

1. INVITATION FOR PROPOSAL

1.1 Background

The State of Jammu & Kashmir (J&K) has geographical area of 2,22,236 Sq. Kms. which includes an area of Indian territory of 1,20,849 Sq. Kms. unlawfully occupied by Pakistan and China. It lies between 32° 10' 12" N to 36° 34' 48" N Latitude and 73° 15' 36" E to 80° 18' 00" E Longitude and it is the northernmost state, sharing borders with the States of Himachal Pradesh and Punjab.

More than 90% of the state's territory is mountainous. It has got three regions, the Kashmir Valley also known as 'the Lesser Himalayas' or 'the Jhelum Valley'; 'the Outer Himalayas' or 'the Southern Mountain Region' (Jammu Province) and 'the Inner Himalayas' or 'the Indus Valley' (Ladakh and the Frontier areas)'.

The State has around 20,230 sq.kms of the area under forests which accounts for 19.9 % of the geo-graphical area (1, 01,387 sq.kms.). 825 thousand hectares area is under cultivation which is around 8% of its geographical area. The population of the state as in March, 2011 was 1.25 crores (provisionally).

The State of Jammu & Kashmir has the unique practice of having two Capitals. During the winter season the Capital is at Jammu and during the summer season it is at Srinagar. For administrative purposes, the state is divided into two Divisions, and further into 22 districts, 66 Sub-Divisions headed by SDMs, 266 Tehsils, 652 Niabats, 427 G Q Circles, 1714 Patwar Circles and has 7050 villages.

1.2 Decision to Outsource

Jammu & Kashmir Land Records Management Agency (JaKLaRMA), Government of Jammu & Kashmir, has taken up the Project for MODERNISATION OF LAND RECORDS (INCLUDING DATA ENTRY, DIGITISATION OF CADASTRAL MAPS, SURVEY / RE-SURVEY, INTEGRATION WITH RECORDS OF RIGHTS, DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN THE STATE OF JAMMU & KASHMIR. The Agency has decided to outsource the work of this project to qualified vendors with a view to complete this project on a war footing. To begin with, all the activities will be taken up and completed in two major districts, viz. Jammu and Srinagar under the terms and conditions as contained in the ToR. If the work as carried out by the selected vendor is found to be satisfactory in respect of these two districts and financially feasible, work in 10 more districts in the second phase, and the remaining 10 districts in the third phase, will be considered to be awarded to the same vendor on the same terms and conditions, with variance in rates as indicated and accepted. However, the work of scanning old documents, establishment of Ground Control Points including monumentation across the state and development of Web-based Enterprise GIS will be taken up and completed in one go in the beginning itself while completing the other activities in the aforesaid two districts.

- 1.2.1 JaKLaRMA, Government of Jammu & Kashmir, headed by the Financial Commissioner (Revenue) as its ex-officio Chief Executive Officer (CEO) has been tasked to get the work done through the vendor(s), which will be selected after following a two-part competitive bidding process requiring separate technical and financial bids. If found technically feasible and financially viable, the Project may be awarded to the Vendor(s) selected after this competitive bidding process. The Project would be implemented in accordance with the terms and conditions stated in the agreement to be entered into between the JaKLaRMA and the Vendor(s).

2. **REQUEST FOR PROPOSAL**

JaKLaRMA invites Proposals (the “**Proposals**”) for selection of Vendor (the “**Vendor**”) who shall work for MODERNISATION OF LAND RECORDS (INCLUDING DATA ENTRY, DIGITISATION OF CADASTRAL MAPS, SURVEY / RE-SURVEY, INTEGRATION WITH RECORD OF RIGHTS, DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN THE STATE OF JAMMU & KASHMIR. The Agency intends to select the vendor through a competitive bidding process in accordance with the procedure set out herein.

The project is envisaged to be completed in three phases, viz.

Phase I: Two districts, one each from Jammu and Kashmir Divisions, namely, Jammu district and Srinagar district will be taken up for end-to-end implementation of the project.

However, three tasks viz. (a) Establishing Ground Control Points (GCPs) network across the state, as per requirement, (b) Scanning of old records and archival of scanned data and (c) Development of Web-based Enterprise GIS are to be taken up in one go for the entire state in Phase I only.

The scope of the present RFP is primarily limited to Phase I.

Phase II: On satisfactory completion of the tasks enumerated above, 10 more districts (5 districts from each division) will be awarded to the same Vendor on same terms and conditions, on mutual agreement. The Bidders should reflect variance in rates, if any, in the Financial Bid (refer Annexure III) for this additional work.

Phase III: Remaining 10 districts (bringing the total to 22 districts covering the entire state) may also be awarded to the same vendor but on mutual agreement. The Bidders are expected to reflect any variance in rates in the Financial Bid (refer Annexure III).

2.1 **Due Diligence by Bidders**

Bidders are encouraged to inform themselves fully about the assignment and the local conditions before submitting the Proposal by paying a visit to JaKLaRMA and the Project site, sending written queries to the Agency, and attending a Pre-Bid Conference at the designated venue on the date and time specified in Clause 2.6.

2.2 **RFP Document – its availability**

RFP document can be downloaded from the official Website of the Financial Commissioner (Revenue) of Govt. of Jammu & Kashmir, namely, www.jkfcrr.nic.in . The Bidders will have to

deposit an amount of INR 5000/- (Five thousand only) in the form of a Demand Draft or Banker's Cheque drawn on any Scheduled Bank in India in favour of the "**Chief Executive Officer, JaKLaRMA, Govt. of J&K, Jammu**" payable at Jammu, while submitting the Bid.

2.3 **Validity of the Proposal / Bid**

The Proposal shall be valid up to 31.03.2015.

2.4 **Brief description of the Selection Process**

The Bidders will send their Proposals in three sealed envelopes as mentioned in para 13.2. The Agency has adopted a two stage selection process (collectively the "**Selection Process**") in evaluating the Proposals comprising of Technical and Financial Bids to be submitted in three separate sealed envelopes. In the first stage, a technical evaluation will be carried out as specified in Clause 7.1. Based on this technical evaluation, a list of short-listed Bidders shall be prepared as specified in Clause 7.2. In the second stage, a financial evaluation will be carried out as specified in Clause 7.3. Proposals will finally be ranked according to their combined technical and financial scores as specified in Clause 7.4. Vendor will be selected based upon the combined technical and financial score.

2.5 **Currency conversion rate and payments to the selected Vendor**

All payments to the vendor shall be made in INR as per Payment Terms contained in Clause 22.2. However, in case of a foreign currency involvement, the conversion rate applicable on the date of signing of SLA shall prevail.

2.5.1 **Mobilisation Advance:**

An interest free Mobilisation Advance not exceeding 10% of the Gross Bid Value can be given to the selected Vendor for smooth functioning of the project against Bank Guarantee from a nationalised bank / scheduled bank in India, of equivalent amount. This Bank Guarantee will be apart from the Performance Bank Guarantee mentioned under Clause 22.1 and this amount will be adjusted against the first Bills raised by the Vendor.

2.6 **Schedule of Selection Process**

- | | | |
|----|--|-----------------------------|
| 1. | Date of issue | : 04-12-2014 |
| 2. | Last date for receiving queries/
Clarifications | : 15-12-2014 |
| 3. | Agency response to queries | : 18-12-2014 |
| 4. | Pre-Bid Conference | : 23-12-2014
(11:30 IST) |
| 5. | Proposal Due Date for
Submission | : 10-02-2015
(16:00 IST) |
| 6. | Opening of Pre-qualification and
Technical Bids | : 11-02-2015
(11:00 IST) |
| 7. | Technical Presentations by | |

- qualified bidders : 13-02-2015
(11:00 IST)
8. Opening of Financial Bid : 16-02-2015
(11.00 IST)
- (Above dates may be changed, if circumstances warrant so).

2.7 **Pre-Bid visit to the Site (Lab) and inspection of records / data**

Prospective Vendor may visit the site [Director Land Records, Jammu/ Srinagar, Jammu & Kashmir] and review the available data at any time prior to PDD. For this purpose, they will give at least two days' notice to the nodal officer specified below:

Project Coordinator

Sh. Tarseem Chand (M: +91-9419233726), Consultant, JaKLaRMA, Jammu

However, for the convenience of the Vendor, a Pre-Bid visit to the Site (Lab) has been arranged on 10-12-2014 11:00 hrs onwards at Jammu. The Bidders who desire to avail this facility may visit Jammu on the date and time mentioned above.

2.8 **Pre-Bid Conference**

The date, time and venue of Pre-Bid Conference shall be :

Date : 23.12.2014

Time : 11:30 hrs

Venue : Conference Hall, FC(R)'s office, Jammu.

2.9 **Communications**

2.9.1 All communications including the submission of Proposal should be addressed to:

Chief Executive Officer, Jammu and Kashmir Land Records Management Agency (JaKLaRMA), FC(Revenue)'s Office, Revenue Complex, Rail Head Campus, Jammu, J&K, INDIA.

Phone : 0191-2470212

Fax: 0191-2471221

2.9.2 The official website of JaKLaRMA is:

www.jkfcrr.nic.in

E-mail : jaklarma.rev@gmail.com

2.9.3 All communications related to the project should clearly indicate the RFP notice number and marked as “**MODERNISATION OF LAND RECORDS IN THE STATE OF JAMMU & KASHMIR**” on the top of the envelope.

3. INSTRUCTIONS TO PROSPECTIVE BIDDERS

3.1 Scope of Proposal

- 3.1.1 Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The shortlisted Vendor, as indicated in para 7.2 may participate in the Selection Process either individually (the “**Sole Firm**”) or as Lead Member of a Consortium of firms (the “**Lead Member**”) in response to this invitation. The term Bidder (the “**Bidder**”) means the Sole Firm or the Lead Member, as the case may be. The manner in which the Proposal / Bid is required to be submitted, evaluated and accepted is explained in this RFP. The Details of Consortium Members are to be provided as per Annexure IX (Form 15).
- 3.1.2 Bidders are advised that the selection of Vendor shall be on the basis of an evaluation by the Agency through the Selection Process specified in this RFP. Bidders shall be deemed to have understood and agreed that no explanation or justification for any aspect of the Selection Process will be given and that the Agency’s decisions are without any right of appeal whatsoever, with the decision of Agency being final and binding.
- 3.1.3 The Bidder shall submit its Proposal in the form and manner specified in the ToR. The Technical Bid shall be submitted in line with the respective form at Annexure-IX and the Financial Bid shall be submitted in the form at Annexure III. Upon selection, the Bidder shall be required to enter into an agreement with the Agency in the form specified at Annexure X. However, some clauses may be modified on mutually agree-able terms but decision of the Agency will be final.
- 3.1.4 **Key Personnel:** The Vendor Team shall consist of the following key personnel (the “**Key Personnel**”) who shall discharge their respective responsibilities as specified below:

S. No.	Key Personnel	Professional Experience	Responsibilities
1	Project Manager-cum-Team leader	10 years	An Executive Officer / Engineer having complete knowledge of cadastral databases will act as the team leader. He will co-ordinate and supervise the multi-disciplinary Team for execution of the project.
2	Remote sensing and GIS Expert	7 years	Having good knowledge of remote sensing and GIS, will look after the work related to spatial data management in GIS
3	Software Expert	5 years	Having knowledge of software development for Web-based Enterprise GIS and knowledge to link the RoR data with the spatial data in GIS.
4	Revenue Expert	5 years	Should have complete knowledge of the Land Records of the states where consolidation has been done. He will look after all revenue record activity.

5	Surveyor	5 years	Survey related issues and work.
6	Documentation officer	5 years	Look after all documentation activity.

Urdu being the Official Language of the State of Jammu & Kashmir, all land Records are in Urdu. Vendor should have, therefore, adequate number of resource personnel proficient in Urdu for Data Entry, Documentation etc.

3.2 Pre-qualification of Bidders

3.2.1 Request For Proposal is to shortlist the qualified Vendor and thereafter select the vendor for assigning the work as per the criteria.

3.2.2 As pre-qualification for further evaluation of its Proposal, the Bidder shall fulfil the following:

(A) **Technical Capacity:** The Bidder should have at least 5 (five) years of Experience preceding the PDD, of undertaken assignments as specified in Clause 6.1 and Annexure I. Relevant documents are to be submitted. The Committee may visit the vendor's site (s) for verification of the infrastructure submitted by the shortlisted Vendor.

(B) **Financial Capacity:** The Bidder shall have a minimum turnover of Rs.5 (Five) crores per year from geo-spatial activity during the last 3 (three) financial years preceding the Proposal Due Date. For the purpose of evaluation, Bidders having comparatively larger revenues from geo-spatial works shall be given added weightage.

(C) **Availability of Key Personnel:** The Bidder shall offer and make available all Key Personnel having the knowledge and experience as indicated in the RFP.

3.2.3 The Bidder shall enclose with its Proposal, certificate(s) from its Statutory Auditors stating its total revenues from geo-spatial activities during each of the past three financial years and the receipts in respect of each of the assignments specified in the Proposal. In the event that the Bidder does not have a statutory auditor, it shall provide the requisite certificate(s) from the firm of Chartered Accountants that ordinarily audits the annual accounts of the Bidder.

3.2.4 The Bidder should submit a Power of Attorney as per the format at Form - 6 / Form -6(a) of **Annexure IX**; provided, however, that such Power of Attorney would not be required if the Application is signed by a partner of the Bidder, in case the Bidder is a partnership firm or is in a limited liability partnership.

3.2.5 Any entity which has been barred by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, from participating in any project, and the bar subsists as on the Proposal Due Date (PDD), would not be eligible to submit a Proposal either by itself or through its Associate.

3.2.6 A Bidder or its Associate should have, during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder or its Associate, nor been expelled from any project or agreement nor have had any agreement terminated for breach by such Bidder or its Associate.

3.2.7 While submitting a Proposal, the Bidder should attach clearly marked and referenced

Continuation sheets in the event that the space provided in the specified form in the Annexure is insufficient. Alternatively, Bidders may format the specified forms making due provision for incorporation of the requested information.

3.3 **Conflict of Interest**

3.3.1 A Bidder shall not have a conflict of interest that may affect the Selection Process or the Consultancy (the “**Conflict of Interest**”). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the Agency shall forfeit and appropriate the EMD towards the mutually agreed genuine, pre-estimated compensation and damages payable to the Agency for, *inter alia*, the time, cost and effort of the Agency including consideration of such Bidder’s Proposal, without prejudice to any other right or remedy that may be available to the Agency hereunder or otherwise.

3.3.2 The Agency requires that the vendor provides professional, objective, and impartial advice, holds at all times the Agency’s interests paramount, avoids conflicts with other assignments or its own interests, and acts without any consideration for future work. The Vendor shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of the Agency .

3.3.3 Some guiding principles for identifying and addressing Conflicts of Interest have been illustrated in the Guidance Note at Clause 11. Without limiting the generality of the above, a Bidder shall be deemed to have a Conflict of Interest affecting the Selection Process, if:

(a) The Bidder, its consortium member (the “**Member**”) or Associate (or any constituent thereof) and any other Bidder, its consortium member or Associate (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of a Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than 5 per cent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder, its consortium member or Associate is less than 5% (five per cent) of the subscribed and paid up equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in Section 4A of the Companies Act, 1956. For the purposes of this Clause, indirect shareholding held through one or more intermediate persons shall be computed as follows:

(a1) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the “**Subject Person**”) shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and

(a2) subject always to sub- Clause (a1) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-Clause (a2), if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or

- (b) A constituent of such Bidder is also a constituent of another Bidder; or
- (c) Such Bidder or its Associate receives or has received any direct or indirect subsidy or grant from any other Bidder or its Associate; or
- (d) Such Bidder has the same legal representative for purposes of this application as any other Bidder; or
- (e) 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 others' information about, or to influence the Application of either or each of the other Bidder; or
- (f) There is a conflict among this and other consulting assignments of the Bidder (including its personnel and Sub-vendor) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders. The duties of the Vendor will depend on the circumstances of each case. While providing consultancy services to the Agency for this particular assignment, the Vendor shall not take up any assignment that by its nature will result in conflict with the present assignment; or
- (g) A firm which has been engaged by the Agency to provide services for a project, and its Associates, will be disqualified from providing consulting services for the same project save and except as provided in Clause 3.3.4; conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and its Members or Associates, will be disqualified from subsequently providing services related to the same project; or
- (h) The Bidder, its Member or Associate (or any constituent thereof), and the bidder or Concessionaire, if any, for the Project, its contractor(s) or sub-contractor(s) (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of an Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than 5% (five per cent) of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be,) in the bidder or Concessionaire, if any, or its contractor(s) or subcontractor(s) is less than 5% (five per cent) of the paid up and subscribed share capital of such Concessionaire or its contractor(s) or sub-contractor(s); provided further that this disqualification shall not apply to ownership by a bank, insurance company, pension fund or a Public Financial Institution referred to in section 4A of the Companies Act, 1956. For the purposes of this sub-Clause (h), indirect shareholding shall be computed in accordance with the provisions of sub- Clause (a) above.

For purposes of this RFP, Associate means, in relation to the Bidder, a person who controls, is controlled by, or is under the common control with such Bidder (the “**Associate**”). As used in this definition, the expression “control” means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person by operation of law or by contract.

- 3.3.4 Any Bidder eventually appointed to provide Vendor for this Project, and its Associates, shall be disqualified from subsequently providing services related to the operation of the same Project and any breach of this obligation shall be construed as Conflict of Interest; provided that the restriction herein shall not apply after a period of 5 (five) years from the completion of this assignment or to consulting assignments granted by banks/ lenders at any time; provided further that this restriction shall not apply to consultancy/ advisory services performed for the Agency in continuation of this Consultancy or to any subsequent consultancy/ advisory services performed for the Agency in accordance with the rules of the Agency. For the avoidance of

doubt, an entity affiliated with the Vendor shall include a partner in the Vendor's firm or a person who holds more than 5% (five per cent) of the subscribed and paid up share capital of the Vendor, as the case may be, and any Associate thereof.

3.4 Number of Proposals

No Bidder or its Associate shall submit more than one Application (Proposal) for the Services. A Bidder applying individually or as an Associate shall not be entitled to submit another application either individually or as a member of any consortium, as the case may be.

3.5 Cost of Proposal / Bid

The Bidders shall be responsible for all costs associated with the preparation of their Proposals and their participation in the Selection Process including subsequent negotiation, visits to the Agency, Project site etc. The Agency will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Selection Process.

3.6. Site visit and verification of information

Bidders are encouraged to submit their respective Proposals after visiting the Project site and ascertaining for themselves of the quantum and quality of the existing data and the type of work, applicable laws and regulations or any other matter considered relevant by them. Visits shall be organized for the benefit of prospective Bidders on dates, time and venue as specified in Clause 2.6 / 2.7.

3.7 Acknowledgement by Bidder

3.7.1 It shall be deemed that by submitting the Proposal, the Bidder has:

- (a) made a complete and careful examination of the RFP;
- (b) received all relevant information requested from the Agency ;
- (c) Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of the Agency or relating to any of the matters referred to in Clause 3.2 above;
- (d) Satisfied itself about all matters, things and information, including matters referred to in Clause 3.2 herein above, necessary and required for submitting an Informed Application and performance of all of its obligations thereunder;
- (e) Acknowledged that it does not have a Conflict of Interest; and
- (f) Agreed to be bound by the undertaking provided by it under and in terms hereof.

3.7.2 The Agency shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RFP or the Selection Process, including any error or mistake therein or in any information or data given by the Agency.

3.8 Right to reject any or all Proposals

3.8.1 Notwithstanding anything contained in this RFP, the Agency reserves the right to accept or reject any Proposal at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.

3.8.2 Without prejudice to the generality of Clause 3.8.1, the Agency reserves the right to reject any Proposal if:

- (a) at any time, a material misrepresentation is made or discovered, or
- (b) the Bidder does not provide, within the time specified by the Agency, the Supplemental information sought by the Agency for evaluation of the Proposal.

Misrepresentation / improper response by the Bidder may lead to the disqualification of the Bidder. If the Bidder is the Lead Member of a consortium, then the entire consortium shall be disqualified / rejected. If such disqualification / rejection occurs after the Proposals have been opened and the highest ranking Bidder gets disqualified / rejected, then the Agency reserves the right to consider the next best Bidder, or take any other measure as may be deemed fit in the sole discretion of the Agency, including annulment of the Selection Process.

3.9 Clarifications

3.9.1 Bidders requiring any clarification on the RFP may send their queries to the Agency in writing before the date mentioned in the Schedule of Selection Process at Clause 2.6. The envelopes shall clearly bear the following identification:

“Queries/Request for Additional Information concerning RFP”

The Agency shall endeavour to respond to the queries within the period specified. The responses will be sent by fax or e-mail. The Agency will post the reply to all such queries on the Official Website and copies thereof will also be circulated to all Bidders who have purchased the RFP document without identifying the source of queries.

3.9.2 The Agency reserves the right not to respond to any questions or provide any Clarifications, in its sole discretion, and nothing in this Clause shall be construed as obliging the Agency to respond to any question or to provide any clarification.

3.10 Amendments to RFP

3.10.1 At any time prior to the deadline for submission of Proposal, the Agency may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP document by the issuance of Addendum/ Amendment and displaying it on the Official Website and by conveying the same to the prospective Bidders (who have purchased the RFP document) by fax or e-mail.

3.10.2 All such amendments will be notified in writing through fax or e-mail to all Bidders who have purchased the RFP document. The amendments will also be displayed on the Official Website along with the revised RFP containing the amendments and will be binding on all Bidders.

3.10.3 In order to afford the Bidders a reasonable time for taking an amendment into account, or for any other reason, the Agency may, in its sole discretion, extend the Proposal Due Date.

4. **PRE-BID CONFERENCE**

- 4.1 Pre-Bid Conference of the Bidders shall be convened at the designated date, time and place. Only those Bidders, who have purchased the RFP document or downloaded the same from the Official Website, shall be allowed to participate in the Pre-Bid Conference. A maximum of two representatives of each Bidder shall be allowed to participate on production of an Authorisation Letter from the Bidder.
- 4.2 During the course of Pre-Bid Conference, the Bidders will be free to seek clarifications and make suggestions for consideration of the Agency. The Agency shall endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Selection Process.

5. **PREPARATION AND SUBMISSION OF PROPOSAL / BID**

5.1 **Language**

The Proposal with all accompanying documents (the “**Documents**”) and all communications in relation to or concerning the Selection Process shall be in English language and strictly on the forms provided in this RFP. No supporting document or printed literature shall be submitted with the Proposal unless specifically asked for and in case any of these Documents is in another language, it must be accompanied by an accurate translation of the relevant passages in English, in which case, for all purposes of interpretation of the Proposal, the translation in English shall prevail.

5.2 **Format and signing of Proposal**

- 5.2.1 The Bidder shall provide all the information sought under this RFP. The Agency would evaluate only those Proposals that are received in the specified forms and complete in all respects.
- 5.2.2 The Bidder shall prepare one original set of the Proposal (together with originals/ copies of Documents required to be submitted along therewith pursuant to this RFP) and clearly marked “ORIGINAL”. In addition, the Bidder shall submit 2 (two) copies of the Proposal, along with Documents, marked “COPY”. In the event of any discrepancy between the original and its copies, the original shall prevail.
- 5.2.3 The Proposal and its copy shall be typed or written in **indelible** ink and signed by the authorized signatory of the Bidder who shall initial each page, in blue ink. All the alterations, omissions, additions, or any other amendments made to the Proposal shall be initialled by the person(s) signing the Proposal. The Proposals must be properly signed by the authorized representative (the “**Authorized Representative**”) as detailed below:
- (a) By the proprietor, in case of a proprietary firm; or
 - (b) By a partner, in case of a partnership firm and/or a limited liability partnership; or
 - (c) By a duly authorized person holding the Power of Attorney, in case of a

- Limited Company or a corporation; or
- (d) By the authorized representative of the Lead Member, in case of consortium.

A copy of the Power of Attorney certified under the hands of a partner or director of the Bidder and notarized by a notary public in the form specified in Annexure IX (Form-6) shall accompany the Proposal.

- 5.2.4 Bidders should note the Proposal Due Date, as specified in Clause 2.6, for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Agency and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date as specified in Clause 2.6. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For avoidance of any doubt, the Agency reserves the right to seek clarifications under and in accordance with the provisions of Clauses 4.2.4 and 6.4.1. Bidder shall not submit any document after PDD except in response to any clarification sought by JaKLaRMA and in response to clarifications no change shall be made.

5.3 **Technical Proposal /Bid**

- 5.3.1 Bidders shall submit the technical proposal in the formats at Annexure IX (the “**Technical Proposal**”).

5.3.2 While submitting the Technical Proposal, the Bidder shall, in particular, ensure that:

- (a) The EMD is provided;
- (b) All forms are submitted in the prescribed formats and signed by the Prescribed signatories;
- (c) Power of Attorney, if applicable, is executed as per Applicable Laws;
- (d) CVs of all Professional Personnel have been included;
- (e) Key Personnel have been proposed only if they meet the Conditions of Eligibility laid down at Clause 3.1.4 of the RFP;
- (f) No alternative proposal for any Key Personnel is being made and only one CV for each position has been furnished;
- (g) The CVs have been recently signed and dated in blue ink by respective Personnel and countersigned by the Bidder. Photocopy or unsigned / countersigned CVs shall be rejected;
- (h) The CVs shall contain an undertaking from the respective Key Personnel about his/her availability for the duration specified in the RFP;
- (i) Professional Personnel proposed have good working knowledge of English Language and some of them have good working knowledge of Urdu also;
- (j) Key Personnel would be available for the period indicated in the TOR;
- (k) No Key Personnel should have attained the age of 75 (seventy five) years at the time of submitting the proposal; and
- (l) The proposal is responsive in terms of Clause 6.2.3.

5.3.3 Failure to comply with the requirements spelt out in Clause 5.3.2 shall make the Proposal liable to be rejected.

5.3.4 If an individual Key Personnel makes a false averment regarding his qualification, experience

or other particulars, or his commitment regarding availability for the Project is not fulfilled at any stage after signing of the Agreement, he shall be liable to be debarred for any future assignment of the Agency for a period of 5 (five) years. The award of this service to the Bidder may also be liable to cancellation in such an event.

- 5.3.5 The Technical Proposal shall not include any financial information relating to the Financial Proposal.
- 5.3.6 The proposed team shall be composed of experts and specialists (the “**Professional Personnel**”) in their respective areas of expertise and managerial/support staff (the “**Support Personnel**”) such that the Vendor should be able to complete the Project within the specified time schedule. The Key Personnel specified in Clause 3.1.4 shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at Form-11 of Annexure IX
- 5.3.7 A Bidder may, if it considers necessary, propose suitable Sub-Vendor /Consortium in specific areas of expertise. Credentials of such firms should be submitted in Form-15 of **Annexure IX**. A Sub-Vendor/Consortium, however, shall not be a substitute for any Key Personnel.
- 5.3.8 The Agency reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Agency to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Agency there-under.
- 5.3.9 In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Vendor either by issue of the LOA or entering into of the Agreement, and if the Selected Bidder has already been issued the LOA or has entered into the Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by the Agency and the Agency shall not be liable in any manner whatsoever to the Bidder or Vendor, as the case may be.

In such an event, the Agency shall forfeit and appropriate the EMD as mutually agreed pre-estimated compensation and damages payable to the Agency for, *inter alia*, time, cost and effort of the Agency, without prejudice to any other right or remedy that may be available to the Agency.

5.4 **Financial Proposal / Bid**

- 5.4.1 Bidders shall submit the financial proposal in the formats at Annexure III (the “**Financial Proposal**”) clearly indicating the total cost of the services in both figures and words, in Indian Rupees, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.

5.4.2 While submitting the Financial Proposal, the Bidder shall ensure the following:

- (i) All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work remuneration for all the Personnel (Expatriate and Resident, in the field, office etc), accommodation, air fare, equipment, printing of documents, surveys, geo-technical investigations etc. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
- (ii) The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.
- (iii) Costs (including break down of costs) shall be expressed in INR.

5.5 Submission of Proposal / Bid

5.5.1 The Bidders shall submit the Proposal in hard bound form with all pages numbered serially and by giving an index of submissions. Each page of the submission shall be initialled by the Authorized Representative of the Bidder as per the terms of the RFP. In case the proposal is submitted on the document downloaded from Official Website, the Bidder shall be responsible for its accuracy and correctness as per the version uploaded by the Agency and shall ensure that there are no changes caused in the content of the downloaded document. In case of any discrepancy between the downloaded or photocopied version of the RFP and the original RFP issued by the Agency, the latter shall prevail.

5.5.2 The Proposal will be sealed in an outer envelope which will bear the address of the Agency as indicated at Clause 13.2 and the instructions contained therein need to be followed.

If the envelope is not sealed and marked as per instructions, the Agency assumes no responsibility for the misplacement or premature opening of the contents of the Proposal submitted and consequent losses, if any, suffered by the Bidder.

5.5.3 The aforesaid outer envelope will contain three separate sealed envelopes as mentioned under Clause 13.2. The “Technical Proposal” shall contain:

- (i) Application in the prescribed format (Form-1 to Form-15 of Annexure IX) along with all supporting documents;

and

- (ii) EMD as specified in Clause 5.9 / Clause 13.1 and RFP Document cost.

The envelope marked “Financial Proposal” shall contain the financial proposal in the prescribed format in Annexure III of ToR.

5.5.4 The Technical Proposal and Financial Proposal shall be typed or written in **indelible** ink and signed by the Authorized Representative of the Bidder. All pages of the original Technical Proposal and Financial Proposal must be numbered and initialled by the person or persons

signing the Proposal.

- 5.5.5 The completed Proposal must be delivered on or before the specified time on Proposal Due Date. Proposals submitted by fax, telex, telegram shall not be entertained.
- 5.5.6 The Proposal shall be made in the Forms specified in this RFP. Any attachment to such Forms must be provided on separate sheets of paper and only information that is directly relevant should be provided. This may include photocopies of the relevant pages of printed documents. No separate documents like printed annual statements, company brochures, copy of contracts etc. will be entertained.
- 5.5.7 The rates quoted shall be firm throughout the period of performance of the assignment up to discharge of all obligations of the Vendor under the Agreement.

5.6 **Proposal Due Date**

- 5.6.1 Proposal should be submitted on or before the Proposal Due Date at or before 1600 hrs in the manner and form as detailed in this RFP. A receipt thereof should be obtained from the person specified therein.
- 5.6.2 The Agency may, in its sole discretion, extend the Proposal Due Date by issuing separate notice.

5.7 **Late Proposals**

Proposals received by the Agency after the specified time on Proposal Due Date shall not be eligible for consideration and shall be summarily rejected.

5.8 **Modification/ substitution/ withdrawal of Proposals**

- 5.8.1 The Bidder may modify, substitute, or withdraw its Proposal after submission, provided that written notice of the modification, substitution, or withdrawal is received by the Agency prior to Proposal Due Date. No Proposal shall be modified, substituted, or withdrawn by the Bidder on or after the Proposal Due Date.
- 5.8.2 The modification, substitution, or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 5.5, with the envelopes being additionally marked “MODIFICATION”, “SUBSTITUTION” or “WITHDRAWAL”, as appropriate.
- 5.8.3 Any alteration / modification in the Proposal or additional information or material supplied subsequent to the Proposal Due Date, unless the same has been expressly sought for by the Agency, shall be disregarded.

5.9 **Earnest Money Deposit (EMD)**

- 5.9.1 The Bidder shall furnish as part of its Proposal, EMD of **Rs. 20 Lakhs** (Twenty Lakhs) in the form of a Demand Draft issued by one of the Nationalized/ Scheduled Banks in India in favour of “**Chief Executive Officer, JaKLARMA, Govt. of J&K, Jammu**” payable at Jammu (the “**EMD**”), returnable not later than 90 (Ninety) days from PDD except in the case of the two highest ranked Bidders. In the event that the first ranked Bidder commences the assignment as

required in Clause 8.6, the second ranked Bidder (R2), who has been kept in reserve, shall be returned its EMD forthwith, but in no case later than 180 days (one hundred and eighty days) from PDD. The Selected Bidder's EMD shall be returned when the Bidder signs the Agreement and submits Performance Bank Guarantee and completes all other formalities.

- 5.9.2 Any Bid not accompanied by the EMD shall be rejected by the Agency declaring it as nonresponsive.
- 5.9.3 The Agency shall not be liable to pay any interest on the EMD and the same shall be Interest free.
- 5.9.4 The Bidder, by submitting its Application pursuant to this RFP, shall be deemed to have acknowledged that without prejudice to the Agency's any other right or remedy hereunder or in law or otherwise, the EMD shall be forfeited and appropriated by the Agency as the mutually agreed pre-estimated compensation and damage payable to the Agency for, *inter alia*, the time, cost and effort of the Agency in regard to the RFP including the consideration and evaluation of the Proposal under the following conditions:
- a. If a Bidder submits a non-responsive Proposal;
 - b. If a Bidder engages in any of the Prohibited Practices specified in Clause 9 of this RFP;
 - c. If a Bidder withdraws its Proposal during the period of its validity as specified in this RFP and as extended by the Bidder from time to time;
 - d. In the case of a Selected Bidder, if the Bidder fails to sign the Agreement or commence the assignment as specified in Clauses 8.4, 8.5 and 8.6 respectively, or
 - e. If the Bidder is found to have a Conflict of Interest as specified in Clause 3.3.

6. EVALUATION PROCESS

6.1 QUALIFICATION CRITERIA

The Vendor should meet the following criteria as on the date of submission of the bid and should submit documentary proof where-ever possible:

1. Bidder will have to give the Registration No. of the firm, CST No., EPF Account (Annexure-V) / Sales / Service Tax / VAT documents in their respective bid document.
2. The bidder should have credential for digitization of cadastral maps and GIS oriented work in Government Agencies / Private (Nationally / Internationally). The work completion certificate / Work Order / Performance Certificate should be enclosed in the Technical Bid.
3. Turnover of the firm must exceed Rs.5 (Five) crore per annum from geo-spatial activity including software development during each of the 3 (three) financial years preceding the Proposal Due Date.
4. The bidder should submit Income Tax Return statement and Auditor's Report and at least three duly signed copies of orders in support of Turnover details.

5. The bidder should have at least 50 GIS and CAD Professionals on their payroll for the activities related to Map Scanning and Digitization (Attach the list of key Employees with exposure to Projects and Technologies).
6. The Bidder should have professionals for data entry in Urdu, as all the land records of the Agency are in Urdu. However, the outputs (Text appearing in maps / records/ Reports) are to be made available in Urdu, Hindi, and English as per requirement. If not, Bidders should submit strategy to do so.
7. Bidders having ISO (9001:2000) or equivalent certification would be preferred.
8. Bidders should furnish details of Hardware / Legal Software / Surveying Equipments with Technical specifications.

6.2 Evaluation of Proposals / Bids

- 6.2.1 The Agency shall open the Proposals / Bids at 11:00 hours on 21.1.2015, at the place specified in Clause 2.6 and in the presence of the Bidders who choose to attend. The envelopes marked "Pre-qualification of Bidders" are to be opened first followed by "Technical Bid". The "Financial Bid" will only be opened if the Technical Bid secures the minimum marks as per the Clause 7.1.3. The envelopes marked "Financial Bid" shall be kept sealed for opening at a specified date.
- 6.2.2 Proposals for which a notice of withdrawal has been submitted in accordance with Clause 5.8 shall not be opened.
- 6.2.3 Prior to evaluation of Proposals/ Bids, the Agency will determine whether each Proposal is responsive to the requirements of the RFP. The Agency may, in its sole discretion, reject any Proposal that is not responsive. A Proposal shall be considered responsive only if:
 - (a) The Technical Proposal/Bid is received in the forms specified at Annexure IX;
 - (b) It is received by the Proposal Due Date including any extension thereof pursuant to Clause 2.6;
 - (c) It is accompanied by the EMD as specified in Clause 5.9 / Clause 13.1.
 - (d) It is signed, sealed, bound together in hard cover and marked as stipulated in Clause 5;
 - (e) It is accompanied by the Power of Attorney as per Form 6 or Form 6(a) of Annexure IX;
 - (f) It contains all the information (complete in all respects) as requested in the RFP;
 - (g) It does not contain any condition or qualification.
- 6.2.4 The Agency reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Agency in respect of such Proposals.
- 6.2.5 The Agency shall subsequently examine and evaluate Proposals in accordance with the Selection Process specified at Clause 7.1.3 and the criteria set out in Clause 7.3 and 7.4 of this RFP.
- 6.2.6 After the technical evaluation, the Agency shall prepare a list of shortlisted Bidders in terms of Clause 7.1.3 for opening of their Financial Proposals. A date, time and venue will be notified to all Bidders for announcing the result of evaluation and opening of Financial Proposals. Before

opening of the Financial Proposals, the list of pre-qualified and shortlisted Bidders along with their Technical Score will be read out. The opening of Financial Proposals shall be done in presence of respective representatives of Bidders who choose to be present. The Agency will not entertain any query or clarification from Bidders who fail to qualify at any stage of the Selection Process. The financial evaluation and final ranking of the Proposals shall be carried out in terms of Clauses 7.3 and 7.4.

- 6.2.7 Bidders are advised that Selection will be entirely at the discretion of the Agency. Bidders will be deemed to have understood and agreed that no explanation or justification on any aspect of the Selection Process or Selection will be given.
- 6.2.8 Any information contained in the Proposal shall not in any way be construed as binding on the Agency, its agents, successors or assigns, but shall be binding against the Bidder if the Consultancy is subsequently awarded to it.

6.3 **Confidentiality**

Information relating to the examination, clarification, evaluation, and recommendation for the selection of Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional adviser advising the Agency in relation to matters arising out of, or concerning the Selection Process. The Agency will treat all information, submitted as part of the Proposal, in confidence and will require all those who have access to such material to treat the same in confidence. The Agency may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/or the Agency.

6.4 **Clarifications**

- 6.4.1 To facilitate evaluation of Proposals, the Agency may, at its sole discretion, seek clarifications from any Bidder regarding its Proposal. Such clarification(s) shall be provided within the time specified by the Agency for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.
- 6.4.2 If a Bidder does not provide clarifications sought under Clause 6.4.1 above within the specified time, its Proposal shall be liable to be rejected. In case the proposal is not rejected, the Agency may proceed to evaluate the proposal by construing the particulars requiring clarifications to the best of its understanding, and the bidder shall be barred from subsequently questioning such interpretation of the Agency.

7. **CRITERIA FOR EVALUATION**

7.1 **Evaluation of Technical Proposals / Bids**

- 7.1.1 Technical Proposals will be evaluated on the basis of Bidder's experience, its understanding of ToR, proposed methodology and Work Plan, and experience of Key Personnel. Only those Bidders whose Technical Proposals score 60 marks or more out of 100 shall qualify for further consideration, and shall be ranked from highest to the lowest on the basis of their technical

score (TS).

- 7.1.2 The Bidder must score a minimum of 60 points out of 100 to be eligible for further consideration for award of work. Financial bid shall not be opened in such cases where Technical Score is less than 60 %.
- 7.1.3 The scoring criteria based upon the concept of **Quality-cum-Cost Based Selection (QCBS)** will be followed for evaluation. For this weight-age as provided below shall be given while evaluating the Technical Bids of the prospective Vendor:

Technical BID Evaluation Criteria:

Item Code	Parameter	Evaluation Criteria	Maximum Marks
1	Relevant Experience of the Bidder	a) Implemented at least one project related to cadastral map digitisation: (5) b) At least Three GIS Projects related to digitisation using scanned maps and High Resolution Satellite Imagery (HRSI) and implementation of project value not less than INR 50 Lakhs (2 marks for each project completed): (6) c) At least one project of spatial data integration: (5) d) Overall experience and credentials of the firm: (15) i) Financial strength, capacity of firm: (7) < 5 crore = 0 marks, 5 Crores 1 marks, further 1 marks for each 1 crore, maximum marks 7. ii) Turnover from Software Development Services, (4). 1 marks for each 1 crore with a maximum of 4 marks. iii) Years of Experience in MIS/GIS: (4) 1 marks for each 1 years, with maximum marks of 4. e) Cadastral experience of J&K / Punjab/ Haryana/ Delhi/ Western U.P. (un-divided) / Rajasthan / Himachal Pradesh : (5) f) Sufficient Resources for Data Entry in Urdu :(4).	40
2	Approach & Methodology (Refer Annexure IX Form 12)	a) Clear understanding of ToR and scope of services including their interpretation: (10) b) Methodology and Work Plan including Team organisation for an efficient activity scheduling. Work Plan for 10 more districts also needs to be given: (15)	25

3	Key Personnel (minimum 50 GIS and CAD personal dedicated to this project are required)		15
4	Evaluation Committee observations	a) Hard copy of the Technical Presentation of the capabilities of the organisation, implementation plan including time-lines for this project : (10) b) Corporate Social Responsibility (CSR) performances : (5) c) ISO or Equivalent Certification: (5)	20
		G. Total	100

Note: Minimum 60 marks are required in Technical Bid evaluation for further consideration. The score given by the Evaluation Committee of the Agency shall be final and binding on all the bidders and no representation in this regard shall be entertained.
(Also see Notes at the end of Annexure II)

7.2 Short-listing of Bidders

The Bidders securing 60 points and above will be ranked from highest to lowest. The Vendor so shortlisted shall stand qualified for financial evaluation in the second stage. However, if the number of such prequalified Bidders is less than two, the Agency may, in its sole discretion, pre-qualify the Bidder(s) whose technical score is less than 60 points even if such Bidder(s) do(es) not qualify in terms of Clause 7.1; provided that in such an event, the total number of pre-qualified and short-listed Bidders shall not exceed two.

7.2.1 The short-listed Vendor will be invited to give Technical Presentation of the capabilities of the Organisation, its relevant experience, infrastructure relevant to the project, implementation plan including time-lines for this project. The presentation should be focused and will carry 50 marks. Thus, Technical Bid will be worth 150 marks including 100 marks as per detailed above.

7.3 Evaluation of Financial Proposals / Bids

7.3.1 In the second stage, the financial evaluation will be carried out and as per this Clause, each Financial Proposal will be assigned a financial score (SF).

7.3.2 For financial evaluation, the total cost indicated in the Financial Proposal, excluding Additional Costs, will be considered. Additional Costs shall include items specified as such in Financial Proposal of Annexure-III of ToR.

7.3.3 The Agency will determine whether the Financial Proposals are complete, unqualified and unconditional. The cost indicated in the Financial Proposal shall be deemed as final and

reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the ToR within the total quoted price shall be that of the Vendor. The lowest Financial Proposal (FM) will be given a financial score (SF) of 100 points. The financial scores of other proposals will be computed as follows:

$SF = 100 \times FM/FS$ (where FS = Amount of Financial Proposal under consideration).

7.4 Combined and final evaluation

- 7.4.1 Proposals will finally be ranked according to their combined Technical (ST) and Financial (SF) scores as follows: $S = ST \times Tw + SF \times Fw$
where $ST = 100 \times TS / TH$; TH is 150 and TS is Technical Score of the prospective bidder out of 150.

Where S is the combined Score and Tw and Fw are weights assigned to the Technical Proposal and Financial Proposal that shall be 0.70 and 0.30, respectively.

8. APPOINTMENT OF VENDOR

8.1 Negotiations

- 8.1.1 The Selected Bidder may, if necessary, be invited for negotiations. The negotiations shall generally not be for reducing the price of the Proposal, but will be for re-confirming the obligations of the Vendor under this RFP. Issues such as deployment of Key Personnel, understanding of the RFP, methodology and quality of the work plan shall be discussed during negotiations.

8.1.2 Verification of Infrastructure by the Board / Committee members on vendor's site

The Vendor will provide the under-mentioned details as part of Technical Bid:

- (i) Number of Computers / hardware/ Surveying equipments, with make, model and technical specs, to be used for execution of the project.
- (ii) Number of personnel to be engaged for the project. If currently not employed, then strategy to reach that number (if fails to recruit these personnel before award of the project, then the bidder is liable to lose the contract). Semi-skilled personnel may be hired locally also.
- (iii) List of legal software(s) (with number). Legal Software compliance is to be passed to Sub-Contractors as well and that is to be ensured.

Before the award of the contract, user may visit the facilities of the short-listed Vendor / companies and verify the plan as submitted.

- 8.1.3 The Agency will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Agency .
- 8.1.4 The Agency will examine the credentials of all Sub-Vendors / Consortium members proposed for this service and those not found suitable shall be replaced by the Bidder to the satisfaction

of the Agency.

8.2 **Substitution of Key Personnel**

8.2.1 The Agency will not normally consider any request of the Selected Bidder for substitution of Key Personnel as the ranking of the Bidder is based on the evaluation of Key Personnel and any change therein may upset the ranking. Substitution will, however, be permitted if the Key Personnel is not available for reasons of any incapacity or due to health, subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Agency .

8.2.2 The Agency expects all the Key Personnel to be available during execution of the Project. The Agency will not consider substitution of Key Personnel except for reasons of any incapacity or due to health. Such substitution shall ordinarily be limited to one Key Personnel subject to equally or better qualified and experienced personnel being provided to the satisfaction of the Agency. As a condition to such substitution, a sum equal to 20% (twenty per cent) of the remuneration specified for the original Key Personnel shall be deducted from the payments due to the Bidder. In the case of a second substitution hereunder, such deduction shall be 50% (fifty per cent) of the remuneration specified for the original Key Personnel. Any further substitution may lead to disqualification of the Bidder or termination of the Agreement.

8.2.3 Substitution of the Team Leader will not normally be considered and may lead to disqualification of the Bidder or termination of the Agreement.

8.3 **Indemnity**

The Bidder shall, subject to the provisions of the Agreement, indemnify the Agency for an amount not exceeding 3 (three) times the value of the Agreement for any direct loss or damage that is caused due to any deficiency in services.

8.4 **Award of work**

After selection, a Letter of Award (the “**LOA**”) shall be issued, in duplicate, by the Agency to the Selected Bidder and the Selected Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Selected Bidder is not received by the stipulated date, the Agency may, unless it consents to extension of time for submission thereof, appropriate the EMD of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by the Agency on account of failure of the Selected Bidder to acknowledge the LOA, and the next highest ranking Bidder may be considered.

8.5 **Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the Selected Bidder, it shall execute the Service Level Agreement within the period prescribed in Clause 22.11. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

8.6 Commencement of assignment

The Selected Bidders shall commence the Services at the Project site within 7 (seven) days of the date of the Agreement or such other date as may be mutually agreed.

8.7 Proprietary data

Subject to the provisions of Clause 6.3, all documents and other information provided by the Agency or submitted by a Bidder to the Agency shall remain or become the property of the Agency. Bidders and the Vendor, as the case may be, are to treat all information as strictly confidential. The Agency will not return any Proposal or any information related thereto. All information collected, analyzed, processed or in whatever manner provided by the Vendor to the Agency in relation to the services shall be the property of the Agency.

9. FRAUD AND CORRUPT PRACTICES

9.1 The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, the Agency shall reject a Proposal without being liable in any manner whatsoever 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, undesirable practice or restrictive practice (collectively the “**Prohibited Practices**”) in the Selection Process. In such an event, the Agency shall, without prejudice to its any other rights or remedies, forfeit and appropriate the EMD or Performance Bank Guarantee, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Agency for, *inter alia*, time, cost and effort of the Agency, in regard to the RFP, including consideration and evaluation of such Bidder’s Proposal.

9.2 Without prejudice to the rights of the Agency under Clause 9.1 above and the rights and remedies which the Agency may have under the LOA or the Agreement, if a Bidder or Vendor, as the case may be, is found by the Agency to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOA or the execution of the Agreement, such Bidder or Vendor shall not be eligible to participate in any tender or RFP issued by the Agency during a period of 2 (two) years from the date such Bidder or Vendor, as the case may be, is found by the Agency to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:

(a) “**Corrupt Practice**” means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Agency who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOA or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns

or retires from or otherwise ceases to be in the service of the Agency , shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Agreement, who at any time has been or is a legal, financial or technical vendor/ adviser of the Agency in relation to any matter concerning the Project;

(b) “Fraudulent Practice” means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;

(c) “Coercive Practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person’s participation or action in the Selection Process;

(d) “Undesirable Practice” means

(i) Establishing contact with any person connected with or employed or engaged by the Agency with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or

(ii) Having a Conflict of Interest; and

(e) “Restrictive Practice” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

10. MISCELLANEOUS

10.1 The Selection Process shall be governed by, and construed in accordance with, the laws of India and the State of J&K. The Courts at Jammu / Srinagar (Jammu & Kashmir) shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with the Selection Process.

10.2 The Agency, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:

(a) Suspend and/or cancel the Selection Process and/or amend and/or supplement the Selection Process or modify the dates or other terms and conditions relating thereto;

(b) Consult with any Bidder in order to receive clarification or further information;

(c) Retain any information and/or evidence submitted to the Agency by, on behalf of and/or in relation to any Bidder; and/or

(d) Independently verify, disqualify, reject and/or accept any and all submissions or other information and/or evidence submitted by or on behalf of any Bidder.

10.3 It shall be deemed that by submitting the Proposal, the Bidder agrees and releases the Agency , its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/or performance of any obligations hereunder, pursuant hereto and/or in connection herewith and waives any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or future.

All documents and other information supplied by the Agency or submitted by any Bidder shall

remain or become, as the case may be, the property of the Agency. The Agency will not return any submissions made hereunder. Bidders are required to treat all such documents and information as strictly confidential.

The Agency reserves the right to make inquiries with any of the clients listed by the Bidders in their 'Previous experience' record.

11. GUIDANCE NOTE ON CONFLICT OF INTEREST

11.1 Explanation of the provisions of Clause 3.3

11.1.1 Vendor should be deemed to be in a conflict of interest situation if it can be reasonably concluded that their position in a business or their personal interest could improperly influence their judgment in the exercise of their duties. The process for selection of Vendor should avoid both actual and perceived conflict of interest.

11.1.2 Conflict of interest may arise between the Agency and a vendor or between Vendor and present or future concessionaries/ contractors. Some of the situations that would involve conflict of interest are identified below:

- (a)** Agency and Vendor:
 - (i)** Potential vendor should not be privy to information from the Agency which is not available to others; or
 - (ii)** Potential vendor should not have defined the project when earlier working for the Agency ; or
 - (iii)** Potential vendor should not have recently worked for the Agency overseeing the project.
- (b)** Vendor and concessionaires/contractors:
 - (i)** No vendor should have an ownership interest or a continuing business interest or an on-going relationship with a potential concessionaire/ contractor save and except relationships restricted to project-specific and short-term assignments; or
 - (ii)** No vendor should be involved in owning or operating entities resulting from the project; or
 - (iii)** No vendor should bid for works arising from the project.

The participation of companies that may be involved as investors or consumers and officials of the Agency who have current or recent connections to the companies involved, therefore, needs to be avoided.

11.1.3 The normal way to identify conflicts of interest is through self-declaration by Vendor. Where a conflict exists, which has not been declared, competing companies are likely to bring this to the notice of the Agency. All conflicts must be declared as and when the Vendor becomes aware of them.

11.1.4 Another way to avoid conflicts of interest is through the appropriate grouping of tasks. For example, conflicts may arise if Vendor drawing up the terms of reference or the proposed documentation are also eligible for the consequent assignment or project.

11.1.5 Another form of conflict of interest called "scope-creep" arises when Vendor advocates either

an unnecessary broadening of the terms of reference or makes recommendations which are not in the best interest of the Agency but which will generate further work for the Vendor. Some forms of contractual arrangements are more likely to lead to scope-creep. For example, lump-sum contracts provide fewer incentives for this, while time and material contracts provide built in incentives for Vendor to extend the length of their assignment.

11.1.6 Every project contains potential conflicts of interest. Vendor should not only avoid any conflict of interest, they should report any present/ potential conflict of interest to the Agency at the earliest. Officials of the Agency involved in development of a project shall be responsible for identifying and resolving any conflicts of interest. It should be ensured that safeguards are in place to preserve fair and open competition and measures should be taken to eliminate any conflict of interest arising at any stage in the process.

TERMS OF REFERENCE (ToR)

12. INTRODUCTION

The activities /works to be carried out include, survey / re-survey, data entry of textual attributes, digitisation of cadastral maps, integration with Records of Rights (RoR) and management of old revenue documents, development of Web-based Enterprise GIS for land related Applications and management of Land Records in the virtual Modern Record Rooms, make the software operational in the Computer Centres at Niabat/Tehsil/District/ Regional Directorate/ State levels under NLRMP Scheme of Govt. of India, in the state of Jammu & Kashmir and to preserve the data available in the form of documents, electronic storage and facilitate web-based retrieval and its easy access to the public and functionaries of the Agency.

The Vendor selected after completing the Bidding Process as contained in para 13 below shall carry out the tasks enumerated in the paras to follow as per the specifications mentioned herein and the NLRMP Guidelines issued by Govt. of India.

As mentioned under Clause 2 above, the project is envisaged to be completed in three phases, viz.

Phase I : Two districts, one each from Jammu and Kashmir Divisions, namely, Jammu district and Srinagar district will be taken up for end-to-end implementation of the project.

However, three tasks viz., (a) Establishing Ground Control Points (GCPs) network across the state, as per requirement, (b) Scanning of old records and archival of scanned data and (c) Development of Web-based Enterprise GIS are to be taken up in one go for the entire state in Phase I only.

The scope of the present RFP is primarily limited to Phase I, but variance of rates quoted for Phase II and Phase III will also impact the Selection of the Vendor.

Phase II: On satisfactory completion of the tasks enumerated above, 10 more districts (5 districts from each division) will be awarded to the same Vendor on same terms and conditions, on mutual agreement. The Bidders should reflect variance in rates, if any, in the Financial Bid (refer Annexure III).

Phase III: Remaining 10 districts will be awarded to the same vendor but on mutual agreement. The Bidders are expected to reflect any variance in rates in the Financial Bid (refer Annexure III).

The Hardware at the Computer centres will be procured, installed and commissioned by the Agency separately and connectivity will also be ensured in due course. However, the Vendor / Firm to whom the job is awarded shall use its equipments (including surveying equipments), software, man-power (skilled / semi-skilled/un-skilled) and other resources such as hiring of vehicles and suitable accommodation etc.

The assignment specifications, terms and conditions, and various Performa for submitting the Bids are described in this document.

13. THE BIDDING PROCESS

13.1 The EMD

As contained in para 5.9, Earnest Money Deposit (EMD) amounting to INR 20 Lakhs should be submitted in the form of Demand Draft raised from nationalized bank along with the Proposal favouring “Chief Executive Officer, JaKLaRMA, Govt. of J&K, Jammu” payable at Jammu.

13.2 Submission of Proposal / Bid

The bidder will submit the response to the present RFP in single packet which contains following envelopes:

ENVELOPE-I: Pre-qualification of Bidder – The ‘CHECK LIST’ as given in Annexure I, with Bidders response, in an envelope duly super-scribed as ‘Pre-qualification of Bidder’ and clearly marked “TECHNICAL BID FOR MODERNISATION OF LAND RECORDS (INCLUDING DATA ENTRY, SURVEY / RE-SURVEY, DIGITISATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS (ROR), DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN JAMMU & KASHMIR (JAMMU AND SRINAGAR DISTRICTS)” along-with Reference Number, Due Date and with the wordings “DO NOT OPEN BEFORE DUE DATE” along-with Reference Number, Due Date and with the wordings “DO NOT OPEN BEFORE DUE DATE”.

In case the Bidder has shown its inability to comply with certain criteria, then its Technical as well as Financial Bids will not be opened.

All the details will however be cross- checked for compliance in the process.

ENVELOPE-II: Technical Bid – (1 original + 1 copy) + EMD + Documents Charges of Rs. 5000 (if not already deposited).

Technical offer along with EMD and document charges (if not already deposited) should be put in single sealed envelope clearly marked “TECHNICAL BID FOR MODERNISATION OF LAND RECORDS (INCLUDING DATA ENTRY, SURVEY / RE-SURVEY, DIGITISATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS (ROR), DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN JAMMU & KASHMIR (JAMMU AND SRINAGAR DISTRICTS)” along-with Reference Number, Due Date and with the wordings “DO NOT OPEN BEFORE DUE DATE”:

ENVELOPE-III : Financial Bid

The cover containing Financial Offer should be put in single sealed envelope clearly marked “FINANCIAL BID FOR MODERNISATION OF LAND RECORDS (INCLUDING DIGITISATION OF CADASTRAL MAPS, SURVEY / RE-SURVEY, INTEGRATION WITH RECORDS OF RIGHTS (ROR), DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN THE STATE OF JAMMU & KASHMIR” along-with the Reference Number, Due Date and with the

wordings “DO NOT OPEN BEFORE DUE DATE”:

The above mentioned three packets thus prepared should also indicate clearly the name, address, E-mail ID and Telephone No. of the company to enable the offer to be returned unopened in case it is declared "Late" or submitted after the due date.

The offer should be page numbered and appropriately flagged and must contain the list of contents with page numbers. Any deficiency in the documentation shall result in the rejection of the Bid.

The copy of RFP document is to be downloaded from website www.jkfer.nic.in and an amount of INR 5000 needs to be paid by way of Demand Draft favouring “Chief Executive Officer, JaKLaRMA, Govt. of J&K, Jammu” payable at Jammu, at the time of submission of Bid.

14. The Objective and Scope of the Project

The objective behind implementation of the Project titled “MODERNISATION OF LAND RECORDS (INCLUDING DATA ENTRY, SURVEY / RE-SURVEY, DIGITISATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS (RoR), DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP SCHEME IN THE STATE OF JAMMU & KASHMIR (TWO DISTRICTS OF JAMMU AND SRINAGAR TO START WITH)” is digitizing the cadastral maps of the State and linking of the same with textual data (RoR) and to extend these services to the citizens. As of now, an in-house developed software is being used in Jammu & Kashmir for preparing and maintaining the RoR and for registration of Land Deeds. The proposed system would create the database of cadastral maps in digitized form. This would streamline the land revenue administration through Web-based Enterprise GIS to be developed by the vendor as part of the Project and such a system would be temper proof with easy availability of data in the Niabats / Tehsils/ Districts/Regional Directorate / State level computer centres.

For every village, there are cadastral maps having parcels of land (popularly known as Khasra Number or Survey Number), which form the basic record of revenue administration. After linking of the cadastral map with textual data, the citizen can be provided with the services e.g. RoR with plot map (parcel map), showing dimensions of each side, area & the adjoining plots and Textual RoR data updation in sync with spatial data updation.

The main objective of the project is to develop a modern, comprehensive and transparent land records management system in the state with the aim to implement the conclusive land-titling system with title guarantee, which will be based on four basic principles, i.e.,

- (i) A single window to handle land records (including the maintenance and updating of textual records, maps, survey and settlement operations and registration of immovable property);
- (ii) The “mirror” principle, which refers to the fact that cadastral records mirror the ground reality;
- (iii) The “curtain” principle which indicates that the record of title is a true depiction of the ownership status, mutation is automated following registration and the reference to past

- records is not necessary, and
- (iv) Title insurance, which guarantees the title for its correctness and indemnifies the title holder against loss arising on account of any defect therein.

The present project has the main aim of development of Digital Cadastral Reference Database using village cadastral maps. This involves identifying the procedures for generating the softcopy products and standardisation of each product for unique identification of each cadastral map in the entire country and content (legend) codification so that each feature in the map is uniquely defined.

14.1 Scope of Work:

The digitisation and updation of village maps (Shajra) will help State Government to create database of the revenue maps/ musavis in digitized form and linking up with the existing database of Land Records Management Software. Average number of plots per musavi is 100 (approx.). However, the khasra nos. may increase after updation.

RFP is for carrying out all the tasks in respect of two districts, namely Jammu and Srinagar. The Jammu district has 912 villages and Srinagar district has 137 villages. The Service provider is supposed to provide turnkey solution which includes digitisation of existing cadastral maps and linking the same with existing textual data i.e. RoR (jamabandi). For updation using Survey / Re-survey and digitisation of Cadastral maps, musavi should be used as base. In case Cadastral Maps are not in a position to be scanned then regeneration of musavis will be carried out. Tentative number of such cases would be minimal. The Updation of the hard copy Cadastral map (musavi sheets/ paper) as per the existing RoR will be carried out by the Vendor assisted by the Agency. In case, due to non-clarity / non-availability of the updated parcel information in the Agency, the updation will be carried out by the service provider from field using ETS survey or satellite imagery. Thereafter, the digitized data will be updated to current stage by the Vendor selected for this project using hard copy updated cadastral map (musavi sheets) provided by the Agency. However, the updation of the cadastral maps from the field / satellite imagery will be done by Vendor only.

The process of creation of a Cadastral Information System (CIS), as part of Web-based Enterprise GIS, will involve Geo-referencing of High Resolution Satellite Image (HRSI), Digitisation/redrawing of Musavis, Geo-referencing of Musavis / cadastral maps, Field Verification, Public Validation, Attribute addition, linking with RoR and fixing Sehada (village tri-junction pillars) stones besides the main GIS Applications and web based retrieval system and associated facilities for virtual Modern Record Rooms.

After the successful completion of this job, the vendor should provide support for 2 years for maintaining record, updation, imparting training etc.

15. Location codes and Feature Coding

The Census Department of Govt. of India has assigned location codes from states down to villages. The State of J&K being the northern-most state had been assigned '01' code. The codes have now been modified vide Registrar General of India letter No. 9/21/2009-CD(CEN) dated 21-8-2009 (which is Census of India 2011 – Circular No. 5) available on the official

website of Census Department. This is further to be extended to exercise of assigning unique Ids to Survey Numbers (Khasra or parcel). As per the above letter, the location code of J&K stands changed to '010' and similarly for other administrative units.

All the features digitized, as per the requirement, would be assigned feature codes as specified in the 'Study of Uniform Coding Scheme for Computerisation of Land Records' brought out by DoLR Govt. of India. To be specific these details will be contained in the 'Technical Inputs' document to be released with the work order. Vendor will ensure complete and proper association of the corresponding feature codes for all features.

This coding scheme is to be invariably used as Ids for parcels and other items, indexing the scanned data (metadata of scanned data), while entry of RoR and allied textual data and development of GIS.

16. Details of Project Components

16.1 Data Entry / Re-Entry / Data Conversion of all Textual Data

Data entry / Re-entry / Data conversion of all textual records is to be carried out in a manner so as to facilitate its integration with the land records maintenance system. The textual data is to be stored in MS Access format initially which will be ported to Central GIS database supported by Web-based Enterprise GIS solution provided by the vendor. The records that are to be computerised are:

- (i) Jamabandi / Record of Rights (RoR)
- (ii) Khasra Girdawari
- (iii) Mutation Registers
- (iv) Valuation Data/Details
- (v) Legal Encumbrances Data
- (vi) Other allied land attributes data / socio-economic data
etc.

Urdu being the Official Language of Jammu & Kashmir, all the records of the state are in Urdu. The data entry is to be carried out in Urdu, but after completion of data entry and integrating it with spatial data, the Web-based Enterprise GIS which is to be developed will be required to have facility to generate reports and map text etc. in any of the three languages, viz., Urdu, Hindi and English. Therefore, the vendor carrying out data entry will have to create reports and tables etc. accordingly.

The data entry has already been completed by the Agency in respect of land records of some villages. The vendor will convert this data into the prescribed format in respect of villages whose data has already been completed for the sake of uniformity. However, those villages will be taken up for data entry, on priority, where this activity has not been taken up earlier and thereafter the activity of conversion will be completed.

The information regarding work already completed by the Agency is given in para 16.4 below.

16.2 Preserving Old Records

The records as listed below need to be scanned and prints as per 'Financial Bid Format' (Refer Annexure III) shall also be taken.

- (i) Musavis /Lathas – A0 size
- (ii) Pages of Field Books / Misal Haqiyat / Jamabandi – A3 size
- (iii) Pages of Field Books in some cases – A4 size
- (iv) Permanent Resident Certificates – A4 size

Any other records from Sub Registrar Office (SRO) which need to be scanned and preserved.

In the 'Financial Bid Format' quantum of work has been given, which may be treated as indicative and payments will be made on actual basis.

16.3 Establishing Ground Control Points (GCPs) across the State / Project area

Adequate number of Primary, Secondary and Tertiary GCPs of the national frame-work along-with Bench Marks (with MSL Height), covering area of Jammu district and Srinagar district will be acquired by the Agency from Survey of India, the national Surveying and Mapping agency under Ministry of Science & Technology.

These GCPs will be used for further densification of control for Geo-referencing the High Resolution Satellite Imagery (to be arranged by the Agency) and for taking up demarcation of village boundary and delineation of parcels.

Monumentation of village tri-junction pillars and other control points considered necessary will be done as per NLRMP guide-lines.

16.4 Survey / Re-Survey

The task of Survey / Re-Survey and updating of the survey and settlement records will also include creation of original Cadastral records wherever necessary, and ground truthing. Moreover, the exercise will also include the task of reconciliation of the re-survey data with the available records and finalize the dimensions of each land parcel. Prepare the land parcels for the proposed exercise and map the identified boundary vertices.

In the State of Jammu & Kashmir, the requirement of Survey and Re-Survey will fall in three categories:

- (i) Survey: Where fresh or partial measurements need to be carried out.
- (ii) Re-Survey (Chain): For those villages where survey has been done using chain survey method.
- (iii) Re-Survey (ETS): For those villages where measurements have been done using GPS and ETS and deposited, for integration with the new Survey.

(a) Status of Survey / Re-Survey and Data Entry of RoR etc. of the villages of Jammu District:

Total number of villages in Jammu District: 912

No. of villages -surveyed using ETS but RoR prepared manually : 176

No. of villages -surveyed using ETS and RoR computerised : 116

No. of villages –surveyed using chain and RoR prepared manually: 129
No. of villages -surveyed using chain but RoR computerised : Nil

(b) Status of Survey / Re-Survey and Data Entry of RoR etc. of the villages of Srinagar District:

Total number of villages in Srinagar District: 137

No. of villages -surveyed using ETS but RoR prepared manually :03
No. of villages -surveyed using ETS and RoR computerised :24
No. of villages –surveyed using chain and RoR prepared manually :04
No. of villages -surveyed using chain but RoR computerised :Nil

Other relevant details that are required :-

(a) District : Jammu

Total area :3097 sq. km.
Area for Survey / Re-Survey :2370 sq. km.

(b) District : Srinagar

Total area :2228 sq. km.
Area for Survey / Re-Survey : 117 sq. km.

The following modern technology options are to be used as per requirement and as per the type of terrain:

- (i) Pure ground method using Electronic Total Station (ETS) and Differential Global Positioning System (GPS)
- (ii) Hybrid methodology using aerial photography and ground truthing by ETS and DGPS
- (iii) High Resolution Satellite Imagery (HRSI) and ground truthing by ETS and DGPS.

Priority for Survey work will be given to those villages where mapping has not been done using ETS. Thereafter, those villages will be taken up where the measurements have been carried out using ETS by Revenue officials / personnel. The cadastral maps (in digital form) prepared by the Revenue officials will be overlaid on the geo-referenced HRSI. In case differences are substantial, survey work will be taken up afresh and in case minor differences are there, then survey work will be carried out for making necessary changes only.

Teams of responsible Revenue officials headed by Girdawar Qanungo and Patwari will oversee the work carried out by Survey Teams of the vendor on daily basis. Following records will be carried to field by Revenue officials for assisting the survey process:

- (i) Latha Rampori of the village under survey
 - (ii) Misal Haqiyat / Jamabandi (Registers)
 - (iii) Khasra Girdawari
 - (iv) Mutation Records
 - (v) Fard Badr Register
 - (vi) Roz Naamcha Waqyati
 - (vii) Register Fard Partaal
 - (viii) Chaant
 - (ix) Chuminda Register
 - (x) Chuminda (A rough sketch of the area under Survey / Re-survey)
- and
any other records which may be required.

The cadastral map with RoR data linked to it, is to be superimposed on geo-referenced imagery and that is to be used as back-ground image on ETS. Modifications / updations are to be made using the on-board software.

The survey team will generate a discrepancy register that will give the details of land parcels showing the area difference between resurvey and old survey records. In case, where the area of resurveyed land parcel is more than 5% and such land parcel has non-private land (Government / Semi Government) on any of its side, then digitize the old map of the survey number and superimpose on the resurveyed parcel of land showing the variation on the map as well as on the area. The encroached area (of adjoining Govt. or Common land) is to be shown by dotted lines and given a different shading and encroachment land register, in prescribed format needs to be generated and submitted.

The record so prepared will be handed over for promulgation to the Survey and Settlement officer who would take up the promulgation activity. This activity is to be done by the specified government official.

Generate one register for new survey no. arising out of resurvey with no corresponding old survey no.

16.5 Integration of textual and spatial data.

The integration of textual data of RoR, mutation records etc. will also include socio-economic data that will be integrated with the cadastral maps, side-by-side the Survey / Re-survey work and such data once integrated can be utilised for development of Village level planning using GIS techniques and this will enhance utility of cadastral maps in the present day context. The data entry has to be in such a way that it should be possible to generate reports in any of the three languages, viz., Urdu, Hindi or English and such provision should be made in the Web-based Enterprise GIS also.

16.6 Development of Web-based Enterprise Geospatial Information System (GIS)

The three layers of data will be integrated, viz.,

- (1) Geo-referenced High-Resolution Satellite Imagery;
- (2) Survey of India and Forest Survey of India maps; and
- (3) GIS-ready digitized cadastral maps linked with textual data from revenue records and other socio-economic data.

Creating and maintaining an effective land administration system is a multifaceted process often managed by many agencies and organizations. Duplicated efforts and data quality problems are common. Although separate GIS applications have been used to manage individual aspects of land records in the past, the full potential of GIS can best be realized when applied across the entire cadastre workflow.

Web-based Enterprise GIS, with a geo-database, data models, and an array of applications, provides the framework for an integrated workflow for creating and updating a cadastre that can be easily shared both within and between organizations. Workflows can be streamlined and cadastral procedures can be enforced in the correct and legal way through efficient job management. This delivers cost efficiencies and ensures that quality is maintained consistently throughout the process.

Once the basic plot-wise data is created, seamless integration would be possible for micro and macro planning and other relevant applications.

There should be provision in the GIS so developed for getting the information and Cadastral maps etc. in three languages viz., Urdu, Hindi and English.

16.7 Establishing Modern Record Rooms

This activity is linked with that of scanning of old records mentioned at sub-para (b) above. The records are being maintained in paper form at Jammu as well as at Srinagar. Once these are scanned as per prescribed specifications, the scanned data is to be archived in the storage devices at these two locations with provision of appropriate web-based retrieval / access software.

Database standards: RDBMS with spatial data support to be used for data storage.

16.8 Inter-connectivity among Revenue and Sub-Registrar Offices

The servers housing the spatial and non-spatial data at the Computer Centres at Tehsil / Niabat Level are to be connected to the SRO where all transactions/ activities related to land parcels take place and the land records with the Agency are to be systematically updated online based on these activities.

The Agency is establishing these Computer Centres separately and physical connectivity will be ensured by the Agency. However, making the Web-based Enterprise GIS software fully operational for automation of all such activities will be the responsibility of the Vendor.

16.9 Training & Capacity Building

The Vendor will take care of imparting formal as well as hands-on training to the staff working with them. The Revenue Training Institutes are well equipped to carry forward the task of training the staff in future.

17 Work Details and Specifications

17.1 Digitisation (vectorisation) of current / serving Cadastral Maps / Musavis:

- a) Agency will provide the current musavis and RoR data and vendor agency will scan the musavis and update the same assisted by the concerned Patwari. The vendor agency will carry out digitisation (in defined time frame strictly). Digitized musavis will be geo-referenced with the help of GCPs and High-Resolution Ortho-rectified Satellite Imagery (HRSI). Thereafter, up-dation of map data and RoR will be carried out as per Clause 17.2.5. The day that data (Spatial and Non-Spatial) is verified and accepted by the Agency, that will be the cut-off date for up-dation of cadastral map and related RoR data of the concerned village.
- b) If Musavi (hard copy) is not available with the Agency or not readable then the creation and digitisation of the new musavis from field book will be done by the vendor with assistance of Patwari.
- c) Digitized cadastral maps/musavis, integration with Records of Rights (RoR) in GIS layers depicting Geographic Information (the property co-ordinates, the actual measurements as per ground reality and musavi), attributes information (based on RoR), its interlinking with optimum precision.
- d) To generate integrated, Geo-referenced Village/Tehsil/District mosaic of cadastral maps.
- e) To develop retrieval system to obtain the drawing of the land parcels along with dimensions, area (as on ground and also as per RoR), attributes and neighbourhood details.
- f) The property maps should be able to integrate with the Record of Rights and future web application/publishing.

17.1.1 Following points must be addressed during the process of digitisation:

- a) The missing features (present on the ground but not on musavis) and invalid features (present in musavis but not on the ground) should be digitized and reflected in separate layers.
- b) Updated geo-referenced Musavis should show the roads/canals/water bodies/railway lines as existing, missing or invalid features in separate layers as per RoR.
- c) Provision to be made to show the property dimensions and area in the metric system as well as traditional system as per requirement.
- d) Vendor will also generate the field book of the village from the digitized musavis.
- e) The details of the plots should be shown in the attribute table (Area as per RoR, Ownership details etc) along with actual ground/ map dimensions.

- f) Comparison of area and dimensions should be done.
- g) Encroachments, excess areas and measurement discrepancies should be highlighted (using different symbol / colour schemes) in the musavis. The further course of action on that area is the responsibility of the Agency.
- h) The precision in linear and area measurements should be 99%. Accuracy of < 25 cm on ground should be achieved for detail survey using ETS.
- i) Linkage with RoR:
The vendor will provide the digitized musavis in the form of Shape files as per the format specified by the Agency. These shape files must contain the attribute data required to integrate with the Web-based Enterprise GIS.

17.1.2 Specifications for digitisation

Vendor is supposed to provide vector digital data with complete clean/edit/topology building processing in specified formats, conforming all accuracy and completion requirements, along with associated feature codes. The requirements are:

- i. The Vendor will submit a check plot for accuracy and completion check. Exact specifications will be provided in the 'Technical Inputs' document, along with agreement.
- ii. Digital data would be submitted in the required format for checking of topological correctness.
- iii. Vendor shall incorporate all omissions and rectify all identified errors using check plot and digital data.
- iv. One ink plot on 170 GSM paper after one-to-one checking of 100% data with original manuscript and another print on 100 GSM paper for reference in field during Survey and Re-Survey. Refer point 3.2 of Financial Bid Format.

17.1.3 Editing/Cleaning of data

- i. Relocation of misplaced features
- ii. Adding missing features
- iii. Removing undershoots and overshoots
- iv. Deleting extra features
- v. Brightness And Contrast Adjustment
- vi. Colour Balance
- vii. Resize and Cut
- viii. Flip/Rotate
- ix. Image Compress
- x. File Format Changing

17.1.4 Deliverables after Digitisation

- i. Digitized vector data is supposed to be in planner form i.e. all intersections of lines and significant features on a line should be marked by nodes.
- ii. Labels marked on the map should be digitized as point and not as text or annotation

- including line lengths as mentioned on the map
- iii. The final vector data should be topologically complete and should be transformed, to the base data provided by the Agency/ DLR, Jammu & Kashmir. However, each data may not be transformed, but it should be produced as per the requirement reflected in the System Design Document.
 - iv. Seam-less data generation Tehsil / District-wise.
 - v. The survey map of village is available in several sheets (sub-maps). The first sub-maps would be scanned to get a raster image and it would be vectorised to generate vector digital data. These digitized musavis will then be integrated to generate a map of the village after updation using software tools. Thereafter, the digital maps of different villages of tehsil will be merged (mosaiced) together through software to construct the map of tehsil. Similarly, the digital maps of Tehsils would be merged together to form a map of the district.
 - vi. The output format of the digitized cadastral map should be .shp file subject to change to some other format if decided by the Agency.
 - vii. The Agency will issue the certificate to service provider about successful implementation of project after receiving the satisfactory report from the authorities at District level
 - viii. After successful implementation of project, service provider will handover all Technical documents as well as User Manuals for the database of digitized cadastral maps, Operational Manuals of Enterprise GIS and Intellectual Property Rights (IPR) rights to the Agency. A copy each of the user manual would also be provided to authorities at District/ Tehsils/ Subdivision level. All the deliverables mentioned in this document would become the property of the Agency and the same reserves the right to replicate the digitisation process in as many Tehsils and other administrative units as required.
 - ix. Open standard may be used for creation of Database / Applications etc. As far as the encoding standards are concerned, the UNICODE should be used for data storage and local language display and support.

The work of scanning has to be done at space provided by State Government in the premises where records are lodged at Jammu and Srinagar. However, the Vendor shall have to carry a scanning system to district HQs and Tehsil HQs where records of sizes A4+, A3+ and A1 will have to be scanned.

It is required to convert the existing paper maps into GIS-ready digital form in order to facilitate updating of cadastral maps in synchronisation with the changes made in the RoRs. RoRs provide information on the plots held by individual or joint owners, indicating ownership of land, its classification, land use, source of irrigation etc. Detailed maps of individual pieces of land, called parcels or plots, are prepared accurately for each revenue village. A plot of land may have been further subdivided into two or more sub-plots and transferred to other persons by way of deed of gift or sale or inheritance, or conversion of classification of land use etc. The need for indicating these changes in the map arises every time a change as mentioned above takes place so as to depict the ground reality. The cut-off date for updation of musavis will be mentioned in SLA (Service Level Agreement). However, one original copy of musavis in digitized form will be preserved and the changes will be made in another copy of the original musavi.

GIS-ready digitisation of cadastral maps and their integration with RoR involve the following steps:

Scanning of the cadastral map or part of the village map and feeding this scanned map into the computer to create a computer image of the map which is known as a raster map.

The next step involves geo-referencing of the raster image and then vectoring the details, such as, village boundary, parcel boundaries and all details as per the 'Technical Inputs' document.

A printout of these vectorised maps would be given to the Agency by the service provider for thorough checking with the original cadastral maps. The Agency would then table check the vectorised map on a glass table with the original map placed below it. Every line and point on the two maps should match. With Respect to RoR Dimensions and the correctness of the digitized map would be then certified by the Agency. Errors, if any detected, have to be rectified by the Service Provider/digitizing agency. Necessary arrangement for this testing will be done by the Service Provider.

Once the Agency has approved the vectorised map and the files, the Vendor can proceed to add each of the handwritten information on the original map except the signature at the bottom given out neatly typed, Distances (line lengths) as per musavis to be fed for each arm/ side of polygon/ plot.

The print-out of the map taken out at this stage needs to be thoroughly checked and approved by the Agency.

17.2 Survey / Re-Survey and Up-dation of the Survey & Settlement Records

For updation of Revenue records / Musavis the following survey methods can be adopted as per the ground situation /reality using any / both of the following method :

- a) Pure ground method using Electronic Total Station (ETS) and Differential Global Positioning System (DGPS)
- b) **High Resolution Satellite Imagery (HRSI)**

The Agency will procure Ortho-rectified satellite imagery of best possible resolution along with DEM data, if available. The GCPs established using DGPS will be post pointed on the imagery to improve accuracy of geo-referencing for better registration of maps prepared in the process of Survey / Re-Survey.

The Purpose of ETS and DGPS survey is as follows:

- i. Updation of Maps / Parcel which could not be updated by the Agency due to the unavailability / clarity of record.
- ii. Survey / Re-survey where required and ground truthing of the features captured from satellite image.
- iii. Fixing of Sehada stones as per specifications.
- iv. Geo-referencing of ortho-rectified imagery by post pointing of GCPs for improving accuracy of registration of maps created after Survey / Re-Survey.

17.2.1 Specifications for the DGPS / ETS survey for Parcel updation and Fixing of Sehada stone (village tri-junction pillars)

- i) Generation of Primary Grid of each 16 x 16 Km / Tehsil Head Quarter spacing with

observation time of 8 to 10 hours at each point.

- ii) Generation of Secondary Grid at 4 x 4 Km spacing with observation time of 4 to 6 hours at each point.
- iii) Tertiary points at a distance of 1 x 1 km spacing with 2 to 3 hours observation time and monumentation of each Sehada stone at village boundary.

It may be noted that the lands under urban settlements and the lands of forest department are not to be covered in the process of Survey / Re-Survey and therefore, GCPs are to be provided accordingly. The raw data of GPS observations in the native format and RINEX format needs to be delivered along with the co-ordinates after post-processing and adjustments.

17.2.2 Setting up the Ground Control Network

All the control points should be based on datum given below:

- i) **Horizontal Datum:** WGS-84 (i.e., the latest version of the World Geodetic System).
- ii) **Vertical Datum:** MSL, i.e., the Mean Sea Level.

(a) Primary Control Points

(i) Horizontal

The primary control points will be established by static GPS with 8 to 10 hours observation time with dual frequency GPS receivers. The observed data of these control points needs to be post-processed with precise ephemeris adjusted with the help of appropriate s/w to the ITRF co-ordinate system and the RMSE as determined by the residuals of the network adjustment with 95% confidence interval should be within 5 cm. All the secondary and tertiary control points should be connected to the primary control points of Survey of India to ensure connection to the National Framework. Every primary control point should be fixed by observing two masters and one rover in triangle.

The pillars should have the following characteristics

- i) Rock-stone or Sand-stone 24 x 24 x 100cm or RCC.
- ii) The control point should be 15 cm above the ground and 85 cm inside the ground.
- iii) The control points should be fixed to the ground using at least 15 cm of cement block.
- iv) Monuments shall bear a triangle on top with a plummet hole in the middle and a 15 cm steel rod inserted (flush with concrete surface).
- v) The control point number should be inscribed on the monument.

(ii) Vertical

The precision Bench Marks should be established as primary vertical control.

(b) Secondary Control Points

(i) Horizontal

The secondary control points should be established as 8-10 km network to be provided using the GCPs requisitioned from Survey of India.

(aa) Best places for affixation: In protected areas like premises of government buildings including school buildings, veterinary hospitals, etc. and other protected structures, etc. The selected site should be open and clear to sky with a cut off angle of 15°. High-tension power lines, transformers, electric sub-stations, microwave towers, high-frequency dish antennas, radars, jammers, etc., which interfere with GPS signals, should be strictly avoided.

(bb) Densification: 10 km average

(cc) Instrument to be used: Dual-frequency GPS receivers

(dd) Accuracy levels required: All GCPs shall be connected to the National Grid Reference System and GCPs will be measured within the accuracy standard of $5 \text{ mm} \pm 0.5 \text{ PPM}$ with reference to nearest SOI control points.

(ee) GPS network design: Secondary control points should be observed with a geometrically sound network plan, connected to primary control points in triangle.

(ff) Schedule of observations: Observations for Secondary GCPs should be scheduled with proper mission planning, considering the optimum availability and Geometric Dilution of Precision (GDOP) of satellites less than 3 (i.e., geometric strength of satellite configuration on GPS accuracy). Observation time should be 4 to 6 hours.

(gg) Monumentation of secondary control points

The pillar should have the following characteristics

- a) It should be light in weight.
- b) It should be easy to install.
- c) Material used should be fire resistant.
- d) It should stand for at least 50 years, if metal is proposed, it should be rust proof as well as should be difficult to uproot.
- e) Should have provision of engraving/punching the name of organisation.
- f) Pillars/markers for sandy/swampy soil.

(ii) Vertical

In case some modern technology develops later, the details will be circulated separately.

(c) Tertiary Control Points

(i) Horizontal Control

Tertiary controls should be observed as triangular offsets. Single offset will not be allowed..

Schedule of observations: Observations for Tertiary GCPs should be carried out with proper

mission planning. Observation time should be 2 to 3 hours.

- (ii) **Vertical control:** Single GPS offset up to 5 km from secondary vertical control may be allowed for connection of GPS heights in WGS 84 datum to MSL heights.

However, such offsets should not be extended.

(d) Auxiliary Control Points

i) **Best places for affixation:** Each secondary and monumented tertiary control point shall be paired with one auxiliary control point, which should be located on permanent structures like bridges, culverts, permanent building corners, etc. The auxiliary control points should be within the line of sight from the primary, secondary and tertiary control points.

ii) **Densification:** There shall be one auxiliary point for each secondary and tertiary control point, typically 200 m or more.

iii) **Instrument:** Dual/Single-frequency GPS Receiver (as used for main control).

iv) **Accuracy levels required:** same as their respective primary, secondary and tertiary control points.

Notes:

- 1) The co-ordinate list and description of the location of all the control points shall be submitted to the State Agency through JaKLaRMA. The locations and IDs of all the control points should be maintained in GIS form.
- 2) The co-ordinate list should be supplied both for geodetic system (Lat/Long) and Projected System – Universal Traverse Mercator, i.e., the UTM projection of the respective zone.
- 3) In case a village tri-junction has not been marked and monumented by a primary, secondary or tertiary control point, the same should be monumented as per the parameters.

17.2.3 Monumentation / Sehada (village tri-junction pillars)

The Monumentation of the surveyed points as per the specification mentioned above should be done by the vendor. The Unique ID will be grooved over the steel plate which shall be fixed in the permanent structure. The selection of the location for the Monumentation shall be done in such a fashion that it does not get damage due to the movement of vehicle etc. The monument constructed shall be properly fenced/ protected. Monumentation to be done by vendor for all primary, secondary points and territory points.

- 17.2.4 It is proposed to set up a Virtual Reference Network (VRN) in the state of Jammu and Kashmir in near future. The GCPs should be established accordingly. The vendor will provide a good quality map which should contain only such monumented GCPs at secured places which can be used for this purpose.

17.2.5 Up-dation of the existing map / data in field :

The softcopy of the vectorised map created as per 6.1.4 above, the paper print of which has already been checked thoroughly by Agency will be overlaid on the geo-referenced

HRSI and necessary extent of the imagery along-with this vector map, both in hard as well as soft-copy form are to be given to the Survey team for updation who will carry out the survey work using ETS. The HRSI and the map are loaded on the ETS which will be used as active files and the whole exercise of updation will be carried out in the presence of Settlement Team and land owners. The RoR data is also up-dated simultaneously. It has to be ensured that IDs of parcels in the Spatial and non-spatial data are same.

After ensuring that all updations are done, the data will be ported to the Computer Centre and a good quality print is generated by the Service Provider in the presence of authorized official who will certify it and the same will be verified by the Tehsildar or an authorised Revenue Officer. Final printout will be handed over to the Agency for its approval / authentication.

17.3 Registration of Village digital (vectorised) data using GCPs

The Village data to be superimposed over the geo-referenced ortho-rectified satellite image for updation of the land parcels and identification of the encroachments.

17.4 Process involved in Integration of spatial database with textual RoR data

- a) Each plot of land is represented on the digital map as a closed polygon. Each polygon is identified by a unique plot number & each plot is also referenced by this unique plot number. This provides a basis for integration of digital map data with the textual RoR data.
- b) The basic textual RoR database consists of several tables which provide information on ownership, land classification, etc.
- c) After integration of the textual and spatial RoR data, the digitized map may be shown on the computer, which indicates through colour codes depicting the plots which do not have a corresponding textual detail or plot number, or where the textual and spatial data (area) do not match each other. The corrections will have to be carried out by the Vendor with the help of revenue official/officer.
- d) Pedigree tables also need to be created in respect of all villages.

17.5 Grouping of Features contained in the Spatial Database

Vendor is required to group various features in different classes / coverage and that will be specified in the System Design Document which the selected vendor will prepare and submit after signing the SLA based on the technical inputs from the Agency. Vendor will also provide a comprehensive coverage containing all control points, and similar important features.

17.6 Dataset to be Topologically Complete

The final dataset should fulfil the following criteria for all classes / coverage:

- i. Polygons are closed properly. No undershoots or overshoots are acceptable.
- ii. All linear features should conform to planarity requirement, i.e. all intersections are

properly termed as nodes.

iii. All Polygons have individual and unique label.

17.7 Management of Old Revenue Documents

The scope will include scanning and indexing of hardcopies of the following works:

- a) Scanning of Misal Haqiyat copy of Jamabandi
- b) Scanning of all the deeds registered during last 10 years
- c) Cataloguing and indexing of all the scanned documents
- d) Storage of scanned documents in soft copy form in .pdf or .tiff formats
- e) Security of scanned documents
- f) Software for indexing and retrieval of scanned documents
- g) Scanning and preservation of old documents
- h) Geo-link with RoR, Geo-link with Document management
- i) Virtual Modern Record Rooms and Land Records Management Centres (Data Centres / Computer centres at Niabat / Tehsil / District / Regional Directorate / State Level.

The scope will also include the following with respect preservation of documents. The records supplied by the Agency should undergo a pre-scanning procedure including removal of pins, tags, threads, rubber bands, stapler pins. If the pages are not in proper order, it has to be correctly ordered.

Scanning of all the records available with the Agency for each of the record room in minimum resolution of 200 dpi using “**Black & White and Colour**” option as per requirement and storing the document in **encrypted pdf** and **tiff** format in a predefined file naming convention and indexing it. If the condition of input record is bad, higher resolution scanning needs to be used.

Vendor shall ensure that Automatic Curvature Correction (Correction of curved texts at centre-binding), Automatic finger masking (erasing of images of fingers holding pages) and Auto-erasure of centreline shadows are applied to achieve a good quality of scanned image.

Vendor shall provide detailed specifications /make /model of the High-end scanners proposed to be used for the project as part of their Technical Bid.

The Vendor shall maintain registers and entries should be made for receiving from and returning to the Agency, the cadastral maps, after checking in respect of all the activities viz., scanning, digitizing, indexing.

While scanning, adjustment of various parameters like contrast, brightness and density of images should be made to optimal level so that all the contents written on the village maps, musavis, Jamabandis, Field books etc. are captured in readable format.

Most of the original hard copy Map Documents are on tracing cloth and are very old with sizes ranging from A0 and lower. It is the vendor’s responsibility to ensure that proper preventive measures are taken to avoid damage/mutilation while scanning of these hard copy documents.

Some of these Original tracing cloth map documents have width equal to that of A0 Size but the length exceeds that of A0 Size. In such cases, Vendor need to ensure that the scanned images in parts are stitched properly without creating data loss, misalignment along the stitched edges.

The file naming convention/codification/tagging convention should include attributes to identify the Tehsil keeping in mind that the system may get upgraded to an enterprise system. The naming convention should be discussed with and approved by the Agency.

High end scanners with scanning capabilities of 600dpi or better need to be used to scan bad conditioned documents. Vendor needs to ensure that Automatic Curvature Correction (Correction of curved texts at centre-binding), Automatic finger masking (erasing of images of fingers holding pages) and Auto-erasure of centreline shadows are applied to achieve a good quality of scanned image. Vendor needs to provide detailed specifications / make / model of the High-end scanner proposed to be used for the project as part of their Technical Bid.

It is the Vendor's responsibility to ensure that all types of hard copy map documents and records available at existing Record Rooms at Jammu/Srinagar and with the Revenue department at district /Tehsil HQs should be scanned completely without causing any kind of damage to the original documents.

All images shall be saved in upright orientation and sufficient post scanning treatment including removing unwanted noises like black spots are to be applied.

The treated Scanned images should be delivered to the Agency in uncompressed format as well as in linearised pdf or tiff formats..

The documents are to be tagged with digital metadata information as per the format specified by the Agency which will act as “key-words”, with which the document can be easily searched and identified in the document management system.

The files / documents will not be allowed to be removed from premises allocated to successful bidder. Suitable hardware infrastructure/facilities have to be established onsite at the premises that shall be allocated to do the scanning work.

All documents shall be returned to the Agency in its original condition. Under no circumstances shall the documents be changed, mutilated, destroyed or replaced by some other documents. Any damages caused to the hard copy documents by the vendor shall attract penalties.

Storage of the scanned copies of the records in the Server and making them available to the server based digital document management system software (part of Web-based Enterprise GIS) for easy retrieval.

Physical arrangement of all of the hard copies available with the Agency in the map cabinets, compactors and racks as per the series and sequence proposed. The maps are to be stored in such a way that there is a “moisture blotting paper” in between the maps. The blotting papers also need to be supplied by the bidder.

Barcode Tagging of Hardcopies

Establish barcode tagging of each of the hard copy document. The document may be single paged or multi-paged.

The Agency will get alterations done in the Record Rooms and procure necessary equipments separately for physical lodgement of the records in the Modern Record Rooms. However, it is the responsibility of the vendor to make the virtual Modern Record Rooms operational at all levels.

17.8 Web-based Enterprise GIS, High level specifications for J&K Land Records and Application areas

General Specifications:

- In order to assist the day to day activities of the stakeholders of the land records, a browser based GIS application needs to be developed.

- The scope includes system study, requirement analysis, design, development, testing, implementation, commissioning, running and maintenance of Web-based Enterprise GIS application with facility for editing the spatial and attribute data over web browser and having options to perform day to day mutation, modification, updates, reports, generation and printing of demand notes, collection receipts, online retrieval and storage of old/legacy data and all other activities of the Agency related to maintenance and use of land records
- Average number of transactions can be estimated from Table 1 and Table 2 below. Moreover, it is to be noted that the state is divided into two Divisions, further into 22 districts, 66 Sub-Divisions headed by SDMs, 266 Tehsils, 652 Niabats, 1714 Patwar Circles and has 7050 villages. The number of users and concurrent users, with reasonable cushions, have to be estimated accordingly during software development.

Table 1 : Progress of attestation of mutations during January, February and March 2014 in Jammu, Kathua, Srinagar and Budgam districts of J&K

District	Jan 2014 Pending Mutations/ Attestations	Feb 2014 Pending Mutations/ Attestations	Mar 2014 Pending Mutations/ Attestations	Total	Percentage
Jammu	2527 / 1025	2724 / 1263	2152 / 864	7393 / 3152	42.63
Kathua	566 / 278	602 / 278	498 / 191	1666 / 747	44.83
Srinagar	517 / 517	240 / 240	148 / 148	905 / 905	100
Budgam	1123 / 174	1149 / 232	1064 / 176	3336 / 582	17.44

Table 2 : Details of Sale Deeds registered in Jammu, RS Pura, Bishnah and Akhnoor Tehsils during November 2014

Tehsil	Number of Sale deeds
Jammu	307
RS Pura	57
Bishnah	61
Akhnoor	55

- Suitable documentation in detail, user references and data formats must be provided both on soft copy (CD/ DVD) and in hard copies.
- The developed solution must be compiled executables and packages that are ready for installation. The hardware/software configurations for installation of the solution must be clearly mentioned.
- The installation of the solution must be simple and automated and installable by a trained computer user as and when required.
- The solution developed should cater for future obsolescence of hardware/ components and operating systems and must ensure support for all advancements and versions
- The software will comprise of Five distinct and independent module as below
 - Editing Users
 - Public Users
 - System Admin Users
 - Agency Users
 - External Users

Functional Requirements common to all users

- The application module should have the user authentication screen before opening the GIS user interface. None of the web pages or module interfaces should be available to any user without authentication of user name and password allotted to him by administrative users. However, the public user should be able to use the functionalities available to the public user by registering themselves on the website by specifying an unused user name and a password of his choice as per the guidelines mentioned on the website in line with best practices in the industry.
- The GIS user interface should be user friendly.
- The user should be able to select and load the map at Tehsil level using the drill down option using combo box in the following sequence

District → Tehsil

The Tehsil should be populated as per the selection of the district. After selecting Tehsil, it should take the user to the GIS interface opened with the selected Tehsil on the map display area.

- After loading the data for a Tehsil, there should be option to drill down to the Khasra level using combo boxes in the following sequence

Tehsil/ Niabat→G.Q. Circle →Patwar Halqa→ Village →Khasra No

There should be option to directly select the village name also, without selecting the G.Q. Circle or Patwar Halqa. If there is more than one village with the same name, the options should be automatically highlighted with details of village with corresponding G. Q. Circles and Patwar Halqas so that the user can select from the available options.

- The interface should have easy to use Map Navigation Options like:
 - Zoom to Full Extent
 - Single click fixed Zoom-in and Zoom-out options
 - Zoom to previous extent
 - Zoom to selected features
 - Zoom to specified scale
 - PAN using click and drag options and/or using sliders at bottom and right side
 - Option to view the feature layer list currently displayed in a stacked form.
 - Option to switch the display of a feature layer ON or OFF independently.
 - Attribute query options to find records satisfying conditions based on specific field or combination of fields using logical and mathematical operators.
 - General GIS spatial queries.
 - Measure distance and Area using specified mouse clicks.
 - Click and select features. Select using rectangle, circle, polygon etc.
 - Online help on usage of the system.
 - Scale based display to avoid cluttering of data
 - Smooth visualization
 - Provision for Administrator to set Layer Display
 - selection of layers for display on/off by user in browser based application
 - Analysis results layers On/Off
- **Facility to generate and print copies of Land Records**
 - Any public user can print copies of Khasra with/without Map and/or RoR data, only after registering himself once and making online payment in favour of **JaKLaRMA** through the payment gateway.
 - Designated person at Tehsil level should be able to receive application for issue of Land Records Copy. He shall receive the payment from the applicant by cash/demand draft/debit card/credit card. He should be able to drill down to a Khasra and take print copies of Khasra with/without Map. After entering the payment details, the print option shall be activated. He will take the printout and handover the same to the applicant.
 - In case the applicant applies for the land record online and pays the fee via payment gateway, then after realization of his payment by the bank, the application shall take control of the browser from the payment gateway and a print option should be activated for the applicant to take print out of the land record, for which payment is made.

- Vendor shall have to generate a statewide unique number called “ULR” Number for all the records currently stored in the database.
 - An encrypted pdf file with “ULR” Number as filename should be automatically generated and saved in the server
 - At any point of time, if anybody feeds the “ULR” Number in the user interface at the home page of the website, he should be able to see the already printed land records copy as well as the current status of the same Khasra No. If the Khasra Number gets subdivided, then he should be able to see all the parts and vice versa.
 - At any point of time, if anybody feeds the “ULR” number via SMS, he should be able to view the selected fields as per the current status of that Khasra No. The fields to be displayed shall be finalized at the time of drafting the System Design Document.
 - The layout of the Land Records Copy shall be pleasing and well organized. The layout should be approved by the Agency prior to its implementation. It should have details like “ULR” Number, Date of generation, selected attribute details of Khasra (if taking copy of Khasra with Map). The map layout should be aesthetically pleasing and should follow the rules of cartography.
 - The North arrow should be ideally placed on the top left/right hand corner of the map. The layout should have a graphical scale to be specific, so that the reading information from printouts of any size is easy. The scale should be located on the bottom right side of the map.
 - The details of district/Tehsil/GQ Circle/Patwar Halqa/Village and Khasra No. all should be included in the bottom right side of the map.
 - The map border shouldn't have any co-ordinate information (Latitude/Longitude) attached to it, because it might be against the policy of mapping set by Govt. of India where true graticules shouldn't be shared publicly due to security reasons. (Hence proper care should be taken not to violate the law of the land with respect to mapping). Instead map can be divided into grids and grid no's can be written on the border for reference (if at all such reference is needed by the Agency or the applicant for easy referencing of his khasra of interest).
 - The paper size should be selected automatically to A4 or A3 as per the size of the parcel. The scales to be used shall be 1:500, 1:1000, 1:2000, 1:2640 and 1:4000. The applicant shall choose the paper size (A4 or A3) if the parcel can be printed in both A4 and A3 on any of the scales mentioned.
- **Payment Gateway**
 - The Vendor is required to make facility for Payment Gateway so that payments using online net-banking or debit/credit/cash cards are incorporated in the solution.
 - **Grievances Module**
 - There should be a software module and hardcopy option to records the grievances. It can be grievances regarding any process or application.
 - There should be standard form filling-in the details of grievance. Based on the type of issue, it should automatically be forwarded to the concerned officer.
 - There should be escalation mechanism to the higher authorities. At any point of time, the applicant should be in a position to view the status.
 - The applicant apart from being able to see the status should also be able to see the number of days that have passed since he submitted the grievance and a mechanism should be provided to him wherein he himself can hit on a escalate button (where

the escalated report goes to the next higher official in the hierarchy taking care of the grievance) if no proper response /no response at all is provided to him within a stipulated time frame. Officers should be in a position to view status of cases pending with self and his sub-ordinates.

- **Feedback Module**

- There should be a software module and hardcopy option for recording feedbacks by all types of users regarding the system. It can be like errors/bugs/difficulties in using the system or general comments which may or may not include suggestions for improvement.

Additional Functional Requirements for Public User

- Select the Khasra using the drill down combo boxes or after directly selecting the village
- See demand note under all heads
- Pay dues online using internet and online banking/debit/credit/cash cards
- Receive the digitally signed payment receipt in real-time.
- See dues paid status.
- Payment details shall be passed to the accounts Agency

Additional Functional Requirements for payments receiving counters

- Select the Khasra using the drill down combo boxes from higher levels or after directly selecting the village.
- See demand note for Receipts or Payment made status.
- Receive payment from public by cash/demand draft/debit/credit/cash card and update the payment details in the database.
- Payment details shall be passed to the Agency.

Provision of SMS Gateway

- Should have additional gateway for providing details on Khasra records to the citizens through SMS Services.
- The SMS Solution must be able to seamlessly integrate with the proposed Web- based Enterprise GIS Solution.
- In developing the proposed SMS Solution, the bidder must include, at minimum but without limitation, the features and requirements specified below.
- The SMS Solution should be designed and developed to be used with all mobile handset available or in use to facilitate device independence in delivery of services
- The SMS Solution must support standard message formats. The applications should be able to send and receive messages in multi lingual format including but not limited to Hindi and English languages.
- The SMS Solution must allow Government Agency to send messages, in both single and / or bulk mode, to mobile devices / network operated by both Local and National (GSM/CDMA) service operators.
- Khasra record corresponding to the ULR number shall be sent via SMS to the applicant through the Service Provider.
- Payment details as per no. of SMS received, shall be passed to the Agency.

Additional Functional Requirements for Editing User

- All edits are to be done by the human resources supplied by the bidder but the edits should be authenticated by biometry and digital signature of the authorized Agency officials, while posting the edits to the central server.
- It should be noted that while posting the edits to the data, the edit shall be written to databases at Data Centre instantly and a confirmation flag should be returned to the editing session.
- Tools for editing attribute data with user permission authentication with audit trails, undo options and versioning. Once the edits are authenticated and saved to the server, the undo options shall not be available to the users.
- Easy to use editing tools should be available. Option to create temporary lines as reference lines while editing, make parallel lines at a specified distance to an edge, drawing lines perpendicular to an edge etc.
- Options to update and manage Mutation details like:
 - Division/Partition.
 - Sale/Purchase/Government Patta.
 - Legal possession due to Will or Succession.
 - Donation.
 - Land acquisition by the Government
- Options to update the following records whenever there is a requirement:
 - Khasra (Field Book).
 - Maps.
 - Holder wise Revenue collection register
- During the registration process, a flag shall be introduced to indicate that the property has been registered to another owner by the registration authority. After the mutation process, the flag shall be removed by the revenue authority. Till the removal of the flag, the property cannot be sold / transferred again.

Module to Manage Demand and Collection for Agricultural Land Revenue

- Option to compute the land revenue as well as generate and print the demand note.
- Option to generate and print collection/payment receipt from owners and update the records automatically for collection and pass the information to accounts
- Update the registers in ULRs format automatically Option to compute the Premium and Annual Rent for diversion and to generate, print the demand note.
- Option to generate and print collection/payment receipt for premium as well as annual rent from owners and update the records automatically for collection and pass the information to accounts
- Update the registers in ULRs format automatically
- Option to manage sending the notices and the destruction of illegal construction/possession and/or encroachment
- Module to Manage Demand and Collection for Mining Land
- Option to compute the Premium and Annual Rent for Mining Land, generate and print the demand note.
- The solution should have full function versioning to load to a previous version and option to roll back to a previous version if required.
- Options to overlay registered images including satellite images/aerial photos
- Automatic quality checks and data validation options:

- Check for Sliver Polygon
 - Check for Overlapping features
 - Check for “No man’s land”/ “Holes”
 - Check for Uniqueness of Khasra Number within a village
 - Check for Positional Accuracy of digitization
 - Check for Adequacy of nodes / Absence of clustered nodes
 - Check for Layering
 - Check for Feature Type
 - Check for Missing / Incomplete Attributes
 - Check for absence of garbage data
 - Check for Undershoot, Overshoot/Dangles
 - Check for Unclosed Polygons
 - Check for Continuity and Contiguity
 - Check for Nodes at intersection
 - Check for Correct Spatial Reference
 - Check for Snapping within Layer
 - Check for Snapping between Layers
 - Check for gaps in dates
- The system should have interfaces for Patwaris for feeding data (Fixed data as well as temporal/seasonal data) pertaining to a Khasra such as
 - Soil Type details
 - Land Utilization details
 - Cultivable Area details
 - Land Irrigation details
 - Ownership details
 - Crop details (Facility to feed different seasonal crops in a same year for the same land with individual areas of cultivation)
 - Crop Irrigation details
 - Equipments
 - Lease details
 - Encroachment details
 - Tree Information details
 - Possession of Economy related Animals and Birds by farmers
 - Agricultural Labour availability in different classes, Wages prevailing in each class
 - Prevailing rates of agricultural commodities, farm price, market whole sale price and market retail price
 - Phasal status by eye estimate
 - Details required for performing crop cutting experiments
 - The details collected by Patwaris shall be fed in to the system by vendor’s resources along with biometric authentication by Patwaris.
 - Facility for writing comments after supervision of Land Parcel (Khasra)
 - The system should have facility to write comments after supervision of Land Parcel (Khasra) for monitoring the actions by Patwaris. The provision to put comments shall be available at the following levels:
 - Girdawar Qanungo
 - Tehsildar, Naib-Tehsildar, Addl. Tehsildar
 - Deputy Commissioner

- Other Higher Authorities
- After insertion of comments to a parcel as above, the color of the record in the reporting interface should be changed to Red. After the issue / instruction is addressed by the Patwari, the color of the record should be changed to Green. The supervising officer shall review the action by Patwari and after acceptance by the officer, the color shall change to default black. Upon non-acceptance of the same by the officer originally inserted the comment, he shall introduce new comment and the record shall again change to red.
- There should be provision in the reporting module to see the sequence of comments on a parcel or sequence of comments related to any officer/Patwari.
- There should be a module to view the statistics of the comments and actions by patwaris pertaining to the supervisory officer. The report should also show the percentage of Khasra supervised by the supervisory officer to the total number of Khasra under his jurisdiction.
- The solution should have a “File Server”, which will enable the users to load scanned images of documents or other documents in digital format like reference material in popular image formats/popular document sharing formats.

Additional module for management, retrieval and providing public services for data/document pertaining to Record Rooms

- Data Porting
- The successful vendor is required to perform porting of digital data including scanned images and data stored in local databases at record rooms.

Functionality requirements of the application module

- The search and find sub-module should have smart query and real time search options based on key-words of the metadata and user defined indexes to find a documents and folders.
- The solution should be integrated with barcode reader, barcode printer(including auto-generation of barcode for a new document) and biometric fingerprint authentication device.
- The solution should have facility to add new documents to the system including auto-generation of barcode for a new document.
- Role based user creation and management facility should be present.
- The solution should also provide the facility to create users and groups through a separate administration module. The system administrator should be able to provide access rights on documents, folders and metadata based on users and groups. The system should support multiple level access rights like (Delete / Edit / View / Print / Copy or download)
- The solution should support system privileges and secure login and password for each user.
- The solution should have transaction and session management, connection pooling, load balancing and fault-tolerance capabilities
- The solution should provide dependable digital archival, fast retrieval and efficient distribution solutions.
- The solution should have universal viewer in order to enable users to view the uploaded PDF Files and any other common image formats, without help of the Desktop based PDF Reader or any other concerned file viewer installed on the desktop.
- Whenever a hardcopy document is taken out of the record room, the information has to be fed in to the system with document id (identified with barcode reader), person taking the document (identified with biometric fingerprint authentication), date and time (taken from the server), contact details of the person, expected return date etc.

- The software solution should generate extensive audit-trails at each user level. All actions like modification, creation, deletion etc. should be logged automatically to audit trail tables in the system's database with date, time and name of the person. All such reports must be exportable to XML, PDF, MS-Excel, txt, CSV formats.
- The solution should have option to take copies of the document retrieved using search sub-module by printing it. There should be option to choose to print only a portion of a document, specified by a temporary rectangle drawn by the user by clicking two corners of the rectangle. The print option should be integrated with the payment module for collecting the designated "fee" from the applicant and module for generation and printing the receipt.
- Document linking – provision to create links to other documents within the existing documents.
- The solution should have internet module for the public for viewing, searching and taking copies of documents and should run on industry standard browsers like Internet Explorer, Mozilla, Google Chrome etc. Taking copies should be after making a payment to the Agency by the user through the website. Online receipt also should be generated.
- While viewing, users should be able to perform all types of imaging operations like rotate, invert, adjustment of brightness/contrast, zoom-in, zoom-out etc.
- The solution should support indexing of folders and documents based on system defined and user defined parameters.

Establishing Connectivity between SWAN PoP and LAN

- State Wide Area Network (SWAN) connectivity shall be provided by the Agency for all Tehsil user locations.
- For Data Centres and all other client machines at the Tehsil except for the client machines in the Record Room, the vendor's scope includes connecting the SWAN PoP (Point of Presence) to the client machines by supply of all required equipments/materials (including router) and establishment of LAN.
- The scope under this project includes connecting the SWAN PoP with the client machines in the Record Rooms by establishment of connection from SWAN PoP to the LAN at the Record Room through supply and installation of all equipment/materials (including router) required at the vendor's cost.

Additional Functional Requirements for Administrative/Institutional Users of the Revenue Records

System Administrative Users

- Generate data editing statistics. Who has done what, where and when? Generate editing statistics between specified date ranges.
- Data loading options as and when new data is available with ULR
- Automatic linking of attribute data to map data. This is a requirement at the database level. There shall be separate pure non-spatial tables in the database, which shall be linked to map data through single or multiple linking fields (Primary key and foreign key). This facility is provided to overcome the fact that all non-spatial table records may not have corresponding surveyed map data. As and when the map data is available, the non-spatial records should automatically link to the corresponding map data.
- Data security management against unauthorized access. The authorization levels should be controllable with machine Hardware ID and IP.

- User Management including setting up of access levels for data as well as functionalities
- Any changes to the data including uploading of new data or changes to the existing data or administrative settings including security and user management shall be done using authentication of authorized Agency user using biometric authentication and digital signature.
- option of cache clearing after session expires
- Role based functionality access and restrictions
- LDAP based security implementation
- Single sign-on login facility
- Provision for administrator to define the user role and access along with security rights
- OGC standards web services for data publishing/ sharing
- Access through user define ports to ensure security
- Connectivity through low band width based intranet to connect remote clients
- Agency Users
 - The solution should have facility to take print outs of the land records by the Agency staff of his authorized area. Selection and printing includes both map in desired scale in up to A0 paper size and attributes data or either. There should be facility to select and print single or a group of records as per standard or custom selection criteria.
 - The solution should have facility for the Agency users to generate and print statistics and reports.

Additional Requirements for special external users

- Users from the following external Agencies shall be provided with special accessibility with the corresponding functionalities as listed below:

Sr.No	System Name	Integration Requirement
1	Financial Institution	<ul style="list-style-type: none"> ● Financial Institutions should have special login registered with JaKLaRMA. They should be able to view the Land Record Copy issued by specifying the “ULR” Number. ● They should also be able to see the current state of the Khasra by selecting the Khasra using drill down options or directly taken from the “ULR” Number of an already issued Land Record Copy. ● They should be in a position to feed finance details/comments in finance remarks data column associated with the Khasra.
2	Town Planning Agencies	<ul style="list-style-type: none"> ● Town Planning Agencies should have special login registered with the Agency. ● Notes and comments as well as map from the Agency shall be available to town planning Agencies. ● Separate options shall be available to Town Planning Agencies for inserting Notes and

		Comments (like land-use change) upon login. Maps should be automatically available.
3	Registration Agency	<ul style="list-style-type: none"> • Registration Agencies should have special login registered with the Agency. They should be able to view the Land Records by specifying Khasra No selected using drill down options. • They should be in a position to feed Registration details/comments in registration remarks data column associated with the Khasra. • Mutation trigger shall be automatically generated and intimation has to be sent to concerned Tehsildar. • A flag shall be generated against the Khasra to denote that the property has been registered to new owner. The flag will be removed after completing the mutation process. Till the removal of flag, the property cannot be sold / transferred again.
4	Courts (Revenue and Civil)	<ul style="list-style-type: none"> • Courts should have special login registered with the Agency. They should be able to view the Land Records by specifying Khasra No selected using drill down options. • They should be in a position to feed Court details/comments (like guarantee declarations, Sureties etc.) in Courts remarks data column associated with the Khasra.
5	Any other authorised User	<ul style="list-style-type: none"> • As authorized from time to time by the Agency, any other User can be permitted special login facility to get information relevant to them. • Such authorized Users Cell should be in a position to use the data available to them as a web service and they should be in a position to use the service in their software to generate reports.

17.8.1 As per the envisaged set-up, there shall be 2 State Level Computer Centres (CCs), one at Jammu and the other at Srinagar. Besides the above, there shall be 9 CCs at Regional Directorate level, 22 CCs at District level and 266 CCs at Tehsil level inter-connected as per requirement. Both the CCs at State Level shall have Servers which will host Applications and Database (Spatial and Non-Spatial). At both the locations there shall be provision of fail-over Application Server and backup for Database also. There shall be provision of SAN Storage (for scanned data and other types of data to work as virtual Record Room) also. These two CCs will work in Active-Passive mode, but data (Spatial and non-spatial) in the servers at two locations will be true replica of each other. The Applications, as part of Web-based Enterprise GIS, shall run on the (active) Server at State Level CC and data will be accessed by authorised users, using web browsers, at all CCs down the line, who will have privileges to

view the data, generate reports based on queries and take print-out of map / desired portion of a map along-with reports, with text in Urdu, Hindi or English as per their requirement. Moreover, the authorised users at the CCs at Tehsil level should be able to access and copy the data of required portion through web browsers onto a desktop computer, make edits based on mutations / registry etc. and after getting these edits authenticated, the authorised user / System Administrator should be able to up-load the up-dated data on to the central server.

17.9 **Training and Capacity Building**

Vendor would provide suitable training to all the Tehsildars, Naib-Tehsildars, Qanungos and Patwaris of Revenue department of the State of Jammu & Kashmir who are working at Tehsil Head Quarters or villages. The officials would be trained to operate the software and the system independently. Vendor will also impart on-job training to the Settlement Patwaris or any other staff deputed for the job by the Agency to use the DGPS and ETS sets independently for field surveys. The deputed staff shall be trained for operating Web-based Enterprise GIS software for full functionalities at State/ RD/ District/ Tehsil/ Niabat / Patwar Halka levels. Workshops will be organised for senior officers to explain all necessary aspects including the functionalities of Web-based Enterprise GIS solution.

Vendor will also provide onsite post implementation support for two years.

18. **Accuracy, Quality and Data Completeness**

The project will have well defined and set procedures for quality assurance of the database. The quality check (QC) procedures are both qualitative and quantitative. All coverage or hard copy maps submitted by the Vendor will have to go through the quality check procedure by JaKLaRMA before acceptance. The following aspects regarding quality assurance have to be adhered to by Vendor:

- i. The quality assurance of the data will be carried out by JaKLaRMA
- ii. This will include checks for topological correctness, unique feature coding, and completeness of data, naming conventions, accuracy and RMS errors.
- iii. The Quality Assurance Form duly filled in as per the specified format (it will be contained in the System Design Document) has to be submitted along with the soft copy data.
- iv. Data not complying with the standards and accuracy specifications will be sent to vendor for corrections and will have to be re-submitted after carrying out necessary corrections.
- v. If the data complies with the quality assurance standards and error limits are in the prescribed range, the data will be accepted.
- vi. Quality assurance of database will be done within a specified time set by JaKLaRMA
- vii. On sample basis, the geo-referenced files of individual villages and the mosaic will be digitally quality checked by JaKLaRMA. The Vendor will ensure submission of data / records as mentioned below :
 - a. Digitized maps (musavis updated to current stage) on CD media as .shp files
 - b. Data base of digitized maps as database file.

- c. The printouts on 1:1 scale on specified media have to be provided in the following manner for validation / checking:
 - o One printout of scanned Original map on 90 GSM paper for validation (Glass Table to be used for one to one checking)
 - o One printout of draft digitized (vectorised) musavi, on 90 GSM paper for validation.
 - o Vendor may have to print more numbers till final corrections.
 - o Two prints of final digitized musavi, one print on 170 GSM paper and another on 100 GSM paper for use in field during Survey / Re-survey (also refer point 3.2 of Financial Bid Format).
 - d. Scanned final maps with complete indexing on CD media.
 - e. Digitized maps should be linked with RoR which is already computerized and available in Client Server.
 - f. Final output should run on Systems of land records computerisation to be developed and made operational at State / District headquarters of Jammu & Kashmir. It should be made operational at all the Tehsil headquarters of Jammu and Srinagar districts of the state, to begin with and the process will be replicated in all other districts for which the work will be awarded on the same terms and conditions, if work found satisfactory and on vendor's consent.
- (viii) Bidders shall follow the rules, regulations, laws and policies / guidelines of Government related to Land Records and Settlements. The missing or extra khasra nos. will be provided to the Vendor for correction.

18.1 Acceptance Test

The Agency will carry out the acceptance test for every deliverable. The Vendor has to arrange for demonstration of Digitisation & Updating of Cadastral Maps (Musavis) and Complete Document Management of Old Records project at their own level for undertaking the acceptance test on the date and time fixed by the Agency. All features as contained in this RFP will be demonstrated to the Agency in respect of Web-based Enterprise GIS to acceptance level.

Quality assurance will comprise the following aspects:

- (a) Positional Accuracy
- (b) Attribute Accuracy
- (c) Logical consistency
- (d) Completeness
- (e) Mosaicing of the maps
- (f) Standardization of Spatial information data infrastructure

The criteria and acceptance levels for various parameters are given below:

File naming 100%

Directory structure 100%

Data readability 100%

Data structure 100%

Data format 100%
Topology 100%
Attribute correctness 99-100%
Attribute completeness 100%
Data mosaicing 98-100%

At each step of the process, adopted for computerization and geo-referencing of the village map, quality check will be applied to ensure error free database generation. However, the following major quality checks will be designed to ensure the project objectives:

- Quality check on merged product generation using satellite data
- Quality check for Inventory and coding of the maps
- Quality check on first hardcopy output
- Quality check on softcopy of village maps
- Quality check on final hardcopy output
- Quality check on geo-referenced village maps
- Quality check on mosaic of geo-referenced village maps
- Quality check on final deliverables.

The following criteria for testing digital vector data for completion and accuracy may include, but not limit the number:

- (1). Physical Verification of test plot on tracing paper on random sample basis.
- (2). Random checking of features, during which, not more than 10% of points tested should be out by +/- 0.1% of the original map.
- (3). Verification of topological correctness by actually constructing the topology.
- (4). Verification of job requirements reflected in design document.

The digital data failing to conform these tests will not be accepted. Vendor shall be given an opportunity to rectify errors to the satisfaction of the Agency within a stipulated time, failing which the work order shall stand terminated. In such a case, the Agency reserves the right to get the work executed by another Vendor at the cost of defaulting party. NLRMP guidelines have to be referred.

Standards for data structure for integration with other data are to be followed.

During execution of work, the spatial as well as non-spatial data, when submitted by Vendor will have to be checked for quality as below, else the data will be deemed accepted:

- Village-data acceptance : Within 4 days from the date of submission to Patwari /
GQ (after 100% check)
- Niabat-wise acceptance : Within 7 days from the date of submission to Naib Tehsildar
(after 50% check)
- Tehsil-wise acceptance : Within 10 days from the date of submission to Tehsildar
(after 25% check)
- District-wise acceptance : Within 15 days from the date of submission to Regional
Director/Settlement Officer (minimum 10% check)

19. General Requirements

- i) Village boundaries are to be marked.
- ii) The (X, Y, Z) coordinates for the control points should be given in spherical coordinates (Geographic co-ordinates). Heights will be reduced to MSL by suitably connecting BMs which will be procured from SOI and provided to the Vendor.
- iii) Datum is to be taken WGS 84 and projection UTM. The state of J&K falls in two zones, namely, 43 and 44.
- iv) The Vendor should clearly mention the specifications of the instruments to be used to achieve the required accuracy. The Survey instruments should be technology-wise latest. The total station should have angular accuracy of 2" and distance accuracy of +/- 2mm. Also it must have the capability to upload active background maps, as the Agency will be providing ortho-rectified satellite imagery to the Vendor.
The DGPS to be used should have Static accuracy of 3mm +/- 0.1 ppm - For establishment of primary & secondary control points and at least 200 channels (to ensure the usage of new and latest technology available in this field) and all latest satellite constellations.
- v) Some baselines for calibration of the monumentation should be maintained at selected locations.
- vi) A sketch for each category of the control points shall be submitted, showing the location of the control points along with their description for easy identification.

20. Time bound completion of the work:

The work is to be completed in a time specific manner. Vendor would provide a time schedule / work plan for various activities, some of the activities will run in parallel. The selected Vendor shall mobilise adequate resources to ensure end-to-end completion of the project in minimum possible time.

The duration of the project is _____ weeks (to be given by prospective Vendor, which will be given due weight-age during the evaluation process for selection of vendor).

21. ROLES AND RESPOONSIBILITIES

21.1 Roles and Responsibilities of the Vendor

- 1 Vendor will ensure that the digital vector data is accurate and complete, as per the requirement detailed out in the bid document.
To keep liaising with Land Records and Settlement officials (District / Tehsil) to study the hole system related to the cadastral maps and Jamabandi etc. and submit 'System Design Document' to the Agency within 4 weeks from the date of the award of contract.
- 2 Identification of System Design Document requirements by the Agency which will have to be incorporated in the document during implementation of the project.
- 3 To identify requirements across Land Records (District/Tehsil) and to help to digitize the cadastral maps in generic manner so that the same can be used by all the concerned offices across the state.
- 4 To impart satisfactory training to users by solution provider (the Vendor) after installing and commissioning the software. All necessary changes, suggested during training and implementation will be incorporated in the project.
- 5 To prepare Technical Documents as well as User Manuals for all activities

Including Survey / Re-survey, digitisation of cadastral maps and its linking with textual data.

- 6 Project will be deemed to be completed after establishing the completeness of the work in all respects as per the laid down standards of accuracy.
- 7 Completion of the work is defined as accomplishment of all intended features and the logical grouping, as specified in the bid/ design document.
- 8 Accuracy is defined in terms of positional correctness, digital vector data and Topological completeness, subject to various tolerance limits, as specified in design document
- 9 After successful implementation of project, Vendor will handover Technical document as well as user manuals for the scanned images, digitized maps, all their copyrights shall be the sole property of the user Agency i.e., Agency of Govt. of Jammu & Kashmir.
- 10 All features as contained in this RFP will be demonstrated to the Agency in Respect of Web-based Enterprise GIS to acceptance level and it has to be made operational in respect of all Niabats / Tehsils of Jammu and Srinagar districts.
- 11 Vendor will ensure that the digital vector data and all Land Records are generated using licensed versions of the software and are accurate and complete, as per the requirement detailed out in the work order. Even, if an error is detected at later stage after the project period, but during the maintenance period, the Vendor will carry out the correction.
- 13 Vendor will give an undertaking that integrity, secrecy and security of data shall be maintained. Vendor will hire suitable accommodation for installing the computer systems for carrying out various activities, such as, Data entry, post-processing of Survey data etc. All the necessary hardware/software, LAN connectivity, UPS, etc. would be done by the Vendor to suit requirements. If approached, space can be made available by the Agency, subject to availability on chargeable basis. However, all the aforesaid ancillary work will be carried out by Vendor.

21.2 Roles and Responsibilities of User Agency

- 1 JaKLaRMA under Agency, Govt. of Jammu & Kashmir will constitute a High Power Committee for monitoring the project activities and its implementation.
- 2 Facilitate liaison of JaKLaRMA/Vendor with identified offices of the State.
- 3 Existing RoR/ Jamabandi record / Data should be provided in compatible format for linking with the digital cadastral maps.
- 4 Regular review of the progress of work carried out by JaKLaRMA/ Vendor.
- 5 Convene/facilitate the Public validation process and deploy representative (s) for accompanying the vendor during Public validations.
- 6 To supply the existing Musavis and other records to Vendor.
- 7 Agency will ensure return of the updated copy of the Musavis to the vendor agency for digitisation in defined time frame.
- 8 To conduct field verifications of updated Musavis as provided by Vendor.
- 9 To bring about legal changes wherever required enabling updating of records as per ground reality/field validation.
- 10 Respective DCs of various districts may be designated as the Nodal Officers for the project who would make available the musavis and other related information, arrange to make updation as per Shajra maps through Patwaris and validate / authenticate the maps. He may in turn form Tehsil-wise Technical Core Groups headed by Tehsildar for smooth-functioning of the project.
- 11 Continuous supply of cadastral maps, updation and validation of the digitized maps through

individual village Patwaris should be ensured by the Nodal Officers within the specified time limits to avoid delays in the schedules.

- 12 One Qanungo and one Patwari of the concerned District would be required to be deputed at JaKLaRMA for the project period to assist with regard to understanding the cadastral system and its terminologies, reading of musavis, language etc.
- 13 Quality of the output will depend on the input map provided. Hence, the cadastral maps should be of good quality as far as possible.
- 14 District administration may be required to provide the logistic support to the visiting Executive Officers in the field.
- 15 District administration will furnish necessary data, information and documents and other materials related to the work.
- 16 JaKLaRMA will provide all support where-ever and whenever required.

21.3 Roles and Responsibilities of JaKLaRMA (the Agency)

- 1 Being a nodal agency of the State Government for Management of Land Records, JaKLaRMA will execute this project up-to the end through outsourcing to the service provider.
- 2 JaKLaRMA will arrange funds from Govt. of India as well as from State Government for outsourcing of the work defined in the RFP document and for purchase of GCPs from Survey of India (SOI) and High Resolution Satellite Imageries (HRSI) from NRSC, wherever required. The User Agency will arrange timely procurement of GCPs from SOI and Satellite Imagery from NRSC. The Vendor shall not be held responsible for any delay in procurement, as the same will have impact on time-lines.
- 3 JaKLaRMA will interact with High Power Committee constituted by the Commissioner during the entire project implementation cycle.
- 4 Financial Commissioner, Revenue & Ex-Officio Chief Executive Officer, JaKLaRMA will constitute an empowered team (headed by Commissioner, Survey and Land Records, Ex-Officio Project Coordinator of the Project) for execution and monitoring of the project activities and its implementation.
- 5 Vendor will interact with this team during the entire project implementation-cycle.
- 6 Approval of the System Design Document submitted by the Vendor for digitisation of the cadastral maps and linking of the spatial data with textual data along-with other activities within the scope of the project.
- 7 Processing and payment of the bills submitted by the Vendor without un-necessary delay.
- 8 To check and verify the quantity and quality of the work and authentication of the deliverables to be supplied by the vendor within specified timeframe.

22 TERMS AND CONDITIONS

22.1 Performance Bank Guarantee

The Vendor must submit a Performance Bank Guarantee for project phase till commissioning of this project from any Nationalized Bank @20% of Gross Bid Value in the name of CEO, JaKLaRMA for a period of 12 months as per the format given at “Annexure VI” within 15 days of the signing of Agreement. Thereafter, separate Performance Bank Guarantee @30% as per format given at “Annexure VI” will be submitted for a period of 2 years, 2 months prior to the expiry of previous Performance Bank Guarantee.

22.2 Payment Terms

JaKLaRMA, Govt. of Jammu & Kashmir will release payments for the entire services rendered as per calculations given in the table below:

S. No. K-Key Events	Event	Completion Date	Payment % of total Contract Value
K1	Preparation of System Study and Design Document (SDD) (including Hardware, System software to be used, Data Model Structure, Design of Architecture, Data Security, Data Migration Strategy and Data Backup Strategy).	T+ 4 WEEKS	Nil
K2	Scanning of all Records and maps as per Specifications (including prints as required). [All Land Records at Jammu and Srinagar]	T+ WEEKS	20% of Contract Value (Bills may be raised on monthly basis)
K3	Provision of GCPs across the state including monumentation. [Whole State, District-wise break-up]	T+ WEEKS	10% of Contract Value (As per District-wise break-up)
K4	1. Digitisation (Vectorisation and Geo-Referencing) of current serving Cadastral maps, Data Entry of updated RoR. 2. Survey / Re-survey and Updation of the Survey & Settlement Records (including ground truthing) using the modern technology. Integration of non-spatial and spatial data. 3. Training of Technical Field Staff at each Tehsil level	T+ WEEKS	20% of Contract Value (As per the Tehsil-wise breakup)
K5	Verification and Final User Acceptance Test of Project (District-wise breakup for Jammu and Srinagar Districts)	T+ WEEKS (District-wise)	10% of Contract Value (As per Tehsil-wise break-up)

K6	(1).Development of Enterprise GIS including software modules for Virtual Modern Record Room/ Land Record Management Centres at Niabat /Tehsil/ District/ Regional Directorate/ State Level with provision of three languages for outputs viz., Urdu, Hindi and English including all features mentioned in the RFP. (2).Handholding/ Customisation (Comprehensive training of employees on packages developed) (3).Handing over of all the data, documents and manuals after development of Web-based Enterprise GIS software	T+ WEEKS	5% of Bid Value (50% of the amount under this head will be released after successful completion of Sub-item (1).
K7	Commissioning of Project (including preparation of mosaics and creating administrative unit-wise maps with imagery in the background)	T+ WEEKS	15% of Contract Value
K8	Maintenance and Operational Support for the Project for two years (At the start itself but on submission of PBG)	K7+2 years	20% of Contract Value, against Performance Bank Guarantee (PBG) of 30% of total contract value for a period of 2 years after K7.
*T-Date of signing SLA with vendor		*K-Key EVENTS	

Note : Number of Weeks to be entered by the Vendor in the above table.

22.3 Penalty

Vendor is supposed to achieve the milestones in the specified time frame. Non-adherence to the specified time frame will attract penalty @ 0.5% of Gross Bid value per week maximum to 5% of the contract value of the work in the form of forfeiture of the amount of Performance Bank Guarantee or Demand Draft duly deposited. Maximum delay allowed is 60 days and in case delay exceeds 60 days the Agency can terminate the contract. Subsequent changes recommended by Government of Jammu and Kashmir during implementation and maintenance phase and after development phase, including AMC will have to be carried out by the Vendor, non-adherence will attract penalty @ 0.5% per week.

Penalty shall also be imposed as follows for inaccuracy / errors detected during checking of work:

S No.	Number of errors (in Maps/Records data)	Penalty (in % of the Bid Amount of concerned activity)
1	Less than 15	No Penalty
2	15-25	5%
3	25-35	8%
4	35-50	10%
5	>50	15%

Cadastral Maps (musavis / shajras) should be returned immediately after scanning of the same. In case of damage of the Musavi / shajra, penalty would be imposed by Government of Jammu & Kashmir as elaborated in SLA.

22.4 Order Cancellation

CEO of JaKLaRMA, Govt. of Jammu & Kashmir reserves the right to cancel the order in the event of one or more of the following situations:

(a) If any batch of job/ services performed & software copies/ CDs/ Hardware copies carrying digital data do not match with approved specifications or approved samples and found inferior in quality, the entire lot will be rejected and no payment will be made for such a supply. Such items will have to be taken back by the Vendor at its own risks and cost. No payment will be made for unsatisfactory jobs/ services and contract is liable to be cancelled along with forfeiture of Performance Bank Guarantee.

(b) If there is delay in submitting the deliverables and all related services beyond the stipulated period. The JaKLaRMA, Jammu & Kashmir shall have the right to inspect the work or get it inspected by his representative or any authorized officer at any stage. The JaKLaRMA, Jammu & Kashmir reserves the right to inspect, the process of the scanning, digitisation, indexing, storing methodology and the equipments during the contract period at any time. The Vendor shall provide all possible information and extend such cooperation as desired by the inspecting authority of the Agency during the inspection of work. In case, the Inspecting authority finds that the services and the equipments used are adversely affecting the quality of work, the Agency reserves the right to treat this as an act of breach of contract. As a result, the contract shall be terminated at the expenses of the Vendor.

(c) Delay in Project as per the agreed project timelines.

In addition to the cancellation of contract, JaKLaRMA, Govt. of Jammu & Kashmir reserves the right to levy appropriate damages and deduct from the earnest money deposit (EMD) given by the Vendor or foreclose the Bank Guarantee given in lieu of performance guarantee. The Agency also reserves the right to get the work executed by another vendor at the cost of

defaulting vendor.

22.5 Non-Disclosure Agreement

The successful Vendor has to execute confidentiality agreement incorporating that any data/information which will be handled/ shared will be kept in strict confidence and neither the vendor or its associates or channel partners or Vendor's employees part with the data/information in any form to anybody without prior written consent of the JaKLaRMA, Jammu & Kashmir

22.6 Data Security

The Vendor should ensure security (both physical and logical) to protect Agency's data by incorporating standard security measures both in field and in Data Centres. Non-compliance will attract stringent action.

22.7 Termination of the Contract

JaKLaRMA, Jammu & Kashmir reserves the right to terminate the entire and / or part of the contract by giving one month notice in writing.

22.8 Indemnity

Vendor has to indemnify JaKLaRMA, Jammu & Kashmir against any claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from any proceedings initiated against the Agency for any deficiency in services related to Project provided by the Vendor during the period of contract.

22.9 Force Majeure

The vendor shall not be liable for forfeiture of its Performance Bank Guarantee, Liquidated Damages or Termination for default, if and to the extent that it's delay in performance or 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 control of the vendor and not involving the Vendor's fault or negligence and not foreseeable. Such events may include, but are not limited to, Acts of God or of public enemy, acts of Government of India in their sovereign capacity or either in fires, floods, strikes, lockouts and freight embargoes.

If a Force Majeure situation arises, the Vendor shall promptly notify the JaKLaRMA, Jammu & Kashmir in writing of such conditions and the cause thereof within three calendar days. Unless otherwise directed by the Agency, the Vendor shall continue to perform its obligations under the Contract as far as it is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. Notwithstanding above, the decision of the Agency shall be final and binding on the Vendor.

22.10 Publicity

Any publicity by the Vendor in which the name of JaKLaRMA, Jammu & Kashmir is to be

used should be done only with the explicit written permission of the Agency.

22.11 Service Level Agreement (SLA)

Vendor would be required to enter into a Service Level Agreement, format enclosed as Annexure X, with JaKLaRMA, Govt. of Jammu & Kashmir (the Agency) at the mutually agreed terms within three weeks from the date of issuance of Letter of Award. In case the SLA is not executed within the said stipulated period, the Agency will be at liberty to forfeit the EMD and R2 will be invited to sign Service Level Agreement.

Any modification to the existing RFP which includes proposed amendments till the date of final bid will form part of SLA. However, any deviation from / modification of any Clause will be at the sole discretion of the Agency.

As per this RFP, modernisation of land records in the Jammu and Srinagar districts of the state will be taken up and completed by the Vendor. The work, if found satisfactory on technical grounds and financially feasible, 10 more districts will be taken up for land records modernisation programme on the same terms and conditions, on mutual agreement and this will be reflected in the SLA. For the remaining 10 districts, variance of rates may be reflected in this proposal and if considered feasible by the Agency, work can be awarded to the same Vendor, on mutual agreement.

22.12 Resolution of Disputes

The Agency and the Vendor shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, JaKLaRMA, Jammu & Kashmir and the Vendor are unable to resolve amicably a contract dispute; either party may require that the dispute be referred for resolution by formal arbitration. All questions, disputes or differences arising under and out of, or in connection with the contract, shall be referred to two Arbitrators: one Arbitrator to be nominated by Agency of Revenue, Govt. of Jammu & Kashmir and the other to be nominated by the Vendor. In the case of the said Arbitrators not agreeing, then the matter will be referred to an umpire to be appointed by the Arbitrators in writing before proceeding with the reference. The award of the Arbitrators, and in the event of their not agreeing, the award of the Umpire appointed by them shall be final and binding on the parties. The arbitration and reconciliation act 1996 shall apply to the arbitration proceedings and the venue and jurisdiction of the arbitration shall be in the State of Jammu & Kashmir.

Annexure I

Pre-qualification of Bid (Checklist)

	Item	Complied (Yes/ No)	Document attached (Yes/ No)
1	Covering Letter		
2	All pages of bid are numbered, signed by authorized signatory and bids are sealed properly in three envelopes		
3	Proof of authorised signatory (Power of Attorney/ Board Declaration)		
4	EMD and Draft for RFP cost (if not paid already)		
5	CVs of Key Resources proposed, Details on the total number of Resources proposed and 'Resource Deployment Plan' given as part of Technical Bid		
7	Bid submitted as per Clause 3, Instructions to Prospective Bidders		
8	Turnover (Balance Sheets have been attached) (Qualification Criteria – Clause 3.2.2)		
9	Lists of Agencies/ Offices where scanning and digitisation (Vectorisation) of maps have been done along with the successful implementation certificate obtained from the Heads of these offices		
10	Details of Infrastructure as per Clause 8.1.2		
11	The proposal / Bid is responsive and meets all conditions specified under Clause 6.2.3		

Note: The Bidder should submit the above Checklist, compliance being important criterion. This is to be submitted in a separate envelope as mentioned under clause 13.2.

Annexure-II

Technical Bid - Evaluation Form

(To be used by the Evaluation Committee / Board)

Name of the Company:

Item Code	Parameter	Evaluation Criteria	Maximum Marks	Points Scored	Remarks
1	Relevant Experience of the Bidder	<p>a). Implemented at least one project related to cadastral map digitisation (Vectorisation) : (5)</p> <p>b). At least Three GIS Projects related to digitisation (Vectorisation) using scanned maps and High Resolution Satellite Imagery (HRSI) and implementation of project value not less than 50 Lakhs : (6)</p> <p>c). At least one project of spatial data integration : (5)</p> <p>d). Overall experience and credentials of the firm: (15)</p> <p style="padding-left: 20px;">i). Financial strength, capacity of firm : (7) ; < 5 crore = 0 5 Crores 1 marks, further 1 marks for each 1 crore, maximum marks: 7</p> <p style="padding-left: 20px;">ii). Turnover from software Development Services : (4) 1 marks for each 1 crore maximum marks 4,</p> <p style="padding-left: 20px;">iii). Years of Experience in MIS / GIS: (4), 1 marks for each 1 years, maximum marks 4.</p> <p>e). Cadastral experience in the States of J&K / /Punjab/ Haryana / Delhi/Western U.P. (un-divided)/ Himachal Pradesh : (5)</p> <p>f). Resources to handle data entry in Urdu : (4)</p>	40		
2	Approach & Methodology	<p>a) Clear understanding of ToR and scope of services including their interpretation: (10)</p> <p>b) Methodology and Work Plan including Team organisation for an efficient activity scheduling. Work Plan for 10 more districts also needs to be given: (15)</p>	25		

3	Key Personnel (minimum 50 personnel required)	a). Experience and competence of the Key staff for the assignment: (5) b).Experience, competence and hands-on experience of the Team Leader in execution and co-ordination of such projects: (2) c).Profile and Experience of Key Staff in man years on similar MIS/GIS projects : (3) d). Extent of on-site commitment/ engagement of the key staff for the project Senior Cadastral Executive Officer/Engineer-cum-Team leader : (1) Software Engineer: (2) Revenue officer, Surveyor, Documentation officer: (2)	15		
4	Evaluation Committee observation	a) Hard copy of Technical Presentation of capabilities of the organisation, implementation plan including time-lines for this project : (10) b)Corporate Social Responsibility (CSR) performances : (5) c) ISO or equivalent Certification : (5)	20		
		G. Total	100		

Notes:

- (1) The Bidders securing 60 points and above will be ranked from highest to lowest. The Vendor so shortlisted, shall stand qualified for financial evaluation in the second stage. However, if the number of such prequalified Bidders is less than two, the Agency may, in its sole discretion, pre-qualify the Bidder(s) whose technical score is less than 60 points even if such Bidder(s) do(es) not qualify in terms of Clause 7.1; provided that in such an event, the total number of pre-qualified and short-listed Bidders shall not exceed two.
- (2) The short-listed Vendors will be invited to give Technical Presentation of the capabilities of the organisation, its relevant experience, infrastructure relevant to the project, implementation plan including time-lines for this project, H/W requirements (to be procured by the Agency) for implementation of the project. The presentation should be focused one and it will carry 30 marks. Thus, Technical Bid will be worth 130 marks including 100 marks as per details above.
- (3) In the case of Consortium, Financial Capacity and past experience can be based on any of the Consortium members. However, proper agreements and documentation should be submitted as part of the proposal.

Annexure-III

FINANCIAL PROPOSAL / BID

(Covering Letter)

(On Applicant's letter head with Date and Reference)

The Chief Executive Officer
JaKLaRMA
Govt. of Jammu & Kashmir,
Jammu.

Subject: Appointment of Service Provider for Modernisation of Land Records (Including Scanning of Land Records, Digitisation (Vectorisation) of Cadastral Maps, Survey /Re-Survey, Integration of Spatial & Non-Spatial Data, Development of Web-based Enterprise GIS and Management of Old Revenue Documents) under the NLRMP Scheme in the State of Jammu & Kashmir.

Reference:

Dear Sir,

I/We, _____ (Applicant's name) herewith enclose the Financial Proposal for selection of my/our firm as Vendor for the subject Project.

I/We agree that this offer shall remain valid for a period of 180 (One Hundred Eighty) days from the Proposal Due Date or such further period as may be mutually agreed upon.

Yours faithfully,

(Signature, name and designation of the authorized signatory with date)

Note: The Financial Proposal is to be submitted strictly as per forms given as Annexure to this RFP.

FINANCIAL BID FORMAT

Name of the Company:

Component-wise break-up of prices is as follows:

S. No	Job / Work	Unit	Quantity	Amount in Rs. Per unit	Total Amount
1.	System Study and Design Document				
2.	Document Management (Virtual Modern Record Room/ Land Record Management Centre at Tehsil/District/Regional Directorate / State Levels)				
2.1	Scanning of Records / Documents having page sizes A4, A4+, A3, A3+ using appropriate book scanner with resolution of 200 dpi minimum. Un-wanted noise and spots to be removed, image quality to be enhanced and orientation of image to be upright. The image data to be delivered in .tiff and .pdf formats along-with meta data.	Page	Number of pages of records at Jammu: A4 size : 6000 A4+ size :28 Lakh A3 size :1000 A3+ size : 24 Lakh Number of pages of records at Srinagar: A4 size : 1500 A4+ size : 2000 A3 size : 7 crore A3+ size : 4 crore (Payment will be made on actual basis)		
2.2	Scanning of Musavis / Cadastral Maps of A1 size using high resolution flat-bed or roller scanners as per requirement	Map Sheet	Number of map sheets at Jammu : 7000 Number of map sheets at Srinagar : 21,200 (Payment will be made on actual basis)		
2.3	Scanned data of current serving cadastral maps (as per 17.7 above) to be delivered on CD	Musavi	Number of musavis in Jammu district : 1100 Number of musavis in Srinagar district : 400		
2.4	Scanned data of musavis/ cadastral maps (as per 17.7 above) to be delivered on Hard disk of high capacity for porting on to the Storage devices from where it will be accessed / retrieved using software as part of Web-based Enterprise GIS.	Musavi	Number of musavis in Jammu division : 7000 Number of musavis in Kashmir Division : 21500		

2.5	Full colour printing of all the scanned maps as per 17.7 above on 170 GSM paper – 2 Sets (original scale).	Map Sheet	Number of map sheets at Jammu Central Record Room : 7000 Number of map sheets at Kashmir Central Record Room : 21500		
3.	Digitisation (Vectorisation) of current serving Cadastral maps				
3.1	Digitisation (vectorisation) of boundary of Survey nos. (Khasra) and placing some textual info, such as, Khasra No., Area etc. The vectorised data to be placed in separate layers as per prescribed structure. Digitisation will also include administrative boundaries of villages with pillars, point details, adm. names etc.	Musavi	Number of musavis in Jammu district : 1100 Number of musavis in Srinagar district : 400		
3.2	Printing of each original Musavi sheet after digitisation (vectorisation) on 100 GSM paper on 1:1 scale for one-to-one checking. Thereafter, one print on 170 GSM paper of corrected musavi and second print on 100 GSM paper for reference in field, during Survey / Re-Survey.	Musavi	Number of musavis in Jammu district : 1100 Number of musavis in Srinagar district : 400		
4.	Data Entry / Re-Entry / Conversion of all textual Records				
4.1	Data Entry of all updated Jamabandi / RoR and other textual data as per prescribed coding scheme and structure. Non-Spatial (RoR data etc.) data is to be delivered in MS Access format (latest version for databases). This MS Access database is to be ported to appropriate Central GIS database supported by Web-	Parcel (khasra no.)	Number of parcels in Jammu District: 5.5 Lakh Number of parcels in Srinagar district : 60,000		

	based Enterprise GIS. The HW for Computer Centres at various levels and connectivity issues shall be catered by the Agency, as per requirement.				
4.2	Data Conversion to desired format of already entered RoR and textual data	Villages	Number of villages in Jammu District : 150 Number of villages in Srinagar district: 120		
5.	Survey/Re-survey and updation of the survey & settlement records (including ground control network and ground truthing) using the modern technology.				
5.1	Establishment of Ground Control Points (GCPs) for Survey / Re-Survey, Geo-referencing of High Resolution Ortho-rectified Satellite imagery for improving accuracy. The GCPs should be established on each and every Sehada stone and one or two Locations within village/musavi boundary, at least two GCPs in every village should be inter-visible. The GCPs network should be established using dual frequency DGPS as per technical guidance in ToR across the State.	Ground Control Point	Approx. number of different types of Control Points: Primary = 2000 Secondary = 5000 Tertiary = 7000		
5.2	Monumentation of GCPs as per prescribed specifications / standards mentioned in the ToR	Ground Control Point	Number of different types of control points: Primary = 2000 Secondary = 5000 Tertiary = 7000		
5.3	Satellite data preparation as per ToR requirement and geo-referencing (a) including processing of HRSI (stereo) for creation of ortho-rectified images,	District	District Jammu District Srinagar		

	<p>extraction of details, such as, parcel boundaries (village-wise) to serve as Chuminda or may be used for ground truthing.</p> <p>(b) Without feature extraction. The ortho-rectified geo-referenced imagery will be used for reference and preparing mosaics by overlaying updated maps over this imagery after validation and acceptance.</p> <p><i>(Also refer Note (5) at the end of this FINANCIAL BID FORMAT – ANNEXURE III.)</i></p>				
5.4	Overlaying of digitized (vectorised) musavis data on geo-referenced ortho-rectified imagery for loading on the ETS.	Village	<p>Number of villages in Jammu district : 912</p> <p>Number of villages in Srinagar district : 137</p>		
5.5	Survey of village using ETS (The imagery and digitized map as per 5.4 above are to be loaded on the ETS having angular accuracy of minimum 2 seconds).	Sq. km.	<p>Total area to be surveyed of Jammu District (in Sq. Km) :1370</p> <p>Total area to be surveyed of Srinagar District (in Sq. Km) : 80</p>		
5.6	Integration of Spatial Data (Musavis etc. already generated) and the textual (RoR) data	Sq. Km.	<p>Total area to be surveyed of Jammu District (in Sq. Km) : 1000</p> <p>Total area to be surveyed of Srinagar District (in Sq. Km) : 37</p>		
5.7	For villages where records / data not available, fresh records to be	Sq. km.	Total area to be surveyed of Jammu District (in Sq. Km) :Nil		

	generated after survey.		Total area to be surveyed of Srinagar District (in Sq. Km) :Nil (Unit rates in sq. Km. may be given as the same be required for other districts)		
5.8	Printing of each draft Musavi sheet after Survey / Re-Survey on 1:1000 Scale (for verification, including those villages where fresh survey will be carried out)	Musavi	Number of musavis in Jammu district : 6000 Number of musavis in Srinagar district : 700		
5.9	Printing of each final Musavi sheet in two copies after verification / validation, on 1:1000 Scale, one copy on 100 micron polyester matt film and second copy on 170 GSM paper (including those villages where fresh survey will be carried out).	Musavi	Number of musavis in Jammu district : 6000 Number of musavis in Srinagar district :700		
5.10	Merged village map by mosaicing sheets / musavis in soft copy form along with A0 size paper print on a suitable scale	One sheet per village	Number of villages in Jammu District : 912 Number of villages in Srinagar District : 137		
5.11	Mosaiced Tehsil and District maps in softcopy form along with a print on A0 size paper.	One Sheet Per Tehsil	Number of Tehsils in Jammu District: 21 (+1 district map) Number of Tehsils in Srinagar District: 7 (+1 district map)		
6.	Development of Web-based Enterprise GIS				
6.1	As per the requirements in Clauses 17.8 and 17.8.1, (a) COTS GIS Software used for developing Web-based Enterprise GIS Solution, at	License	Number of licenses : 4 (2 licenses each for the two		

	<p>the two State Level CCs [Name of Software with version and other necessary details in brief]</p> <p>(b) The COTS RDBMS software to be used (compatible with the Web GIS solution) at the two State level CCs [Name of Software with version and other necessary details in brief]</p> <p>(c) Any other COTS GIS Software required for making Web GIS solution operational at two CCs. [Name of Software with version and other necessary details in brief]</p> <p>[See Notes (7), (8) and (9) below]</p>	<p>License</p> <p>License / Unit</p>	<p>locations)</p> <p>Number of licenses: 4 (2 licenses each for the two locations)</p> <p>Number of Units / Licenses: (Number to be given by the bidder).</p>	
6.2	<p>To develop Web-based Enterprise GIS, including Web Portal, for all land records related Applications as per specifications, including computerisation of activities, such as, updation of land records, easy indexing and retrieval of scanned documents along with drawing of land parcel with dimension (from map and RoR) attribute information, neighbourhood details and printing the maps and data. Updation of data based on info received from SROs, preferably online. Besides all functionalities as per Clause 17.8 and 17.8.1, there should be option to get reports, forms, maps etc. in Urdu, Hindi or English.</p>	<p>Lumpsum</p>		

7.	Training of Technical Field Staff and Database AMC at each Tehsil			
7.1	Annual maintenance support for 2 years. At least 2 GIS specialists should be provided for technical support at each district head quarter. Training of minimum 50 persons and 4 Master Trainers for the two districts. Preparation of User Manuals is the responsibility of the Service Provider.	Per district Manpower (cost per month-2 GIS Specialists)	Total <u>cost per District</u> for two years for two GIS Specialists Resources i.e., 12x2x2= 48 months	
	Total (excluding tax)			
Total	Total (including tax & S.T)			
	Gross Value of Bid, inclusive of taxes and duties			

Notes :

- (1) The number of pages of various types records for scanning, number of musavis/ cadastral maps for vectorisation, number of khasras (parcels), number of GCPs of different types, area in Sq. Km. are only indicative. Payment will be made on actual basis.
- (2) It is re-iterated that during Phase I, two districts, one each from Jammu and Kashmir Divisions, namely, Jammu district and Srinagar district will be taken up for end-to-end implementation of the project.
However, three tasks viz., (a) Establishing Ground Control Points (GCPs) network across the state, as per requirement, (b) Scanning of old records and archival of scanned data and (c) Development of Web-based Enterprise GIS are to be taken up in one go for the entire state in Phase I only.
The scope of the present RFP is primarily limited to Phase I.
- (3) Phase II : On satisfactory completion of the tasks enumerated above, 10 more districts (5 districts from each division) will be awarded to the same Vendor on same terms and conditions, on mutual agreement. The Bidders should reflect variance in rates, if any, in this Financial Bid. Separate sheet may be attached.
- (4) Phase III: Remaining 10 districts may be awarded to the same vendor but on mutual agreement. The Bidders are expected to reflect variance in rates, if any, in this Financial Bid. Separate sheet may be attached.
- (5) For arriving at the Bid Value Amount, the bidder's quoted price for 5.3 (b) will only be taken in the instant case as the Agency will procure Ortho-rectified HRSI along with corresponding DEM data, if available.

- (6) The rates quoted at 5.7 above will not be included in the Bid Value. However, the rates given by the bidder, may be applicable in the case of other districts.
- (7) The COTS GIS software and COTS RDBMS software to be used for development of Web based Enterprise GIS solution are to be selected by the vendor keeping in view the requirements as per Clauses 17.8 and 17.8.1. Provision of SAN Storage is to be there. The responsibility of license agreements and any other required agreements with the concerned Company / Firm / Organisation, shall lie with the bidder.
- (8) The Software, as mentioned at SI No. (7) above shall be procured at a suitable time but within a year, for two CCs at State level. The rates quoted should remain valid for one year. However, if there is any cut in the prices owing to Govt. policies or otherwise, the same shall be passed on to the Agency.
- (9) The Bidder shall enclose a Configuration Chart / Architecture of the complete set-up, clearly mentioning number of Servers (with technical specifications) required at the two State Level CCs, SAN Storage Devices required as per the quantum of data, minimum number of desktop computers (with technical specifications) which each of the CCs at various levels should have. The HW with required Operating System will be procured by the Agency at appropriate time. The band width and other requirements pertaining to Data Security etc. also need to be clearly mentioned which shall also be arranged by the Agency.
- (10) The cost of software as per item 6.1 above, though to be included while evaluating the Financial Proposal, shall not be included in the Contract Value for the purpose of releasing payments of other activities, as per Payment Terms under Clause 22.2. Payment for the aforesaid software shall be made on production of invoices / bills after supply of software to the Agency, within a month.

Annexure IV

Award of Order

(Refer Clause 7.4.1)

The final score used for calculating the most responsive bid shall be calculated based on a Quality-Cum-Cost based evaluation. The weight-age to be used for calculating the total overall score of the bidders is as follows:

The Normalisation of Technical and Financial score shall be done by awarding maximum marks to the bidder having highest Technical Score and lowest Financial Bid respectively.

The total score shall be arrived at, using the following formula :

Total score, S = Tw x ST + Fw x SF

= 0.70 x {(Technical Score of Bidder/ Highest Technical Score) x100}

+ 0.30 x {(Lowest Financial Bid received / Financial Bid of Bidder) x 100}.

The bidders will be ranked as R1, R2, R3, R4....etc. based on the combined merit of the technical and financial scores.

Calculation for R1, R2, R3, R4

Sr No	Bidders	Normalised Technical Score = 70 x TS/TH	Normalised Financial Score = 30 x FM/F	Total Marks	Rank of Bidder
	A	B	C	B+C	
1.					
2.					
3.					
4.					
5.					

*Where F means the Financial Bid (price) offered by the Bidder, FM means lowest (Minimum) price offered; TS is Technical Score of the proposal (Bidder) under consideration and TH is highest Technical Score secured by a Bidder.

**Annexure V
(Manpower Details)**

Name of the Company:

Note: - Details filled in this form must be accompanied by sufficient documentary evidence, in order to verify the correctness of the information.

S. No.	Name	Designation	Qualification	Experience (in years)	Date of Employment with Company
1					
2					
3					
4					
5 ...					

Date: _____

Seal & Signature of the Vendor

Place: _____

Annexure VI

(Format for Performance Bank Guarantee)

The Chief Executive Officer
JaKLaRMA
Govt. of Jammu & Kashmir,
Jammu.

Sub : Performance Bank Guarantee

1. Whereas M/s _____ (hereinafter called "Service Provider") has to undergo "PROJECT NAME _____" Project implementation assignment as per agreement dated _____ signed between _____ on behalf of _____ (hereinafter called "Cleint").

2. NOW THEREFORE KNOW ALL THE MEN THESE PRESENTS THAT WE, _____ having its Head Office at _____ (hereinafter called "the Bank") are bound up to the "Client" in the sum of Rs. _____ (_____) for which payment will and truly to be made to the "Client", the Bank binds itself, its successors and assignees these presents.

3. "The Bank" further undertakes to pay to the "Client" upto the above amount on receipt of its first written demand, without the "Client" having to substantiate its demand. The Client's decision in this regard shall be final and shall not be called upon to question under any circumstances. The Bank Guarantee will remain in force upto _____. However, its validity can be got extended before _____ solely at the instance of the "Client". This Clause shall remain valid notwithstanding anything else contained to the contrary in the document.

4. Our liability under this guarantee is restricted to _____ (_____) and it will remain enforced upto _____ unless a demand in writing is received by the bank on or before _____, all your rights under the said guarantee shall be forfeited and we shall be released and discharged from all the liabilities there under.

5. Sealed with the Common Seal of the said Bank this _____ day of _____ 20____.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this _____ Day of _____ 20____.

For Bank _____
Witness
Signature
Name
M/s _____

Annexure VII

**DECLARATION REGARDING ACCEPTANCE OF TERMS & CONDITIONS
CONTAINED IN THE RFP DOCUMENT**

Date: _____ 2015

The Chief Executive Officer
JaKLaRMA
Govt. of Jammu & Kashmir,
Jammu.

Subject: Acceptance of Terms and Conditions in this document

Reference :

Sir,

I have carefully gone through the Terms & Conditions contained in the RFP Document [No. _____] regarding _____ (Project name).

I declare that all the provisions of the RFP Document are acceptable to my Company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours very truly,

Name : _____

Designation: _____

Company: _____

Address: _____

Note:- Copy of authorisation by competent authority in the bidders company pertaining to signing, not only this form, but entire bid should be enclosed.

Annexure – VIII

DECLARATION REGARDING CLEAN TRACK RECORD

Date: _____ 2015

RFP Reference No.:

The Chief Executive Officer,
JaKLaRMA.
Govt. of Jammu & Kashmir,
Jammu.

Subject: Declaration regarding clean track record of the firm

Sir,

I have carefully gone through the Terms & Conditions contained in the RFP Document [No. RFP No. 01/CEO/JaKLaRMA/27/128] regarding _____ (Project Name). I hereby declare that my company has not been debarred/black listed by any Government / Semi Government organisations. I further certify competent authority in my company has authorized me to make this declaration.

Yours very truly,

Name:
Designation:
Company:
Address:

Annexure-IX
(See Clause 5.3.1)

TECHNICAL PROPOSAL

(Forms 1 to 15)

- 1 Letter of proposal
- 2 Particulars of Bidder
- 3 Abstract of eligible assignments of Bidder / other Consortium member
- 4 Eligible assignments of Bidder / other member of Consortium
- 5 Statement of legal capacity
- 6 Power of Attorney
- 6(a) Power of Attorney (for Lead Member of Consortium)
- 7 Financial capacity of Bidder
- 8 Particulars of key personnel
- 9 Abstract of eligible assignments of key personnel
- 10 Eligible assignments of key personnel
- 11 Curriculum Vitae (CV) of key personnel
- 12 Proposed methodology and Work Plan
- 13 Deployment of personnel
- 14 Survey and field updations of RoR Data
- 15 Proposal for Sub-Vendor / Consortium members

ANNEXURE-IX

(See Clause 5.3.1)

TECHNICAL PROPOSAL

Form-1

Letter of Proposal

(On Bidder's letter head with Date and Reference)

The Chief Executive Officer
JaKLaRMA
Govt. of Jammu & Kashmir,
Jammu.

Subject: Appointment of Service Provider for Modernisation of Land Records (including Scanning of Land Records, Digitisation (Vectorisation) of Cadastral Maps, Survey /Re-Survey, Integration of Spatial & Non-Spatial Data, Development of Web-based Enterprise GIS and Management of Old Revenue Documents) under the NLRMP Scheme in the State of Jammu & Kashmir.

Reference:

Dear Sir,

With reference to your RFP No. dated, I/we, having examined all relevant documents and understood their contents, hereby submit our Bid for selection as(Name of the project)..... . The proposal is unconditional and unqualified.

1 All information provided in the Bid and in the Appendices is true and correct and all documents accompanying this Bid are true copies of their respective originals.

2 This statement is made for the express purpose of appointment as the Vendor for the aforesaid Project.

3 I/We shall make available to the Agency any additional information it may deem necessary or require for supplementing or authenticating the Bid.

4 I/We acknowledge the right of the Agency to reject our application without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.

5 I/We certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.

6 I/We declare that:

(a) I/We have examined and have no reservations to the RFP Documents, including any

Addendum issued by the Agency ;

- (b) I/We do not have any conflict of interest in accordance with Clause 3.3 of the RFP Document;
- (c) I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in Clause 9 of the RFP document, in respect of any tender or request for proposal issued by or any agreement entered into with the Agency or any other public sector enterprise or any government, Central or State; and
- (d) I/We hereby certify that we have taken steps to ensure that in conformity with the provisions of Section 4 of the RFP, no person acting for us or on our behalf will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

7 I/We understand that you may cancel the Selection Process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the Vendor, without incurring any liability to the Bidders in accordance with Clause 3.8 of the RFP document.

8 I/We declare that we/any member of the consortium, are/is not a Member of a/any other Consortium applying for Selection as a Vendor.

9 I/We certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.

10 I/We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.

11 I/We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our Directors/Managers/employees.

12 I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Agency [and/ or the Government of India] in connection with the selection of Vendor or in connection with the Selection Process itself in respect of the above mentioned Project.

13 I/We agree and understand that the proposal is subject to the provisions of the RFP document. In no case, shall I/we have any claim or right of whatsoever nature if the Project is not awarded to me/us or our proposal is not opened or rejected.

14 The EMD of INR 20 Lakh (INR Twenty Lakh only) in the form of a Demand Draft is attached, in accordance with the RFP document.

15 I/We agree to keep this offer valid for 90 (ninety) days from the Proposal Due Date specified in the RFP.

16 A Power of Attorney in favour of the authorized signatory to sign and submit this Proposal and documents is attached herewith in Form 6.

17 In the event of my/our firm/ consortium being selected as the Vendor, I/we agree to enter into Service Level Agreement in accordance. We agree not to seek any changes in the aforesaid agreement and agree to abide by the same.

18 I/We have studied RFP and all other documents carefully and also surveyed the Project site. We understand that except to the extent as expressly set forth in the Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Agency or in respect of any matter arising out of or concerning or relating to the Selection Process including the award of the Project.

19 The Financial Proposal is being submitted in a separate cover. The Technical Proposal read with the Financial Proposal shall constitute the Application which shall be binding on us.

20 I/We agree and undertake to abide by all the terms and conditions of the RFP Document. In

witness thereof, I/we submit this Proposal under and in accordance with the terms of the RFP Document.

Yours faithfully,

(Signature, name and designation of the authorized signatory) (Name and seal of the Bidder / Lead Member)

Notes:

- 1) Quoted rates will remain valid till 31 March 2015 and during currency of this project. The additional similar work for 10 more districts may be allotted on the same rates if the Agency receives funding for it and work completed for two districts found satisfactory on technical grounds and financially feasible. The vendor will be bound to take up the additional work, if allotted, on the same rates.
- 2) All payments will be made in Indian Rupees and are subject to applicable Indian Laws.
- 3) Rates should be inclusive of all duties, levies and taxes.
- 4) The rate should be quoted including cost of collecting cadastral maps and delivery of digital data from / at Corresponding District/Tehsil for which cadastral maps have to be scanned, digitized (vectorised) and printed.
- 5) All the works, except field survey and other similar works including connectivity issues, have to be done at Revenue Complex, Jammu in respect of Jammu and other districts of Jammu Division and at Srinagar in respect of Srinagar and other districts of Kashmir division.

Annexure IX

Form 2

Particulars of Bidder

1. (a) Name:
(b) Country of incorporation:
(c) Address of the corporate headquarters and its branch office(s), if any, in India:
(d) Date of incorporation and/ or commencement of business:
2. Brief description of the Company including details of its main lines of business and proposed role and responsibilities in this Project:
3. Details of individual(s) who will serve as the point of contact/ communication for the Agency :
(a) Name:
(b) Designation:
(c) Company:
(d) Address:
(e) Telephone Number:
(f) E-Mail Address:
(g) Fax Number:
4. Particulars of the Authorized Signatory of the Bidder:
(a) Name:
(b) Designation:
(c) Address:
(d) Phone Number:
(e) Fax Number:
5. In case of a Consortium:
(a) The information given above (1-4) should be provided for all the Members of the Consortium.
(b) A copy of the Jt. Bidding Agreement, should be attached to the Application.
(c) Information regarding the role of each Member should be provided as per table below:

S.No.	Name of Member	Role	Percentage of equity in the consortium
1.			
2.			
3.			
4.			

* The role of each Member, as may be determined by the Bidder, should be indicated.

(d) The following information shall also be provided for each Member of the Consortium:

Name of Bidder/ member of Consortium:

No.	Criteria	Yes	No
1.	Has the Bidder/ constituent of the Consortium been barred by the [Central/ State] Government, or any entity controlled by it, from participating in any project ?		
2.	If the answer to 1 is yes, does the bar subsist as on the date of Application?		
3.	Has the Bidder/ constituent of the Consortium paid liquidated damages of more than 5% (five per cent) of the contract value in a contract due to delay or has been penalized due to any other reason in relation to execution of a contract, in the last three years?		

6. A statement by the Bidder and each of the Members of its Consortium (where applicable) or any of their Associates disclosing material non-performance or contractual non-compliance in past projects, contractual disputes and litigation/ arbitration in the recent past is given below (Attach extra sheets, if necessary):

Annexure IX

Form -3

Abstract of Eligible Assignment of the Bidder / other Consortium Partner

S. No.	Name of the Project	Name of the Client	Estimated capital cost of project (Rs. in Crores)	Payment of Services / Consultancy Fees received by the Bidder (Rs. in Crores)
(1)	(2)	(3)	(4)	(5)
1				
2				
3				
4				

The Bidder should provide details of only those projects that have been undertaken by it under its own name.

Exchange rate should be taken as applicable on the date of the signing of Service Level Agreement (SLA) for US \$ denominated conversions.

The names and chronology of Eligible Projects included here should conform to the project-wise details submitted in Form-10 of Annexure IX. The Work order and / or completion certificate should be furnish as supporting document for the detail mentioned in Form -8 Annexure IX or certificate of the Statutory Auditor may be submitted.

Certificate from the Statutory Auditors

This is to certify that the information contained in Column 5 above is correct as per the accounts of the Applicant and / or the clients.

Name of the audit firm:

Seal of the audit firm:

(Signature, name and designation of the authorized signatory)

Date:

In case the Bidder does not have a statutory auditor, it shall provide the certificate from its Chartered Accountant that ordinarily audits the annual accounts of the Bidder.

Note: The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the bidder.

Annexure - IX

Form-4

Eligible Assignments of Bidder / other Consortium Partner

Name of Bidder:	
Name of the Project:	
Area in sq. km or other particulars	
Description of services performed by the Bidder firm:	
Name of client and Address: (indicate whether public or private)	
Name, telephone no. and fax no. of client's representative:	
Estimated capital cost of the Project (Rs. Crores or US \$ millions):	
Payment received by the Bidder (Rs. in Crore):	
Start date and finish date of the services (month / year):	
Brief description of the Project:	

Notes:

1. Use separate sheet for each Eligible Project.
2. The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the Bidder.
3. Exchange rate should be taken as applicable on the date of the signing of Service Level Agreement (SLA) for US \$ denominated conversions.

Annexure IX

Form-5

Statement of Legal Capacity

(On the letter head of the Bidder)

The Chief Executive Officer
JaKLaRMA
Govt. of Jammu & Kashmir,
Jammu.

Subject: Appointment of Service Provider for Modernisation of Land Records (Including Scanning of Land Records, Digitisation (Vectorisation) of Cadastral Maps, Survey /Re-Survey, Integration of Spatial & Non-Spatial Data, Development of Web-based Enterprise GIS and Management of Old Revenue Documents) under the NLRMP Scheme in the State of Jammu & Kashmir.

Reference:

Dear Sir,

I/We hereby confirm that we, the Bidder (along with other members in case of consortium, constitution of which has been described in the Proposal), satisfy the terms and conditions laid own in the RFP document.

I/We have agreed that (Insert Bidder's name) will act as the Lead Member of our consortium.

I/We have agreed that (Insert individual's name) will act as our Authorized Representative/ will act as the Authorized Representative of the consortium on our behalf and has been duly authorized to submit our Proposal. Further, the authorized signatory is vested with requisite powers to furnish such proposal and all other documents, information or communication and authenticate the same.

Yours faithfully,

(Signature, name and designation of the authorized signatory with date)
For and on behalf of _____

Annexure IX

Form-6
(See Clause 3.2.4)
Power of Attorney

Know all men by these presents, we, (name of Firm and address of the registered office) do hereby constitute, nominate, appoint and authorize Mr /Ms..... son/daughter/wife..... and presently residing at, who is presently employed with us and holding the position of as our true and lawful attorney (hereinafter referred to as the “Authorized Representative”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Proposal for and selection as the Vendor for the [Name of the Project], proposed to be carried out by the JaKLaRMA (the “Agency ”) including but not limited to signing and submission of all applications, proposals and other documents and writings, participating in pre-bid and other conferences and providing information/ responses to the Agency , representing us in all matters before the Agency , signing and execution of all contracts and undertakings consequent to acceptance of our proposal and generally dealing with the Agency in all matters in connection with or relating to or arising out of our Proposal for the said Project and/or upon award thereof to us till the entering into of the Agreement with the Agency .

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Authorized Representative pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Authorized Representative in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF, 20.....

For

(Signature, name, designation and address)

Witnesses:

- 1
- 2

Notarized Accepted

.....

(Signature, name, designation and address of the Attorney)

Notes: The mode of execution of the Power of Attorney should be in accordance with the

procedure, if any, laid down by the applicable law and the charter documents of the executant (s) and when it is so required the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of Rs. 50 (fifty) and duly notarized by a notary public.

Wherever required, the Bidder should submit for verification the extract of the charter documents and other documents such as a resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, Bidders from countries that have signed the Hague Legislation Convention, 1961 need not get their Power of Attorney legalized by the Indian Embassy if it carries a conforming Apostille certificate.

Annexure IX

Form-6 (a)

Power of Attorney (for Lead Member of Consortium)

[Note: Bidder should submit a power of attorney as per the format given here-under to authorized signatory of the application in case of a consortium, the member should submit a power of attorney in favour of lead member as per the format below]

Whereas the("the Agency ") has invited applications from interested parties for the.....Project (the "Project").

Whereas,, and (collectively the "Consortium") being Members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the Request for Proposal (RFP) and other connected documents in respect of the Project, and

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and Agency to do, for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's Bid for the Project and its execution.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

We,having our registered office atM/s. having our registered office atM/s. having our registered office at, and M/s. having our registered office at, (hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s. having its registered office at....., being one of the Members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (hereinafter referred to as the "Attorney"). We here by irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the contract, during the execution of the Project and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the pre-qualification of the Consortium and submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and generally to represent the Consortium in all its dealings with the Agency , and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium's bid for the Project and/ or upon award there of till the Concession Agreement is entered into with the Agency .

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF, 20.....

For
(Signature)

..... (Name
& Title)

For
(Signature)

..... (Name
& Title)

For
(Signature)

..... (Name
& Title)

Witnesses:

- 1
- 2

.....(Executants) (To be executed by all the Members of the Consortium)

Notes:

1. *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
2. *Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*
3. *For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostle certificate.*

Annexure IX

Form-7

Financial Capacity of the Bidder

(Refer Clause 3.2 and 6.1)

S. No.	Financial Year	Annual Receipts (Rs. in Crore)
1.		
2.		
3.		

Certificate from the Statutory Auditor #

This is to certify that(name of the Bidder) has received the payments shown above against the respective years on account of Services / Consultancy Fees.

Name of the audit firm:

Seal of the audit firm:

Date:

(Signature, name and designation of the authorized signatory)

In case the Bidder does not have a statutory auditor, it shall provide the certificate from its chartered accountant that ordinarily audits the annual accounts of the Bidder.

Note: Please do not attach any printed Annual Financial Statement.

Annexure IX
Form-8
Particulars of Key Personnel

S. No .	Designation of Key Person	Name	Educational Qualification	Length of Professional Experience	Present Employment		No of Eligible Assignments
					Name of Firm	Employed Since	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.							
2.							
3.							
4.							
5.							
6.							

Refer Form 9 of Annexure-IX, Eligible Assignments / Experience of Key Personnel

Annexure IX

Form-9

Abstract of Eligible Assignments of Key Personnel@/

S.No.	Name of Project	Name of Client	Estimated capital cost of project (Rs. In Cr.)	Name of firm for which the Key Person worked	Designation of the Key Person for the assignment	Date of compensation of assignment	Mandays spent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

@ Use separate Form for each Key Person.

1. The names and chronology of projects included here should conform to the project-wise details submitted in Form-8 of Annexure IX

Note: The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the Key Personnel.

Annexure IX
Form-10
Eligible Assignments of Key Personnel

Name of Key Person:	
Designation of Key Person:	
Name of the Project:	
Area in sq. km or other particulars	
Name of Consulting Firm where employed:	
Description of services performed by the Key Person (including designation):	
Name of client and Address: (indicate whether public or private)	
Name, telephone no. and fax no. of client's representative:	
Estimated capital cost of the Project (Rs. In crore):	
Start date and finish date of the services (month/ year):	
Brief description of the Project:	
It is certified that the aforesaid information is true and correct to the best of my knowledge and belief.	
(Signature and name of Key Person)	

Notes:

- 1 Use separate sheet for each Eligible Project.
- 2 The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the Key Personnel.

Annexure IX

Form-11

Curriculum Vitae (CV) of Key Person

- 1 Proposed Position:
- 2 Name of Person:
- 3 Date of Birth:
- 4 Nationality:
- 5 Educational Qualifications:
- 6 Employment Record:(Starting with present position, list in reverse order every employment held.)
- 7 List of projects on which the Person has worked; Name of Project, Description of Responsibilities
- 8 Details of the current assignment and the time duration for which services are required for the current assignment.

Certifications:

(1) I am willing to work on the Project and I will be available for entire duration of the Project assignment as required.

(2) I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications and my experience.

Place.....

(Signature and name of the Key Personnel)

(Signature and name of the authorized signatory of the Bidder)

Notes:

- 1 Use separate form for each Key Personnel
- 2 The names and chronology of assignments included here should conform to the project-wise details submitted in Form-8 of Annexure IX.
- 3 Each page of the CV shall be signed in ink by both the Personnel concerned and by the Authorized Representative of the Bidder firm along with the seal of the firm.

Photocopies will not be considered for evaluation.

Annexure IX
Form-12

Proposed Methodology and Work Plan

The proposed methodology and work plan shall be described as follows:

1 Understanding of ToR (not more than 5 pages) The Bidder shall clearly state its understanding of the ToR and also highlight its important aspects. The Bidder may supplement various requirements of the ToR and also make precise suggestions if it considers this would bring more clarity and assist in achieving the Objectives laid down in the ToR.

2 Methodology and Work Plan (not more than 70 pages)

The Bidder will submit its methodology for carrying out this assignment, outlining its approach toward achieving the Objectives laid down in the ToR. The Bidder will submit a brief write up on its proposed team and organisation of personnel explaining how different areas of expertise needed for this assignment have been fully covered by its proposal. In case the Bidder is a consortium, it should specify how the expertise of each firm is proposed to be utilized for this assignment. The Bidder should specify the sequence and locations of important activities, and provide a quality assurance plan for carrying out the Consultancy Services.

2.1 The Bidder shall also submit work-plan for carrying out the activities in 10 more districts, if awarded after completion of the tasks in the 2 districts viz., Jammu and Srinagar as part of para 2 above.

Note: Marks will be deducted for writing lengthy and out of context responses.

Annexure IX

Deployment of Personnel

Form-13

Sl. No.	Name	Designation	Man-days	@ Month (Number of months as per Vendor's estimation ...)															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			At Project site																
1.																			
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10																			
11																			
Total Man-days																			

Annexure - IX

Form-14

Survey and Field Updatations of RoR Data

Item of Work / Activity	To be Prepared / Carried out by		#Months											
	Name	Designation	1	2	3	4	5	6	7	8	9	10	11	12

Number of months to be as per the Vendor’s proposed Time-lines.

Annexure IX

Form-15

(See clause 3.1.1)

Proposal for Sub-Vendor(s) / Consortium member (s)

1. Details of the Firm				
Firm's Name Address Telephone				
Contact Person: Name : Telephone No.				
Fields of Expertise				
No. of Years in business in the above Fields				
2. Services that are proposed to be sub-contracted:				
3. Person who will lead the Sub-Vendor Name: Designation: Telephone No: Email:				
4. Details of Firm's previous experience				
Name of Work	Name, address and telephone no. of Client	Total value of Services Performed	Duration of services	Date of Completion of Services
1				
2				
3				

(Signature and name of the authorised signatory)

Note:

1. The Proposal for Sub-Vendor(s) shall be accompanied by the details specified in Forms 3 and 4 of Annexure IX
2. Use separate form for each Sub-Vendor

Annexure X
(Draft) Service Level Agreement

This SERVICE LEVEL AGREEMENT is made on theday of2015, between Jammu & Kashmir Land Records Management Agency (JaKLaRMA), an Agency under the Government of Jammu & Kashmir and having its office at Tankipora, Srinagar (J&K) during Summer and at Revenue Complex, Rail Head Campus, Jammu (J&K) during Winter, on the one part (hereinafter called 'the Agency ', which expression shall unless repugnant to the context, include its successors and assignees) and

M/s., a company incorporated under the Indian Companies Act, 1956 with its corporate office at, India (hereinafter called the **Vendor**, which expression shall unless repugnant to the context, include its successors and assignees).

This Agreement consists of the signature page and the following attachments that are incorporated into and form part of this Agreement by this reference:

RFP Issued by the Agency Appendix I
Proceedings of the Pre-bid Conference held onAppendix II
Technical bid during bidding process and
Inception Report submitted by the **Vendor**.....Appendix III
'Technical Inputs' containing technical details about the project..... Appendix IV

WHEREAS,

(A). The Agency has requested the Vendor to undertake the Project "MODERANISATION OF LAND RECORDS (INCLUDING DATA ENTRY, DIGITISATION OF CADASTRAL MAPS, SURVEY / RE-SURVEY, INTEGRATION WITH RECORDS OF RIGHTS, DEVELOPMENT OF WEB-BASED ENTERPRISE GIS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN THE STATE OF JAMMU & KASHMIR (hereinafter called the Services) necessary for the State of Jammu & Kashmir.

(B). As per the RFP, modernisation of land records in the Jammu & Srinagar districts of the state will be taken up and completed by the Vendor including other tasks related to Scanning, establishing GCPs and developing Web-based Enterprise GIS for whole state. The work, if found satisfactory on technical grounds and financially feasible, 10 more districts will be taken up in Phase II for land records modernisation programme on the same terms and conditions.

(C). The Vendor has agreed to provide the Services on the terms and conditions set forth in this Agreement.

NOW THEREFORE the parties hereto hereby agree as follows:

1. Services

The Vendor shall perform the Services under this Agreement in accordance with the Scope of Work mentioned in the RFP as attached in Appendix I hereto and as agreed in the Technical bid and Inception Report as attached in Appendix III. The Vendor shall consider all the suggestions made by the Agency, its representatives during each stage of the project. The Vendor will be required to address all such suggestions / queries as long as there is no major deviation from the detailed Scope of Work mentioned in the RFP as per Appendix I.

The Vendor would follow a methodology to carry out the proposed project. The methodology should be such as prescribed in the Technical bid and as finalized in the Inception Report as per Appendix III.

If any modifications in the report or in plans and sections are required, due to attributable reasons to the Vendor or if any additional work relevant to the project (which is within the Scope of Work) is required to be carried out for preparation of reports of high professional quality (as agreed in the Scope of Work - Appendix I and in the Inception Report – Appendix III submitted by the Vendor acceptable to the approving authorities shall be carried out without any additional compensation.

1.1. Commencement Date

The Vendor shall commence the Services as soon as possible but not later than 15 days after the Agency has given notice to proceed with the Services (Letter of Intent).

1.2. Additional Work

If, in the opinion of the Agency, it is necessary to carry out any work outside the Scope of Work for the purposes of the Project in addition to the Services, the Vendor shall carry out such additional work with the prior authorization of the Agency. The charges for the personnel Implementing Agency for Centrally Sponsored NLRMP Scheme required for such additional work would be as per the area of the surveyed area quoted by the Vendor and mentioned in Section 4.1.

In case there is any dispute about determining whether any work proposed is within or outside the Scope of Work mentioned in the RFP – (Appendix I), the decision of the Agency shall be final and binding on the Vendor.

1.3. Other Documents

RFP document including any amendments made to it at the bidding stage, Vendor's bid offer documents, Scope of Work, Inception Report shall form part of the Agreement.

2. Personnel

2.1. Personnel

(a). The Services shall be carried out by the personnel specified in Inception Report Appendix III hereof (hereinafter called the "Personnel") for the respective periods of time indicated therein. The Vendor may, with the prior approval of The Agency, make minor adjustments in such periods as may be appropriate to ensure the efficient performance of the Services, provided that such adjustments will not cause payments made under the Agreement to exceed the cost estimates referred to in Section 4.1.

(b). Except as the Agency may otherwise agree, no changes shall be made in the Personnel. If for any reason beyond the reasonable control of the Vendor it becomes necessary to replace any of the Person/Personnel, the Vendor shall forthwith provide a replacement. Such person of replacement shall be equivalent or better qualified and experienced and who is found eligible and acceptable to the Agency. The Vendor should take prior approval from the Agency in case of such replacement.

(c). If at any time during the project, it is found that the Person or Personnel, as mentioned in Appendix - III, are not performing the task, which they were to perform, instead some other person/s are performing or if the Vendor replaces any person without knowledge of the Agency, in such a case the Agency may accept such a person, if such a person is found of equal or of better calibre. However, such a replacement would not be binding on the Agency and the Agency reserves the right to cancel the Agreement with a prior notice and after providing an opportunity of being heard to the Vendor.

(d). In the event that any person specified in Appendix III is found by the Agency to be incompetent in discharging his assigned duties, the Agency may request the Vendor to forthwith provide a replacement by a person with qualifications and experience acceptable to the Agency. The decision of the Agency in this regard shall be final and binding on the Vendor. The replacement must be done within 7 days from the date of intimation by the Agency.

2.2. Project Manager

The Vendor shall appoint two resident Project Managers, one each at Jammu and Srinagar, acceptable to the Agency, who shall be responsible for day to day operations and liaise between the Vendor and the Agency.

3. Undertakings of The Vendor

3.1. General Standard of Performance by the Vendor

The Vendor shall carry out the Services with due diligence and efficiency, and shall exercise such skill and care in the performance of the services as is consistent with recognized professional standards. The Vendor shall act at all times so as to protect the interests of the Agency.

3.1.1 Cut-off date for updation of Cadastral Maps and the RoR data

Agency will provide the current musavis and RoR data, the vendor agency will scan the musavis and update the same assisted by the Patwari. The vendor agency will carry out digitisation (in defined time frame strictly). Digitized musavis will be geo-referenced with the help of GCPs and High-Resolution Satellite Imagery (HRSI). Thereafter, up-dation of map data and RoR will be carried out as per Clause 17.2.5. The day that data (Spatial and Non-Spatial) is verified and accepted by the Agency, that will be the cut-off date for up-dation of cadastral map and related RoR data of the concerned village.

3.2. Records

During the subsistence of this Agreement and two years from the date of completion of the project, the Vendor shall permit the duly authorized representative of the Agency, (after reasonable advance notice is served on the Vendor), from time to time to inspect its records relating to the Services and to make copies thereof and shall permit the Agency or any person authorized by the Agency, from time to time, to audit such records during and after the services.

3.3 Information regarding the Centrally Sponsored NLRMP Scheme

The Vendor shall furnish the Agency such information relating to the Services and the Project as the Agency may from time to time request.

3.4. Assignments

The rights and liabilities of the Vendor shall not be assigned or transferred by the Vendor, without the consent in writing of The Agency to any other persons, firm or organization. The Agency may allow such assignment at his discretion. However, such assignment shall not relieve the Vendor from any obligation, duty or responsibility under the Agreement. Any assignment as above without prior written approval of the Agency shall render the agreement void. The Agency may transfer its rights and obligations to any other person, firm or organization only with the consent of the Vendor. If it is found that the Vendor has assigned particular work to some other Agency, without approval and notice of the Agency, The Agency reserves the right to reject any such work carried out. If The Agency accepts any such work, the estimate made by The Agency in such case attributable to the amount of work done shall be final and binding on the Vendor. In the event that any such Third Party Agency is found by The Agency to be incompetent to discharge his assigned duties; The Agency may request the Vendor forthwith either to provide a replacement with qualifications and experience acceptable to the Agency or to resume the performance of the Services itself.

The decision of the Agency in this regard shall be final and binding on the Vendor.

3.5. Confidentiality

(a). Except with the prior written consent of The Agency , the Vendor or the Personnel shall not at any time communicate to any person or entity any confidential information disclosed to them for the purposes of the Services, nor shall the Vendor or the Personnel make public or inform any one, directly or indirectly, any such information received by them or any recommendations formulated in

the course of or as a result of the Services. Confidential Information for the purposes of this clause means all the information that has been marked as “Confidential” at the time of disclosure.

(b). The Agency agrees with the Vendor that all information including the information relating to the Vendor’s trade secrets, know-how/technical data, research, products, strategies, internal procedures, employees and business opportunities and other proprietary information of the Vendor as described specifically as “Confidential Information” belongs to the Vendor and shall not disclose or divulge such confidential information to any third parties or make use or allow others to make use thereof. These clauses, (a) and (b), shall survive the termination of this Agreement. However, the reports submitted by the Vendor to The Agency shall become property of The Agency and The Agency is free to use any / all information mentioned in the report, procedures specified in the report, suggestions / conclusions made in the report and any such other information based on the report.

3.6. Prohibition on Conflicting Activities

The Vendor shall ensure that no member of the Personnel assigned to the Agreement shall engage, directly or indirectly, during the subsistence of this Agreement either in his name or in the name of his close relative or through the Vendor, in any other business or professional activities which is likely to be in conflict or impact the performance of his duties or assignment.

3.7. Independent Contractor

Nothing contained herein shall be construed as establishing or creating between the Agency and the Vendor the relationship of the Agency and Contractor, it being understood that the position of the Vendor and of anyone else performing the Services is that of an Independent Contractor.

3.8. Insurance

The Vendor shall at its cost take out and maintain adequate professional liability insurance as well as adequate insurance against third party liability and loss of or damage to equipment/person/property Implementing Agency for Centrally Sponsored NLRMP Scheme acquired in whole or in part with funds provided by the Agency . The Agency undertakes no responsibility in respect of any damage to person/property/equipment during the course of implementation of project.

3.9. Notice of Delay

The Vendor shall execute the work as per the time schedule prescribed in the Inception Report. In the event of any expected delay the Vendor shall inform the Agency well in advance giving justification for the delay. The Vendor may request for an appropriate extension of time for completion of the Services. However, the Agency reserves the right to grant any such extension and the decision of the Agency in this regard shall be final and binding on the Vendor.

4. Cost and Payment terms

4.1. Cost

The cost to carry out the project is: (Rupees only) per square kilometre inclusive of Service Tax.

The total cost to carry outas per the RFP of the project is coming to Rs. (Rupeesonly) inclusive of Service Tax.

The above total cost will be considered to assess the Performance Bank Guarantee, Cost for setting up Control Network and Mobilization Advance, if any.

The cost quoted are per unit basis and inclusive of all taxes and duties for the Scope of Work as agreed and mentioned in Appendix I including all other expenses for personnel services, visits, transport charges, cost of collecting required data, etc. and all the necessary services, materials,

stationary, computer services, typing, printing, photocopying etc. to fulfil the requirement of the scope. No changes to the cost shall be allowed on any account except for changes in any taxes/duties.

65% of the estimated contract value will be paid on submission of the complete project deliverables, proprietary information and any other project related information collected during the course of the project duration. The final 35% amount will be paid after acceptance of all the final deliverables and signing off the project by the Agency. All payments are subject to correct submission of bills in original.

Acceptance means after submission of report and after the Vendor has made presentation to the committee, the Administration will issue letter of acceptance along with comments/suggestions on the report.

Above payments shall be made after deduction of income tax at source, whichever may be applicable, by the Acts prevailing at the time of making payment. Payment of all other tax and levies would be the responsibility of the Vendor.

All payments to the agencies would be made in Indian Rupees only. The payment shall be made after the successful completion of the activity and successful submission of the deliverables.

The minimum gap between two successive invoices will be 04 weeks

PENALTY CLAUSE

Any delay in implementation at any milestone mentioned in the plan, will attract a penalty of 0.5% of the contract value for every 7 days, subject to a maximum of 5%. Maximum delay permitted will be 60 days beyond which the agreement is liable to be terminated and the Vendor performance guarantee will be forfeited. In such case, The Agency reserves the right to make necessary alternate arrangements to complete the project.

Further any interim delays in project implementation must be made good by the Vendor by the time of the payment milestones.

It is of utmost importance that the project implementation needs to be as per schedule. The purpose of this is to ensure all necessary formalities for project completion and closure are completed as planned and vendor will not deliver/ complete a large part of the work only at the end stage, as this would hinder smooth project completion and sign-off.

4.2. In case, the Agency is not able to communicate the acceptance of report within 30 days of submission of the report, the Agency will release 50 % of the payment due at particular stage of project. The balance 50% of the payment will be released upon acceptance of the report by the Agency.

If the report submitted by the Vendor is not acceptable to the Agency, reasons for such non-acceptance should be recorded in writing; the Agency shall not release the payment due to the Vendor. In such case, the payment will be released to the Vendor only after it re-submits the report and the report is accepted by the Agency .

5. Reports

The Vendor has to submit the reports as mentioned in the RFP.

6. Time schedule for submission of reports

The total time frame for carrying out the assignment would be weeks (to be given by the Vendor) from start i.e. 21 days from the date of issue of Letter of Intent. The details of work plan, timeframe for each stage of project is put up at Appendix III – Inception Report. During the course of action for providing feedback and comments, the timelines consumed by The Agency will not be taken into account for calculating the scheduled timelines by the Vendor. Implementing Agency for Centrally Sponsored NLRMP Scheme.

7. Liquidated Damages for late submission

The Vendor should submit his own detailed time schedule with measurable milestones and such schedules should be practicable, reasonable and balanced.

Any delay in implementation will attract a *penalty of 0.5% of the Agreement value for every 7 days*, subject to a maximum of 5%.

Maximum delay permitted will be *60 days*, beyond which the agreement is liable to be terminated and the Vendor performance guarantee will be forfeited.

In such case, the Agency reserves the right to make necessary alternate arrangements to complete the project.

8. Termination of the Agreement

8.1. The Agency reserves the right to cancel the Agreement at any time if it is not satisfied with the services of the Vendor or there is breach of any of the condition of this Agreement by the Vendor, provided a period of 30 days has lapsed from the date of serving notice on the Vendor requiring it to remedy the breach and if the breach has continued up to the date of the action. In this event, the work done till then by the Vendor shall be taken over by the Agency. The Agency reserves the right to appoint a new Vendor and hand over to him all the documents to complete the assignment. The Vendor in such case, upon termination, The Agency may also impose liquidated damages, up to maximum of 5% of the Agreement value. The Vendor shall be required to pay any such liquidated damages to The Agency within 30 days of termination date.

8.2. The Agency reserves the right to cancel the Agreement by giving 30 days notice, subject to payment of the fees for the actual work done by the vendor for the project up to the date of the notice cancellation of the Agreement as per Section 8.5.

8.3. The vendor reserves the right to terminate the Agreement immediately upon situations arising due to non-compliance of the stipulations of this Agreement by the Agency. The termination notice shall be held valid only if it is preceded by a corresponding non-compliance notice issued at least 30 days prior to the date of the termination notice and if the non-compliance has continued up to the date of the termination notice. The Agency shall be liable to pay the vendor fees for the actual work done by the vendor for the project up to the date of cancellation of the Agreement as per Section 8.5.

8.4. The parties also reserve a right to terminate this Agreement in the event any voluntary insolvency petition/ IP petition is filed by either party, or if any proceedings are instituted against either party, property or assets under any bankruptcy, insolvency, receivership, debtors relief, winding up rehabilitation, or similar statute or any effective resolution is passed for the winding up of that party or for any remedy under any such statute.

8.5. The payment of the fees will be determined based on the actual work carried out and accepted by the Agency , in terms of area of land surveyed as specified in Section 4.1. In case of failure to decide the compensation, Arbitrator as per the terms of the Agreement shall be appointed to decide the compensation.

9. Performance obligations

The Vendor shall have to be responsible for the soundness of services rendered. In the event of any deficiency in these services, the Vendor shall promptly redo/ remedy without any additional cost to The Agency and carry out such modifications and /or rectification as may be required.

10. Compliance with labour laws, statutes, rules and regulations of Government / local authority

The Vendor shall comply with all the labour laws and other laws, statutes and rules & regulations of Central and State Governments or Local authorities that may be applicable from time to time in respect of any personnel deployed or engaged by the Vendor or their sub contractor either directly or indirectly. With respect to their employees or assignees, the Vendor shall be solely responsible for strictly following all labour laws, industrial laws, factories act, minimum wages act and other such laws which are applicable from time to time, including but not limited to the modification, amendments or additions which are made to these laws during the period of Agreement. Implementing Agency for Centrally Sponsored NLRMP Scheme. The Vendor will also be responsible for the various levies of State/Central Governments and/or any Statutory Body. The Vendor shall have to, at their expense, comply with labor laws and keep The Agency indemnified in respect thereof. Agency shall be fully responsible for all matters arising out of the performance of the Agreement and shall comply, at their own expenses, with all laws / acts / enactment / orders / regulations / statutory obligations, whatsoever of the Government of India / State Government, Local Self Government or any Statutory Authority.

11. Period of Agreement

The agreement to be entered into between The Agency and the Vendor shall be valid from the date of signing the Agreement or 15 days from issuance from LOI, whichever is earlier till final approval of The Agency is received.

12. Liability

In no event shall either party be liable for any direct, indirect, incidental, spatial, consequential, reliance or cover damages, including, but not limited to, loss of profits, revenue, data or use, incurred by the other party. In no event, however, shall the total liability of the Vendor under this Agreement exceed the amount of fee received by the Vendor from the Agency . However this clause will not prevent The Agency from levying the liquidated damages as per Clause 7 and 8.1.

13. Notices

Any notice or request required or permitted to be given or made under this Agreement to either party shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or fax to the party to which it is required or permitted to be given or made at such party's Head Office or Registered Office or Corporate Office or branch office addresses.

14. Arbitration

In the event of any dispute or difference at any time arising between the parties relating to the construction, meaning or effect of this agreement or any other clause or any content of the rights and liabilities of the parties or other matters specified herein or with reference to anything arising out of or incidental to this agreement or otherwise in relation to the terms, whether during the continuance of this agreement or thereafter, such disputes or differences shall be endeavoured to be solved by mutual negotiations. If, however, such negotiations are anfractuous, these shall be decided by arbitration of two Arbitrators, one to be appointed by each party to the dispute or difference and to an Umpire to be appointed by Arbitrators in writing before taking upon them the burden of arbitration. Such a reference shall be deemed to be a submission to arbitration under the provisions of the Arbitration and Conciliation Act, 1996 and of any modification or re-enactment thereof. The venue of arbitration shall be Jammu or Srinagar only, the expense of the arbitration shall be paid as may be determined by the Arbitrators.

15. Jurisdiction

All questions, disputes or differences arising under out of or in connection with the Agreement shall be subject to the exclusive jurisdiction of the court under whose jurisdiction the place from which the agreement has executed i.e. Jammu.

16. Force Majeure

16.1. Force Majeure means such of the following factors which substantially affect the performance of the Agreement, such as: natural phenomena, including but not limited to floods, droughts, earthquakes and epidemics; acts of any Government, domestic or foreign, including but not limited to war, declared or undeclared, quarantines, embargoes; Illegal strikes and legal lockouts in respect of the Agency 's / the Vendor's scope of work provided, either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.

16.2. The Vendor or the Agency shall not be liable for delays in performing their obligations resulting from any Force Majeure cause as referred to and/or defined above.

16.3. However, if such an event lasts for a period of 180 days or more then either party shall have an option to terminate this Agreement forthwith without any liability after intimating the other party of the same. The Vendor shall however be entitled to receive payments for all the services rendered by it Implementing Agency for Centrally Sponsored NLRMP Scheme under this Agreement prior to termination of Agreement. The payment shall be determined as per Section 8.5.

17. Custody of Drawing/ reports/data etc

Original Drawings/Maps/Atlas/Data/Charts/Photocopies of classified documents such as topo sheets etc., and all other documents received from the Agency , shall remain in the custody of the Vendor during the period of assignment only and shall be used exclusively for this job and shall not be made use of for any other purpose. These shall be carefully preserved by the Vendor till the completion of the job and shall be handed over to the Agency on preparation of final report or on termination of the Agreement.

18. Indemnity

The Vendor shall indemnify the Agency and every members, officers and employees of the Agency , against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or, in connection with various matters and against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of any negligent act or omission or failure by the Vendor in the performance of the Vendor obligation under this Agreement.

19. General clauses

19.1. Entire Agreement & Amendments

This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior written, oral or implied understandings between them on that subject matter. This Agreement may be amended, modified or supplemented only by the Authorized representatives of the parties in writing executed on behalf of both parties hereto.

19.2. Exclusive Agreement

The Agency at any time is free to engage other competent vendor in the interest of the project for any inconclusive arbitration.

The Vendor can take up such similar business in any other state or location but without affecting the services agreed to be offered by it under this Agreement and subject to clause 3.7. However, the Vendor shall express written information from the Agency under such circumstances.

19.3. Severability

In the event that any provision or any portion of any provision of this Agreement shall be held invalid, illegal or unenforceable under applicable law, the remainder of this Agreement shall remain valid and enforceable in accordance with its terms.

19.4. Survival

The clauses of this Agreement, which by their very nature ought to survive termination of this Agreement, shall so survive.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed. Each party warrants and represents that its respective signatories whose signatures appear below have been and are on the date of signature duly authorized to execute this Agreement.

Authorised Signatory
On behalf of the Agency

Authorised Signatory
On behalf of the Vendor

In witness of

In witness of

- 1. _____
- 2. _____
- 3. _____

- 1. _____
- 2. _____
- 3. _____

Abbreviations

1	AOI-Area of interest
2	CIS -Cadastral Information System
3	CLR - Computerisation of Land Records
4	CSR -Corporate Social Responsibility
5	CV-Curriculum Vitae
6	DD - District Code
7	DGPS -Differential Global Positioning System
8	EMD -Earnest Money Deposit
9	ETS – Electronic Total Station
10	F -Amount of Financial Proposal
11	FM –Lowest (Minimum) Financial Proposal
12	FS – Financial Score
13	Fw -Weight Assigned To Financial Proposal
14	GCP -Ground Control Point
15	GFR – General Financial Rules
16	JaKLaRMA – Jammu & Kashmir Land Records Management Agency
17	HHH - Halqa Number
18	HRSI -High Resolution Satellite Image
19	IPR -Intellectual Property Rights
20	ISO – International Organisation for Standardisation
21	LAN – Local Area Network
22	LISS – Linear Imaging Self Scanner
23	LOA -Letter of Award
24	MIS/GIS – Management Information System/ Geographical Information System
25	NIC – National Informatics Centre
26	NLRMP -National Land Records Modernisation Program
27	NN - Sheet Number
28	PAN – Panchromatic
29	PBG-Performance of Bank Guarantee
30	PDD -Proposal Due Date
31	PPP – Public Private Partnership
32	QA -Quality Assurance
33	QC – Quality Check
34	QCBS – Quality-cum-Cost Based Selection System
35	RDBMS – Relational Database Management System
36	RFP -Request for Proposal
37	RMS errors – Root Mean Square errors
38	S -Combined Technical & Financial Scores
39	SF -Financial Score
40	SLA -Service Level Agreement
41	SoI – Survey of India
42	SP -Service Provider
43	SRA&ULR -Strengthening of Revenue Administration and Updating of Land Records
44	ST -Combined Technical Scores
45	TH – Technical Score Highest
46	ToR – Terms of Reference
47	TS -Technical Score

- 48 TT -Tehsil Code
- 49 Tw -Weight Assigned To Technical Proposal
- 50 UPS-Un-disrupted Power Supply
- 51 VVV- Village Number
- 52 WV – World View