RFP.
- 4 Bidders are suggested not to use — 'To Be Determined' or similar annotations in the cells for cost estimates. It is suggested that the bidders need to specify prices for all categories.

15.4. Bid Submission details

1. Bids must be direct, concise, and complete. All information not directly relevant to this RFP should be omitted. Department shall evaluate the bid based on its clarity and the correctness of its response to the requirements of the project as outlined in this RFP.
2. In case of EMD/ Bid Security not received as per the timeline mentioned in Bid Data Sheet, the bid submitted in e-Procurement portal would be rejected.
3. "Fraudulent practice" means a misrepresentation of facts to influence award of contract or a procurement process or an execution of a contract to the detriment of Director Land Records Chhattisgarh and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive Department of the benefits of the free and open competition.
4. The bids shall be submitted online on <http://www.eproc.cgstate.gov.in/> only as per the formats given below and as per date and time mentioned in the Bid data sheet. No physical submission is required.

15.5. Bidder's Authorized Signatory

A proposal should be accompanied by an appropriate board resolution or letter of authorization (Annexure-23) in the name of an authorized signatory of the Bidder stating that he is authorized to execute documents and to undertake any activity associated with the bidder's proposal.



A copy of the same should be uploaded under the relevant section/folder on the e-Procurement portal. Furthermore, the bid must also be submitted online after being digitally signed by an authorized representative of the bidding entity.

16. Award of Contract

16.1.1. Right to Accept Any Proposal and To Reject Any or All Proposal(s)

DEPARTMENT reserves the right to accept or reject any proposal, and to annul the bid process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for DEPARTMENT action.

16.1.2. Failure to Agree with the Terms and Conditions of the Bid Document

Failure of the successful bidder to agree with the Terms & Conditions of the Bid Document shall constitute sufficient grounds for the annulment of the proposal or the award, in such event DEPARTMENT would reject the proposal.

17. Confidentiality

- a. Any attempt by a Bidder to influence DEPARTMENT in the evaluation of the bids or contract award decisions may result in the rejection of its bid.
- b. If any Bidder wishes to contact DEPARTMENT during/after opening of the Bid to award of contract, they may do so only in writing.

Except as otherwise permitted by this Bid Document (and later Contract Agreement), neither of the parties may disclose to third Parties the contents of this Bid Document (and later Contract Agreement) or any information provided by or on behalf of the other that ought reasonably to be treated as confidential and/or proprietary. Parties may, however, disclose such confidential information to the extent that it: (a) is or becomes public other than through a breach of this Bid Document (and later Contract Agreement), (b) is subsequently received by the receiving party from a third party who, to the receiving party's knowledge, owed no obligation of confidentiality to the disclosing party with respect to that information, (c) was known to the receiving party at the time of disclosure or is thereafter created independently, (d) is disclosed as necessary to enforce the receiving party's rights under this Bid Document (and later Contract Agreement), or I must be disclosed under applicable law, legal process or professional regulations. These obligations shall be valid for a period of three years from the date of termination of the Contract Agreement.

18. General instructions

1. While every effort has been made to provide comprehensive and accurate background information, as per requirements and specifications, bidders must form their own conclusions about the solution needed to meet the requirements. Bidders and recipients of this bid document may wish to consult their own legal advisers in relation to this bid document.



2. All information supplied by bidders may be treated as contractually binding on the Bidders, on successful award of the assignment/project by Director Land Records Chhattisgarh based on this bid document.
3. No commitment of any kind, contractual or otherwise, shall exist unless and until a formal written contract has been executed by or on behalf of Director Land Records Chhattisgarh. Any notification of preferred bidder status by Departments shall not give rise to any enforceable rights by the bidder. Director Land Records Chhattisgarh may cancel this bid document at any time prior to a formal written contract agreement being executed by or on behalf of Director Land Records Chhattisgarh.
4. This bid document supersedes and replaces any previous public documentation & communications, and bidders should place no reliance on such communications.
5. This section specifies the procedures to be followed by bidders in the preparation and submission of their bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of contract. It is important that the bidder carefully reads and examines the bid document.
6. The successful SI shall ensure complete responsibility, safety & security, required compliance of its manpower used during survey, assessment, design, supply, installation, testing, commissioning, operations & maintenance at the offices etc. Director Land Records Chhattisgarh shall have no such responsibility in any case.
7. Transfer / Sub-Contracting: Transfer or Subcontracting is not permitted.

19. Conflict of Interest during Bid Process

The system integrator shall not have a conflict of interest. Any system integrator (s) found to be having a conflict of interest shall be disqualified. The system integrator shall be considered to have conflict of interest with one or more parties in this bidding process, if:

1. They have a controlling partner in common.
2. They receive or have received any direct or indirect subsidy from any of them; or
3. They have the same legal representative for purpose of this bid; or
4. They have a relationship with each other, directly or through common third parties, that puts them in position to have access to information about or influence on the bid of another system integrator, or influence the decisions of the purchaser regarding this bidding process; or
5. A bidder submits more than one bid in the bidding process, either individually [including bid submitted as agent /authorized representative on behalf of one or more manufacturer(s) or through Licensee – Licensor route, wherever permitted as per the provision of Qualification requirement for Bidder(s)] or as partner, except for alternative offers permitted under Invitation to Bid. This results in the disqualification of all such bids.
6. However, this does not limit the participation of a Bidder as a sub-contractor in another Bid, or of a firm as a sub-contractor in more than one bid: or
7. A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specification of the services/works that are subject of the bid, or

The Bidder directly or indirectly shall not be a dependent agency of the Purchaser. This Bid is open to any Bidder who provides satisfactory evidence that:

1. It is a qualified manufacturer or SI who supplies and is capable of study, design installations, testing and commissioning work specified in the bid document and has adequate technical knowledge and practical experience for the same.



2. It does not anticipate change in the ownership during project execution period (if such a change is anticipated, the scope and effect thereof shall be defined);
3. It has adequate financial stability and status to meet the financial obligations related to scope of the project.
4. It has adequate field services organization to provide the necessary field erection and management services required to successfully erect, test and commission equipment's as per Specifications and Documents; and
5. It has established quality assurance systems and Organization designed to achieve high levels of equipment reliability, during manufacturing and field installation, commissioning, migration and operational phase.

The above stated requirements are a minimum and Director Land Records Chhattisgarh reserves the right to request for any additional information and reserves the right to reject the Proposal of any Bidder, if in the opinion of Purchaser, the qualification data is incomplete, or the Bidder is found not qualified to satisfactorily perform the Contract.

A Bidder shall not have a conflict of interest that may affect the Selection Process or the Solution delivery (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, Director Land Records Chhattisgarh shall forfeit and appropriate the EMD, if available, as mutually agreed genuine pre-estimated compensation and damages payable to the Director Land Records Chhattisgarh for, inter alia, the time, cost, and effort of the Director Land Records Chhattisgarh including consideration of such Bidder's Proposal, without prejudice to any other right or remedy that may be available to the Director Land Records Chhattisgarh hereunder or otherwise.

20. Disqualification

Director Land Records Chhattisgarh may at its sole discretion and at any time during the processing of bid, disqualify any Tender from the bid process if: -

1. The bid is not submitted in accordance/compliant with this document.
2. The bidder fails to meet the minimum eligibility criteria as mentioned in this RFP.
3. During validity of the bid or its extended period, if any, the bidder increases his quoted prices.
4. The bidder has submitted conditional bid.
5. Bidder has made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.
6. Bid(s) are received after due date and time.
7. Bidder is found to have a record of poor performance such as abandoning work, not completing the contract, inordinately delaying completion, being involved in litigation or financial failures, etc.
8. Bid is not accompanied by required documentation and Earnest Money Deposit (EMD) and would therefore be rendered non-responsive and outrightly rejected.
9. The bidder has failed to provide clarifications related thereto, when sought.
10. Bidder has submitted more than one bid. This will cause disqualification of all bids submitted by such bidder.



11. Any Bidder(s) is found to canvass, influence, or attempt to influence in any manner for the qualification or selection process, including without limitation, by offering bribes or other illegal gratification shall be disqualified from the process at any stage.
12. A bidder submits more than one bid in the bidding process, either individually or agent or authorized representative of any company/ies or as partner/s in a partnership, this results in the disqualification of all such bids.
13. Bidders may specifically note that while processing the bid documents, if it comes to Department's knowledge expressly or implied, that some bidders may have colluded in any manner whatsoever or otherwise joined to form a cartel resulting in delay/holding up the processing of tender, then, the bidders so involved are liable to be disqualified for this contract as well as barred for a further period of two years from participation in any of the tenders floated by any department of Govt. of Chhattisgarh.

21. Confidentiality

1. The purchaser or its nominated agencies shall allow the system integrator to review and utilize highly confidential public records and the system integrator shall maintain the highest level of secrecy, confidentiality, and privacy with regard thereto.
2. Additionally, the system integrator shall keep confidential all the details and information with regard to the project, including systems, facilities, operations, management and maintenance of the systems/facilities.
3. The purchaser or its nominated agencies shall retain all rights to prevent, stop and if required take the necessary punitive action against the system integrator regarding any forbidden disclosure.
4. The system integrator shall ensure that all its employees, advisor and sub-contractors involved in the project, execute individual non-disclosure agreements, which have been duly approved by the purchaser with respect to this project. The system integrator may submit a declaration that it has obtained the Non-Discloser-Agreement (NDA) from its employees.
5. For the rectification of doubt, it is expressly clarified that the aforesaid provisions shall not apply to the following information:
 - i. information already available in the public domain.
 - ii. information which has been developed independently by the system integrator;
 - iii. information which has been received from a third party who had the right to disclose the aforesaid information;
 - iv. Information which has been disclosed to the public pursuant to a court order.
6. Any handover of the confidential information needs to be maintained in a list, both by purchaser & system integrator, containing at the very minimum, the name of provider, recipient, date of generation of the data, date of handing over of data, mode of information, purpose and signatures of both parties.
7. Notwithstanding anything to the contrary mentioned hereinabove, the system integrator shall have the right to share the Letter of Intent/ work order provided to it by the purchaser in relation to the Agreement, with its prospective purchasers solely for the purpose of and with the intent to evidence and support its work experience under the Agreement.



22. Data Protection Compliance

The System Integrator (SI) shall ensure full compliance with the Digital Personal Data Protection (DPDP) Act 2023 and Information Technology (IT) Act 2000, including Sensitive Personal Data or Information (SPDI) Rules 2011, any other applicable laws/acts/compliances/policies/rules for all personal/confidential data processed under the UPAHAR project, such as farmer details, location data, and other information.

1. The SI shall implement consent mechanisms for data collection and processing, including opt-in provisions for farmer advisories and tele consultations, ensuring data minimization and purpose limitation as per DPDP Act.
2. The SI shall appoint a Data Protection Officer (DPO) responsible for conducting Data Protection Impact Assessments (DPIA) for all data processing activities and ensuring annual compliance audits.
3. Data Processing Agreements (DPAs) shall be executed with all sub-contractors and vendors, if any, outlining data security safeguards, breach notification protocols, and user rights (e.g., access, correction, erasure).
4. All data shall be processed with reasonable security practices, including ISO 27001 certification, end-to-end encryption (AES-256), and audit trails.
5. In case of a data breach, the SI shall notify the Department and affected data principals within 72 hours, as mandated by DPDP Act, and bear liability for any unauthorized disclosure under IT Act Section 43A and 72A.
6. Data retention shall adhere to purpose limitation, with erasure upon completion of purpose or user request.
7. Non-compliance with these requirements shall result in penalties as per SLAs and applicable laws, including termination of contract.

23. Delay and Non-Performance

In case of implementation schedule not being adhered to, Director Land Records Chhattisgarh has the right to cancel the order wholly or in part without any liability to pay cancellation charges and procure the goods elsewhere in which case the successful tenderer shall make good the difference between the cost of goods procured elsewhere and price set forth in the order with the successful tenderer.

24. Risk Purchase Clause

In the event agency fails to execute the project as stipulated and the directions given by Director Land Records Chhattisgarh from time to time, Director Land Records Chhattisgarh reserve the right to procure similar services from the next eligible bidder or from alternate sources at the risk, cost and responsibility of the agency. Before taking such a decision, Department shall serve a notice period of one month to the agency.

25. Applicable Law

The contract shall be governed by the laws and procedures prescribed by the Laws prevailing and in force in India, within the framework of applicable legislation and enactment made from time to time concerning



such commercial dealings/processing. All legal disputes are subject to the jurisdiction of courts of Chhattisgarh only.

26. Limitation of Liability towards Director of Land Records, Government of Chhattisgarh

The agency's liability for the scope of work shall be determined as per the Law in force for the time being. The agency shall be liable to Director of Land Records, Government of Chhattisgarh for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the agency and its employees, including loss caused to Director of Land Records, Government of Chhattisgarh on account of defect in goods or deficiency in services on the part of agency or his agents or any person/ persons claiming through or under said agency. However, such liability of agency shall not exceed the total value of this project.

27. Fraud and Corruption

Director Land Records Chhattisgarh requires that agency must observe the highest standards of ethics during the execution of the contract. In pursuance of this policy, Director Land Records Chhattisgarh of Chhattisgarh defines, for the purpose of this provision, the terms set forth as follows:

1. **"Corrupt practice"** means the offering, giving, receiving or soliciting of anything of value to influence the action of Director Land Records Chhattisgarh of Chhattisgarh in contract executions.
2. **"Fraudulent practice"** means a misrepresentation of facts, in order to influence a procurement process or the execution of a contract, to Director Land Records Chhattisgarh of Chhattisgarh, and includes collusive practice among bidders (prior to or after proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive Director of Land Records, Government of Chhattisgarh of the benefits of free and open competition.
3. **"Unfair trade practices"** means supply of services different from what is ordered on, or change in the Scope of Work, which is given by Director of Land Records, Government of Chhattisgarh.
4. **"Coercive Practices"** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of contract.

If it is noticed that the agency has indulged into the Corrupt/Fraudulent/Unfair/ Coercive practices, it will be a sufficient ground for Director of Land Records, Government of Chhattisgarh for termination of the contract and initiate black listing of the vendor.

28. Force Majeure

The agency shall not be liable for forfeiture of its performance guarantee, imposition of liquidated damages or termination for default, if and to the extent that it's delay in performance or any other failure to perform its obligations under the contract is the result of an event of Force Majeure. For purposes of this clause, "Force Majeure" means an event beyond the "reasonable" control of the Agency, not involving the Agency's fault or negligence and not foreseeable. Such events may include Acts of God & Acts of Government of India in their sovereign capacity. For the agency to take benefit of this clause it is a condition precedent that the agency must promptly notify Director of Land Records, Government of



Chhattisgarh, in writing of such conditions and the cause thereof within 30 calendar days of the Force Majeure event arising. Director of Land Records, Government of Chhattisgarh, or the consultant/committee appointed by Director of Land Records, Government of Chhattisgarh as per the directives of Principle Secretary – Revenue/Food/Agriculture Government of Chhattisgarh shall study the submission of the agency and inform whether the situation can be qualified one of Force Majeure. Unless otherwise directed by Director of Land Records, Government of Chhattisgarh in writing, the agency shall continue to perform its obligations as far as it is reasonably practical and shall seek all reasonable alternative means for performance of services not prevented by the existence of a Force Majeure event. In the event of delay in performance attributable to the presence of a force majeure event, the time for performance shall be extended by a period(s) equivalent to the duration of such delay. If the duration of delay continues beyond a period of 30 days, Director of Land Records, Government of Chhattisgarh and the Agency shall hold consultations with each other in an endeavor to find a solution to the problem. Notwithstanding anything to the contrary mentioned above, the decision of Director of Land Records, Government of Chhattisgarh shall be final and binding on the agency. That the successful tenderer produces evidence of the date of occurrence and the duration of the force majeure in an adequate manner by means of documents drawn up by responsible authorities. That successful tenderer proves that the said conditions have actually been interfered with the carrying out of the contract.

That the successful system integrator proves that the delay occurred is not due to his own action or lack of action. Apart from the extension of the time limit, force majeure does not entitle the successful tenderer to any relaxation nor to any compensation of damage or loss suffered.

29. Conflict of Interest

The agency shall disclose to Director of Land Records, Government of Chhattisgarh in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Agency or its Team) during performing the services as soon as it becomes aware of such a conflict. Agency shall hold Director of Land Records, Government of Chhattisgarh interest paramount, without any consideration for future work, and strictly avoid conflict of interest with other assignments.

1. A Bidder shall not have a conflict of interest (the “Conflict of Interest”) that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the Authority shall forfeit and appropriate the Bid Security as the case may be. Without limiting the generality of the above, a Bidder shall be considered to have a Conflict of Interest that affects the Bidding Process, if;
2. Such Bidder (or any constituent thereof) and any other Bidder (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this qualification shall not arise in cases where the director indirect shareholding in a Bidder or a constituent thereof in the other Bidder(s) (or any of its constituents) is less than 1% of its paid up and subscribed capital; or
3. Such Bidder receives or has received any direct or indirect subsidy from any other Bidder, or has provided any such subsidy to any other Bidder; or
4. Such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or



5. Such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each other's information about, or to influence the Bid of either or each of the other Bidder.
6. A Bidder shall be liable for disqualification and forfeiture of Bid Security if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Bidder in any manner.

30. Settlement of Disputes and Arbitration

1. The Department and the system integrator shall make every effort to resolve amicably by direct informal negotiation, any disagreement or dispute that may arise between them under or in connection with the contract.
2. If, after 30 days from the commencement of such informal negotiations, the department and the system integrator are unable to amicably resolve a contract dispute, either party may require that the dispute be referred for resolution to the formal mechanism specified in the clause below. However, during the period of doubt, disagreement or dispute, the SI shall ensure that the Project works in a normal way. Such doubts, disputes and disagreement shall not give any reason or freedom to the SI to interfere in or prevent normal functioning of the Project.

30.1. Dispute Settlement Mechanism

1. All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to performance, which cannot be settled amicably, may be resolved through arbitration.
2. The venue of arbitration shall be at Raipur, Chhattisgarh in India. The arbitration shall be governed by the Arbitration and Conciliation Act 1996 as amended from time to time. In any arbitration proceeding hereunder:
3. The English language shall be the official language for all purposes; and
4. The decision of the sole arbitrator shall be final and binding and shall be enforceable in any court of competent jurisdiction in Chhattisgarh and the parties hereby waive any objections to or claims of immunity in respect of such enforcement.

30.2. Legal Jurisdiction

In case of any dispute, jurisdiction shall be a court situated in Raipur, Chhattisgarh only.

31. Taxes and Duties

1. The Department or its nominated agencies shall be responsible for withholding taxes from the amounts due and payable to the system integrator wherever applicable. The system integrator shall pay for all the taxes in connection with the Agreement, SLA, scope of work and any other engagement required to be undertaken as a part of the Agreement, including, but not limited to, property, sales, use, excise, value-added, goods and services, consumption and other similar taxes or duties.
2. The responsibility of obtaining all the necessary statutory clearances lies with the system integrator. The system integrator shall be solely responsible for all taxes, duties, license fees, octroi



etc. regarding all the items needed for completion of work assigned to him excluding GST. GST will be paid extra at actual.

32. Local Conditions

1. The system integrator shall be deemed, to have exhaustively examined the Bid Document, to obtain all information and clarifications on all matters whatsoever, that might affect the carrying out of the work and to have satisfied himself as to the adequacy of the Bid. The system integrator is deemed to have known the scope, nature and magnitude of the work and as to all work he/she has to complete in accordance with the contracts, whatever be the defects, omissions or errors that may be found in the bid document.
2. Bidders/ system integrator shall be deemed to have acquainted themselves/ himself of Government of India's and Government of Chhattisgarh taxes & duties, laws, statutes, regulations, levies and other charges.
3. Any negligence or omission or failure on the part of the system integrator in obtaining necessary and reliable information as stated above or on any other matter affecting the system integrator shall not relieve him from any risks or liabilities or the entire responsibility for completion of the work in accordance with the bid document.

33. Notice

1. Any notice, request or consent required or permitted to be given or made in this contract shall be in writing. Any such notice/ request shall be deemed to have been given or made when delivered in person to the authorized representative of the party to whom the communication is addressed, or sent by registered official mail, email to such party at the address specified below:
 - i. In case of Competent Authority – DLR, Raipur
 - ii. In case of system integrator (To be filled at the time of signing of the Contract):
 - iii. Notice will be deemed to be effective from the date of delivery.

34. Warranty and Maintenance

1. The system integrator shall provide a comprehensive warranty for duration of 60 months, commencing from the date when the system reaches "Final Go-Live" i.e. "Final Go- Live" till the end of duration of contract.
2. System integrator shall also provide complete seamless maintenance support for all the solution components as outlined in this bid till the end of duration of project from the date of Go- live i.e. "Final Go-Live".
3. During the warranty period, the system integrator warrants that the services rendered under this contract are of most recent version and incorporate all recent improvements in design unless provided otherwise in the contract. The system integrator further warrants that the services rendered under this contract shall have no defects arising from design, materials or workmanship.
4. Competent Authority shall promptly notify system integrator in writing of any claims arising under this warranty. Upon receipt of such notice, the system integrator shall, within the warranty period



and with all reasonable speed, repair the defect without costs to competent authority and within time specified and acceptable to competent authority.

5. If system integrator, having been notified, fails to remedy the defect(s) within the period specified in the contract, competent authority may proceed to take such reasonable remedial action as may be necessary, at the system integrator's risk and expense and without prejudice to any other rights, which Competent Authority may have against the system integrator under the contract.
6. During the comprehensive warranty period, the system integrator will provide all product(s) and documentation updates, patches/ fixes, and version upgrades within 30 days of their availability and should carry out installation and make operational the same at no additional cost to Competent Authority.
7. The system integrator will have to ensure that:
 - i. The implemented solution represents a complete, integrated solution meeting all the requirements as outlined in the bid including amendments, if any, and provides the functionality and performance, as per the terms and conditions specified in the contract.
 - ii. The implemented solution will achieve parameters delineated in the technical specification/ requirement and shall be appropriately integrated to meet project requirements.
 - iii. It ensures the maintenance of the acceptance criterion/standards in respect of the systems during the warranty period.
 - iv. Except where otherwise provided for in the contract, all questions and disputes relating to the meeting of the specifications as per the scope of work and instructions herein before mentioned and to the quality of work as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:
 - v. If the SI considers any work demanded of him to be outside the requirements of the contract, or disputes, record or decision given in writing by the Director, Director Land Records Chhattisgarh on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 30 days request Director, Director Land Records Chhattisgarh, in writing for written instruction or decision. Thereupon, the Director, shall give his written instructions or decision within a period of one month from the date of receipt of the contractor's letter. If the Director, Director Land Records Chhattisgarh fails to give his instructions or decision in writing within the aforesaid period or if the SI is dissatisfied with the instructions or decision of the Director, Director Land Records Chhattisgarh, the contractor may, within 30 days of the receipt of Director, Director Land Records Chhattisgarh decision, appeal to the Principal Secretary, Department, Chhattisgarh who shall afford an opportunity to the contractor to be heard, if the latter so desires, and within 30 days of receipt of contractor's appeal.
 - vi. Except where the decision has become final, binding and conclusive in terms of sub para(i) above disputes of difference shall be referred to the sole arbitrator namely Principal



Secretary, Department, Chhattisgarh. The provisions of Indian Arbitration Act, 1996 and the rules made there under or statutory modifications thereto for the time being enforced.

35. Data Ownership and Access

All the data generated, processed or collected under this project including satellite images, derived crop maps, farmer information and yield models shall be the sole property of the State Government. The Selected bidder shall not reproduce, share or monetize the data without prior written consent.

36. Termination of Contract

Director of Land Records, Government of Chhattisgarh may, without prejudice to any other remedy under this contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 60 days stating the reason for default to the agency and as it deems fit, terminate the contract either in whole or in part:

1. If the agency fails to deliver any or all of the project requirements/ operationalization/ go live of project within the time frame specified in the contract; or
2. If the agency fails to perform any other obligation(s) under the contract.

Prior to providing a notice of termination to the agency, Director of Land Records, Government of Chhattisgarh shall provide the agency with a written notice of 30 days instructing the agency to cure any breach/ default of the Contract, if Department is of the view that the breach may be rectified. On failure of the agency to rectify such breach within 30 days, Department may terminate the contract by providing a written notice of 30 days to the agency, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to Department. In such event the agency shall be liable for penalty/liquidated damages imposed by Department. In the event of termination of this contract for any reason whatsoever, Department is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the agency shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to Department and/ or succeeding vendor, as may be required, to take over the obligations of the agency in relation to the execution/ continued execution of the requirements of this contract.

37. Team Structure for Management and Operations

The expected minimum inputs for the key team members are provided below. However, as per bidder's assessment of the scope of work, bidders may include additional team members as well as additional inputs of the key team members, as considered necessary.

The table below outlines the engagement of resources under each role in a year.

S. No.	Expert Title	Qualifications & Skills	Experience	Unit	Total Man-Months
1.	Project Manager	Mandatory Qualification-	<ul style="list-style-type: none"> • At least 10 years of experience on end-to- 	01	Till the completion of



		<ul style="list-style-type: none"> • BE/BTech/MTech, MCA, M.Sc. – IT/ MBA – IT /in IT/Computer Application/ Computer Science/ Management • PMP/PRINCE-2 Certification • Good communications and interpersonal skills and fluency in written and spoken Hindi and English 	<p>end GIS integration of e-Governance/ large IT projects</p> <ul style="list-style-type: none"> • Shall have hands of experience for the initiation, Planning, executing, transitioning, implementation, while managing scope, time, risk etc. before during and implementation of any ICT/e-Governance/SDLC service delivery project • Experience of handling projects in Govt. department/ PSU. • Should experience having Agriculture and Food domain with GIS implementation knowledge 		Operations and Maintenance phase (Onsite)
2.	Assistant Project Manager – I (Domain Agriculture Experts)	<p>Mandatory Qualification- M.Sc. (Agri) / M.Tech.</p> <p>Desirable -</p> <ul style="list-style-type: none"> • Package of Agriculture Practices • Good communications and interpersonal skills and fluency in written and spoken Hindi and English 	<ul style="list-style-type: none"> • At least 10 years of experience agriculture domain. • Experience of handling projects in Govt. department/ PSU. • Knowledge of agriculture package of practices 	01	Till the completion of Operations and Maintenance phase (Onsite)
3.	Assistant Project Manager – II (Senior GIS Analyst – Domain Expert)	<p>Mandatory Qualification- M.Tech/M.Sc in Remote Sensing and GIS /Geoinformatics or Equivalent with MCA/B.Tech in Computer Science/Equivalent</p>	<ul style="list-style-type: none"> • At least 10 years of experience in spatial and non-spatial database management and WebGIS development • Experience in real-time dashboard management and mobile application 	01	Till the completion of Operations and Maintenance phase (Onsite)



			<p>development</p> <ul style="list-style-type: none"> • Proficiency in Python and R, with experience in AI/ML techniques for spatial data analysis and decision support system development • Experience of handling projects in Govt. department/ PSU. • Knowledge of agriculture package of practices 		
4.	System Architecture	<p>Mandatory Qualification- Bachelor's Degree in Engineering / Technology (B.E. / B.Tech) in Computer Science, IT, Electronics, or Post-Graduate Degree such as M.Tech / MCA / MBA (IT/Systems) shall be preferred.</p> <p>Desirable -</p> <ul style="list-style-type: none"> • Cloud Architect certification (AWS / Azure / GCP) • Security certifications (ISO 27001, CISSP, etc.) • Good communications and interpersonal skills and fluency in written and spoken Hindi and English 	<ul style="list-style-type: none"> • Minimum 10 years of overall professional experience in IT Systems Design, Architecture, and Implementation of large-scale enterprise applications. • At least 4 years of experience as a Solution Architect / Technical Architect / Enterprise Architect for complex, mission-critical IT systems. • Minimum 4 years of experience in designing and implementing large-scale Government IT / e-Governance / State or Central Government projects. 	01	Design phase to till go-live with integration. (Hybrid working)
5.	Senior Remote Sensing Expert - Domain Expert	<p>Mandatory Qualification- BE/BTech/ M.Sc. / M. Tech. in Remote Sensing or GIS fluency in written and spoken Hindi and English</p>	<ul style="list-style-type: none"> • At least 10 years of experience in Disaster Management /Agriculture /Land Records/Water Resources Projects • Hands-on experience in 	02	Till the completion of Operations and Maintenance phase



		<p>At least 10 years of experience on end-to-end remote sensing data integration applications in Agriculture IT projects</p> <p>Experience of handling projects in Govt. department/ PSU.</p> <p>Should experience having Agriculture domain with GIS implementation knowledge</p>	<p>remote sensing with a strong focus on optical and hyperspectral image processing and analysis, AI/ML techniques for spatial data, satellite and drone data processing, and applications in flood and drought monitoring</p> <ul style="list-style-type: none"> • Experience of handling projects in Govt. department/ PSU. 		
6.	Data Analyst	<p>Mandatory Qualification-</p> <p>Bachelor's Degree in CS/IT/ MBA-IT/MCA/MSc-IT, CS/ Data Analytics / Data Science / Statistics</p> <p>Desirable -</p> <ul style="list-style-type: none"> • Exposure to projects involving agriculture, rural development, land records, procurement, or citizen registries shall be an added advantage • Good communications and interpersonal skills and fluency in written and spoken Hindi and English 	<ul style="list-style-type: none"> • Minimum 5 years of overall professional experience in data analysis, data modeling, and reporting. • At least 3 years of experience in analyzing large-scale datasets for enterprise or government IT systems • Experience in at least one (01) large Government / State-level / Enterprise IT project, involving structured and unstructured data analysis • Experience supporting decision-support systems, dashboards, MIS reports, or analytics platforms. • Exposure to projects involving agriculture, rural development, land records, procurement, or citizen registries shall be an added advantage. 	03	From Go-live to till the completion of Operations and Maintenance phase (Onsite)
7.	Support Executive Desk	<p>Mandatory Qualification-</p>	<ul style="list-style-type: none"> • Minimum 2 years of experience in IT Help 	20	From Go-live to till the



		<p>Minimum qualification: Graduate in any discipline</p> <p>Providing Level-1 and Level-2 support</p> <p>Desirable -</p> <ul style="list-style-type: none"> Proficiency in Hindi is mandatory. Knowledge of Chhattisgarhi or local dialects shall be a strong advantage 	<p>Desk / Technical Support / Application Support roles</p> <ul style="list-style-type: none"> Prior experience in Government IT projects, e-Governance platforms, or large enterprise applications shall be preferred. Experience in handling ticket-based support systems and end-user issue resolution is mandatory. 		<p>completion of Operations and Maintenance phase (Onsite)</p>
--	--	--	---	--	--

- In the above table detail of the resource deployment is minimum required manpower has been mentioned, SI is required to deploy/replace additional manpower at its own cost as per the requirements raised by the department to complete the scope of work within timelines mentioned in the tender document.
- The deployment of the resources to be based on SI onboarded for custom development proposed project application. SI may suggest better deployment strategy to Department for approval. If above resources are not adequate to fulfill all the obligations of implementation phase, SI shall deploy additional resources on its own cost. Department shall not make any payment for additional manpower.
- Implementation phase manpower shall remain stationed at Raipur. Department shall provide adequate space with all necessary amenities to them. IT Equipment (Laptop, Computer, Printer, etc.) and consumables shall be provided by SI to these resources.
- Implementation phase resources shall submit progress report to the designated officer of Department on fortnightly basis.

Note

- The bidder shall provide the manpower deployment schedule as per the requirement mentioned under this document to facilitate monitoring and review against the required scope of work. The same shall be provided along with the details of the team members dedicatedly deployed to this proposed project for the period mentioned in the RFP. The bidders are free to increase any inputs requirement or add any additional position as per the Approach and Methodology proposed by the bidder. This should be reflected in the work plan and staff schedule.
- Bidders will submit the timesheets of the people deployed on the project every month to Department.

37.1. Replacement

- In case any resource tenders resignation from the SI's employment, the SI shall inform Department within one week of such resignation.



2. SI shall promptly initiate a search for a replacement and use commercially reasonable efforts (including the expenditure of reasonable sums, such as to engage the services of a recruiting firm) to ensure that the role of any member of the Key Personnel is not vacant for any longer than 30 days, subject to reasonable extensions requested by SI.
3. Before assigning any replacement member of the Key Personnel to the provision of the Services, SI shall provide Department with:
 - a. At least three resumes, curriculum vitae and any other information about the candidate that is reasonably requested by Department; and
 - b. an opportunity to interview the candidate.
4. SI must provide replacement resource who score at least the same marks as the resource proposed originally on the same evaluation parameters defined in this RFP document. Once this is confirmed, the Purchaser shall conduct an interview of the candidate and notify SI within ten days after its interview (or if Department does not request an interview within ten working days after SI has provided the information, then it would be deemed as accepted).
5. If Department does object to the appointment, SI shall not assign the individual to that position and shall seek an alternative candidate in accordance with this section.
6. The SI must ensure at least 4 weeks of overlap period in such replacements.

38. Business Continuity Plan (BCP)

A yearly audit of Business Continuity Plan (BCP) to ensure the adequacy, completeness, and appropriateness of plan through various means including availability of technologies, processes, and people to implement the plan that all broadly covered under the umbrella of business continuity and disaster recovery. The audit of business continuity plan shall validate its major components and parameters as per agreement with shall rate the performance of BCP activities in three grades i.e. Satisfactory, Requires Improvement and Unsatisfactory.

The overall audit activities shall be carried out with an intent of "As-Is" assessments to assess the current operational capabilities of application on Infrastructure Data Center, Disaster Recovery Center, Network Bandwidth, Help Desk Service Centres support, Services suppliers etc. This activity shall take support of extensive use of data analytics to enhance the audit coverage and focus on "risks that matter". The auditor shall follow the 360-degree approach to identify and mitigate risks related to both operations and legal compliances. To benchmark against industry peers to implement the most efficient practice and policies.

It should be a rigorous program management and quality monitoring mechanism to ensure seamless delivery of assessments despite large volume of system. The audit program shall be structured to complete the reviews in minimum time with no disruption to daily business activities.

39. Project Deliverable Timeline and Payment Milestone

The payment to SI shall be made as under:

- a. T is the date of Agreement
- b. CAPEX cost should not be more than 25% of the overall project cost.



Sr. No.	Line Item	Timeline (Weeks)	Payment Terms
1	Inception Report	T + 1 Week	1% of the CAPEX Cost will be released upon successful submission and approval of the Inception Report. This report must include the project charter, implementation methodology, risk assessment, and resource deployment plan.
2	Supply and Installation of Software Licenses (Digital Web Application and Mobile Application and allied applications)	T + 4 Weeks	a. 70% of the CAPEX allocated for Supply of Software Licenses (Digital Web and Mobile Application) will be released post the supply and installation of licenses. b. 30% of the CAPEX shall be released post Go-Live of the entire project. Beneficiary should be DLR for all licenses procured.
3	Software Requirements Specification (SRS) for Web and Mobile Applications and allied applications	T + 4 Weeks	20% of the CAPEX allocated for Web and Mobile Application Development shall be payable upon approval of the comprehensive SRS, covering functional requirements, use cases, and technical architecture.
4	Web Application- and allied applications – Design, Development, Deployment & UAT Completion	T + 12 Weeks	a. 20% of the CAPEX for Web Application Development will be released post development, successful internal testing, deployment to the staging environment, and formal User Acceptance Testing (UAT) sign-off. b. 20% of the CAPEX for Web Application Development will be released post completion of Trainings of all the stakeholders.
5	Mobile Application Development, Deployment & UAT Completion	T + 12 Weeks	a. 20% of the CAPEX for Mobile Application Development shall be payable upon successful development, deployment of Android/iOS apps, and UAT sign-off by the client. b. 20% of the CAPEX for Mobile Application Development shall be payable upon post successful completion of training of all the stakeholders.
6	Go-Live of Web and Mobile Applications and allied applications	T + 16 Weeks	40% of the combined CAPEX for Web and Mobile Application Development and allied applications development will be payable post production deployment and confirmation of stable performance in the live environment.
7	Operations and Maintenance – Web & Mobile Applications and allied applications	T + 16 Weeks Onwards	Remaining O&M cost for Web and Mobile Applications will be paid in equal quarterly installments, starting from the Go-Live date, for the agreed maintenance duration.
8	AMC for Software Licenses (Digital Web Application and Mobile Application)	T + 1 Year onwards	AMC for Software Licenses (Digital Web Application and Mobile Application) will be paid in equal quarterly installments post 1 year until the project period i.e. 5 th year of the project



9	Data Analytics Centre (DAC) Setup	T + 12 Weeks	70% of the Total DAC Value (as per BoQ Line Item No. 3) will be released upon completion of physical setup, hardware deployment, and verification of operational readiness.
10	Operations and Maintenance – DAC	T + 12 Weeks Onwards	The remaining 30% of the DAC Value shall be disbursed in equal quarterly payments over the balance project period for ongoing O&M support, including infrastructure management and system uptime assurance.

Note: BG against inception report shall be released post GO LIVE of the entire project.

39.1. Payment Terms based on Reports Submission

Payments shall be made in accordance with the schedule outlined below, subject to the achievement of a minimum overall accuracy of minimum 70%. Disbursement of funds will occur only after verification and certification by the designated representative of the authority. The selected bidder must raise invoices for each report only after obtaining formal approval from the authority or its representative. All necessary verifications will be completed within 30 days following the completion of the respective milestones or service delivery. Payments will be processed based on the milestone-wise schedule, provided that the quality has been duly certified by the authority's representative.

Note: The payment for the solution and other components as supplied and deployed by the SI during the respective milestones of the project as defined in the RFP shall be made as per the table mentioned above and only after successful completion of the respective milestones and review & sign off from the competent authority of Department.

39.2. Payments for Change Request handling

Payments for Change Request shall be made as per the relevant clause of the document and as per approval of the nominated technical committee appointment by Department and shall be made after Go-live as O&M quarterly payment only. Change Acceptance Letter(s) mentioning approved charges and signed by competent authority, shall be submitted with the separate invoice.

Note: No Advance payment shall be made in any stage.

- 1 The SI is required to maintain detailed timesheets of all personnel working on this project along with details of inputs (clearly showing the on and off-site input details) as they may be asked to produce the same during the contract period for project audit purposes.
- 2 Upgrades, Updates, Patches and Technical Support are required for the Technology. For all other commercially of the shelf Applications, upgrade, updates, Patches and Technical Support are required for the entire duration of the Project

Note: The payment for the Hardware, Software and other components as supplied and deployed by the Implementing Agency during the respective phases/ milestone of the project as mentioned in the RFP shall be made as per the table mentioned above and only after successful completion of the respective phase. For this purpose, the item-wise price for the respective item, as quoted by the bidder in the financial bid, will be taken into account.



1. No Advance payment shall be made in any stage.
2. Successful Bidder shall submit invoice on or before 05th of each subsequent quarter.
3. Successful Bidder shall not be subject to penalties / delayed payments / invoice non-acceptance due to non-functioning of the e-Surveillance System for reasons not attributable to the Successful Bidder.
4. The above quoted prices should include all charges, fee, expenses etc. to be incurred by the bidder. Department would not make any payment (including reimbursement of expenses/ incidentals/etc.) other than the quoted prices. The bidder should compulsorily quote for all the items. In case, if the bidder has not quoted for any item, then the proposal of that bidder shall be disqualified.
5. The Prices quoted above should include all applicable taxes, duties, levies etc., if any, as applicable, excluding GST, as applicable, as of the amended of submission of the tender. All new taxes levied/increase in tax rates after the tender submission date will be borne by the bidder. Any benefit due to reductions in the taxes etc. will be passed on to Department.
6. Department reserves the right to buy additional licenses, if any, as per the Per User charges quoted in this RFP as and when required during the project.
7. In case of constitution of new branch offices by the State Govt during the Project time (Including operation and maintenance phase), the same has to be considered for implementation without any extra cost.

40. Service Level Agreement

40.1. Service Level Agreement (SLA):

40.1.1. Service Level – Implementation period SLA.

The SI shall be evaluated based on the following SLA parameters:

- a. Timeliness of Deliverables (Milestone Completion)
- b. Quality of Deliverables (Acceptance Criteria Compliance)
- c. Security Compliance (CERT IN for initial stage and STQC for Final stage after go-live the project)
- d. System Availability during Go Live
- e. Documentation and Reporting Compliance

Each milestone is tied to a payment percentage, and the release of payment shall be strictly subject to satisfactory compliance with SLA parameters.

Sr. No.	Service level description	Penalty
1	Delay in milestone delivery	Rs. 1,00,000 per week
2	Delay in report submission	Rs. 1,00,000 per week per report
3	Delay in advisories	Rs. 50,000 per week per advisory
4	Delay in manpower deployment at DAC	Rs. 50,000 per week

40.1.2. Service level agreement for O&M phase

- A. System Level



Sr. No.	Service level description	Min SLA expected	Penalty
1	System availability	97% of the time	For every 100 basis points of percentage – 2% Operations & Maintenance value per quarter i.e. if system is available 95% of time in particular quarter then penalty would be 4%

B. Operational Level

S. No.	Service Area	SLA Parameter	Severity / Priority	Target Service Level	Measurement Method	Penalty for Non-Compliance
1.	Incident Response	Initial response time	Medium	≤ 30 minutes	Helpdesk / ticket system	INR 5,000/- per incident
2.			High	≤ 1 hour	Helpdesk / ticket system	INR 7,000 per incident beyond SLA
3.			Critical	≤ 4 hours	Helpdesk / ticket system	INR 10,000 per incident
4.	Incident Resolution	Resolution / workaround	Medium	≤ 4 hours	Ticket closure logs	INR 5,000 per incident
5.			High	≤ 8 hours		INR 7,000 per incident beyond SLA
6.			Critical	≤ 12 hours		INR 10,000 per incident
7.	Preventive Maintenance	Scheduled maintenance compliance	NA	≥ 95% adherence	Maintenance reports	INR 5000 of monthly O&M charges
8.	Defect Fixing	Bug fixing post deployment	Major defect	≤ 5 working days	Defect tracker	INR 5,000 per defect per week of delay
9.	Documentation	Updated SRS, FRS, manuals	NA	Updates within 15 days of change	Document submission records	INR 10,000 of monthly O&M charges per instance
10.	Training	User training sessions	NA	As per Department request	Training reports / attendance	₹10,000 per delayed session
11.	Helpdesk Support	Availability of support	NA	As specified in RFP	Attendance / call logs	INR 10,000 of monthly O&M charges
12.	Data Backup & Recovery	Backup success rate	Critical	100% daily backups	Backup logs	INR 10,000 per backup failure



13.	Security Management	Resolution of security vulnerabilities	High	≤ 48 hours	Security audit reports	INR 1,00,000 per unresolved vulnerability
14.	Ground Truthing	GT Coverage	NA	NA	Ground Truthing coverage 1%-2% of different sown areas	INR 200000/- per 10 percentage basis points drop.
15.	GT Accuracy	Filed Data Accuracy	NA	NA	Ground Truthing validations	>95% valid points

40.1.3. General Penalty & SLA Conditions

S. No.	Clause	Provision
1.	Maximum Penalty Cap	15% of Total Contract Value (TCV)
2.	Cumulative Delay	Department may terminate contract subject to approval of Competent authority
3.	Repeated SLA Breach	3 consecutive failures → Show cause Notice of one month → Another 3 consecutive failures → May initiate Termination subject to approval of Competent authority
4.	Any other Penalty	0.25% of the Milestone payment upto 5% For O&M – 0.25% of the Quarterly payment upto 5%
5.	Penalty Adjustment	Deducted from milestone / O&M payments
6.	Waiver	Only with written approval of Department



41. Annexure

41.1. Bid Submission Letter (Annexure – 1)

(On Bidder's Letterhead)

Ref. No.

Date: DD/MM/YYYY

To,

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002

Subject: Submission Bid RFP Number <<>> Dated, <<DD/MM/YYYY>>

Ref: RFP Number <<>>Dated<<>>

Dear Sir,

With reference to your Request for Proposal for selection of System Integrator for “**Unified Platform for Agriculture and Holistic Assessment with Records**”, we hereby submit our Prequalification proposal, Technical Proposal and Financial Proposal for the project.

We hereby declare that:

- We offer to supply and install “Digital Land Record and Agriculture with Integrated Command and Control Center” and provide services at the prices and rates mentioned in the attached financial proposal.
- We have never been declared to be a willful defaulter by any Bank.
- We, along with our constituent partner(s), have not suffered any order of winding up or appointment of Liquidator by a court of competent jurisdiction
- We are applying for the selection in the capacity of an individual firm
- We or any person on our behalf will not engage in any corrupt, fraudulent or coercive practices to influence the Bidding Process.
- We hereby acknowledge and unconditionally accept that the Department can at its absolute discretion apply whatever criteria it deems appropriate, not just limiting to those criteria set out in the RFP and related documents, in short listing of vendors for providing System.
- We have paid tender fee of Rs. (Rsonly)online towards the RFP document cost.
- We hereby declare that all information and details furnished by us (including all partners of the Consortium) in the proposal are true and correct, and all documents accompanying such application are true copies of their respective originals.
- We agree to abide by our offer for a period of 180 days from the date of opening of bid prescribed by Department of Chhattisgarh and that we shall remain bound by a



communication of acceptance within that period.

- We have carefully read and understood the terms and conditions of the RFP and the conditions of the contract applicable to the RFP. We do hereby undertake to abide by these terms and conditions of the RFP.
- In the event of acceptance of our bid, we do hereby undertake:
 - a. To provide required services and software and commence the overall System services as stipulated in the schedule of delivery forming a part of the attached proposal.
 - b. To undertake the O&M as stipulated in RFP from the date of acceptance of overall commissioning (Full Go-live) of the project.
 - c. We affirm that the prices quoted are inclusive of delivery, installation, commissioning, training, and providing O&M charges and inclusive of all taxes, levies, custom, excise, octroi, work contract tax, discounts etc. (exclusive of GST).
- We do hereby undertake, that, until a formal contract is prepared and executed, this proposal, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.
- We understand that the bank guarantee furnished by us as Earnest Money Deposit may be encased under conditions enumerated in the RFP document.
- We understand that the Department of Chhattisgarh may cancel the Bidding Process at any time and that Department is not bound to accept any bid that it may receive without incurring any liability towards the Bidders and without giving any reasons thereof.

Self-Certifications for Qualification Requirements:

- a) We certify that we the authorized implementation partner of the customized solution offered by us in the proposal.
- b) We certify that..... Is CMM/CMMI level..... valid certification as on bid submission date.
- c) We certify that we have resources of the offered solution as per the Qualification Requirements specified in the RFP.

In case of any clarifications please contact..... e-mail at (M)

Signature of Authorized Signatory (with official seal)

Date

Name

Designation Address Telephone

.....

E-mail address

.....



41.2. Bid Submission Letter (Annexure – 2)

Manufacturer Authorization Forms (MAF)

(To be obtained from all OEMs on respective company letter head)

Ref. No.

Date: DD/MM/YYYY

To,

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002

Subject: Submission Bid RFP Number <<>> Dated, <<DD/MM/YYYY>>

Ref: RFP Number <<>>Dated<<>>

WHEREAS..... who are official
.....manufacturers of
..... Having factories at Do hereby authorize
..... to submit a Bid in relation to the Invitation for Bids indicated
above, the purpose of which is to provide the following Goods, manufactured by
us..... and to subsequently negotiate and sign the Contract.

The supplied device/item/system software/software shall not be at the End of Life/ End of Sale/ Agritech Services pertaining to Functional Requirements /End of Support with upgradation, updation and necessary support will be available till next 5 years. In case, if further extension of project for next 02 years granted then above-mentioned support will also get extended for next 02 years.

We hereby extend our full warranty & technical support in accordance with General Conditions of Contract, with respect to the Goods offered by the above firm in reply to this Invitation for Bid.

Name:

In the capacity of:

Signed:

Duly authorized to sign the Authorization for and on behalf of.....

Date:

Official Seal



41.3. Certificate of Corporate Principal (Annexure – 3)

CERTIFICATE AS TO CORPORATE PRINCIPAL

(To be signed by any of Board Directors or Co. Secretary)

(To be accompanied along with requisite copy of the board resolution)

I..... certify that I am..... Of the Company under the laws of And thatwho signed the above tender is authorized to bind the Company / Firm by authority of its governing body.

Signature:

Full Name:

Address:

Date:

Official Seal:



41.4. Project Experience Submission (Annexure – 4):

Project Experience Submission

(To Be Submitted with Each Project Experience)

Name of the Project:	Location:
Client Name:	Client Address:
Type of Client: (PSU / Government Department/ Government Authority/ Public Sector Banks/ Public Sector undertaking (PSU)/Centre Government /State Government/ State PSUs/ Private/ Others):	
Project Duration (In Months):	Project Value: (In INR Crores):
Status: (Complete / Ongoing)	
Start Date:	Completion Date:
Number of Users:	Modules covered:
Name of the solution implemented:	
Complete Documentary Evidence Attached (Yes/No):	Documentary Evidence (Start Page No. To End Page No.):

Bidder:

Signature:.....

Name:.....

Designation:.....

Company:.....

Date:.....

Official Seal:



41.5. Technical Bid Submission (Annexure – 5):

Technical Bid Submission Cover letter

To,

Director,
Director Land Records Chhattisgarh,
Block – 2, First Floor, Indravati Bhawan,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002

Sub: Submission Bid RFP Number <<>> Dated, <<DD/MM/YYYY>>

Ref: RFP Number <<>>Dated<<>>

Sir,

I/ We, the undersigned Bidder(s), having read and examined in detail all the RFP/ bidding documents in respect of Request for Proposal for selection of System Integrator “**Unified Platform for Agriculture and Holistic Assessment with Records**” hereby propose to provide our services as specified in the bidding proposal submitted by us.

1 Deviation

We declare that all the services shall be performed strictly in accordance with the clauses and conditions of RFP document and there is “No Deviation” submitted by us.

2 Qualifying Data

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

3 Performance Bank Guarantee

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance bank guarantee in the form prescribed in this RFP.

4 We hereby declare that our bid is made in good faith, without collusion or fraud. All the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

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

Thanking you,

Yours faithfully,

(Signature of the Bidder)..... Printed Name.....

Designation.....SealDate.....



41.6. Manpower Details (Annexure – 6):

Manpower Details

I/We propose the following resources for working on this project. I/we hereby certify that the resource details submitted by us are complying and in accordance with the RFP clauses and conditions.

S. No.	Name	Current position in the firm	Name of the firm	Proposed position for the project	Professional Years of experience in years	Relevant Experience in years	Qualifications as per RFP

The CVs of the above resources attached in the format provided in the RFP.

Bidder:

Signature.....

Name

Designation

Company.....

Seal.....

Date.....



41.7. Curriculum Vitae Format (Annexure – 7)

Curriculum Vitae Format

1	Proposed Position:				
2	Name of Firm and Role				
3	Name of Staff:				
4	Position held in Firm				
5	Date of Birth:		Nationality:		
6	Education:				
	S. No.	Year	Degree/Examination	Institute/Board	
7	Membership of Professional Associations:				
8	Other Training:				
9	Countries of Work Experience:				
10	Project Experience:				
	S. No.	Project	Project Organization	Roll	
11	Languages:				
	S. No.	Language	Speaking	Reading	Writing
12	Employment Record:				
	S. No.	From	To	Employer	Position Held
13	Detailed Tasks Assigned:				



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Raipur, Date: 22/04/2026

14	Work Undertaken that best illustrates capability to handle the tasks assigned:	
15	Certification:	

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, my experience and my committed man-months for this project. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of the staff

Full name of authorized representative:

Bidder:

Signature.....

Name

Designation

Company.....

Seal.....

Date.....



41.8. Software Support (Annexure – 8)

Software Support:

We warrant that the software to be supplied by us hereunder shall be free from all encumbrances, defects and faults and shall be of the highest grade as per the established and generally accepted standards for the same. The software shall be in full conformity with the functional requirement specifications of this RFP and shall operate properly. We shall be fully responsible for its efficient and effective operation.

This support shall start after Go-live and till the completion of the contract or from the date of acceptance whichever is later.

We further agree to:

- 1 Provide all the latest upgrades/patches/releases for all the software components
- 2 Accept any remedial action taken by the Purchaser, if having been notified, fail to remedy the defect(s) within the period specified in the contract,
- 3 Achieve parameters delineated in the Functional requirement specifications and Scope of Work.
- 4 Take total responsibility for support services from sub-contracted third-party producers or licensors of products included in the systems
- 5 I/we will use authorized licensed software's for software development environment (OS for Server, Database etc.) and maintenance of the solution.

During the support period, our obligations shall include all costs and taxes relating to software operations for operating effectively and efficiently and conform to the requirement.

.....

Signature of the Bidder's

Authorized Signatory

Date:.....

Seal of the Company.....



41.9. No Deviation Certificate (Annexure – 9)

No Deviation Certificate

[Covering Letter shall be on the official letterhead of the Bidder]

[Reference No.]

From:

[Address of the Bidder]

[Telephone No., Fax No., Email]

[Date]

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002

I/we hereby certifies that the bid response submitted by us are complying and in accordance with the RFP clauses and conditions, and there is “No Deviation” submitted by us.

In case any deviation is found in the bid submitted by us, the bid is liable for rejection.

Seal of the Company

Full Signature:.....

Name:.....

Designation:.....

Date:.....



41.10. Non-Disclosure Agreement – NDA (Annexure – 10)

Non-Disclosure Agreement (NDA)

WHEREAS, we the undersigned Bidder,, having our principal place of business/ registered office at....., are desirous of bidding for RFP No. <<.....>> dated <<MM-DD-YYYY>> covering “Request for Proposal for selection of System Integrator for **“Unified Platform for Agriculture and Holistic Assessment with Records”** under Development and implementation of project (hereinafter called the said ‘RFP’) to the Director, Land Record, Nava Raipur Chhattisgarh, hereinafter referred to as ‘Purchaser’ and,

WHEREAS the Bidder is aware and confirms that the Purchaser’s business/ operations, information, Application/software, hardware, business data, architecture schematics, designs, storage media and other information / documents made available by the Purchaser in the RFP documents during the bidding process and thereafter, or otherwise (confidential information for short) is privileged and strictly confidential and/or proprietary to the Purchaser,

NOW THEREFORE, in consideration of disclosure of confidential information, and in order to ensure the Purchaser’s grant to the Bidder of specific access to Purchaser’s confidential information, property, information systems, network, databases and other data, the Bidder agrees to all of the following conditions.

It is hereby agreed as under:

1. The confidential information to be disclosed by the Purchaser under this Agreement (“Confidential Information”) shall include without limitation, any and all information in written, representational, electronic, verbal (“to be confirmed in writing within fifteen days of such verbal disclosure.) or other form relating directly or indirectly to processes, methodologies, algorithms, risk matrices, thresholds, parameters, reports, deliverables, work products, specifications, architecture, project information, money laundering typologies, related computer programs, systems, trend analysis, risk plans, strategies and information communicated or obtained through meetings, documents, correspondence or inspection of tangible items, facilities or inspection at any site to which access is permitted by the Purchaser.
2. Confidential Information does not include information which:
 - a. the Bidder knew or had in its possession, prior to disclosure, without limitation on its confidentiality;
 - b. is obtained by the Bidder from a third party without any obligation of confidentiality;
 - c. information in the public domain as a matter of law;
 - d. the Bidder is required to disclose by order of a competent court or regulatory authority;
 - e. is released from confidentiality with the written consent of the Purchaser.
3. The Bidder agrees to hold in trust any Confidential Information received by the Bidder, as part of the Bidding process or otherwise, and the Bidder shall maintain strict confidentiality in respect of such Confidential Information, and in no event a degree of confidentiality less than the Bidder uses to protect its own confidential and proprietary information. The Bidder also agrees:
 - a. to maintain and use the Confidential Information only for the purposes of bidding for this RFP and thereafter only as expressly permitted herein;



- b. to only make copies as specifically authorized by the prior written consent of the Purchaser and with the same confidential or proprietary notices as may be printed or displayed on the original;
 - c. to restrict access and disclosure of Confidential Information to their employees, agents, consortium members and representatives strictly on a “need to know” basis, to maintain confidentiality of the Confidential Information disclosed to them in accordance with this clause; and
 - d. to treat Confidential Information as confidential unless and until Purchaser expressly notifies the Bidder of release of its obligations in relation to the said Confidential Information.
4. Notwithstanding the foregoing, the Bidder acknowledges that the nature of activities to be performed as part of the Bidding process or thereafter may require the Bidder’s personnel to be present on premises of the Purchaser or may require the Bidder’s personnel to have access to software, hardware, computer networks, databases, documents and storage media of the Purchaser while on or off premises of the Purchaser. It is understood that it would be impractical for the Purchaser to monitor all information made available to the Bidder’s personnel under such circumstances and to provide notice to the Bidder of the confidentiality of all such information.

Therefore, the Bidder shall disclose or allow access to the Confidential Information only to those personnel of the Bidder who need to know it for the proper performance of their duties in relation to this project, and then only to the extent reasonably necessary. The Bidder will take appropriate steps to ensure that all personnel to whom access to the Confidential Information is given are aware of the Bidder’s confidentiality obligation. Further, the Bidder shall procure that all personnel of the Bidder are bound by confidentiality obligation in relation to all proprietary and Confidential Information received by them which is no less onerous than the confidentiality obligation under this agreement.

5. The Bidder shall establish and maintain appropriate security measures to provide for the safe custody of the Confidential Information and to prevent unauthorized access to it.
6. The Bidder shall comply with **THE DIGITAL PERSONAL DATA PROTECTION ACT, 2023** or any other **Acts** as applicable.
7. The Bidder agrees that upon termination/expiry of this Agreement or at any time during its currency, at the request of the Purchaser, the Bidder shall promptly deliver to the Purchaser the Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the Bidder or its Affiliates or directors, officers, employees or advisors based on the Confidential Information and promptly certify such destruction.
8. Confidential Information shall at all times remain the sole and exclusive property of the Purchaser. Upon completion of the Bidding process and/or termination of the contract or at any time during its currency, at the request of the Purchaser, the Bidder shall promptly deliver to the Purchaser the Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the Bidder or its Affiliates or directors, officers, employees or advisors based on the Confidential Information within a period of sixty days from the date of receipt of notice, or destroyed, if incapable of return. The destruction shall be witnessed and so recorded, in writing, by an authorized representative of the Purchaser. Without prejudice to the above the Bidder shall promptly certify to the Purchaser, due and complete destruction and return. Nothing contained herein shall in any manner impair rights of the Purchaser in respect of the Confidential Information.



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- 9. In the event that the Bidder hereto becomes legally compelled to disclose any Confidential Information, the Bidder shall give sufficient notice and render best effort assistance to the Purchaser to enable the Purchaser to prevent or minimize to the extent possible, such disclosure. Bidder shall not disclose to a third party any Confidential Information or the contents of this RFP without the prior written consent of the Purchaser. The obligations of this Clause shall be satisfied by handling Confidential Information with the same degree of care, which the Bidder applies to its own similar Confidential Information but in no event less than reasonable care.

For and on behalf of:

(BIDDER)

Authorised Signatory

Office Seal:.....

Name:.....

Place:.....

Designation:.....

Date:.....

Note: The Bidder and all members of the consortium shall execute a Non-Disclosure Agreement (NDA) as per above format, individually, in favor of the Purchaser before signing of the contract.



41.11. Letter of Undertaking (Annexure – 11)

Letter of Undertaking

(To be submitted by the Bidder along with his Bid)

(To be executed on non-judicial paper requisite value)

Ref.....

Bank Guarantee No.....

Date.....

To,

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh - 492002

Dear Sirs,

1 I*/We* have read and examined the following bid documents relating to the..... (Full scope of work).

- Notice Inviting Request for Proposal (RFP)
- Complete Request for Proposal (RFP) Document
- I*/We* hereby submit our Bid and undertake to keep our Bid valid for a period of one hundred and eighty (180) days from the bid opening date. I*/ We* hereby further undertake that during the said period I */ We * shall not vary / alter or revoke my* / our * Bid.

This undertaking is in consideration of Director Land Records Chhattisgarh agreeing to open my Bid and consider and evaluate the same for the purposes of award of Contract.

Should this Bid be accepted, I*/ We* also agree to abide by and fulfil all the terms, conditions and provisions of the above-mentioned bid documents.

.....

Signature along with seal of Company

(Duly authorized to sign the RFP on Behalf of the System Integrator)

Name

Designation

Name of Co



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(in block letters)

WITNESS

Signature

Date & Postal Address:.....

Date.....

Name & Address.....

Telegraphic Address

Telephone No.

Telex No.

***Strike out whichever is not applicable.**



41.12. Undertaking by the bidder for No Conflict of Interest (Annexure – 12)

Undertaking by the bidder for No Conflict of Interest

[Covering Letter shall be on the official letterhead of the Bidder]

[Reference No.]

From:

[Address of the Bidder]

[Telephone No., Fax No., Email]

[Date]

To:

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Dear Sir,

We declare that we do not have any relationship/interest with the bidders participating in the bids against Director Land Records Chhattisgarh, tender No....., directly or through common third party, which may invoke conflict of interest clause no..... in the tender.

Date:

Place:

Authorized signature:.....

Name and Designation of Signatory:.....

Name of Firm:.....

Address:.....



41.13. Undertaking Regarding Blacklisting/ Non – Debarment (Annexure – 13)

Undertaking Regarding Blacklisting / Non – Debarment

[Reference No.]

From:

[Address of the Bidder]

[Telephone No., Fax No., Email]

[Date]

To:

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Sub: Self-certificate regarding the Blacklisting / Non – Debarment

Dear Sir,

We hereby confirm and declare that we, M/s....., is not blacklisted/ debarred by any Government Department/ Public Sector Undertaking/ or any other agency for which we have Executed/Undertaken the works/ Services at the date of Bid submission.

For

(Name of Bidder):.....

Authorized Signatory:.....

Address of Bidder:.....

Seal:.....

Date:.....



41.14. Format for Pre-Bid Queries (Annexure – 14)

Format for Queries

To,

Director,
Director Land Records Chhattisgarh,
Block – 2, First Floor, Indravati Bhawan,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Sub: Submission of Queries

Ref: “Request for Proposal for selection of System Integrator for “**Unified Platform for Agriculture and Holistic Assessment with Records**” (RFP No: _____ Dated: __/__/__)

Dear Sir,

We have gone through the bid document and have following queries request for considering on following format: -

S. No.	Bidder	RFP Page No.	Clause No.	Clause/ Requirement Title	Current Clause / Description	Query / Suggestion for Change	Reason for Change / Remarks
1.							
2.							
3.							
n.							

Request your kind response of the same. The above work/excel file share on the given mail ID.

Yours Faithfully:.....

(Authorized Signatory) :.....

Designation:.....

(Place) :.....

(Date and Time) :.....

(Seal and Sign) :.....

(Business Address) :.....



41.15. Format for Undertaking on Total Responsibility (Annexure – 15):

Format for Undertaking on Total Responsibility

[Covering Letter shall be on the official letterhead of the Bidder]

[Reference No.]

From:

[Address of the Bidder]

[Telephone No., Fax No., Email]

[Date]

To,

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Sub: Undertaking for Total Responsibility for <<RFP No.....Dated DD/MM/YYYY>>

Dear Sir,

This is to certify that we..... Undertake total responsibility <<RFP No..... Dated DD/MM/YYYY>> for the successful and defect free services, operation & maintenance of the proposed System, as per the requirements provided in the tender document along with service levels mentioned for the System.

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name:.....

Designation:.....

Date:.....

Time:.....

Seal:.....

Business Address:.....



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41.16. Undertaking on Compliance and Sizing of System (Annexure – 16):

Undertaking on Compliance and Sizing of System

[Covering Letter shall be on the official letterhead of the Bidder]

[Reference No.]

From:

[Address of the Bidder]

[Telephone No., Fax No., Email]

[Date]

To,

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Sub: Undertaking on Compliance and Sizing of System

Sir,

- a. I/We as bidder do hereby undertake that we have proposed and sized the system along with system software (including licenses) based on information provided by Department in its tender document and in accordance with the Service Level requirements and assure Department that the sizing is for all the functionality envisaged in the RFP document.
- b. Sizing of the Proposed System is vetted and endorsed by us and in case we are shortlisted we will submit the detailed sizing calculations for all the users of the proposed System at Department.
- c. Any augmentation of the proposed System or sizing of any of the proposed Systems in order to meet the minimum tender requirements and/or the requisite Service Level requirements given by Department will be carried out at no additional cost to Department.

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name:.....

Designation:.....

Date:.....

Time:.....

Seal:.....

Business Address:.....



41.17. Undertaking on Service Level Compliance (Annexure – 17):

Undertaking on Service Level Compliance

[Covering Letter shall be on the official letterhead of the Bidder]

[Reference No.]

From:

[Address of the Bidder]

[Telephone No., Fax No., Email]

[Date]

To:

Director,
Director Land Records Chhattisgarh,
Block – 2, First Floor, Indravati Bhawan,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Dear Sir,

Sub: Undertaking on Service Level Compliance

1. I/We as System Integrator (SI) do hereby undertake that we shall monitor, maintain, and comply with the service levels stated in the RFP to provide quality service to Director Land Records Chhattisgarh.
2. However, if the proposed solution, resources, operation & maintenance services are found to be insufficient in meeting the RFP and/or the service level requirements given by Director Land Records Chhattisgarh, then we will augment the same without any additional cost to Director Land Records Chhattisgarh.

Yours faithfully,

(Signature of the Authorized signatory of the Bidding Organization)

For (Name of Bidder) :.....

Authorized Signatory:.....

Address of Bidder:.....

Date:.....



41.18. Performance Bank Guarantee (Annexure – 18):

[Date]

To

Director,
Director Land Records Chhattisgarh,
Block – 2, First Floor, Indravati Bhawan,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Sub: Submission of Performance Bank Guarantee (PBG)

Ref: “Request for Proposal for selection of System Integrator for “**Unified Platform for Agriculture and Holistic Assessment with Records**” Nava Raipur, Chhattisgarh (NIT No: _____ Dated: __/__/__)

Dear Sir,

WHEREAS

M/s. (name of successful bidder), a company registered under [Successful Bidder’s Legal Entity], having its registered office at (address of the successful bidder), (hereinafter referred to as “our constituent”, which expression, unless excluded or repugnant to the context or meaning thereof, includes its successors and assignees), agreed to enter into a contract dated (Herein after, referred to as “Contract”) with you (Department of Nava Raipur, Chhattisgarh) for Selection of System Integrator for “**Unified Platform for Agriculture and Holistic Assessment with Records** (NIT No: _____ Dated: __/__/__)

We are aware of the fact that as per the terms of the contract, M/s. (name of successful bidder) is required to furnish an unconditional and irrevocable bank guarantee of amount of Rs Crore in favour of Director Land Records Chhattisgarh,

and guarantee the due performance by our constituent as per the contract and do hereby agree and undertake to pay the amount due and payable under this bank guarantee, as security against breach/default of the said contract by our constituent.

In consideration of the fact that our constituent is our valued customer and the fact that he has entered into the said contract with you, we, (name and address of the bank), have agreed to issue this Performance Bank Guarantee. Therefore, we (name and address of the bank) hereby unconditionally and irrevocably guarantee you as under:

In the event of our constituent committing any breach/default of the said contract, and which has not been rectified by him, we hereby agree to pay you forthwith on demand such sum/s not exceeding the sum of amount Rs Crore without any demur.

Notwithstanding anything to the contrary, as contained in the said contract, we agree that your decision as to whether our constituent has made any such default(s) / breach(es), as aforesaid and the amount or



amounts to which you are entitled by reasons thereof, subject to the terms and conditions of the said contract, will be binding on us and we shall not be entitled to ask you to establish your claim or claims under this Performance Bank Guarantee, but will pay the same forthwith on your demand without any protest or demur.

We further agree that the termination of the said agreement, for reasons solely attributable to our constituent, virtually empowers you to demand for the payment of the above said amount under this guarantee and we would honor the same without demur.

We hereby expressly waive all our rights to pursue legal remedies against Department and other Concerned Government Departments of Director Land Records Chhattisgarh.

We the guarantor, as primary obligor and not merely surety or guarantor of collection, do hereby irrevocably and unconditionally give our guarantee and undertake to pay any amount you may claim (by one or more claims) up to but not exceeding the amount mentioned aforesaid during the period from and including the date of issue of this guarantee through the period.

We specifically confirm that no proof of any amount due to you under the contract is required to be provided to us in connection with any demand by you for payment under this guarantee other than your written demand.

Any notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax, registered post or other electronic media to our address, as aforesaid and if sent by post, it shall be deemed to have been provided to us after the expiry of 48 hours from the time it is posted.

If it is necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this guarantee on the request of our constituent upon intimation to you.

This Performance Bank Guarantee shall not be affected by any change in the constitution of our constituent, nor shall it be affected by any change in our constitution or by any amalgamation or absorption thereof or therewith or reconstruction or winding up but will ensure to your benefit and be available to and be enforceable by you during the period from and including the date of issue of this guarantee through the period.

Notwithstanding anything contained hereinabove, our liability under this Performance Guarantee is restricted to amount Rs Crore and shall continue to exist, subject to the terms and conditions contained herein, unless a written claim is lodged on us on or before the aforesaid date of expiry of this guarantee.

We hereby confirm that we have the power/s to issue this Guarantee in your favor under the Memorandum and Articles of Association/ Constitution of our bank and the undersigned is/are the recipient of authority by express delegation of power/s and has/have full power/s to execute this guarantee under the Power of Attorney issued by the bank in your favor.

We further agree that the exercise of any of your rights against our constituent to enforce or forbear to enforce or any other indulgence or facility, extended to our constituent to carry out the contractual obligations as per the said Contract, would not release our liability under this guarantee and that your



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right against us shall remain in full force and effect, notwithstanding any arrangement that may be entered into between you and our constituent, during the entire currency of this guarantee.

Notwithstanding anything contained herein, our liability under this Performance Bank Guarantee shall not exceed amount RsCrore

The PBG shall be remain valid during the entire contract period of 260 weeks from date of contract agreement and any extensions thereof plus additional 6 Months; and We are liable to pay the guaranteed amount or part thereof under this Performance Bank Guarantee only if we receive a written claim or demand on or before (Date).

Any payment made hereunder shall be free and clear of and without deduction for or on account of taxes, levies, imports, charges, duties, fees, deductions or withholding of any nature imposts.

This Performance Bank Guarantee must be returned to the bank upon its expiry. If the bank does not receive the Performance Bank Guarantee within the above-mentioned period, subject to the terms and conditions contained herein, it shall be deemed to be automatically cancelled.

This guarantee shall be governed by and construed in accordance with the Indian Laws and we hereby submit to the exclusive jurisdiction of Courts of Justice in Raipur (Chhattisgarh) for the purpose of any suit or action or other proceedings arising out of this guarantee or the subject matter hereof brought by you may not be enforced in or by such count.

Dated this Day Year

Yours faithfully,

For and on behalf of theBank,

(Signature)

Designation

(Address of the Bank)

Note:

This guarantee will attract stamp duty as a security bond. A duly certified copy of the requisite authority conferred on the official/s to execute the guarantee on behalf of the bank should be annexed to this guarantee for verification and retention thereof as documentary evidence.



41.19. Form of Power of Attorney (Annexure – 19):

Form of Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT WE, the Partners whose details are given hereunder have formed a under the laws of..... And having our Registered Office(s)/Head Office(s) at..... (Hereinafter called the which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, and assigns) acting through M/s

..... being the Partner in-charge do hereby constitute, nominate, and appoint M/s..... a Company incorporated under the laws of and having its Registered/Head Office at as our duly constituted lawful Attorney (hereinafter called "Attorney" or "Authorized Representative" or "Partner In- charge") to exercise all or any of the powers for and The bids for which have been invited by (Insert name of the Purchaser along with address (Hereinafter called the 'Purchaser') to undertake the following acts:

- 1 To negotiate with the Purchaser the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the Purchaser for and.
- 2 To do any other act or submit any document related to the above.
- 3 To receive, accept and execute the Contract.

It is expressly understood that this Power of Attorney shall remain valid binding and irrevocable till completion of the Defect Liability Period in terms of the Contract.

IN WITNESS THEREOF the Partners as aforesaid have executed these presents on this..... Day of Under the Common Seal(s) of their Companies. for and on behalf of the Partners.

.....
.....

The Common Seal of the above Partners

The Common Seal has been affixed there unto in the presence of:

WITNESS

- | | |
|-------------------|--------------------|
| 1. Signature..... | 2. Signature |
| Name | Name |
| Designation | Designation |
| Occupation | Occupation |

Note:

- i. The Agreement shall be signed on all the pages by the authorized representatives of each of the partners and should invariably be witnessed
- ii. This Deed of Joint Undertaking duly attested by Notary Public of the place(s) of the respective



41.21. Financial Bid Covering Letter (Annexure – 21)

FINANCIAL BID COVERING LETTER

Bid No.

Date:

To,

Director,
Director Land Records Chhattisgarh,
Block – 2, First Floor, Indravati Bhawan,
Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Sub Request for Proposal for selection of System Integrator for “Unified Platform for Agriculture and Holistic Assessment with Records” Development and implementation of project Department of Chhattisgarh.

Dear Sir/Madam,

We, the undersigned, offer to provide the complete services in accordance with your Request for Proposal dated 22-04-2026 and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal (Annexure "22") is for the sum of our quoted value, which is as follows:

Total Bid Price (as mentioned in Tables of Annexure-22, Grand Total A+ Grand Total B + Grand Total C)
(In Figures) Rs.
(In Words) Rs.

This amount is inclusive of all the taxes excluding GST.

1. PRICE AND VALIDITY

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

We hereby confirm that our prices include all taxes. However, all the taxes are quoted separately under relevant sections.

We understand that the actual payment would be made as per the existing indirect tax rates during the time of payment.

2. BID PRICING

We further confirm that the prices stated in our bid are in accordance with your Instruction to Bidders included in Bid documents.

We declare that our Bid Price is for the entire scope of the work as specified in the bid document. These prices are indicated with our Bid as part of the proposal.

3. QUALIFYING DATA



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

4. PERFORMANCE SECURITY

We hereby declare that in case the contract is awarded to us, we shall submit the Performance Bank Guarantee as specified in the Annexure R of this RFP document.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., [Date].

We understand you are not bound to accept any Proposal you receive.

We hereby declare that our Bid is made in good faith, without collusion or fraud and the information contained in the Bid is true and correct to the best of our knowledge and belief.

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

Thanking you,

(Signature)

(In the capacity of).....

Duly authorized to sign the Bid Response for and on behalf of:

(Name and Address of Company)

Seal/Stamp of bidder

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, certify that I am of the, and that who signed the above Bid is authorized to bind the corporation by authority of its governing body.

Date:

Place:

Name and Designation with Seal



41.22. Financial Proposal Submission Forms (Annexure – 22)

Bidder shall have to submit the Price bid document as per the format given in RFP and uploaded as per instructions therein. The price of technically qualified bidder shall be opened online at the notified date.

41.22.1. Bill of Quantity

1) Reports Submission													
Sr. No.	Operations	Unit	Approx. Estimated Area	Cost of Year 1		Cost of Year 2		Cost of Year 3		Cost of Year 4		Cost of Year 5	
				Unit Rates	Amount (In INR)	Unit Rates	Amount (In INR)	Unit Rates	Amount (In INR)	Unit Rates	Amount (In INR)	Unit Rates	Amount (In INR)
Kharif Season													
1	Crop acreage estimation – Preliminary report	Per ha	40 L. Hac.										
2	Crop acreage estimation – Final	Per ha	40 L. Hac.										
3	Crop yield modelling and production – Preliminary report	Per ha	40 L. Hac.										
4	Crop yield modelling and production – Final	Per ha	40 L. Hac.										
5	Advisories for the Kharif season (15 Advisories)	Per advisory	15										
Rabi Season													
6	Crop acreage estimation – Preliminary report	Per ha	20 L. Hac.										



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7	Crop acreage estimation – Final	Per ha	20 L. Hac.										
8	Crop yield modelling and production – Preliminary report	Per ha	20 L. Hac.										
9	Crop yield modelling and production – Final	Per ha	20 L. Hac.										
10	Advisories for the Rabi season (15 Advisories)	Per advisory	15										
Summer Season													
11	Crop acreage estimation – Preliminary report	Per ha	5 L. Hac.										
12	Crop acreage estimation - Final	Per ha	5 L. Hac.										
13	Crop yield modelling and production – Preliminary report	Per ha	5 L. Hac.										
14	Crop yield modelling and production - Final	Per ha	5 L. Hac.										
15	Advisories for the Rabi season (15 Advisories)	Per advisory	15										
16	Reports to be submitted on the event occurrence	Per ha	5 L. Hac.										
Per Year Cost													
Grand Total A													



41.22.2. Web & Mobile Applications Customization and Configuration

Sr. No.	Operations	Unit	Unit Rates	Total Cost
Web & mobile applications' customization and configuration – UPAHAR Platform – CAPEX				
1	Software Licenses (Digital Web Application and Mobile Application)	Lump Sum		
2	Development & customization & Go Live of all the modules within Digital Web Application including O&M of remaining months of the 1 st year post Go live	Lump Sum		
3	Development & customization & Go Live of Mobile Application (iOS and Android) including O&M of remaining months of the 1 st year post Go live	Lump Sum		
Operations and Maintenance of Web & Mobile applications – UPAHAR Platform – O&M				
4	AMC Cost for Software Licenses (Digital Web Application and Mobile Application)	Lump Sum		
5	O&M cost for the 2 nd Year	Lump Sum		
6	O&M cost for the 3 rd Year	Lump Sum		
7	O&M cost for the 4 th Year	Lump Sum		
8	O&M cost for the 5 th Year	Lump Sum		
Grand Total B				
3) Data Analytics Centre (DAC)				
Sr. No.	Operations	Unit	Unit Rates	Total Cost
1	IT Infrastructure	Lump Sum		
2	Non IT Infrastructure	Lump Sum		
3	Manpower cost	Lump Sum		
Grand Total C				

Note:

1. All rates shall be in round figures with no decimal (i.e., round figures in Rs).
2. CAPEX cost should not be more than 25% of the overall project cost.
3. In case of any discrepancy price quoted in the figures shall be considered as final quoted price.
4. Selection of the Bidder



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5. Bidder should quote FOR rate (delivered at the designated place in Chhattisgarh for lump-sum amount or BoQ wise as mentioned in the financial bid for all the supplied hardware/software/tools/goods/licenses with the defined/approved specifications of major components as mentioned in the RFP.
6. The Highest Scorer (H1) bidder through QCBS will be declared the most preferred bidder. The H1 bidder will be considered to undertake & execute the complete scope of work provided as per the scope, terms & conditions meeting the timeline with quality deliverables, as mentioned in the RFP & its annexures/corrigendums, etc., if any.
7. In case of equal scores of two or more than two candidates, the bidder having higher average annual turnover of the last three financial years as mentioned in the RFP will be declared most preferred bidder. In case all the above-mentioned parameters are same, the bid will be cancelled, and fresh tender would be called upon as per discretion of DLR.
8. If the H1 bidder is not ready to execute the contract for any reason, then DLR reserves the right to invite H2 bidder to revise its financial bid, (in case of higher financial bid quote only) to match the financial bid rate of H1 for the award of the contract. If H2 agrees then he will be declared as most preferred bidder. In case, no bidder is agreeing to match the financial bid rate of H1 (in case of higher bid quote only) then the process of tender would be cancelled, and fresh tender would be called upon as per discretion of Competent Authority.
9. In case of any dispute, discretion of Director, DLR is binding and final.
10. In the event the successful bidder (H1) withdraws or is not ready for engagement for any reason after opening financial bids, their EMD will be forfeited and not allowed to participate in any future tenders of the Department whether as a stand-alone entity or as a consortium / JV partner. DLR reserves the right to annul the tender process at this stage or invite the H2 bidder to match H1 financial bid price (in case of higher financial bid quote only) and engagement with same conditions as detailed above.
11. In the event no bids will come then the process of tender would be cancelled, and fresh tender may be again initiated by CG-DLR Department, as per its own discretion and time.
12. Allotment of work and the area of operation to the finally successful bidder/s/service provider/s would be the sole discretion of the DLR. Bidders should comply with all statutory and labor laws, rules, regulations, standards, guidelines and policies of Central/State/Local Government bodies etc. at their own cost.
13. The above quoted prices should include all charges, fee, expenses etc. to be incurred by the bidder. Director Land Records Chhattisgarh would not make any payment (including reimbursement of expenses/ incidentals/etc.) other than the above quoted prices. The bidder should compulsorily quote for all the items. In case, if the bidder has not quoted for any item, then the proposal of that bidder shall be disqualified.
14. The Prices quoted above should include all applicable taxes, duties, levies, fees, excluding GST. No extra taxes & duties will be paid apart from the amount quoted. All new taxes levied/increase in tax rates after the tender submission date will be borne by the bidder. Any benefit due to reduction in the taxes will be passed on to client.
15. All the licenses/certifications/tools/software/s/applications taken/bought/subscribed by SI for this project shall be in the name of department or department shall be the beneficiary of all the licenses/certifications/tools/software/s/applications taken/bought/subscribed by SI for this project. Director Land Records Chhattisgarh reserves the right to buy additional licenses as per the Per User charges quoted above as and when required during the project.



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16. Total of the cost would be considered for financial bid evaluation.
17. Selected Bidder is required to submit the cost of detailed division of cost of Manpower post Letter of Award.
18. Bidder shall offer required number of processors/ server and related software licenses appropriate for the solution. The bidder shall furnish certificate from the OEM of the product, indicating the offered hardware, numbers and type of software licenses offered, detailed calculation of quantity of licenses and confirmation from the OEM on adequacy of the software licenses.

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, certify that I am of the, and that who signed the above Bid is authorized to bind the corporation by authority of its governing body.

Date:

Place:

Name and Designation with Seal



41.23. Bidder's Authorization Certificate (Annexure – 23)

BIDDER'S AUTHORIZATION CERTIFICATE

Bid No.

To,

Director,

Director Land Records Chhattisgarh,

Block – 2, First Floor, Indravati Bhawan,

Nava Raipur Atal Nagar, Raipur, Chhattisgarh – 492002

Subject: Authorization Certificate

<Bidder's Name> ,<Designation> is hereby authorized to sign relevant documents on behalf of the company/firm in dealing with Bid of reference <Bidder Name, Dept & Date> for the Bidding Documents issued for Project "Implementation of Departments automation System in Departments". He/She is also authorized to attend meetings & submit technical & commercial information as may be required by you in the course of processing the above said Bid.

Thanking you,

Authorized Signatory

<Bidder's Name> Seal

Date

Contact No

Email



41.24. Indicative Document Checklist (Annexure- 24)

S. No.	Details	Document Attached (Yes/No)	Page No.
1.	Bid Submission Letter (Annexure – 1)		
2.	Power of Attorney		
3.	Consortium Agreement/MoU		
4.	MoA		
5.	Audited B/S and P&L		
6.	Bid Submission Letter (Annexure – 2)		
7.	Certificate of Corporate Principal (Annexure – 3)		
8.	Project Experience Submission (Annexure – 4)		
9.	Technical Bid Submission (Annexure – 5)		
10.	Manpower Details (Annexure – 6)		
11.	Required Certifications		
12.	Curriculum Vitae Format (Annexure – 7)		
13.	Software Support (Annexure – 8)		
14.	No Deviation Certificate (Annexure – 9)		
15.	Non-Disclosure Agreement – NDA (Annexure – 10)		
16.	Letter of Undertaking (Annexure – 11)		
17.	Undertaking by the bidder for No Conflict of Interest (Annexure – 12)		
18.	Undertaking Regarding Blacklisting/ Non – Debarment (Annexure – 13)		
19.	Format for Pre-Bid Queries (Annexure – 14)		
20.	Format for Undertaking on Total Responsibility (Annexure – 15)		
21.	Undertaking on Compliance and Sizing of System (Annexure – 16)		
22.	Undertaking on Service Level Compliance (Annexure – 17)		
23.	Performance Bank Guarantee (Annexure – 18)		
24.	Form of Power of Attorney (Annexure – 19)		
25.	Proposed Work Plan (Annexure – 20)		
26.	Financial Bid Covering Letter (Annexure – 21)		
27.	Financial Proposal Submission Forms (Annexure – 22)		
28.	Bill of Quantity		
29.	Web & Mobile Applications Customization and Configuration		
30.	Bidder’s Authorization Certificate (Annexure – 23)		
31.	Hardware/ equipment specifications for Help Desk (Annexure- 24)		
32.	Any other required document mentioned in the RFP or deemed necessary for this RFP		

41.25. Hardware/ equipment specifications for Help Desk (Annexure- 25):

The minimum indicative specifications mentioned in the RFP, but not limited to which the bidder must fulfill for the implementation of the whole system.



41.25.1. All in One Desktop Computer

S.No	Description	Specification/Minimum Requirement
1	Processor	Intel Core i7, 10 th generation, processor or higher configuration
2	Graphics	Intel Integrated
3	Operating System	Windows 10 Professional with licence key, factory pre-loaded
4	Memory	8GB RAM, DDR4, 2666 MHz RAM Speed
5	Storage	HDD 1000 GB @ 5400 rpm and SSD 256 GB
6	Display	21 inches or above, 1920x1080 pixels
7	Warranty	On Site OEM Warranty for 5 years from date of commissioning

41.25.2. All-in-one multifunctional Printer

S.No	Description	Specification/Minimum Requirement
1	Printing Technology	Laser
2	Paper Size	A4
3	Print Speed per minute as per ISO/IEC 24734 in (A4) Size - Mono	30
4	Duplexing Feature	Yes
5	Network Connectivity	Yes
6	Print/Photocopy/ scan feature	Yes
7	BIS Registration under CRS of Meity	Yes
8	Warranty	On Site OEM Warranty for 5 years from date of commissioning

41.25.3. UPS

S.No	Description	Specification/Minimum Requirement
1	Capacity	5 KVA
2	Power Back Up	Minimum 5 hours
3	Input Voltage and Voltage Range and Frequency	220V AC/ 230V AC and Voltage range and frequency as per the requirement
4	Output Voltage (Battery Mode)-	220V AC/ 230V AC +/- 10% and Voltage range and frequency as per the requirement
5	External Battery Voltage and Max Charge Current-	12V and 5A/10A/15A/20A (Adjustable)
6	Indicators and Alarms	Standards



S.No	Description	Specification/Minimum Requirement
7	Protection	Overload, Discharge and Overcharge Protection
8	Onsite Warranty on UPS and batteries	05 Years

41.25.4. Configuration for the Video Wall Screen

S.No	Description	Specification/Minimum Requirement
1	Screen Size	56''± 1 or higher (4 * 4 matrix)
2	Lifetime of Light Source	Minimum 1,00,000 hrs. in eco mode
3	Resolution	1920 x 1080 Full high definition (1080p) 16:9 Widescreen or 16:10
4	Power Supply	Dual /redundant power supply
5	Screen to Screen Gap	≤ 1 mm at all temperature/humidity conditions
6	Input	HDMI and other inputs as per Video Wall solution offered
7	Control	- On Screen Display (OSD) - IR remote control (Desirable)
8	Operations	24 x 7

41.25.5. Video Wall Controller

S.No	Description	Specification/Minimum Requirement
	Features	Supports output up to 1920 * 1200 resolution with 60fps Supports H.264/H.265 decoding immediately Supports up to 64 windows per display Supports Multicasting Windows
	Output	HDMI 1.3 , Channel -1 , Color depth 8/10 bit
	Image processing	High tap filter for image scaling Accurate synchronization for display wall Support H.264/H.265/MPEG4 decoding Up to 64 free window per display Window title with vector texts Bezel-compensation and overlap
	MTBF	more than 100,000 hours

41.25.6. Video Wall Management Software

S.No	Description
1	Ability to pre-configure and store various display layouts and access them at any time with a simple mouse click.
2	Ability to display multiple sources anywhere on video wall in any size.
3	Ability to configure display layouts in Realtime without reboot.
4	Ability to create the display layout in background without interrupting the live display.
5	Ability to create and store different profiles defining one or more source and size for different scenarios.
6	Application must be GUI based with easy to use and configure interface.



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S.No	Description
7	Ability to control the Wall Monitoring System through remote PC connected by LAN
8	Ability to share the layouts over LAN/WAN Network with display in Meeting room or on Remote Workstations connected on LAN/WAN Network
9	Ability to display the screen content of the desktop / workstation connected with the Display Controller on the Display wall.
10	The wall management software should support open APIs/ Command list/ RS232 command to enable system integrators to integrate it with their Software or other 3 rd party devices to control the system.
11	Ability to centrally manage configuration parameters.
12	Ability to schedule backup and restore the configuration parameters.
13	Ability to Drag and Drop of sources.
14	Ability to create event log of user access with time stamp.
15	Role based user creation and management.

-----:End Document::-----