



**GOVERNMENT OF RAJASTHAN**

**OFFICE OF THE CEO, RBAAS &  
SETTLEMENT COMMISSIONER RAJASTHAN,  
JAIPUR**

**BIDDING DOCUMENT**

**ESTABLISHMENT OF GROUND CONTROL  
NETWORK, CONDUCTING SURVEY/RESURVEY  
AND UPDATION OF THE SURVEY & SETTLEMENT  
(RECORDS) OPERATIONS IN RAJASTHAN**

**ESTABLISHMENT OF GROUND CONTROL NETWORK, CONDUCTING  
SURVEY/RESURVEY AND UPDATION OF THE SURVEY & SETTLEMENT  
(RECORDS) OPERATIONS IN RAJASTHAN**

**Table of Contents**

<b>Notice Inviting Bids .....</b>	<b>3-7</b>
<b>Section I : Instructions to Bidder .....</b>	<b>8-60</b>
<b>Section II: Bid Data Sheet .....</b>	<b>61-63</b>
<b>Section III: Evaluation and Qualification Criteria.....</b>	<b>64-77</b>
<b>Section IV: Bidding Forms.....</b>	<b>78-109</b>
<b>Section V: Procuring Entity's Requirements.....</b>	<b>110-161</b>
<b>(Scope of work)</b>	
<b>Section VIA: General Conditions of Contract .....</b>	<b>162-180</b>
<b>Section VIB: Special Conditions of Contract .....</b>	<b>181-184</b>
<b>Section VIC: Contract Agreement .....</b>	<b>185-186</b>
<b>Annexure I : Appeals.....</b>	<b>187-189</b>
<b>Annexure II : List of feature layer.....</b>	<b>190-192</b>
<b>Annexure III: List of districts with geographical Area.....</b>	<b>193</b>
<b>Annexure IV : Draft Formats.....</b>	<b>194-199</b>
<b>Annexure V : Map of Rajasthan .....</b>	<b>200</b>
<b>Annexure VI : Performance Security.....</b>	<b>201-202</b>
<b>Annexure VII : Performance Security Declaration.....</b>	<b>203</b>
<b>Annexure VIII : Check list for Eligibility Criteria.....</b>	<b>204-211</b>

Office of CEO, RBAAS & Settlement Commissioner, "Viman Bhawan", Gopalbari,  
Rajasthan, Jaipur.

Tele-Fax No. 0141-2373904, email id- scr-rj@nic.in

No. F-3(1)/survey/resurvey/tender/RBAAS/2014-15/Part-II/547 Date:07-01-16

**E-Bid Notice**

NIB No.CEORBAAS&SCR/Establishment gcn& survey/resurvey/2015-16/2

Online bids are invited for establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan under e-Dharti (NLRMP) programme from eligible bidders with minimum five years experience of the similar *nature* works. The bid process includes single stage two envelopes bid system i.e. technical and financial bid. Technical and financial bid should be submitted online in separate part. Bid Security as mentioned in the table of notice inviting bids, bid document cost Rs. 10000.00 and bid processing fees Rs. 1000.00 in the form of demand draft/banker cheque/Bank Guarantee in specified format shall be deposited. Scanned copies of demand draft/ banker cheque/Bank Guarantee should be uploaded with the technical bid. Complete bid in all respect with digital signature should be submitted only online in electronic format on the website <http://eproc.rajasthan.gov.in> on *dated 23.02.2016 up to 6:00 pm or before*. Technical Bid will be opened on dated 24.02.2016 at 11:00 AM in the presence of the bidders or their representatives who wish to be present. Bidders who have purchase bid document shall only be eligible to attend Pre-bid Meeting. Bidder has to submit a photo copy of DD/BC of bid document cost along with hard copy of Pre-bid queries. Details may be seen of the bidding document at our office or the website of state public procurement portal. <http://sppp.rajasthan.gov.in> Process of bidding will be as per following:-

- (a) Pre bid meeting dated 21.01.2016 at 11:00am  
Venue : Office of the SCR, Viman Bhawan, Gopalbari Jaipur***
- (b) Sale of bidding document dated 23.02.2016 up to 11:00 am.***
- (c) Submission of bids online dated 23.02.2016 up to 6:00 pm.***

**CEO, RBAAS & Settlement  
Commissioner,  
Rajasthan, Jaipur.**

Office of CEO, RBAAS & Settlement Commissioner, "VimanBhawan", Gopalbari,  
Rajasthan, Jaipur.  
Tele-Fax No. 0141-2373904, email id- scr-rj@nic.in

### NOTICE INVITING BIDS

NIB No. CEO, RBAAS & SCR/Establishment GCN & survey/resurvey/2015-16/2

1. Online Single Stage Two- envelopes unconditional Bids are invited on behalf of the Governor of Rajasthan for the Establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan from specialized agencies/organization/Companies/Societies/ with minimum 5 year experience of similar nature works.

(Rupees in Lacs)

SN	Name of work	Region name	Districts	Geog.area in Sq.KM.	Estimated cost	Amount of bid security
1.	Land record modernisation work	Ajmer	Ajmer, Bhilwara, Nagore, Tonk	43928	5271.00	105.42
2.	-do-	Bharatpur	Bhartatpur, Dholpur, Karoli, Sawaimadhopur	18157	2179.00	43.58
3.	-do-	Bikaner-A	Bikaner	30279	3633.00	72.66
4	-do-	Bikaner-B	Hanumangarh, Ganganagar, churu	34457	4135.00	82.70
5	-do-	Jaipur	Jaipur, Dausa, Alwar, Jhunjunu, Sikar	36575	4389.00	87.78
6	-do-	Jodhpur-A	Jodhpur, Pali, Sirohi	40238	4829.00	96.58
7	-do-	Jodhpur-B	Barmer, Jalore	39114	4694.00	93.88
8	-do-	Jodhpur-C	Jaisalmer	38564	4628.00	92.56
9	-do-	Kota	Kota, Bundi, Jhalawar, Bara,	24207	2905.00	58.10
10	-do-	Udaipur	Udaipur, Chittorgarh, Pratapgarh, Dungarpur, Banswara, Rajasamand	36887	4426.00	88.52

2. Bidders who submit bid security of Rs. 202.00 lakhs (sum of two highest bid security zones), may have option to submit financial bid for all zones in BoQ format. Bidders not submitting this much of bid security will have option to submit with required bid security for desired zone and quote financial bid accordingly. After evaluation of bid proposals, the work of maximum two zones may be awarded to successful bidder. Single technical bid is required to be submitted by all bidders, which will be considered for technical evaluation of all zones.
3. Bidding Document including the NIB, ITB, BDS, Procuring entity requirements, conditions of Contract, evaluation and qualification criteria and procedure, bidding forms, Delivery Schedule, etc. can be seen at the office during office hours in working days up to one day before the date of opening of Bids. Alternatively, these may be seen and downloaded from the website of State Public Procurement Portal, <http://sppp.rajasthan.gov.in>.
4. Bids, duly digitally signed on all pages and serially numbered, properly bound, accompanied with the Bid Security, Bid document cost and processing fees in the form of Demand Draft/ Banker's cheque/Bank Guarantee in specified format from a Scheduled Bank in India, related documents shall be scanned and uploaded online with the technical bid. Complete bid in all respect with digital signature should be submitted only online in electronic format on the website <http://eproc.rajasthan.gov.in> on and **before 23.02.16 up to 6:00PM.**
5. The procedure for submission of Bids including payment of price of Bidding document, processing fee, Bid Security, etc. shall be as provided on the State Public Procurement Portal.
6. Pre bid conference will be held as per mentioned in bid data sheet.
7. Bids received after the specified time and date shall not be accepted and returned marked as "Unopened".
8. The Technical Bids shall be opened **on dated 24.02.2016 at 11:00 AM** in the Presence of the Bidders or their authorized representatives who wish to be present.

9. The procuring Entity is not bound to accept the lowest Bid and may reject any or all Bids without assigning any reason thereof.
10. The Bidders shall have to submit a valid Service Tax clearance certificate from the concerned department and the 'PAN' issued by Income Tax Department.
11. Bids have to be submitted only online in electronic form on the website <http://eproc.rajasthan.gov.in> with duly digital signed on all pages.
12. Demand draft/Banker Cheque of Rs. 10000/- for bid document cost and Bid Security to be paid *as mentioned in para 2 above* in favour of CEO, RBAAS & Settlement Commissioner, Jaipur payable at Jaipur before specified time and date. The bid security must remain valid 30 days beyond the validity period of the bid.
13. Demand draft/Banker Cheque of Rs. 1000/- for processing fees to be paid in favour of M.D., RISL, Jaipur payable at Jaipur before specified time and date.
14. The financial bid of only those bidders shall be opened who qualified in technical bid as per criteria laid in bid and only qualified bidders will be informed about financial bid opening.
15. Partially filled or incomplete and unsigned bid will be rejected.
16. The bidder will have to register themselves on website <http://eproc.rajasthan.gov.in> for participating in this bid for this purpose Digital Signature Certificate(DSC) have to be obtained from any agency approved by CCA. This DSC will be used to sign the bids submitted online by the bidder. Unsigned bid will not be entertained and will be rejected out rightly.
17. Before submitting online bid the bidders should ensure that all related document have been scanned and attached along with respective bid.
18. In case any bidder fails to submit original DD/BC/Bank Guarantee of document cost, processing fees and bid security on or before above mentioned date, Technical bid of that bidder shall not be opened and liable to be rejected.
19. Date and Time for opening of financial bid to be intimated later to the technically qualified bidders.
20. Tender document fees and processing fees will not be refunded in any case.

21. All other conditions shall be prevailing as detailed out in bid document in the respective sections/volumes.
22. The bidder who has earlier been blacklisted/debarred/banned by state government and any procuring entity shall not be eligible to participate in this tender.
23. No contractual obligation whatsoever shall arise from the bidding document/bidding process unless and until a formal contract signed and executed between the procuring entity and successful bidder.
24. The provisions of RTTP Act, 2012 and rules there shall be applicable for this procurement furthermore in case of any inconsistency in any of the provisions of this bidding document with RTTP Act, 2012 and Rules there to, the later shall prevail.
25. The Pre-Bid conference will be held on Date 21.01.2016 Time & Venue for the meeting will be 11:00 a.m. in Office of the CEO, RBAAS & Settlement Commissioner, "Viman Bhawan", Gopalbari, Rajasthan, Jaipur. Bidders who have purchase bid document shall only be eligible to attend Pre-bid Meeting. Bidder has to submit a photo copy of DD/BC of bid document cost along with hard copy of Pre-bid queries.
26. If any queries regarding online bid submission/e-tendering bidder may call on toll free no. of e-proc 1800-3070-2232.

Name and Designation of the Procuring Entity: CEO, RBAAS & Settlement Commissioner, "Viman Bhawan", Gopalbari, Rajasthan, Jaipur.

## 1. Instructions to Bidders

**Important Instruction:-** The Law relating to procurement "The Rajasthan Transparency in Public Procurement Act, 2012" [hereinafter called the Act] and the "Rajasthan Public Procurement Rules, 2013" [hereinafter called the Rules] under the said Act have come into force which are available on the website of State Public Procurement Portal <http://sppp.rajasthan.gov.in>. Therefore, the Bidders are advised to acquaint themselves with the provisions of the Act and the Rules before participating in the procurement process. If there is any discrepancy between the provisions of the Act and the Rules and this Bid Document, the provisions of the Act and the Rules shall prevail.

<b>1. Definitions</b>			
<b>S. No</b>	<b>Particulars</b>	<b>Clause</b>	<b>Description</b>
1.		1.1	"Act" means the Rajasthan Transparency in Public Procurement Act, 2012 and Rules 2013.
		1.2	"Procuring Entity" means an entity referred to in sub-section (2) of section-3 of the RTTP, Act.
		1.3	"Bidder" means the Bidder Firms who may any entity or person (legal), consortium/J.V. that may establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan for the Procuring entity under the Contract.
		1.4	"Contract" means the Contract signed by the Parties and all the attached documents and the appendices.
		1.5	"Bid Data Sheet (BDS)" means such part of the Instructions to Bidders used to reflect specific assignment conditions.
		1.6	"Day" means a calendar day.
		1.7	"Government" means the Government of Rajasthan.
		1.8	"Instructions to Bidders (ITB)" means the document which provides Bidders with information needed to prepare their Proposals.



		1.9	"Personnel" means professionals and support staff provided by the Bidder and assigned to perform the Works or any part thereof; "Foreign Personnel" means such professionals and support staff who at the time of being so provided had their domicile outside India; "Local Personnel" means such professionals and support staff who at the time of being so provided had their domicile inside India.
		1.10	"Proposal" means the Technical Proposal and the Financial Proposal submitted by the Bidder.
		1.11	"GCN "means Ground Control Network.
		1.12	"Terms of Reference" (TOR) means the document included in the Bid Document which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Procuring Entity and the Bidder, and expected results and deliverables of the assignment.
		1.13	""Authorized Signatory" means the bidder's representative/ officer vested (explicitly, implicitly, or through conduct) with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/ authority having the Power of Attorney (PoA) from the competent authority of the respective Bidding firm
		1.14	"RBAAS" means Rajasthan Bhu Abhilekh Aadhunikikaran Society
		1.15	"BG" means Bank Guarantee
		1.16	"Bid" means A formal offer made in pursuance of an invitation by a procuring entity and includes tender, proposal.
		1.17	"Contract/Project" means The Contract/ Project Period shall commence from the date of issue of Work order till the period specified in bid document for respective zone.
		1.18	"CEO" means Chief Executive Officer of RBAAS.

		1.19	"CORS" means Continue Operating Reference Station.
		1.20	"DGPS" means Differential Global Position System.
		1.21	"DoLR" means Department of Land Resources, Government of India.
		1.22	"BSD" means Bid Security Deposit (As per RTPP Act and Rules, 2% Amount of the estimated project cost)
		1.23	"ETS" means Electronic Total Station
		1.24	"GCP" means Ground Control Point
		1.25	"GDP" means Geo Data Base.
		1.26	"GIS" means Geographical Information System
		1.27	"GoI" means Government of India
		1.28	"GoR" means Government of Rajasthan.
		1.29	"HRSI" means High Resolution Satellite Imagery
		1.30	"ICT" means Information and Communication Technology
		1.31	"IEC" means Information, Education & Communication
		1.32	"LIS" means Land Information System
		1.33	"LoI" means Letter of Intent
		1.34	"LRC" means Land Record Computerization
		1.35	"MSL" means Mean Sea Level
		1.36	"NeGP" means National e-Governance Plan of Government of India
		1.37	"NIT" means Notice Inviting Tender
		1.38	"NIB" means Notice Inviting Bid

		1.39	"NLRMP" means National Land Record Modernization Programme
		1.40	"NLRMP Guidelines" means NLRMP guidelines, technical manuals and MIS issued by Department of Land Resources, Ministry of Rural Development, Government of India
		1.41	"Prime Bidder" means Lead Bidder of consortium/JV for this project.
		1.42	"Project Evaluation Committee" means Committee constituted for evaluating the project
		1.43	"Project Site" means "The Project Site", wherever applicable, means the designated place or places.
		1.44	"Proposal" means the technical Proposal and the Financial Proposal submitted by the Bidder/Prime Bidder.
		1.45	"PRS" means Principal Secretary Revenue, GoR.
		1.46	"RS" means Revenue Secretary, GoR
		1.47	"Survey" means The fresh new cadastral survey of an area using modern survey instruments is known as Survey.
		1.48	"Resurvey" means The cadastral survey of an area which has already been surveyed earlier is known as Resurvey.
		1.49	"RoR" means Record of Right
		1.50	"SCR" means Settlement Commissioner, Rajasthan
		1.51	"SD" means Settlement Department
		1.52	"Similar Projects" means Similar projects refers to GIS projects in cadastral mapping, Ground Control Network and survey/Re-Survey, Settlement and Land Record operations using ETS/DGPS, HRSI/ Aerial Technique.
		1.53	"SLA" means Service Level Agreement is a negotiated agreement between two parties wherein one is the customer and the other is the service provider. It is a service contract

			where the level of service is formally defined. In practice, the term SLA is sometimes used to refer to the contracted delivery time (of the service) or performance.
		1.54	"SRO" means Sub Registrar Office
		1.55	"Survey Agency" means Bidder who is awarded contract by Procuring Entity will be called as survey agency/successful bidder
		1.56	"UTM" means Universal Transverse Mercator projected coordinate system
		1.57	"WGS-84" means World Geodetic System 84
		1.58	"Procurement Process" means The process of Procurement extending from the issue of invitation to Pre-Qualify or to register or to bid till the award of the Procurement Contract or Cancellation of the Procurement Process, as the case may be.
		1.59	"Subject Matter of Procurement" means in the form of services.
		1.60	"Completed Project" means completed against work order.
<b>2.</b>	Scope of Bid	2.1	In support of the Invitation to Bid indicated in the Bid Data Sheet (BDS), the Procuring entity as indicated in the BDS, issues this Bidding Document for the procurement of works as named in the BDS and as specified in Section V, Procuring Entity's requirements.
<b>3</b>	Code of Integrity	3.1	Any person participating in the procurement process shall,- <ul style="list-style-type: none"> <li>i not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;</li> <li>ii not misrepresent or omit that misleads or</li> </ul>

			<p>attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;</p> <p>iii not indulge in any collusion, Bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process;</p> <p>iv not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;</p> <p>v not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;</p> <p>vi not obstruct any investigation or audit of a procurement process;</p> <p>vii disclose conflict of interest, if any; and</p> <p>viii Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring Entity.</p>
4	Conflict of Interest	4.1	A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.
		4.2	<p>A Bidder may be considered to be in conflict of interest with one or more parties in this bidding process if, including but not limited to:</p> <p>i have controlling partners/ share holders in common; or</p>

			<ul style="list-style-type: none"> <li>ii receive or have received any director in direct subsidy from any of them ;or</li> <li>iii have the same legal representative for purposes of this Bid; or</li> <li>iv have a relationship with each other, directly or through common third parties, that puts the bidder in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding this bidding process; or</li> <li>v The Bidder participates in more than one Bid in this bidding process. Participation by Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same sub bidder, not otherwise participating as a Bidder, in more than one Bid; or</li> <li>vi the Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Works that are the subject of the Bid; or</li> <li>vii Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as Engineer-in- charge/ Bidder for the contract.</li> </ul>
		4.3	The Bidder shall have to give a declaration regarding compliance of the Code of Integrity prescribed in the Act, the Rules and stated above in this Clause along with its Bid, in the format specified in Section IV, Bidding Forms.
		4.4	Breach of Code of Integrity by the Bidder:-

			Without prejudice to the provisions of Chapter IV of the Rajasthan Transparency in Public Procurement Act, in case of any breach of the Code of Integrity by a Bidder or respective Bidder, as the case may be, the Procuring Entity may take appropriate action in accordance with the provisions of sub-section (3) of section 11 and section 46 of the Act.
5	Eligible Bidders	5.1	<p>A Bidder may be a natural person, private Entity, government-owned Entity, company/firm registered under Indian Law or, where permitted in the Bidding documents, any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture [JV]. Joint venture/Consortium or Association shall not consist of more than three companies (one + two). In the case of a Joint Venture, Consortium or Association: -</p> <p>all parties to the Joint Venture, Consortium or Association shall sign the Bid and they shall be jointly and severally liable; and a Joint Venture, Consortium or Association shall nominate a representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the Joint Venture, Consortium or Association during the Bidding process. In the event the Bid of Joint Venture, Consortium or Association is accepted, either they shall form a registered Joint Venture, Consortium or Association as company/firm or otherwise all the parties to Joint Venture, Consortium or Association shall sign the</p>

			<p>Agreement.</p> <p>To assess eligibility criteria in case of consortium/JV partners the work experience, turnover and other similar requirements will be clubbed together of all.</p>
		5.2	<p>A Bidder, and all parties constituting the Bidder, shall have the nationality of India. In case of International Competitive Bidding or Joint Venture, Consortium or Association [where permitted], the nationality of the Bidder and all parties constituting the Bidder shall be of India or an eligible country declared as such by Government of India. A Bidder shall be deemed to have nationality of a country if the Bidder is a citizen or constituted or incorporated, and operates in conformity with the provisions of the Laws of that country. This criterion shall also apply to the determination of the nationality of proposed Sub-bidders for any part of the Contract including related works.</p>
		5.3	<p>A Bidder should not have a conflict of interest in the procurement in question as stated in the Rule 81 and this Bidding document.</p>
		5.4	<p>A Bidder debarred under section 46 of the Act shall not be eligible to participate in any procurement process undertaken by, any Procuring Entity, if debarred by the State Government; and a Procuring Entity if debarred by such procuring Entity.</p>



		5.5	<ul style="list-style-type: none"> <li>• Bidder should have ISO 9001:2008.</li> <li>• The bidder should have completed project or Should have NLRMP Project in progress of survey work involving processing of High Resolution Satellite images / Stereo Satellite images / Aerial Imageries using DGPS / ETS or Ground Survey using DGPS / ETS including preparation of GIS Base map or Linear survey and mapping using DGPS/ETS covering a minimum cumulative geographical area of 1500 Sq. Km. in last 10 Financial Years for Central Govt. of India/ UT Govt./any State Government/ Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</li> </ul>
		5.6	<p><b>Financial Requirements</b></p> <p>Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/aerial photographs using DGPS / ETS or Ground Survey using DGPS/ETS including Preparation of GIS Base map or linear survey and mapping of value as mentioned below in the last 10 years for Central Govt. of India/ any State Govt. Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p> <ul style="list-style-type: none"> <li>• One project of value 4 Crores.</li> <li>• Two projects of value 5 Crores.</li> <li>• Three projects of value 6 Crores.</li> <li>• The Bidder should deposit Bid Security along with the Technical bid. The bid received without required Bid Security will be</li> </ul>

			<p>rejected.</p> <ul style="list-style-type: none"> <li>• Bidder should have a minimum average annual turnover of Rs. 15 crore &amp; above during the last 3 financial years (FY 2012-13, 2013-14 &amp; 2014-15).</li> <li>• The net worth of the bidder must not be less than Rs.10 Crores for the financial year 2014-15.</li> </ul>
		5.7	<p><b><u>Other Requirements</u></b></p> <ul style="list-style-type: none"> <li>• The Bidder should have a <b>Local Support Office at Jaipur</b>. If the bidder, at the time of bidding, does not have a local support office at Jaipur then he should submit an undertaking on his letter-head regarding establishment of same within one month of issuance of work order (if awarded the contract).</li> <li>• The successful bidders are required to establish at district level, Project Office at District and Sub Office at Tehsil as decided by the Procuring Entity, if required.</li> <li>• Bidder should have minimum following instrument /equipment available with their firm for carrying out project activities <ol style="list-style-type: none"> <li>1. Differential Global Positioning System (DGPS) – 09 Nos.</li> <li>2. Electronic Total Station (ETS)/Real Time Kinematic (RTK)– 05 Nos.</li> <li>3. Scanner/Plotter- 01 Nos. each</li> <li>4. Licenses of Genuine softwares - image processing, GIS/Photogrammetric suite with genuine Hardware- at least 01 each.</li> </ol> <p>They may mention how much more they plan to add, in case they get this order. In that case bidder will have to submit proof of</p> </li> </ul>

			<p>purchase.</p> <p>The Bidder must have an overall GIS and <i>remote sensing</i> Engineer, Land Surveyor, CAD Engineer/Operator strength of sufficient number of personnel on their payroll as on 31<sup>st</sup> March 2015.</p> <ul style="list-style-type: none"> <li>• Qualification and experience of expertise as under: <ol style="list-style-type: none"> <li>1. Project Manager: BE/MBA/GIS/Remote Sensing Engineer with 5 year experience in relevant field.</li> <li>2. Revenue Expert: Retired Revenue Officer of different ranks with minimum 20 year relevant experience.</li> <li>3. Cadastral Survey Expert: BE/Diploma (Civil) with minimum 5 years relevant experience.</li> <li>4. GIS &amp; Remote Sensing Engineer: MSc./MA/MCA/BE in the field of IT/Geography/Natural Science/Remote sensing/Geo-informatics with 5 year relevant experience.</li> <li>5. Software Expert: BE/B.Tech.in IT Related field/MCA/ with minimum 5years experience in relevant field.</li> </ol> </li> </ul>
		5.8	<p><b><u>Additional Requirements for Consortium</u></b></p> <ul style="list-style-type: none"> <li>• A bidding firm may also be a consortium of companies/corporations/Firms. In case of a consortium, the same shall not consist of more than three companies/ corporations (one + two) and shall be formed under a duly stamped consortium agreement (Attach Proof). In the event of a consortium, one of the partners shall be designated as a "Lead Partner/ Bidder".</li> <li>• In Consortium, all the members shall be equally responsible to complete the project as per their roles &amp; responsibilities; however Lead Partner/Bidder shall give an undertaking</li> </ul>

			<p>for the successful completion of the overall project. In case of any issues, Lead partner is the responsible person for all the penalties.</p> <ul style="list-style-type: none"> <li>• The MoU/ Agreement, on an appropriate stamp paper, between the Lead partner and his Consortium partner(s) for their exclusive association for this bid and joint responsibility for the respective scope for the entire period of the Project, must be submitted along with the Technical Bid. Roles and responsibilities of each consortium member must also be spelt out in the MOU/ Agreement. No new consortium agreement shall be allowed during the project period.</li> <li>• A bidding company/Firm/ corporation cannot be a part of more than one Consortium. In such a case, both the bids would be disqualified. In case a company/Firm/ corporation has bid as a part of consortium, it can't bid individually and both bids would be disqualified.</li> </ul>
		5.9	<p><b><u>Undertaking Requirement (Mandatory)</u></b></p> <p>The Bidder must submit documentary evidence in support of their claim for fulfilling the eligibility criteria and they should submit an undertaking on their letterheads to the fairness of these documents in support of their claim while submitting the Bids. The Bids received without documentary evidence will be out rightly rejected.</p>
		5.10	<p>Bidders shall provide such evidence of their continued eligibility satisfactory to the Procuring Entity, should the Procuring Entity request.</p>
		5.11	<p>Bidders who submit bid security of Rs. 202.00 lakhs (sum of two highest bid security zones), may have option to submit financial bid for all</p>

			<p>zones in BoQ format. Bidders not submitting this much of bid security will have option to submit with required bid security for desired zone and quote financial bid accordingly. After evaluation of bid proposals, the work of maximum two zones may be awarded to successful bidder. Single technical bid is required to be submitted by all bidders, which will be considered for technical evaluation of all zones.</p>
		5.12	<p>The Sales Tax Registration Number should be quoted and a VAT/ Sales Tax Clearance certificate from the Commercial Taxes Officer of the Circle concerned shall be submitted without which the Bid is liable to be rejected. He is also required to provide proof of Service Tax Registration, PAN certificate, as per law. Income Tax Return with Audit Report from CA for the last three financial years. Bidder should provide an attested &amp; valid copy of all the above-mentioned certificates along with the Technical bid.</p>
6	<b>Contents of Bidding Document</b>		
	Sections of the Bidding Document	6.1	<p>The Bidding Document include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 8.1 and 8.2 [Amendment of Bidding Document].</p> <p>Section I : Instructions to Bidders</p> <p>Section II: Bid Data Sheet</p> <p>Section III: Evaluation and Qualification criteria</p> <p>Section IV: Bidding Forms</p> <p>Section V: Procuring Entity Requirements</p>

			<p>(TOR/Scope of work)</p> <p>Section VIA: General Conditions of Contract</p> <p>Section VIB: Special Conditions of Contract</p> <p>Section VIC: Contract Agreement</p>
		6.2	The bidders are invited to submit a technical proposal and a financial proposal as specified formats in the bid document for establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan.
		6.3	The Invitation for Bids (NIB) issued by the Procuring Entity is also part of the Bidding Document.
		6.4	<p>The sale of Bidding documents shall be commenced from the date of publication of Notice Inviting Bids and shall be stopped one day prior to the date of opening of Bids. The complete Bidding Documents shall also be placed on the State Public Procurement Portal. The prospective Bidders shall be permitted to download the bidding document from the website and pay its price while submitting the filled-up Bidding document to the Procuring Entity, or e-procurement gateway, if the facility is available.</p> <p>The Bidding Document shall be made available to any Bidder who pays the price for it as specified in the Bid Document , in cash or by bank demand draft, banker's Cheque of a Scheduled Bank, unless the procurement is reserved for any specific category of Bidders:</p>
		6.5	The Procuring Entity is not responsible for the completeness of the Bidding Document and its

			agenda, if they were not obtained directly from the Procuring Entity or not downloaded correctly from the State Public Procurement Portal website <a href="http://sppp.rajasthan.gov.in">http://sppp.rajasthan.gov.in</a> .
		6.6	The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or authentic documentation required by the Bidding Document may result in the rejection of the Bid.
		6.7	Bidders who submit bid security of Rs. 202.00 lakhs (sum of two highest bid security zones), may have option to submit financial bid for all zones in BoQ format. Bidders not submitting this much of bid security will have option to submit with required bid security for desired zone and quote financial bid accordingly. After evaluation of bid proposals, the work of maximum two zones may be awarded to successful bidder. Single technical bid is required to be submitted by all bidders, which will be considered for technical evaluation of all zones.
		6.8	The bidder is required to submit details of the documents in given check list at annexure VIII. The documents of check list shall be in conformity with the documents shown in bid evaluation criteria by the bidder.
7	Clarification of Bidding Document and Pre-Bid Conference	7.1	The Bidder shall be deemed to have carefully examined the conditions, specifications, size, make and drawings, etc., of the works and Related Services to be provided. If any Bidder has any doubts as to the meaning of any portion of the conditions or of the specifications, drawings etc., it shall, before submitting the Bid,

			refer the same to the Procuring Entity and get clarifications. A Bidder requiring any clarification of the Bidding Document shall contact the Procuring Entity in writing at the Procuring Entity's address indicated in the BDS. The Procuring Entity will respond in writing to any request for clarification, within seven days provided that such request is received no later than twenty-one(21)days prior to the deadline for submission of Bids as specified in Bid Document. The Procuring Entity shall forward copies of its response to all Bidders who have acquired/ procured the Bidding Document directly from it including a description of the inquiry but without identifying its source. It shall also be placed on the State Public Procurement Portal and should the Procuring Entity deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so following the procedure through an addendum which shall form part of the bid document.
		7.2	The Bidder or his authorised representative is invited to attend the Pre- Bid Conference, as provided in the BDS .The purpose of the Pre- Bid Conference will be to clarify issues and to answer questions on any matter related to this procurement that may be raised at that stage. If required, a conducted site visit shall be arranged by the Procuring Entity.
		7.3	The Bidder is requested, to submit questions in writing, to reach the Procuring Entity not later than one week before the Pre- Bid Conference.
		7.4	Minutes of the Pre-Bid Conference, including the text of the questions raised, and the response s



			given, without identifying the source, will be transmitted promptly to all Bidders who have acquired the Bidding Document and will also be placed on the State Public Procurement Portal. Any modification to the Bidding Document that may become necessary as a result of the Pre-Bid Conference shall be made by the Procuring Entity exclusively through the issue of an addendum(part of Bid document)and not through the minutes of the Pre-Bid Conference.
		7.5	At any time prior to the deadline for submission of the Bids, the Procuring Entity, suo motto, may also amend the Bidding Document , if required ,by issuing an addenda which will form part of the Bidding Document
		7.6	Non-attendance at the Pre-Bid Conference will not be a cause for disqualification of a Bidder.
		7.7	The Procuring Entity reserves the right not to respond to any/ all queries raised or clarifications sought if, in their opinion and at their sole discretion, they consider that it would be inappropriate to do so or do not find any merit in it.
		7.8	The notice of change, if any, will be made available on the website as well as communicated through e-mail to all bidders whose e-mail addresses would be available with Procuring Entity.
		<b>7.9</b>	<b>Bidders who have purchase bid document shall only be eligible to attend Pre-bid Meeting. Bidder has to submit a photo copy of DD/BC of bid document cost along with hard copy of Pre-bid queries.</b>

8	Amendment of Bidding Document	8.1	Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all Bidders who have obtained the Bidding Document directly from the Procuring Entity. It shall also be uploaded on the State Public Procurement Portal for prospective bidders to download.
		8.2	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Entity may, at its discretion, extend the deadline for the submission of the Bids, under due intimation to the Bidders who have procured the Bidding Document from the Procuring Entity and also by uploading it on the State Public Procurement Portal.
9.	<b>Preparation of Bids</b>		
	Cost of Bidding	9.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Entity shall not be responsible or liable for those costs.
		9.2	The Bidder shall furnish the attested copies of following documents with its Bid :- i. Partnership Deed and valid registration certificate with the Registrar of Firms in case of Partnership Firms. In case of companies, copy of valid registration certificate from the registrar of companies. Power of Attorney in favour of the partner signing/submitting the Bid, authorizing him to represent all partners of the firm. ii. VAT/ Sales Tax registration certificate and VAT/Sales Tax clearance certificate from the concerned Commercial Taxes Officer and Permanent Account Number (PAN) with the

			<p>Income Tax Department.</p> <p>iii. Address of residence and office, telephone numbers e-mail address, if any, in case of sole Proprietorship.</p> <p>iv. Certificate of Registration and Memorandum of Association issued by Registrar of Companies in case of a registered company and in case of any other statutory or registered body, certificate of incorporation or registration issued by concerned authorities. Power of attorney in favour of the person Signing the Bid.</p> <p>v. Where permitted to bid as Joint Venture, Consortium or Association, letter of formal intent to enter in to an agreement or an existing agreement in the form of a Joint Venture, Consortium or Association.</p> <p>Vi. Others as required in bid document.</p>
	Language of Bid	9.3	<p><b>The Bid and all subsequent correspondence and documents related to the bid and as submitted by the bidder, shall be written only in English language. Also, any printed literature furnished by the Bidder written in other language (other than English/Hindi) must be accompanied by an certified English/Hindi translation in which case, for purposes of interpretation of the bid, the appropriate translation by the Procuring Entity shall govern.</b></p>
	Documents Comprising the Bid	9.4	<p>The Bid shall comprise of two parts and submitted online simultaneously, one containing the Technical Bid/ Proposal and the other the Financial or Price Bid/ Proposal.</p>

		9.5	<p>The Technical Bid/ Proposal properly bound, shall contain the following :</p> <ul style="list-style-type: none"> <li>i Technical Bid/ Proposal Submission Sheet and Technical Bid containing the filled up Bidding Forms and Declarations related to Technical Bid and Code of Integrity given Section IV, Bidding Forms;</li> <li>ii Proof of payment of price of Bidding Document, processing fee, Bid Security in accordance with Bid Document.</li> <li>iii Written confirmation authorizing the signatory of the Bid to commit the Bidder in accordance with Bid Document.</li> <li>iv documentary evidence in accordance with ITB Clause 5.1 to 5.12 establishing the Bidder's eligibility to bid;</li> <li>v documentary evidence in accordance with Bid Document establishing the Bidder's qualifications to perform the contract if its Bid is accepted; and any other document required in the BDS;</li> <li>vi the Notice Inviting Bids;</li> <li>vii Drawings / designs in support of the Works to be executed.</li> <li>viii any other document required in the BDS; and</li> <li>ix other considered necessary to strengthen the Bid submitted.</li> <li>x Prices must not be indicated in the Technical Bid and must be quoted only in the Financial Bid.</li> <li>xi Organisational structure and list of skilled staff of the bidder.</li> <li>xii List of successfully completed similar</li> </ul>
--	--	-----	--

			<p>projects.</p> <p>xiii Properly filled check list along with documents as per Annexure VIII.</p>
		9.6	<p>The Financial Bid/ Price Proposal shall contain Financial Bid/ Price Proposal Submission Sheet in <b>BoQ format</b>.</p>
	Bid Submission Sheets and Price Schedules	9.7	<p>The Bidder shall submit the Technical Bid and Financial Bid using the appropriate Bid Submission Sheets provided in Section IV, Bidding Forms. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in ink with the information requested. All cuttings, modifications of rates or units shall be attested by the authorised signatory.</p> <p>Bidders desires of submitting bid for more than one zone, shall submit one technical bid only whereas financial bid in <b>BoQ format</b> are to be submitted separately for the zone wise..</p>
		9.8	<p>The Bidder shall submit as part of the Financial Bid in BoQ format provided in Section IV, Bidding Forms.</p>
	Bid Prices	9.9	<p>The Bidder shall indicate prices only in the prescribed <b>BoQ format available on the website of <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a></b> . Prices should be shown separately <b>BoQ</b> as mentioned in Bid Documents. The price components furnished by the Bidder in accordance with format provided in <b>BoQ Template</b> will be solely for the purpose of facilitating the comparison of bids by Procuring Entity and will not in any way limit the Procuring entity's right to contract on any of</p>

			the terms offered.
		9.10	<p>i Prices quoted in the bid must be firm and final and shall not be subject to any upward modifications, on any account whatsoever. However, Procuring Entity reserves the right to negotiate the prices quoted in the bid to effect downward modification.</p> <p>ii The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc.) as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.</p> <p>iii The prices, once offered, must remain fixed and must not be subject to escalation for any reason whatsoever within the period of contract. A proposal submitted with an adjustable price quotation or conditional proposal may be rejected as non-responsive.</p> <p>iv Prices in any form or by any reason before opening the Financial Bid should not be revealed by the bidder or their representatives, failing which the offer shall be liable to be rejected.</p> <p>v Bidders should express the price of their services in Indian currency only.</p>
		9.11	Price quoted by the bidder should be without any condition or qualification whatsoever and should exclude all taxes, duties, fees, levies, and other charges levied by Central & State Government/ government bodies, as may be applicable, to be shown separately in relation to

			activities proposed to be carried out. If there would be any increase in the taxes (except service tax), levies, duties, fee and other charges during tenure of the contract, the financial burden of the same shall be borne by the bidder.
	Currencies of Bid.	9.12	The unit rates and the prices shall be quoted by the Bidder entirely in Indian Rupees. All payments shall be made in Indian Rupees only.
	Documents Establishing the Qualifications of the Bidder	9.13	To establish its qualifications to perform the Contract, the Bidder shall submit as part of its Technical Proposal the documentary evidence indicated for each qualification criteria specified in ITB 5.1 to 5.12 and section-III, Evaluation and Qualification Criteria.
	Period of Validity of Bids	9.14	Bids shall remain valid for 180 days after the Bid submission deadline date as specified by the Procuring Entity. A Bid valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
		9.15	In exceptional circumstances, prior to the expiration of the Bid validity period, the Procuring Entity may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with Bid Document. [Bid security] it shall also be extended for thirty days beyond the dead line of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.

	Bid Security	9.16	Unless otherwise specified in the BDS, the Bidder shall furnish as part of its Bid, a Bid Security in original form and in the amount and currency specified in the BDS.
		9.17	Bid Security shall be mentioned in NIB value of the services deposited. Bid Security will be taken @ <b>0.5% (Half percent) of the estimated project cost, as per RTPP Rules 2013</b> for the S.S.I. Units of Rajasthan. They will furnish original or Photostat copy, duly attested by Gazetted Officer of the Registration of S.S.I. Unit issued by the Director of Industries in respect of the stores for which they are registered. The bid security shall be in Indian Rupees.
		9.18	The Bid Security may be given in the form of cash, a banker's Cheque or demand draft or bank guarantee of a Scheduled Bank in India, in specified format.
		9.19	In lieu of Bid Security, a Bid Securing Declaration shall be taken from Government Departments and State Government Public Sector Enterprises, Autonomous bodies, Registered Societies, Cooperative Societies which are owned or controlled or managed by the State Government, Public Sector Enterprises of Central Government. For the Bid Securing Declaration the Bidder shall use the form included in Section IV, Bidding Forms.



		9.20	Bid Security instrument or cash receipt of Bid Security or a Bid securing declaration shall necessarily accompany the sealed technical Bid. Any Bid not accompanied by Bid Security or Bid Securing Declaration, if not exempted, shall be liable to be rejected.
		9.21	The Bid security originally deposited by earlier bid for this purpose, may be taken into consideration. Difference amount if required may further be deposited. In case of earlier bank guarantee necessary acceptance from the bank will also be required to be submitted for using the same bank guarantee for current bid.
		9.22	Prior to presenting a submission, a Bidder may request the Procuring Entity to confirm the acceptability of a proposed issuer of a Bid Security or of a proposed confirmer, if different than as specified in Bid Document. The Procuring Entity shall respond promptly to such a request.
		9.23	The bank guarantee presented as Bid Security shall be got confirmed from the concerned issuing bank. However, the confirmation of the acceptability of a proposed issuer or of any proposed confirmer does not preclude the Procuring Entity from rejecting the Bid Security on the ground that the issuer or the confirmer, as the case may be, has become insolvent or is under liquidation or has otherwise ceased to be creditworthy.
		9.24	The Bid Security of unsuccessful Bidders shall be refunded soon after final acceptance of successful Bid and signing of Contract Agreement and submitting Performance Security

			by successful Bidder.
		9.25	<p>The Bid Security taken from a Bidder shall be forfeited in the following cases, namely:-</p> <ul style="list-style-type: none"> <li>i. when the Bidder withdraws or modifies his Bid after opening of Bids; or</li> <li>ii. When the Bidder does not execute the agreement in accordance with Bid Document. [Signing of Contract within the specified time ; if any, after issue of letter of acceptance/ placement of Work order within the specified period; or</li> <li>iii. when the Bidder fails to commence the Works as per Work order within the time specified; or</li> <li>iv. When the Bidder does not deposit the Performance Security in accordance with Bid Document. [Performance Security]; in the prescribed time limit after the work order is placed;</li> <li>v. if the Bidder breaches any provision of the Code of Integrity prescribed for Bidders specified in the Act and Chapter VI of the Rules; or</li> <li>vi. if the Bidder does not accept the correction of its Bid Price pursuant to Bid Document. [Correction of Arithmetical Errors].</li> </ul>
		9.26	<p>In case of the successful Bidder, the amount of Bid Security may be adjusted in arriving at the amount of the Performance Security, or refunded if the successful Bidder furnishes the full amount of Performance Security. No interest will be paid by the Procuring Entity on the amount of Bid Security.</p>
		9.27	<p>The Bid Security of a Joint Venture, Consortium or Association must be in the name of the Joint Venture, Consortium or Association that submits</p>

			the Bid. If the Joint Venture, Consortium or Association has not been legally constituted at the time of Bidding, the members of the proposed consortium or JV shall enter in to an Agreement to form a legally constituted JV after the issue of Letter of Acceptance / Letter of Intent to them and also declare a partner as the lead partner in whose name the Bid Security may be submitted.
	Format and Signing of Bid	9.28	<p>The Bidder shall prepare one original of the Technical Bid or Technical Proposal and one original of the Financial Bid or Price Proposal as described in Bid Document. and clearly mark each "ORIGINAL - TECHNICAL BID/ PROPOSAL" and "ORIGINAL - FINANCIAL BID/ PRICE PROPOSAL". In addition, the Bidder shall submit one hard copy of the Technical Bid only at the time of opening of the Technical Bid in sealed envelope.</p> <p>In the event of any discrepancy between the original and the copies, the original shall prevail. The original and copies of Bid shall be properly bound. All pages shall be serially numbered and signed by the Bidder or authorised signatory..</p>
		9.29	The original and all copies of the Bid shall be typed or written in ink and shall be signed by the Bidder or a person duly authorised to sign on behalf of the Bidder/JV. This authorisation shall consist of a written confirmation as specified in the Bid document and shall be attached to the Bid.
		9.30	Any amendments such as inter lineation's, erasures, or over writing shall be valid only if they are signed by the person signing the Bid.

10	<b>Submission and Opening of Bids</b>	10.1.	<p>Bidders shall submit their Bids electronically only. Bidders submitting their Bids electronically shall follow the electronic Bid submission procedure as specified in the State Public Procurement Portal.</p> <p>A bidder may submit zone wise bid proposal as per mentioned NIB with required bid security. After evaluation of bid proposals the work of maximum two zones may be awarded to successful bidder, however Procuring Entity may allot more than two zones for the left out zone/area as per approved or competitive rate with the prior approval of the state government.</p>
		10.2	<p>The Bidder shall submit their technical bid in electronic form only on the website of <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>. The Bidder shall also submit one hard copy of the Technical Bid only at the time of opening of the Technical Bid in sealed envelope.</p> <p><b>The Bidder shall submit their financial proposals electronically only in BoQ (Bill of Quantity) Format. Financial proposals in any format other than BoQ will not be considered. BoQ format is available on the website of <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a></b></p>
		10.3	<p>The inner and outer envelopes shall-</p> <ul style="list-style-type: none"> <li>(a) bear the name and complete address along with telephone/ mobile number of Bidder;</li> <li>(b) Bear complete address of the Procuring Entity with telephone number, if any;</li> <li>(c) Bear the specific identification of the Bidding process pursuant to Notice Inviting Bids and the date and time of submission of Bid. Any additional identification marks as specified in the</li> </ul>

			<p>Bidding documents be also indicated; and</p> <p>(d) The outer envelopes and the inner envelopes containing the Technical Bids shall bear a warning not to be opened before the time and date for the opening of Technical Bids, in accordance with Bid Document.</p> <p>(e) The inner envelopes containing the Financial Bids shall bear a warning not to be opened until advised by the Procuring Entity in accordance with Bid Document.</p>
		10.4	If all envelopes are not sealed and marked as required, the Procuring Entity shall assume no responsibility about its consequences including misplacement and premature opening of the Bid.
	Deadline for Submission of Bids	10.5	Bids shall be submitted electronically, where asked up to the time and date specified in the Notice Inviting Bids.
	Late Bids	10.6	The Procuring Entity shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with Bid Document. Such Bids shall be declared late, rejected, and returned unopened to the Bidder.
	Withdrawal, Substitution and Modification of Bids	10.7	<p>A Bidder may withdraw, substitute or modify its Bid Proposal after it has been submitted by sending a written Withdrawal/ substitutions/ modifications etc. Notice, duly signed by the Bidder or its authorised representative, and shall include a copy of the authorisation in accordance with Bid Document. [Format and Signing of Bid].The corresponding Withdrawal, Substitution or Modification of the Bid must accompany the respective written Notice. All Notices must be:</p> <p>i. Submitted in accordance with Bid Document. [Format and Signing of Bid] and [Sealing and</p>

			<p>Marking of Bids], the respective inner and outer envelopes shall be clearly marked "WITHDRAWAL"; "SUBSTITUTION", or "MODIFICATION" and</p> <p>ii. Received by the Procuring Entity prior to the deadline prescribed by the Procuring Entity for submission of Bids in accordance with Bid Document. [Deadline for Submission of Bids]. All process will be done electronically only.</p>
		10.8	Bid Proposals that are withdrawn in accordance with Bid Document. [Withdrawal of Bids] shall be returned unopened to the Bidders.
		10.9	No Bid shall be withdrawn, substituted or modified in the interval between the deadline for submission of the Bid and the expiration of the period of Bid validity specified in Bid Document. [Period of Validity of Bids] or any extension thereof.
	Bid Opening	10.10	The sealed electronically Bid shall be opened by the Bids opening committee constituted by the Procuring Entity at the time, date and place specified in the Bid Data Sheet in the presence of the Bidders or their authorised representatives, who choose to be present.
		10.11	The Bids opening committee may co-opt experienced persons in the committee to conduct the process of Bid opening.
		10.12	If electronic Bidding is adopted, specific electronic Bids opening procedure as specified on the State Public Procurement Portal shall be followed. The Bidders may witness the electronic Bid opening procedure online.
		10.13	The technical bid shall be opened by the bid

			<p>opening committee in the presence of the bidders or their authorised representatives who choose to be present.</p> <p>The Financial Bids will remain unopened and will be held in custody of the Procuring Entity until the time of opening of the Financial Bids. The date, time, and location of the opening of Financial Bids will be advised in writing by the Procuring Entity.</p>
		10.14	<p>The Bids opening committee shall prepare a list of the Bidders or their representatives attending the opening of Bids and obtain their signatures on the same. The list shall also contain the representative's name and telephone number and corresponding Bidders' names and addresses. The authority letters brought by the representatives shall be attached to the list. The list shall be signed by all the members of Bids opening committee with date and time of opening of the Bids.</p>
		10.15	<p>First, envelopes marked as "WITHDRAWAL" shall be opened, read out, and recorded and the envelope containing the corresponding Bid shall not be opened, but returned to the Bidder. No Bid shall be permitted to be withdrawn unless the corresponding withdrawal notice contains a valid authorisation to request the withdrawal and is readout and recorded at Bid opening. If the withdrawal notice is not accompanied by the valid authorisation, the withdrawal shall not be permitted and the corresponding Bid shall be opened.</p> <p>Next, envelopes marked as "SUBSTITUTION" shall be opened, read out, recorded. The inner</p>

			<p>envelopes containing the Substitution Technical Proposal and/ or Substitution Price Proposal shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the Substitution Technical Proposal, if any, shall be opened, read out, and recorded. Substitution Financial Bids will remain unopened in accordance with ITB 10.13. No Bid shall be substituted unless the corresponding substitution notice contains a valid authorisation to request the substitution and is read out and recorded at Bid opening.</p> <p>Outer envelopes marked as "MODIFICATION" shall be opened thereafter, read out and recorded with the corresponding Bid. No Technical Bid and/ or Financial Bid shall be modified unless the corresponding modification notice contains a valid authorisation to request the modification and is read out and recorded at opening of Technical Bids/ Proposals. Only the Technical Bids, both Original as well as Modification is to be opened, read out, and recorded at the opening. Financial Bids/ Proposals, both Original as well as Modification, will remain unopened in accordance with ITB 10.13.</p>
		10.16	<p>All other envelopes containing the Technical Bids shall be opened one at a time and the following read out and recorded.</p> <ul style="list-style-type: none"> <li>i. the name of the Bidder;</li> <li>ii. whether there is a modification or substitution;</li> <li>iii. whether proof of providing Bid Security or Bid Securing Declaration, if required, payment of</li> </ul>



			<p>price of the Bidding Document, user charges or processing fee, where applicable, have been enclosed;</p> <p>iv. Any other details as the Bids opening committee may consider appropriate. After all the Bids have been opened, they shall be initialled and dated on the first page and other important papers of each Bid by the members of the Bids opening committee.</p>
		10.17	<p>Only Technical Bids shall be read out and recorded at the bid opening and shall be considered for evaluation. No Bid shall be rejected at the time of opening of Technical Bids except the late Bids, Alternative Bids (if not permitted) and Bids not accompanied with the proof of payment or instrument of the required price of Bidding Document, processing fee or user charges (in case of e-procurement) and Bid Security.</p>
		10.18	<p>The Bids opening committee shall prepare a record of opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, modification, or alternative offer (if they were permitted), any conditions put by Bidder and the presence or absence of the price of Bidding documents, processing fee or user charges and Bid Security. The Bidders or their representatives, who are present, shall sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. The members of the Bids opening committee shall also sign the record with date.</p>

		10.19	After completion of the evaluation of the Technical Bids, the Procuring Entity shall invite Bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified to attend the opening of the Financial Bids. The date, time, and location of the opening of Financial Bids will be advised in writing by the Procuring Entity. Bidders shall be given reasonable notice of the opening of Financial Bids.
		10.20	The Procuring Entity shall notify Bidders in writing whose Technical Bids have been rejected on the grounds of being substantially non-responsive and not qualified in accordance with the requirements of the Bidding Document and return their Financial Bids unopened.
		10.21	The Procuring Entity shall conduct the opening of Financial Bids of all Bidders who submitted substantially responsive Technical Bids and have qualified in evaluation of Technical Bids, in the presence of Bidders or their representatives who choose to be present at the address, date and time specified by the Procuring Entity.
		10.22	<p>All financial bid containing in BoQ format of the technically qualified bidders shall be opened one at a time and the following read out and recorded.</p> <ul style="list-style-type: none"> <li>i. the name of the Bidder;</li> <li>ii. whether there is a modification or substitution;</li> <li>iii. the Bid Prices;</li> <li>iv. any other details as the Bids opening committee may consider appropriate.</li> </ul> <p>After all the Bids have been opened, they shall</p>

			<p>be initialled and dated on the first page of the each Bid by the members of the Bids opening committee. All the pages of the Price Schedule and letters, Bill of Quantities attached shall be initialled and dated by the members of the committee. Key information such as prices, completion period, etc. shall be encircled and unfilled spaces in the Bids shall be marked and signed with date by the members of the Bids opening committee. The original and additional copies of the Bid shall be marked accordingly. Alterations/ corrections/ additions/ over writings shall also be signed to make it clear that such alteration, etc. are existing in the Bid at the time of opening.</p>
		10.23	<p>The Bids opening committee shall prepare a record of opening of Financial Bids that shall include as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification, the Bid Price (per lot, if applicable), any discounts and alternative offers (if they were permitted). The Bidders or their representatives, who are present, shall sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. The members of the Bids opening committee shall also sign the record with date.</p>
11	<b>Evaluation and Comparison of Bids</b>		
	Confidentiality	11.1	<p>Information relating to the examination, evaluation, comparison, and post-qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such</p>

			process until information on Contract award is communicated to all Bidders.
		11.2	Any attempt by a Bidder to influence the Procuring Entity in the its examination of qualification, evaluation, comparison of the Bids or Contract award decisions may resulting in the rejection of its Bid, in addition to the legal action which may be taken by the Procuring Entity under the Act and the Rules.
		11.3	Notwithstanding ITB 11.1 [Confidentiality], from the time of opening the Bid to the time of Contract award, if any Bidder wishes to contact the Procuring Entity on any matter related to the Bidding process, it should do so in writing.
		11.4	In addition to the restrictions specified in section 49 of the Act, the Procuring Entity, while procuring a subject matter of such nature which requires the procuring Entity to maintain confidentiality, may impose condition for protecting confidentiality of such information.
	Clarification of Technical or Financial Bids	11.5	To assist in the examination, evaluation, comparison and qualification of the Technical or Financial Bids, the Bid evaluation committee may, at its discretion, ask any Bidder for a clarification regarding his Bid. The committee's request for clarification and the response of the Bidder shall be in writing. The Procuring Entity may conduct clarification meetings with each or any Bidder to discuss any matters, technical or otherwise. The primary function of clarifications in the evaluation process is to clarify disputes arising out of the evaluation of the Bid documents. If considered necessary the Procuring Entity may like to visit projects being

			<p>handled by the bidder. Clarifications provide the opportunity for the Procuring Entity to state its requirements clearly and for the Bidder to more clearly state its proposal. The Procuring Entity may seek inputs from their professional, technical faculties in the evaluation process. The bidder shall furnish the required information to Procuring Entity and its appointed representative on the date asked for, at no cost to the Procuring Entity.</p>
		11.6	<p>Any clarification submitted by a Bidder with regard to his Bid that is not in response to a request by the Bid evaluation committee shall not be considered.</p> <p>The Procuring Entity may seek presentation from the bidder in case of any ambiguity and even the bidder may be asked to clarify certain points, if Procuring Entity thinks it necessary to take a final decision.</p>
		11.7	<p>No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetical errors discovered by the Bid evaluation committee in the evaluation of the financial Bids.</p>
		11.8	<p>No substantive change to qualification information or to a submission, including changes aimed at making an unqualified Bidder, qualified or an unresponsive submission, responsive shall be sought, offered or permitted.</p>
	Deviations, Reservations and Omissions in Technical or Financial	11.9	<p>During the evaluation of Technical or Financial Bids, the following definitions apply:</p> <ul style="list-style-type: none"> <li>i. "Deviation" is a departure from the requirements specified in the Bidding Document;</li> <li>ii. "Reservation" is the setting of limiting</li> </ul>

	Bids		conditions or with holding from complete acceptance of the requirements specified in the Bidding Document; and  iii. "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
	Nonmaterial Non conformities in Technical or Financial Bids	11.10	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity may waive any nonconformity (with recorded reasons) in the Bid that does not constitute a material deviation, reservation or omission.
		11.11	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity may request that the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Request for information or documentation on such nonconformities shall not be related to any aspect of the Financial Proposal of the Bid. Failure of the Bidder to comply with the request in specified reasonable period may result in the rejection of its Bid.
		11.12	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity will rectify nonmaterial nonconformities or omissions (with recorded reasons). To this effect, the Bid Price shall be adjusted during evaluation of Financial Proposals for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The adjustment shall be made using the method indicated in Section III, Evaluation and Qualification Criteria.

	Correction of Arithmetical Errors in Financial Bid	11.13	<p>Provided that a Financial Bid is substantially responsive, the Procuring Entity will correct arithmetical errors during evaluation of Financial Bids on the following basis:</p> <p>i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;</p> <p>ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>iii. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.</p> <p>If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.</p>
	Preliminary Examination of Technical or Financial Bids	11.14	<p>The Procuring Entity shall examine the Technical or Financial Bids to confirm that all documents and technical documentation requested in ITB 9.4 to 9.6.[Documents Comprising the Bid] have been provided, and to determine the completeness of each document submitted as per requirements of Bid Documents.</p>

			If the bidder needs all eligibility criteria and technical bid is complete in every respect, then the technical bid shall be treated/deemed as qualified.
		11.15	<p>The Procuring Entity shall confirm, following the opening of the Technical or Financial Bids, that the following documents and information have been provided :</p> <ul style="list-style-type: none"> <li>i. Bid is signed, as per the requirements listed in the Bidding documents;</li> <li>ii. Bid has been sealed as per instructions provided in the Bidding documents;</li> <li>iii. Bid is valid for the period, specified in the Bidding documents;</li> <li>iv. Bid is accompanied by Bid Security or Bid securing declaration;</li> <li>v. Bid is unconditional and the Bidder has agreed to give the required performance Security; and</li> <li>vi. Price Schedules in the Financial Bids are in accordance with ITB 9.7 to 9.8 [Bid Submission Sheets and Price Schedules];</li> <li>vii. written confirmation of authorisation to commit the Bidder;</li> <li>viii. Declaration by the Bidder in compliance of Section 7 of the Act;</li> <li>ix. other conditions, as specified in the Bidding documents are fulfilled.</li> </ul>
	Responsiveness of Technical or Financial Bids	11.16	The Procuring Entity's determination of the responsiveness of a Technical or Financial Bid is to be based on the contents of the Bid itself, as defined in ITB 9.4 to 9.6 [Documents Comprising the Bid].
		11.17	A substantially responsive Technical or Financial Bid is one that meets without material deviation,



			<p>reservation, or omission to all the terms, conditions, and specifications of the Bidding Document. A material deviation, reservation, or omission is one that: if accepted, would</p> <p>i. affect in any substantial way the scope, quality, or performance of the works; or</p> <p>ii. limits in any substantial way, in consistent with the Bidding Document ,the Procuring Entity's rights or the Bidder's obligations under the proposed Contract; or</p> <p>iii. if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.</p>
		11.18	The Procuring Entity shall examine the technical aspects of the Bid in particular, to confirm that requirements of Section V, Procuring Entity's Requirements have been met without any material deviation or reservation.
		11.19	If a Technical or Financial Bid is not substantially responsive to the Bidding Document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
	Examination of Terms and Conditions of the Technical or Financial Bids	11.20	The Procuring Entity shall examine the Bids to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or Reservation.
		11.21	The Procuring Entity shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clauses 9.4 to 9.6 [Documents Comprising the Bid] and to confirm that all requirements specified in Section V, Procuring Entity's

			Requirements of the Bidding Document and all amendments or changes requested by the Procuring Entity in accordance with ITB Clause 8.1 to 8.2 [Amendment of Bidding Document], have been met without any material deviation or reservation.
	Evaluation of Qualification of Bidders in Technical Bids (Quality-cum-cost- based selection.)	11.22	<p>The determination of qualification of a Bidder in evaluation of Technical Bids shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 9.13[Documents Establishing the Qualifications of the Bidder],and in accordance with the qualification criteria indicated in Section III. Bidders must score at least <b>60 Marks out of 100</b> in the technical scores in order to be considered for technical qualification. The financial bids of only those Bidders, who have scored at least 60 marks in the technical evaluation process, will be opened. However, if the number of such prequalified Bidders is less than two, the Procuring Entity 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 the above framework; provided that in such an event, the total number of pre-qualified and short-listed Bidders shall not exceed two.</p> <p>Short listings of bidders will be done on as per <b>QCBS evaluation criteria</b>, for this purpose, Technical and Financial weightage shall be <b>70% and 30%</b> respectively to compute a Composite Bid Score.</p>
	Evaluation of Financial Bids	11.23	The Procuring Entity shall evaluate each Financial Bid, the corresponding Technical Bid of which has

	(Quality-cum-cost- based selection.)		been determined to be substantially responsive
		11.24	To evaluate a Financial Bid, the Procuring Entity shall only use all the criteria and methodologies defined in this Clause and in Section III, Evaluation and Qualification Criteria. No other criteria or methodology shall be permitted.
		11.25	To evaluate a Financial Bid, the Procuring Entity shall consider the following: i. the Bid Price quoted in the Financial Proposal; ii. price adjustment for correction of arithmetical errors in accordance with ITB Clause 11.13.[Correction of Arithmetical Errors]; iii. Adjustment of bid prices, due to rectification of nonmaterial. Nonconformities or omissions in accordance with 11.10 to 11.12 [Nonmaterial, Nonconformities in Bids].
		11.26	If the Bid, which results in the lowest evaluated Bid Price, is considered to be seriously unbalanced, or front loaded, in the opinion of the Procuring Entity, the Procuring Entity may require the Bidder to produce detailed rate analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those rates with the construction methods and schedule proposed. After evaluation of the rate analysis, taking into consideration, the schedule of estimated Contract payments, the Procuring Entity may require that the amount of the Performance security be increased at the cost of the Bidder to a level sufficient to protect the Procuring Entity against financial loss in the event of default of the successful Bidder under the Contract.

		11.27	In the event the bid composite bid scores are 'tied', the Bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.
	Comparison of Bids	11.28	The Procuring Entity shall compare all substantially responsive Bids to determine the lowest-evaluated Bid, in accordance with ITB Clause 11.22 to 11.27[Evaluation of Bids].
	Negotiations	11.29	To the extent possible, no negotiations shall be conducted after the pre-Bid stage. All clarifications needed to be sought shall be sought in the pre-Bid stage itself.
		11.30	Negotiations may, however, be undertaken only with the most responsive Bidder under the following circumstances when ring prices have been quoted by the Bidders for the subject matter of procurement; or when the rates quoted vary considerably and considered much higher than the prevailing market rates.
		11.31	The Bid evaluation committee shall have full powers to undertake negotiations. Detailed reasons and results of negotiations shall be recorded in the proceedings.
		11.32	The most responsive Bidder shall be informed about negotiations in writing either through messenger or by registered letter and e-mail (if available). A minimum time of seven days shall be given for calling negotiations. In case of urgency the Bid evaluation committee, after recording reasons, may reduce the time, provided the most responsive Bidder has received the intimation and consented to holding of negotiations.

		11.33	Negotiations shall not make the original offer made by the Bidder inoperative. The Bid evaluation committee shall have option to consider the original offer in case the Bidder decides to increase rates originally quoted or imposes any new terms or conditions.
		11.34	In case of non-satisfactory achievement of rates from lowest Bidder, the Bid evaluation committee may choose to make a written counter offer to the lowest Bidder and if this is not accepted by him, the committee may decide to reject and re-invite Bids or to make the same counter-offer first to the second lowest Bidder, then to the third lowest Bidder and so on in the order of their initial standing in the bid evaluation and work order be awarded to the Bidder who accepts the counter-offer.
		11.35	In case the rates even after the negotiations are considered very high, fresh Bids shall be invited.
	Procuring Entity's Right to Accept Any Bid, and to Reject Any or All Bids	11.36	The Procuring Entity reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract award without assigning any reasons thereof and without there by incurring any liability to the Bidders.
12	<b>Award of Contract</b>		
	Procuring Entity's Right to Vary Quantities at Time of Award	12.1	At the time of award of contract, the Works originally specified in the Bidding Documents may be increased or decreased by a percentage specified in Bid Document, but such increase or decrease shall not exceed twenty percent, of the quantity specified in the Bidding Document. It shall be without any change in the unit prices or other terms and conditions of the Bid and the

			Bidding Document.
		12.2	If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Bidding Document.
	Acceptance of the successful Bid and award of contract	12.3	The Procuring Entity after considering the recommendations of the Bid Evaluation Committee and the conditions of Bid, if any, financial implications, samples, test reports, etc., shall accept or reject the successful Bid.
		12.4	Before award of the Contract, the Procuring Entity shall ensure that the price of successful Bid is reasonable and consistent with the required specifications.
		12.5	A Bid shall be treated as successful only after the competent authority has approved the procurement in terms of that Bid.
		12.6	The Procuring Entity shall award the contract to the Bidder whose offer has been determined to be the lowest in accordance with the evaluation criteria set out in the Bidding Document if the Bidder has been determined to be qualified to perform the contract satisfactorily on the basis of qualification criteria fixed for the Bidders in the Bidding Document for the subject matter of procurement.
		12.7	Prior to the expiration of the period of validity of Bid, the Procuring Entity shall inform the successful Bidder in writing, by registered post or email, that its Bid has been accepted.
		12.8	A. If the issuance of formal letter of acceptance

			<p>(LOA) is likely to take time, in the meanwhile a Letter of Intent (LOI) may be sent to the Bidder. The acceptance of an offer is complete as soon as the letter of acceptance or letter of intent is posted and/ or sent by email (if available) to the address of the Bidder given in the Bidding Document.</p> <p>B. Within the awarded zone, successful bidder will start their work as per the approved work plan by Procuring Entity.</p>
	Signing of Contract	12.9	<p>In the written intimation of acceptance of its Bid sent to the successful Bidder, it shall also be requested to execute an agreement in the format given in the Bidding Document on a non-judicial stamp of requisite value at his cost and deposit the Performance Security or a Performance Security Declaration, if applicable, within fifteen days from the date on which the LOA or LOI is dispatched to the Bidder. In case the successful bidder is a JV still to be legally constituted, all parties to the JV shall sign the Agreement.</p>
		12.10	<p>If the Bidder, whose Bid has been accepted, fails to sign a written procurement contract or fails to furnish the required Performance Security or Performance Security Declaration within the specified time period, the Procuring Entity shall forfeit the Bid security of the successful bidder / execute the Bid Securing Declaration and take required action against it as per the provisions of the Act and the Rules. The Procuring Entity may, in such case, cancel the procurement process or if it deems fit, offer for acceptance on the rates of lowest Bidder to the next lowest responsive Bidder</p>

		12.11	The Bid Security, if any, of the Bidders whose Bids could not be accepted shall be refunded soon after the contract with the successful Bidder is signed and his Performance Security is obtained. Until a formal contract is executed, LOA or LOI shall constitute a binding contract.
	Performance Security	12.12	Performance Security shall be solicited from all successful Bidders except State Govt. Departments and undertakings, corporations, autonomous bodies, registered societies, cooperative societies which are owned or controlled or managed by the State Government and undertakings of Central Government. However, a Performance Security Declaration shall be taken from them. The State Government may relax the provision of Performance Security in particular procurement.
		12.13	<p>(i) The amount of Performance Security shall be <b>Five percent</b>, of the amount of the Work order. The currency of Performance Security shall be Indian Rupees,.</p> <p>(ii) If the Bid, which results in the lowest evaluated bid price, is seriously unbalanced or front loaded in the opinion of the Procuring Entity , the Procuring Entity may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities , to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, taking into consideration, the schedule of estimated Contract payments, the Procuring Entity may require that the amount of the performance security be increased (to a maximum of 20% of the bid value</p>



			of such items) at the expense of the bidder to a level sufficient to protect the Procuring Entity against financial loss in the event of default of the successful Bidder under the Contract.
		12.14	<p>Performance Security shall be furnished in one of the following forms as applicable-</p> <p>(a) Bank Draft or Banker's Cheque of a Scheduled Bank in India; or</p> <p>(b) National Savings Certificates and any other script/ instrument under National Savings Schemes for promotion of small savings issued by a Post Office in Rajasthan, if the same can be pledged under the relevant rules. They shall be accepted at their surrender value at the time of Bid and formally transferred in the name of the Procuring Entity with the approval of Head Post Master; or</p> <p>(c) Bank guarantee. It shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as specified in ITB Clause 9.16 to 9.27 [Bid Security]; or</p> <p>(d) Fixed Deposit Receipt (FDR) of a Scheduled Bank. It shall be in the name of the Procuring Entity on account of Bidder and discharged by the Bidder in advance. The Procuring Entity shall ensure before accepting the Fixed Deposit Receipt that the Bidder furnishes an undertaking from the bank to make payment/ premature payment of the Fixed Deposit Receipt on demand to the Procuring Entity without requirement of consent of the Bidder concerned. In the event of forfeiture of the Performance Security, the Fixed Deposit shall be forfeited along with interest earned on such Fixed Deposit.</p>

		12.15	Performance Security furnished in the form of a document mentioned, shall remain valid for a period of <b>sixty days</b> beyond the date of completion of all contractual obligations of the Bidder, including operation and / or maintenance and defect liability period, if any.
		12.16	Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Procuring Entity may award the Contract at the rates of the lowest Bidder to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Procuring Entity to be qualified to perform the Contract satisfactorily.
		12.17	<p>Forfeiture of Performance Security: Amount of Performance Security in full or part may be forfeited in the following cases:-</p> <ul style="list-style-type: none"> <li>i. when the Bidder does not execute the agreement in accordance with ITB Clause 12.9 to 12.11 [Signing of Contract] within the specified time; after issue of letter of acceptance; or</li> <li>ii. when the Bidder fails to commence the services as per Work order within the time specified; or</li> <li>iii. when Bid fails to complete Contracted services satisfactorily within the time specified; or</li> <li>iv. when any terms and conditions of the contract is breached; or</li> <li>v. to adjust any established dues against the Bidder from any other contract with the Procuring Entity; or</li> </ul>

			<p>vi. if the Bidder breaches any provision of the Code of Integrity prescribed for Bidders specified in the Act and Chapter VI of the Rules</p> <p>vii. Notice of reason able time will be given in case of forfeiture of Performance Security. The decision of the Procuring Entity in this regard shall be final.</p> <p>viii. If the survey/Re-survey activity work of sample revenue villages will not match to the satisfaction of Procuring Entity, work may be withdrawn and forfeit performance security.</p>
		12.18	<p>As soon as work will be awarded to a successful bidder</p> <ol style="list-style-type: none"> <li>1. Bidder shall start monumentation work of GCP in awarded area.</li> <li>2. As soon as the bidder will complete the monumentation work of one district Procuring Entity will procure HRSI of that district on earliest.</li> <li>3. The Bidder shall take on sample activity of survey/Re-survey of minimum two adjoining revenue villages to assess the accuracy and competence of working of bidder.</li> <li>4. After providing HRSI of sample revenue villages to bidder it is expected that bidder shall complete the Survey/Re-survey work of sample revenue villages within two months with all respect.</li> <li>5. After successful completion and satisfaction of Procuring entity of the survey/Re-survey activities in one sample revenue villages the bidder may proceed for further activity.</li> <li>6. If the survey/Re-survey activity work of sample revenue villages does not match to the</li> </ol>

			satisfaction of Procuring Entity work may be withdrawn and forfeit performance security.
		12.19	Govt. of India and state Govt. though principally agreed to roll out NLRMP Programme in all 33 districts; however as per financial sanction received, work order for zones covering 11 districts (Banswara, Barmer, Bhilwara, Churu, Sriganganagar, Hanumangarh, Jaipur, Jhalawar, Jodhpur, Rajsamand and Tonk) of first phase will be awarded and proposed work will start from these 11 districts only. For rest of zones work order will be awarded or in remaining districts work will start after financial sanction received.
13	<b>Redressal of Grievances during Procurement Process (Appeals)</b>		
	Grievance handling procedure during procurement process	13.1	Any grievance of a Bidder pertaining to the procurement process shall be by way of filing an appeal to the First or Second Appellate Authority, as the case may be, as specified in the BDS, in accordance with the provisions of chapter III of the Act and chapter VII of the Rules and as given in Annexure 1 to these ITB.

**Section II: Bid Data Sheet****Single stage two envelopes system**

ITB clause Reference	
1.2	Full address of the Procuring Entity : <b>Office of the CEO, RBAAS &amp; Settlement Commissioner, Rajasthan, VimanBhawan, Gopalbari, Jaipur</b>
5.1	Joint Ventures/ Consortium are permitted
6.2	Check one: First Technical Proposal _____ Financial Proposal to be submitted together with Technical Proposal Name of the assignment is: Establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan under NLRMP
6.8	Check list for the documents as per bid evaluation criteria.
7.1	For clarification purposes only, the Procuring Entity's address is:  <b>Office of the CEO, RBAAS &amp; Settlement Commissioner, Rajasthan, VimanBhawan, Gopalbari, Jaipur- 302001, Rajasthan</b>  Telephone No. with STD Code: <u>0141-2373904</u> Email address: scr-rj@nic.in
7.2	<b>The Pre-Bid conference will be held on Date 21.01.16. (Bidders who have purchase bid document shall only be eligible to attend Pre-bid Meeting. Bidder has to submit a photo copy of DD/BC of bid document cost along with hard copy of Pre-bid queries.)</b> <b>Time 11:00 a.m. Venue: CEO, RBAAS &amp; Settlement Commissioner, Rajasthan, VimanBhawan, Gopalbari, Jaipur- 302001</b> Other details are: Written proposal to be submitted at the time of pre-bid. Name and Designation of the convener : CEO, RBAAS & Settlement Commissioner  Street: Viman Bhawan Address: Gopalbari, Jaipur City: Jaipur PIN Code: 302001 Tele-Fax No. with STD Code: 0141-2373904 Email address: scr-rj@nic.in

9.3	Proposals shall be submitted in English language.
9.7	The format of the Proposals are to be electronically submitted as provided in section IV <sup>th</sup> on the website <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>
9.12	The Price for the services shall be expressed in Indian Rupees only.
9.12	The currency(s) of payment in Indian Rupees only. The payment shall be made as stated in the terms of payment.
9.14	Proposals must remain valid for 180 days after the last date for submission.
9.16,9.17,9.18	Bid security shall be submitted in Indian Rupees only as mentioned in Bid Document.
9.28, 10.2	Bidders must submit the original copy of the Technical Proposal, and of the Financial Proposal.
10.1, 10.5	<ul style="list-style-type: none"> <li>i. The technical proposal and financial proposal submitted only online in electronic format on the website <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a></li> <li>ii. Proposals must be submitted online up to the following date and time: Date: 23.02.16 Time: Before 6:00 P.M.</li> <li>iii. The address of website for electronic submission is: <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a></li> </ul>
10.10	The opening of Technical Proposals shall take place at: Office of the CEO, RBAAS & Settlement Commissioner, Rajasthan, Viman Bhawan, Gopalbari, Jaipur, Rajasthan Date: 24.02.2016 Time: 11:00 A.M.
11.22	Criteria for the evaluation of Technical Proposals as mentioned in ITB 5.1 to 5.12 and as specified in section III (Evaluation and Qualification Criteria).
11.22	Method of selection: QCBS(Quality-cum-Cost- Based Selection) Method
11.31, 11.32	Date and address for contract negotiations: Office of the CEO, RBAAS & Settlement Commissioner, Rajasthan, VimanBhawan, Gopalbari, Jaipur, Rajasthan

12.9	The time period within which the successful Bidder shall have to submit Performance Security and sign the Contract Agreement after issue of LOA or LOI by the Procuring Entity is: 15 days
12.12, 12.13	Performance Security or Performance Security Declaration shall be required from the successful bidder within 15 days after issue of the letter of awards. The amount of Performance Security shall be @ 5% of the Contract amount.
12.18	Sample village survey/Re-survey activity.
13.1	The Designation and Address of the First Appellate Authority is: Principal Secretary/Secretary, Revenue Department, Secretariat, Jaipur The Designation and Address of the Second Appellate Authority is: Principal Secretary, Finance Department, Secretariat, Jaipur.

**Section III****Evaluation and Qualification Criteria****3. Bid Evaluation criteria (BEC)**

3.1 The evaluation of both technical and commercial proposals shall be done by a Tender Evaluation Committee. The Tender Evaluation Committee may choose to request for clarification from the bidder related to their products / services offering, approach, methodology or any other information as part of the technical evaluation.

3.2 The Technical Committee members shall evaluate the Technical Bids, in all aspects, along with the Technical presentations as per the Evaluation framework stated under Section III. The decision of the Evaluation Committee in the evaluation of the Technical and Commercial bids shall be final and binding on all the bidders. No correspondence will be entertained outside the process of negotiation/ discussion with the Tender Evaluation Committee. Any effort by a bidder to influence the Tender Evaluation Committee's processing of Bids or award decisions may result in the rejection of the Bid.

**3.3 The bidders should fulfil following minimum requirements to be eligible for evaluation process-**

**3.3.1 Minimum Eligibility and prequalification criteria**

SN	Minimum Eligibility and prequalification criteria	Supporting document
<b>(A)</b>	<b>About Company Competency</b>	
1)	Bidder shall be registered in India under Companies Act 1956 and must be operational since last 10 years as on 31/03/2015.	Certificate of Incorporation of both prime Bidder & consortium need to submit in this regard.
2)	Bidder must have valid certificate of ISO 9001:2008. In case of Consortium, prime bidder should have ISO 9001:2008.	Copy of certificate of ISO 9001:2008 need to be submitted.
3)	The Bidder should be registered for Sales Tax /VAT/Service Tax/ Excise/PAN as applicable.	Copy of certificate need to be submitted.
4).	Joint Venture/Consortium is allowed. Joint Venture/ consortium shall not consist of more than three companies. (one + two)  Every member of the consortium shall be equally responsible and jointly and severally liable for the successful completion of the entire project.	Notarized document of Memorandum of Understanding (MOU) must be submitted clearly defining scope of work and financial sharing of Individual partners.  The MOU agreement shall be exclusively for this project and



SN	Minimum Eligibility and prequalification criteria	Supporting document
		shall be signed by the Chief Executives/ Authorized Signatories
5).	Bidder Should produce Articles of Association (in case of registered firms), Bye laws and certificates for registration (in case of registered co-operative societies), Partnership deed (in case of partnership firm).	Copy of Article of Association or relevant documents for all bidder members
6).	Original signed copy or Authorization /Resolution.	Original copy should be signed and notarized in a legal bond paper
7).	Bidder shall submit a self-declaration for being not under legal action for corrupt or fraudulent practices or not being blacklisted /banned / disqualified / declared ineligible / declared having dissatisfactory performance by any Ministry/ Department of GOI/ State/UT Government/PSU/Government Organizations/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies..	Self-Attested Declaration on company letter head for all bidder members.
8).	Bidder should have an office in Rajasthan. If not available then should provide undertaking to setup office within 1 month after award of contract and also at district head quarters of awarded districts in due course of time.	Address Proof document or Undertaking

<b>(B) Technical Criteria</b>		
1.	<p>The bidder should have completed project or Should have NLRMP Project in progress of survey work involving processing of High Resolution Satellite images / Stereo Satellite images / Aerial Imageries using DGPS / ETS or Ground Survey using DGPS / ETS including preparation of GIS Base map or Linear survey and mapping using DGPS/ETS covering a minimum cumulative geographical area of 1500 Sq. Km. in last 10 Financial Years for Central Govt. of India/ UT Govt./any State Government/ Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p>	<p><b>1. For completed work:</b> Copies of Work order and Completion Certificates should be enclosed in the bid.</p> <p><b>2. For completion of work in countries other than India or Nifty listed Private Companies:</b> In case of experience in countries other than India certificate of Government or Govt. organisation/other appropriate agency shall be attached. In case completion certificate is from other than Government, then proof of accounts showing transactions of the project mentioned be attached. Reputed private company should be NIFTY listed company.</p> <p><b>3. In case of NLRMP Project in progress:</b> <u>Only NLRMP projects</u> shall be considered in this category. Bidder should have Submitted Ground control point network establishment, processing of High resolution Satellite Imageries / Aerial imageries and generation of cadastral maps. Bidder shall submit certificate from concerned authority mentioning completion of above mentioned activities and area against work order.</p>

2.	<p><b>Project Cost:</b></p> <p>Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/aerial photographs using DGPS / ETS or Ground Survey using DGPS/ETS including Preparation of GIS Base map or linear survey and mapping of value as mentioned below in the last 10 years for Central Govt. of India/ any State Govt. Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p> <p>One project of value 4 Crores.</p> <p>Two projects of value 5 Crores.</p> <p>Three projects of value 6 Crores.</p>	<p><b>1. For completed work:</b> Copies of Work order and Completion Certificates should be enclosed in the bid.</p> <p><b>2. For completion of work in countries other than India or Nifty listed Private Companies:</b> In case of experience in countries other than India certificate of Government or Govt. organisation/other appropriate agency shall be attached. In case completion certificate is from other than Government, then proof of accounts showing transactions of the project mentioned to be attached. Reputed private company should be NIFTY listed company.</p> <p><b>3. In case of NLRMP Project In progress:</b> <u>Only NLRMP projects</u> shall be considered in this category. Bidder should have submitted Ground control point network establishment, processing of High resolution Satellite Imageries / Aerial imageries and generation of cadastral maps. Bidder shall submit copy of work order and satisfactory certificate from concerned authority mentioning submission of above mentioned activities and area against work order.</p>
----	--	--

3.	<p>Bidder should have minimum following instrument /equipment available with their firm for carrying out project activities</p> <p>Differential Global Positioning System (DGPS) – 09 Nos.</p> <p>Electronic Total Station (ETS)/Real Time Kinematic (RTK)– 05 Nos.</p> <p>Scanner/Plotter- 01 Nos. each</p> <p>Licenses of Genuine softwares - image processing, GIS/Photogrammetric suite with genuine Hardware- at least 01 each</p> <p>They may mention how much more they plan to add, in case they get this order. In that case bidder will have to submit proof of purchase.</p>	<p>Relevant invoice /bill in the name of firm should be produced/ enclosed with bid, in case of any of equipment on rent/lease, documentary proof may be attached.</p>
4.	<p>The Bidder must have an overall GIS and Remote Sensing Engineer, Land Surveyor, CAD Engineer/Operator strength of sufficient number of personnel on their payroll as on 31<sup>st</sup> March 2015.</p>	<p>Bidder must submit HR head Certificate .</p>

<b>(C) Financial Criteria</b>		
1)	Bidder should have a minimum average annual turnover of Rs. 15 crore & above during the last 3 financial years (FY 2012-13, 2013-14& 2014-15).	Copy of audited financial Statements for last 3 financial years. Certificate from CA /statutory Auditor for Annual Turnover to be attached.
2)	<b>Net Worth:</b> The net worth of the bidder must not be less than Rs.10 Crores for the financial year 2014-15.	Certificate by firm of chartered accountants or statutory auditors

**3.3.2 Detailed marking criteria**

<b><u>Detailed marking criteria</u></b>		
Sl. No	Particulars	Max Marks
	Point System	
<b>(A)</b>	<b>Organization Strength</b>	<b>20 Marks</b>
1)	<b>Average Annual Turnover of Bidder during the last 3 financial years (FY 2012-13 , 2013-14&amp; 2014-15)</b>  More than 15 crore and < 20 crore - 3 marks  Between 21 to 40 crore - 6 marks  More than 40 crore = 10 marks	10 marks
2)	<b>Bidder certification</b>  ISO 9001:2008 – 2 marks  ISO 9001:2008 in GIS and Image processing – 3 marks	5 marks
3)	<b>Participation in this Project</b>  With Consortium Partner– 3 marks  As Single Bidder– 5 marks	5 marks

<b>B.</b>	<b>Domain Technical Expertise and Resources</b>	<b>65 Marks</b>
1).	<p>The bidder should have completed project or Should have NLRMP Project in progress of survey work involving processing of High Resolution Satellite images / Stereo Satellite images / Aerial Imageries using DGPS / ETS or Ground Survey using DGPS / ETS including preparation of GIS Base map or Linear survey and mapping using DGPS/ETS covering a minimum cumulative geographical area of 1500 Sq. Km. in last 10 Financial Years for Central Govt. of India/ UT Govt./any State Government/ Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p> <p><b>For completed work of central / state Govt. / PSU in India:</b></p> <p>&gt; =1500 sq.km but &lt; 3000 sq.km - 3 marks</p> <p>&gt; =3000 sq.km but &lt;5000 sq.km - 5 marks</p> <p>&gt;=5000 sq.km = 10 marks</p> <p style="text-align: center;"><b>or</b></p> <p><b>For completion of work in abroad or Nifty Listed companies:</b></p> <p>&gt;=1500 sq.km but &lt;3000 sq.km - 3 marks</p> <p>&gt;= 3000 sq.km but &lt;5000 sq.km - 5 marks</p> <p>&gt;= 5000 sq.km = 10 marks</p> <p style="text-align: center;"><b>or</b></p> <p><b>In case of NLRMP in progress Projects:</b></p> <p>&gt;= 1500 sq.km but &lt;3000 sq.km - 3 marks</p> <p>&gt;= 3000 sq.km but &lt; 5000 sq.km - 5 marks</p> <p>&gt;=5000 sq.km = 10 marks</p> <p>In progress NLRMP projects shall only be considered if Ground control point network and processing of high resolution satellite imagery / Aerial Imagery and cadastral map generation from satellite image/Aerial image or using DGPS / ETS has been submitted.</p> <p><b>Note:- Bidder shall apply for one of the best option of above and place the document as per that.</b></p>	10 marks

2).	<p><b>Experience in HRSI /Aerial photo (images) geo-referencing and processing.</b></p> <p>&gt;=1500 sq.km but &lt;3000 sq.km - 3 marks</p> <p>&gt;= 3000 sq.km but &lt;5000 sq.km - 5 marks</p> <p>&gt;= 5000 sq.km = 10 marks</p>	10 marks
3).	<p><b>Experience in NLRMP Resurvey Project</b></p> <p>Bidder should have experience in NLRMP resurvey project using DGPS &amp; ETS or HRSI &amp; DGPS/ETS or Aerial &amp; DGPS/ETS for any State Govt. Organization in India.</p> <p>Work completed against work order - 10 marks</p> <p>Ongoing work- 01 marks for every 10% completion of work against work order.</p> <p>Completion Certificate by concerned authority not less than district authority should be enclosed.</p>	10 marks
4).	<p><b>Prior Experience in Rajasthan Area for any Infrastructure projects</b> involving Cadastral survey/Property Survey/ Land / Revenue survey/Land Acquisition related projects using DGPS/ETS/ Satellite in GIS Environment having cumulative value of Rs. 1 Crore in last 10 years for Central Govt of India/ any State Govt Organization/ PSU in India.</p> <p>1. Works in Rajasthan - up to One Crore : 2 marks</p> <p>2. Works in Rajasthan - more than One Crore : 5 marks</p>	5 marks
5).	<p><b>Bidder should have minimum following instrument /equipment</b> available with their firm for carrying out project activities</p> <p>(A) Differential Global Positioning System (DGPS) – 10 marks.</p> <p>&gt;09 nos but &lt;=15 nos - 3 marks</p> <p>&gt;15 nos but &lt;=20 nos - 5 marks</p> <p>&gt;20 nos but &lt;=25 nos - 7 marks</p> <p>&gt; 25 nos - 10 marks</p>	25 marks



	<p>(B) Electronic Total Station (ETS)/Real time Kinematic (RTK) – 5 marks.</p> <p>&gt;5nos but &lt;=10 nos - 2 marks</p> <p>&gt;10nos but &lt;=15 nos - 3 marks</p> <p>&gt;15nos = 5 marks</p> <p>(C) plotter/scanner A0 size : 2 marks</p> <p>&lt;02 nos - 1 marks</p> <p>&gt;02 nos- 02 marks</p> <p>(D) Genuine licences of Photogrammetric Image Processing suite and GIS Software with required appropriate hardware – 8 marks.</p> <p>A. Photogrammetric Image Processing suite</p> <p>Licenses :1no. but =&lt;2nos.      2 marks</p> <p>&gt;2 nos.      4 marks</p> <p>B. GIS Software</p> <p>Licenses:1no. but =&lt;2nos.      2 marks</p> <p>&gt;2 nos.      4 marks</p> <p>Relevant invoice /bill in the name of firm should be produced/ enclosed with bid, in case of any of equipment on rent/lease, documentary proof may be attached.</p>	
6).	<p><b>Overall Technical staff strength on company payroll with the Bidder</b> as on 31st March 2015.</p> <p>&gt;20 nos but &lt;=30 nos - 2 marks</p> <p>&gt;30 nos but &lt;=50 nos - 3 marks</p> <p>&gt;50 nos = 5 marks</p> <p>Bidder must submit HR head Certificate and must submit PF Statement for proof.</p>	5 marks

<b>C</b>	<b>Project Methodology and Technical Presentation</b>	<b>15 marks</b>
1)	Bidder shall include in its Power Point Presentation aspects including Experience under NLRMP work if any, approach and methodology and detailed project plan.	15 marks

### 3.4 Technical Qualification

Bidders must score at least **60 Marks out of 100** in the technical scores in order to be considered for technical qualification. The financial bids of only those Bidders, who have scored at least 60 marks in the technical evaluation process, will be opened. However, if the number of such prequalified Bidders is less than two, the Procuring Entity 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 the above framework; provided that in such an event, the total number of pre-qualified and short-listed Bidders shall not exceed two.

### 3.5 Short listing of bidders

Most responsive bid will be short listed on the basis of **QCBS evaluation criteria**. For this purpose, Technical and Financial weightage shall be **70% and 30%** respectively to compute a Composite Bid Score.

If the Bid, which results in the lowest evaluated Bid Price, is considered to be seriously unbalanced, or front loaded, in the opinion of the Procuring Entity, the Procuring Entity may require the Bidder to produce detailed rate analysis for any or all items of the Bill of quantities, to demonstrate the internal consistency of those rates with the construction methods and schedule proposed.

### 3.6 For the purpose of QCBS evaluation

- (i) The Bidder with highest qualifying technical score (T1) will be awarded 100% score. Technical Scores for other than T1 Bidders will be evaluated using the following formula:
- (ii)  $\text{Technical Score of a Bidder (Tn)} = \left\{ \frac{\text{Technical Score of the Bidder}}{\text{Technical Score of T1}} \times 100 \right\} \%$  (Adjusted upto two decimal places)
- (iii) The Bidder with lowest qualifying financial bid (L1) will be awarded 100% score. Financial Scores for technically qualified Bidders other than L1 Bidders will be evaluated using the following formula:
- (iv)  $\text{Financial Score of a Bidder (Fn)} = \left\{ \frac{\text{Financial Bid of L1}}{\text{Financial Bid of the Bidder}} \times 100 \right\} \%$  (Adjusted up to two decimal places)
- (vii) Any conditional bid would be summarily rejected.
- (viii) Errors & Rectification: Arithmetical errors will be rectified on the following basis: "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail".

### 3.7 Combined and Financial Evaluation

- (i) Technical and financial scores secured by each Bidder will be added using weightage of 70% and 30% respectively to compute a Composite Bid Score.
- (ii) **The Bidder securing the highest Composite Bid Score will be adjudicated as the most responsive Bidder for award of the Project. The overall score will be calculated as follows:-**
  - $B_n = 0.70 * T_n + 0.30 * F_n$   
Where
  - $B_n$  = overall score of Bidder
  - $T_n$  = Technical score of the Bidder (out of maximum of 100 marks)
  - $F_n$  = Normalized financial score of the Bidder
- (iii) In the event the bid composite bid scores are 'tied', the Bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.
- (IV) In descending orders a panel of prospective bidders will be constituted, for the purpose of award of work. However each panel qualifier should have scored minimum of 60% of total QCBS scores in each zone assessments.

### 3.8 Work Award Criteria

- (a) As mentioned at 5.1 under Geographical scope of the bid document, Project work of Rajasthan state has been distributed in to 10 different zones comprising of groups of various districts, which practically represent mostly the administrative divisions of State. Looking to large size of constituents districts, some of the divisions, namely- (1)-Bikaner, (2)- Jodhpur have further been divided into zones, namely-Bikaner A, Bikaner B and Jodhpur A, Jodhpur B and Jodhpur C respectively. For the purpose of bid these will be called as Zones.
- (b) Bidders who submit earnest money of Rs. 202.00 lakhs (sum of two highest EMD zones), may have option to submit financial bid for all zones in BoQ format. Bidders not submitting this much of EMD will have option to submit EMD for desired zone and quote financial bid accordingly. After evaluation of bid proposals, the work of maximum two zones may be awarded to successful bidder.
- (c) In case QCBS ranking  $R_1$  is tied in a zone, the bidder with higher scoring in Technical evaluation will be preferred and invited for negotiation.
- (d) In case bid price for any of Zone/zones is not found justified even after negotiation with qualifiers in the zone, next technical qualifier in over all

technical ranking may be invited for negotiation. This procedure may be adopted in all similar cases.

- (e) In case bid received in a zone, is from bidders who are not technically qualified as per the criteria, then technical qualification criteria will be followed as per procedure mentioned in para 3.4 above under Technical criteria and taking at least two falling under such criteria will be considered and then QCBS criteria will be applied.
- (f) In case no bid is received for any of the zone, then, with the prior approval of State Government, financial offers in sealed envelope from highest scorers of all others zone will be invited and selection will be made on lowest financial offer. This approach may be adopted for more than one Zones, who do not receive any bid, however, in such cases maximum number of zones allocation to successful bidders will not exceed than three in any case.
- (g) In case of any successful bidder failing to submit required performance security in stipulated time, his offer will summarily be rejected along with forfeiture of bid security and next prospective bidder in the evaluation of that zone will may be declared successful and may awarded the contract.

### **3.9 Overview of Bidding Process:**

1. All evaluation will be carried out by Procuring Entity as detailed in tender. The decisions of the Procuring Entity will be final at any stage in this regard.
2. Procuring Entity reserves the right to award the work of more than two zones to the Highest Scorer on techno- commercial ground subject to approval from State Government. The decisions of the procuring Entity will be final at any stage in this regard.

## **Section IV**

## **Bidding Forms**

### **Technical/Financial Proposal**

1. Letter of Proposal
2. Brief description of the background and organization of your Firm/Company and in case of a Joint Venture of each member for this assignment.
3. List only previous similar assignment successfully completed/ongoing.
4. Brief description of the Technical approach, Methodology and work plan for performing the assignment.
5. Month wise work schedule and planning for Deliverables in a form of a bar chart.
6. Brief description of the structure and composition of your team including the list of the key experts, non key experts and relevant technical and administrative support staff.
7. Curriculum vitae(CV):- Provide name of the each Employee(Experts), Position Title and number, Date of Birth, Country of citizenship, educational Qualification with institutions, assignment starting with the present position in Bidder firm/company, Past experience with the name of organization, Language skill, experts contact number (email and phone) and passport photograph.
8. Equipment Details.
9. Pending Litigation
10. Financial Situation
11. Financial Resources

12. Bid Security (Bank Guarantee Unconditional)
13. Bid Securing Declaration
14. Declaration by the Bidder
15. Financial Bid Submission Sheet
16. Financial Bid form

**Technical proposal****4.1 TECHNICAL PROPOSAL SUBMISSION FORM**

---

{Location, Date}

To: *[Name and address of Procuring Entity]*

Dear Sirs:

We, the undersigned, offer to establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan in accordance with your Bid Proposals dated .....“We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope.

{If the Bidder is a joint venture, insert the following: We are submitting our Proposal a joint venture with: {Insert a list with full name and the legal address of each member, and indicate the lead member}.We have attached a copy {insert: “of our letter of intent to form a joint venture” or, if a JV is already formed, “of the JV agreement”} signed by every participating member, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture.

We do hereby offer for the work of Establishment of Ground Control Network, Conducting Survey/Resurvey with Establishment of Digital Land Parcel Map and Land Record operations in districts of Rajasthan. Which include mainly the following scope of work with details mentioned in this Bid:-

1. Scedule1- Establishment of Control Points across Rajasthan state:-
  - (a) Establishment of Project Liaison office.
  - (b) Establishment of Iconic/Sub-Iconic points.
  - (c) Establishment of Primary Control Points.
  - (d) Establishment of Secondary Control Points.
  - (e) Establishment of Tertiary Control Points.
  - (f) Establishment of Auxiliary Control Points.
  - (g) Preparing and supply of the control points network maps.
2. Schedule 2- Conducting survey/resurvey work in Rajasthan state through a hybrid method involving HRSI and DGPS and ETS method is to be used on ground error on linear distance will be +/- 40 cm:-
  - (a) Image Processing/ Ortho rectification and ground reality draft LPM



- (b) Collection and Recording of Additional Attribute Data from field and Ground Survey to achieve the required accuracy levels.
- (c) Preparation and Distribution of village level conformance statement.
- (d) Conduct public interaction sessions.
- (e) Preparation of Digital Land Parcel map and RoRs.
- (f) Collection and Recording of Additional Map Data from field.
- (g) Preparation and Distribution of Draft Land parcel map.
- (h) Preparation and Delivery of final Digital Land Parcel Database.
- (i) Verification and Acceptance of final output deliverables by the procuring entity.
- (j) Preparation, Printing and Delivery of final Data, Report and Land Parcel maps in hard copy and soft copy.

We hereby declare that:

- (a) All the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification by the procuring entity and action may be taken against us under the provisions of the RTPP, Act and the Rules.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid document.
- (c) We have no conflict of interest in accordance with ITB clause 4.1 to 4.4
- (d) We meet the eligibility requirements as stated in Bid document, and we confirm our understanding of our obligation to abide by the Code of Integrity ITB clause 3.1
- (e) We undertake to negotiate a Contract on the basis of the proposed Key Experts. We accept that the substitution of Key Experts for reasons other than those stated in Bid document may lead to the termination of Contract negotiations.
- (f) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Work related to the assignment no later than the date indicated in Bid document.

We understand that the Procuring Entity is not bound to accept any Proposal that the Procuring Entity receives.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Bidder (firm's/ company's name or JV's name): \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Contact information (phone and e-mail): \_\_\_\_\_

{For a joint venture, either all members shall sign or only the lead member, in which case the power of attorney to sign on behalf of all members shall be attached}

**Tecnical proposal****4.2 Brief description of Bidder**

1.
  - (a) Name.....
  - (b) Address.....
  - (c) Date of incorporation and/or Commencement of Business.....
  - (d) Registration incorporation certificate.....
2. Brief description of the Background and organization of Bidder firm/Company and in case of a Joint Venture of each member for this assignment.
3. Details of individuals who will serve as the point of Contact/Communication for the Authority:
  - (a) Name-
  - (b) Designation with Company-
  - (c) Address-
  - (d) Telephone No. -
  - (e) e-mail Address-
  - (f) Fax Number-
4. In case of a Consortium
  - (a) The information above (1-4) should be provided for all the Members of the Consortium.
  - (b) A copy of the Joint Bidding agreement should be attached.
  - (c) Information regarding the role of each Member should provide as per table below:

<b>Sr. no.</b>	<b>Name of Member</b>	<b>Role</b>	<b>Percentage of equity in the Consortium</b>
1.			
2.			
3.			
4.			
5.			

**Technical proposal****4.3 List of Similar Assignments of the Bidders.**

Sr. No.	Name of Project	Name of Client	Project Cost	Date of Completion	Ground Control Network and Survey Area Covered
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Note: Certificate to be attached:

A. In case of completed work- Satisfactory work completion certificate.

B. In case of ongoing certificate- Satisfactory working  
issued by relevant department/ organization

## **Tecnical proposal**

### **4.4 Technical Approach and Methodology of the assignment**

The Proposed Methodology and work Plan shall be described as follows:-

- i The Bidder shall clearly state its understanding of the ToR/Scope of work and also highlight its important aspects; The bidder may supplement various requirements of the ToR/Scope of work and also make precise suggestions if it considers this would bring more clarity and assist in achieving the objectives laid down in the ToR/Scope of work. (Please do not repeat/copy of the ToR/Scope of work here).
- ii The Bidder will submit its Methodology for carrying out this assignment, outlining its approach toward achieving the objectives laid down in the ToR/Scope of work. The Bidder will submit a brief write up on its proposed team and organization 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 caring out this assignment.
- iii Work plan schedule and planning for Deliverables:- The Bidder will submit its work plan and Deliverables for the implementation of the assignment. The Bidder should specify their content and duration, phasing and interrelations, Milestones, and tentative delivery dates of the reports. The proposed work plan should be consistent with the technical approach and Methodology, showing your understanding of the ToR/Scope of work. A list of the final documents to be delivered as final output should be included here. The work plan should be consistent with the work schedule form.

Section IV Bidding Forms

**Tecnical proposal**

**4.5 Monthwise Work schedule and planning**

Sr.N o.	Name of activity/deliverables	Months												Total
		1	2	3	4	5	6	7	8	9	10	11	12	
1	Establishment of Control Points:-													
	(a) Iconic Control Points													
	(b) Sub-iconic Control Points													
	(c) Primary Control Points													
	(d) Secondary Control Points													
	(e) Tertiary Control Points													
	(f) Auxiliary Control Points													
	(g) Supply of Maps of Control Points													
2	Conducting Survey/Resurvey work													
	(a) Image Processing/ Ortho rectification and ground reality draft LPM													
	(b) Superimposition on cadastral map, draft notice and promulgation													
	(c) Final Notice and record preparation													
	(d) Record handover to Procuring Entity													

Note: - Bidder shall submit district wise, CPM and pert chart for Project activities.

**Tecnical proposal****4.6 Brief description of the structure and composition of your team.**

Sr.No.	Name of Project	Name of client	Estimated cost of project	Name of firm for which the key personnel worked	Designation of the key Personnel on the assignment	Worked field or office	Mandays worked	years of experience in GIS/GCN	Years of experience in Survey	Years with Bidding Company
1.										
2.										
3.										
4.										
5.										

Note:-

1. Use separate form for each key personnel/non key personnel and relevant technical and administrative support staff.
2. The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the key personnel.

**Tecnical proposal****4.7 Curriculum Vitae (CV) of key personnel**

Affix a recent  
passport size colored  
photograph

1.	Name of Personnel			
2.	Proposed position			
3.	Date of Birth			
4.	Nationality			
5.	Education Qualifications with institution			
6.	Employment record relevant to the assignment (starting with present position list in reverse order)			
7.	List of projects on which the personnel has worked			
	Sr.no.	Name of project	period	Description of responsibilities
	1.			
	2.			
	3.			
8.	Total Experience in years			
9.	Details of Current assignment and the time duration for which services are required for the current assignment			
10.	Language skills in which you can work			
11.	Experts Contact information			
	i	e-mail		
	ii	Mobile No.		
	iii	Phone No.		

Certification:-

I, the undersigned certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications and my experience, and i am available for entire duration of the project to undertake the assignment in case of an award.



I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal and action under provision of the RTTP, Act and the Rules by the Procuring entity.

Date: **signature with name of expert**

**Counter signature of the Bidder  
with name and date  
(Authorized Signatory)  
Seal**

Notes:-

1. Use separate form for each key personnel.
2. 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.

**Technical proposal****4.8 Equipment**

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment. The details of required equipments will be given by the bidder as under prescribed format.

Sr. no.	Name of equipment	Name of Manufacturer	Year of purchase	Number of equipment	Remarks
1.	3D Workstation (Photogrammetric suite software)				
2.	DGPS				
3.	ETS				
4.	Computers				
5.	Printers				
6.	Plotter				
7.	Other software with version				

Add the following information for equipment to be taken on confirmed lease by the Bidder.

Technical proposal

#### **4.9 Pending Litigation**

**Each Bidder or member of a JV must fill in this form**

##### **Pending Litigation**

- No pending litigation in accordance with Bid Document.
- Pending litigation in accordance with Bid Document.

Year	Matter in Dispute	Value of Pending Claim in INR	Value of Pending Claim as a Percentage of Net Worth

**Tecnical proposal****4.10 Financial Situation**

**Each Bidder or member of a JV must enclosed balance sheet with income statement of last three years. All financial statement of balance sheet and income statements must be audited by a Chartered Accountant. All financial statements must correspond to accounting periods already completed and audited as mentioned in Bid Document. No statement for partial periods shall be accepted.**

<b>Sr.no.</b>	<b>Year</b>	<b>Financial statements</b>	<b>Remarks</b>
1.	2012-13		
2.	2013-14		
3.	2014-15		

**Each Bidder or member of a JV must fill in this form**

<b>Particulars</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			
Others as required			
Total Revenues			
Profit before Taxes			
Profit after Taxes			
Others as required			

**Tecnical proposal****4.11 Financial Resources - Rupees**

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total work cash flow demands of the subject contract or contracts.

**FINANCIAL RESOURCES**

<b>S.No</b>	<b>Source of Financing</b>	<b>Amount in Rupees</b>

**Tecnical proposal****4.12 Form of Bid Security****Bid Security (Bank Guarantee Unconditional)*****[insert Bank's Name, and Address of Issuing Branch or Office]*****Beneficiary: CEO, RBAAS, and Settlement Commissioner, Rajasthan,  
Jaipur****Date: *[insert date]*****BID GUARANTEE No.: *[insert number]***

We have been informed that ***[insert name of the Bidder]*** (hereinafter called "the Bidder") has submitted to you its bid dated ***[insert date]*** (hereinafter called "the Bid") for the execution of **[Establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan]** under Notice Inviting Bids No. ***[insert NIB number]*** ("the NIB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we ***[insert name of Bank]*** hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ----- ***[insert amount in figures][insert amount in words]*** upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the *Procuring Entity* during the period of bid validity,
  - i fails or refuses to execute the Contract Form,
  - ii fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders (hereinafter "the ITB"),
- (c) has not accepted the correction of errors in accordance with the ITB, or
- (d) has breached a provision of the Code of Integrity specified in ITB;

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) thirty days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

Signed: \_\_\_\_\_

***[insert signature of person whose name and capacity are shown]***

Name: \_\_\_\_\_

***[insert complete name of person signing the Bid Security]***

In the capacity of: \_\_\_\_\_

***[insert legal capacity of person signing the Bid Security]***

Duly authorized to sign the Bid Security for and on behalf of

***[insert name of the Bank]***

Dated on            day of ,

***[insert date of signing]***

Bank's Seal \_\_\_\_\_

***[affix seal of the Bank]***

[Note: In case of a Joint Venture, the Bid-Security must be in the name of all partners to the Joint Venture that submits the bid.]

## **Tecnical proposal**

### **4.13 Bid Securing Declaration**

#### **Form of Bid Securing Declaration**

Date: ***[insert date (as day, month and year)]***

Unique Bid No.: ***[insert number of bidding process]***

Alternative No.: ***[insert identification No if this is a Bid for an alternative]***

To: **CEO, RBAAS, and Settlement Commissioner, Rajasthan, Jaipur**

We, the undersigned, declare that:

We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Procuring Entity for the period of time of ***[insert number of months or years]*** starting on ***[insert date]***, if we are in breach of our obligation(s) under the bid conditions, because we:

(a) have withdrawn our Bid during the period of bid validity specified in the Form of Bid; or

(b) do not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or

(c) having been notified of the acceptance of our Bid by the Procuring Entity during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security Declaration, in accordance with the ITB; or

(d) Breach any provision of the code of integrity specified in the ITB.

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) thirty days after the expiration of our Bid.

Signed: \_\_\_\_\_

***[insert signature of person whose name and capacity are shown]***

Name: \_\_\_\_\_

***[insert complete name of person signing the Bid-Securing Declaration]***

In the capacity of: \_\_\_\_\_

***[insert legal capacity of person signing the Bid-Securing Declaration]***



Duly authorized to sign the bid for and on behalf of: \_\_\_\_\_

***[insert complete name of Bidder]***

Dated on \_\_\_\_\_ day of \_\_\_\_\_,

***[insert date of signing]***

Corporate Seal \_\_\_\_\_

***[affix corporate seal of the bidder]***

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.]

**Tecnical proposal****4.14 Declaration by the Bidder****Declaration by the Bidder in compliance of Section 7 & 11 of the Act**

In relation to my/our Bid submitted to CEO, RBAAS, and Settlement Commissioner, Rajasthan, Jaipur for establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan in response to their Notice Inviting Bids No..... Dated..... I/we hereby declare under Section 7 and 11 of the Rajasthan Transparency in Public Procurement Act, 2012, that;

1. I/we possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
2. I/we have fulfilled my/our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
3. I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;
4. I/we do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
5. I/we do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;
6. We have complied and shall continue to comply with the Code of Integrity as specified in the Act, the Rules and the bidding documents.

Date:

Signature of bidder

Place:

Name:

Designation:

Address:

## Financial proposal

### 4.15 Letter of Financial Bid

#### Financial Bid Submission Sheet

Date: \_\_\_\_\_

NIB No.: \_\_\_\_\_

Alternative No., if permitted: \_\_\_\_\_

To: **CEO, RBAAS, and Settlement Commissioner, Rajasthan, Jaipur**

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Document, including Addenda No.: -  
\_\_\_\_\_

(b) We offer to execute in conformity with the Bidding Document the following Works:  
\_\_\_\_\_

(c) The total Price for our Bid, excluding any discounts offered, if permitted, in item (d) below is: \_\_\_\_\_ -  
\_\_\_\_\_

(d) The discounts offered, if permitted, and the methodology for their application is: \_\_\_\_\_

(e) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed.

(f) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

(g) Other comments, if any:

Name/ address: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Signed: \_\_\_\_\_

Duly authorised to sign the Bid for and on behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Financial proposal****4.16.1 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Ajmer zone for following Districts  
Ajmer, Bhilwara, Nagaur and Tonk of Rajasthan through 0.4 m or higher  
High Resolution stereo satellite image t  
hrough Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Ajmer zone for following Districts Ajmer, Bhilwara, Nagaur and Tonk of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Ajmer Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.2 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Bharatpur zone for following Districts Bharatpur, Dholpur, Karoli and Sawai Madhopur of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Bharatpur zone for following Districts Bharatpur, Dholpur, Karoli and SawaiMadhopur of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Bharatpur Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.3 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Bikaner-A zone for District Bikaner of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Bikaner-A zone for District Bikaner of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Bikaner-A zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.4 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Bikaner-B zone for following Districts Hanumangarh, Ganganagar and Churu of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Bikaner-B zone for following Districts Hanumangarh, Ganganagar and Churu of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Bikaner-B zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.5 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Jaipur zone for following Districts Jaipur, Dausa, Alwar, Jhunjhunu and Sikar of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Jaipur zone for following Districts Jaipur, Dausa, Alwar, Jhunjhunu and Sikar of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Jaipur zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*



**Financial proposal****4.16.6 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Jodhpur-A zone for following Districts Jodhpur, Pali and Sirohi of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Jodhpur-A zone for following Districts Jodhpur, Pali and Sirohi of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Jodhpur-A Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.7 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Jodhpur-B zone for following Districts Barmer and Jalore of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Jodhpur-B zone for following Districts Barmer and Jalore of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Jodhpur-B Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.8 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Jodhpur-C zone for District Jaisalmer of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Jodhpur-C zone for District Jaisalmer of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Jodhpur-C Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.9 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Kota zone for following Districts Kota, Bundi, Jhalawar and Baran of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Kota zone for following Districts Kota, Bundi, Jhalawar and Baran of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Kota Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

**Financial proposal****4.16.10 Financial Bid Form (In BOQ format)**

**GIS compatible Land Parcel Map for Udaipur zone for following Districts Udaipur, Chittorgarh, Pratapgarh, Dungarpur, Banswara and Rajsamand of Rajasthan through 0.4 m or higher High Resolution stereo satellite image through Hybrid Method involving HRSI, DGPS and ETS**

**Unit Cost (per square kilo meter) of establishing GCP network and undertaking GIS based all survey operations for Udaipur zone for following Districts Udaipur, Chittorgarh, Pratapgarh, Dungarpur, Banswara and Rajsamand of Rajasthan.**

<b>Item</b>	<b>Total Cost* per square kilometre of area (in figure, INR)</b>	<b>In Words</b>
GIS based Settlement operation. Establishment of Iconic, sub-iconic, Primary, Secondary and corresponding Auxiliary Ground Control Points and integration of primary control points with geodetic network of India as per scope defined in this Bid Document with all required deliverables and Detailed survey/resurvey using techniques high resolution satellite imagery (HRSI) 0.4 m or higher and Ground Truthing by ETS and DGPS and Land Record operations, as per NLRMP guidelines (This rate is to be given for the entire <b>Udaipur Zone</b> )		

*\*The Cost shall be exclusive of Government Taxes (VAT/CST/Entry Tax/Service Tax etc. as applicable, to be shown separately. Service tax component will be paid as per rates prevailing at that time.*

*\* BoQ Template is available on the website of <http://eproc.rajasthan.gov.in>.*

## Section V PROCURING ENTITIE'S REQUIREMENTS

### Scope of Work

Government of Rajasthan is desirous of selecting Agency/ Agencies who can undertake the work of **Establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations as per NLRMP guidelines in the State.** The scope of work is categorised as following:-

- Geographical scope
- Functional scope

#### 5.1 Geographical Scope

The geographical area required to be undertaken for the works as specified in functional scope below shall comprise of (Details of Districts enclosd) :-

SN	Name of work	Zone name	Districts	Geog.area in Sq.KM.
1.	Land record modernisation work	Ajmer	Ajmer, Bhilwara, Nagore, Tonk	43928
2.	-do-	Bharatpur	Bhartatpur, Dholpur, Karoli, Sawaimadhopur	18157
3.	-do-	Bikaner-A	Bikaner	30279
4	-do-	Bikaner-B	Hanumangarh, Ganganagar, churu	34457
5	-do-	Jaipur	Jaipur, Dausa, Alwar, Jhunjunu, Sikar	36575
6	-do-	Jodhpur-A	Jodhpur, Pali, Sirohi	40238
7	-do-	Jodhpur-B	Barmer, Jalore	39114
8	-do-	Jodhpur-C	Jaisalmer	38564
9	-do-	Kota	Kota, Bundi, Jhalawar, Bara,	24207
10	-do-	Udaipur	Udaipur, Chittorgarh, Pratapgarh, Dungarpur, Banswara, Rajasamand	36887

#### 5.2 Functional scope

The activities to be carried out under the project shall comprise of following components –

##### 5.2.1 Schedule I - Establishment of control points across the state in above Geographical area.

**5.2.2 Schedule II- Preparation of up to date GIS compatible Land parcel maps for districts of Rajasthan through hybrid method using High resolution stereo image of satellite (HRSI) , Differential GPS and Electronic Total Survey Station(ETS) in GIS environment, including various attributes/metadata.**

**5.2.3 Schedule III - Land record and Settlement operations.**

**5.2.4 Schedule IV - Project Management progress updation module**

**5.2.1 Schedule - I Ground control network, monumentation along with Identity numbering.**

**5.2.1.1 General approach on methodology**

Differential GPS sufficient to achieve the accuracies mentioned in the following sections are to be used. The following are the typical steps involved:

- a) **Identification** of Iconic/sub iconic point location, Primary Control Point Location, Secondary Control Point Location and Tertiary Control Point using Archive Mono 40 cm or coarser, High Resolution Satellite Imagery to be provided by Procuring Entity and also his approval prior to establishment of monumentation and GPS observation on ground.
- b) **Pre-signalization of SOI base** Iconic/ Primary control Points.
- c) All the Iconic/Sub Iconic/Primary and Secondary control points erected under the project in Rajasthan, **should be connected to** primary, secondary and tertiary ground control points of the **Survey of India (SOI)** to ensure connectivity with the National Framework.
- d) **Collection and Recording of Attribute information from field.**
- e) **Completion of establishment of Ground Control Network and submission to Dept. with all deliverables.**
- f) **Preparation and Delivery of Final Hard copy control point network Maps.**
- g) **Verification and Acceptance by the Department.**

### 5.2.1.2 Whole to part concept

- a) The whole survey exercise should follow the concept of Whole to Part of Survey. While establishing the control points, the Iconic, sub iconic, Primary Control Points should be established first, then the Secondary and Tertiary.
- b) GCP's shall be established on the basis of triangle of set base.
- c) Bidder need to identify, establish, undertake monumentation, take necessary readings and submit required information with procuring Entity as per scope. 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 standard for use in cartography)
  - II. **Vertical Datum: MSL, i.e. mean Sea Level.** The precision Bench Mark of the SOI should be used as primary vertical control

### 5.2.1.3 Recording Requirements for all types of Control Points :

- a. Longitude using WGS 84 datum
- b. Latitude using WGS 84 datum
- c. X in UTM Coordinates
- d. Y in UTM Coordinates
- e. Altitude (Z) from Mean Sea Level
- f. Monument Unique ID

The Primary Control points of the Survey of India (SOI), provided by static GPS observations (72 hours) with dual frequency GPS receivers, should be used as reference points for preparing district net work to link the district with national survey net work. In case of non availability of SOI data of network control points at all places, same kind of data and control points should be established in consultation with SOI and prepared by the Bidder with MSL datum as per below mentioned standards.

The primary control points of the SOI will have to be post processed with the precise ephemeris adjusted with the help of Standard Industrial Engineering Software supplied with DGPS to the ITRF co-ordinate system or with a consultation of Survey of India . All the iconic, sub Iconic, primary and secondary control points erected under this project should be connected to Primary and Secondary Ground control points of the SOI, to ensure connection to the National Framework.

Locations of Base Station, Primary & Secondary Control Points will be identified by Procuring Entity with the help of bidder. Field visits also shall be used to assist the same, if required. The designated project team members of the procuring Entity would visit the locations of Base Station, Primary & Secondary Control Points to



ensure the suitability of the site. If it is found un-suitable, another alternate location needs to be identified from field.

**5.2.1.4 Base Station: Iconic Control Point** at all district head quarters with minimum 72 hour observation by DGPS with zero level accuracy. Linking of base station control points with nearest SoI zero/primary control points (Geodetic Control Points) is also required. (If SOI Zero/Primary happens to be at any district head quarter, the iconic point may not be established after discussions with the Procuring Entity). It will be erected at a place in district HQ communicated to bidder by Procuring Entity. **Monumentation details and other specifications of this will be as per Primary Control Point monumentation given below.** Numbering of Iconic points can be IDDNN, I stands for Iconic, D for district code and N for number.

**I Iconic Control Point:**

- (1) **Densification:** 1 in each District HQ.
- (2) **Instrument to be used:** Minimum Dual Frequency DGPS
- (3) **Minimum Observation Time:** 72 Hrs. Static Observations.

**II Primary Control point – Identification of location**

1. The entire State of Rajasthan shall be divided into a grid of 16 x 16 km network. Approximate locations for the proposed control points shall be derived for the respective district from this statewide grid network. This is to ensure uniformity in spacing of the Primary control points being established by different Bidders in their respective districts, especially near the district boundaries. The same method shall also be adopted for establishment of Secondary and Tertiary Control points.
2. **In the vicinity of ideal location for any Primary Control point, if a Survey of India Zero Control Point (Geodetic Control Point) is available, it can be used as Primary Control Point.** If the usage of Survey of India control point is not feasible or if the point is not available on ground in good monumented state, the Bidders are required to establish their own control point. Even if the Bidder is using their own Primary control points, the points need to be connected to the available Survey of India Control points.

3. The following technical specification shall be used for identification of Primary Control Points

Sr.No	Criteria	Requirement
1.	Density	<ul style="list-style-type: none"> <li>One in every 256sqkm (16kmx16km). 16kms apart on an average</li> </ul>
2.	Site Selection	<ul style="list-style-type: none"> <li>Survey of India Zero Level Control Point, if available on ground in monumented and good condition</li> <li>The site for control points should be in a protected place like within compounds of Government offices/facilities like schools, community centres, panchayat offices, hospitals etc.</li> <li>The location should have open sky without obstructions with a cutoff cone of 15 degrees from ground.</li> <li>The location strictly should not have any electromagnetic interference like proximity to radio/mobile towers, high tension electriclines, transformers, high frequency dish antennas, radars etc.</li> <li>Should be away from signal jamming area by defense or any other agency.</li> <li>Locations should have minimal chances of destruction by natural/manmade activities.</li> </ul>

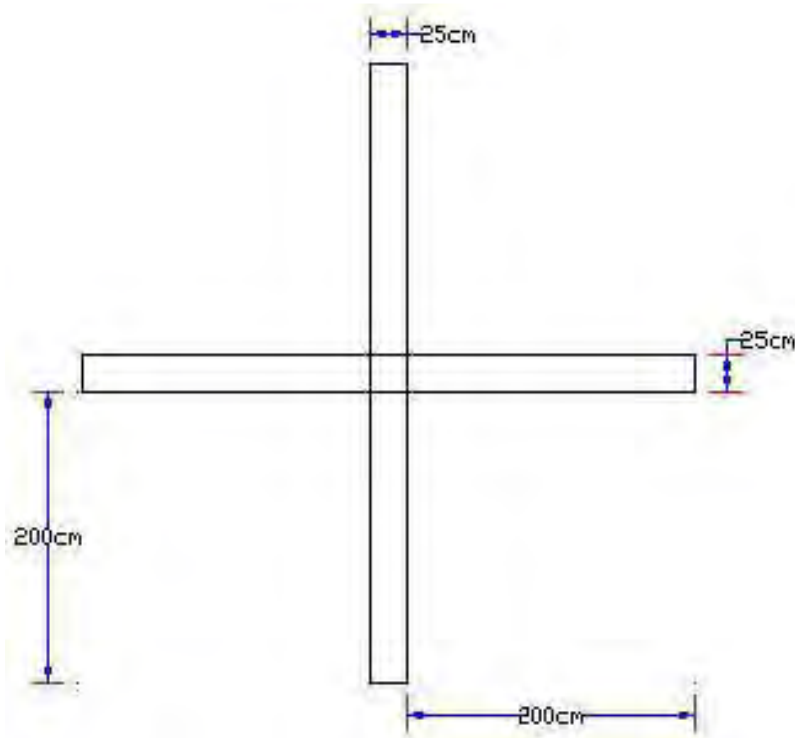
### III Monumentation of Iconic/Primary control points-

- All the Iconic/Primary Control Points are required to be monumented by the Bidders using the following specification. Monumentation is not required if SOI Zero level geodetic point is used as the control point and if it is already monumented by SOI and if the monumentation is existing on the ground in good condition.

S.N.	Criteria	Requirement
1.	Size	<ul style="list-style-type: none"> <li>25cm x 25 cm x 120 cm</li> </ul>
2.	Material	<ul style="list-style-type: none"> <li>Pre-casted RCC</li> </ul>
3.	Ground Fixing	<ul style="list-style-type: none"> <li>20cm above ground and 100 cm below ground</li> <li>Fixed to the ground using at least 15cms of cement block</li> </ul>
4.	Monumentation Marking	<ul style="list-style-type: none"> <li>Should bear a cross (painted with white road marking paint) on top with plummet hole in the middle and 20cm steel rod inserted (flush with concrete surface). Provision to put GPS reading strip of granite.</li> <li>Monument Unique ID shall be inscribed on the monument</li> </ul>

#### IV Additional marking for pre-signalization

The following ground marking should be established by the field team before the acquisition of satellite images. These cross bar marking should be 4MX4M with pillar at the intersection ( as shown in the figure below) shall facilitate easy identification of Ioconic/Zero/Primary Control Points on the Satellite Images.



The pre-signaling marking should be made of either lime mortar or made using PCC with white washing on the surface. The marking should be good enough to withstand rain or other environmental issues till procurement of satellite images by the designated agency.

### **V Establishment of Geo coordinates for Primary control points**

The Primary Control Points shall be established using the following technical specifications:

<b>S.N.</b>	<b>Criteria</b>	<b>Requirement</b>
1.	Minimum Observation Time	<ul style="list-style-type: none"> <li>• 4 Hours rapid static</li> </ul>
2.	Accuracy	<ul style="list-style-type: none"> <li>• Zero Level. Linking of primary control points with nearest SoI primary control points (Geodetic Control Points) is also required.</li> </ul>
3.	Vertical	<ul style="list-style-type: none"> <li>• All the primary control points should be connected by spirit-leveled heights. The leveling lines for such connections should terminate at the nearest precision control point of the SoI and all errors adjusted within them.</li> <li>• Permissible error for leveling line (meters) = <math>0.025 \times \sqrt{k}</math> where k is the length of leveling line in km</li> </ul>
4.	Equipment	<ul style="list-style-type: none"> <li>• Minimum Dual Frequency DGPS observation with 3 machines.</li> </ul>
5.	Recordings Required	<ul style="list-style-type: none"> <li>• Longitude using WGS 84 datum</li> <li>• Latitude using WGS 84 datum</li> <li>• X in UTM Coordinates</li> <li>• Y in UTM Coordinates</li> <li>• Altitude (Z) from Mean Sea Level</li> <li>• Monument Unique ID</li> </ul>

### **VI Numbering scheme for Primary Control points**

The Zero/Primary Control Points shall be numbered as PDDNNN, where DD shall represent the district code and NNNN is counting numbers starting from 1.

## VII Post pointing

### Post Pointing Sheets

- (a) While conducting the establishment of Control Points, the team should carry printouts of the satellite image of the location and the exact location of the point on the ground shall be marked in the printout with reference to the Monument ID. These sheets need to be supplied to the GIS/Photogrammetric Operator for processing of the satellite images. Alternatively, the team can carry a laptop and create a feature layer to mark the locations of the control point sites with reference to the satellite images along with the required readings.
- (b) Geo-tagged Digital Photographs of the Control Points
- (c) The Bidder is required to take Geo-tagged digital photographs of the control point along with the pole/staff/monument to clearly indicate the control point location.
- (d) Photos should be taken from minimum two angles so that the location is clearly identifiable.
- (e) The photos should be named as <Control Point Id>\_n where Control Point Id is the name of the control point as per the numbering scheme specified in this document and n is the counting numbers starting from 1.

#### 5.2.1.5 Sub Iconic points

- (1) **Densification:** 1 in each Tehsil HQ.
- (2) **Instrument to be used:** Minimum Dual Frequency DGPS
- (3) **Minimum Observation Time:** 12 Hrs. rapid Static Observations.

**Monumentation details and other specifications of these will be as per Secondary Control Points monumentation given below.** Numbering of Sub Iconic points can be SIDDNNN, SI stands for sub iconic, D for district code and N for number.

**I. Identification and location of Secondary control points –**

1. The entire State of Rajasthan shall be divided into a grid of 4 x 4 km network. Approximate locations for the proposed control points shall be derived for the respective district from this statewide grid network. This is to ensure uniformity in spacing of the Secondary control points being established by different Bidders in their respective districts, especially near the district boundaries.
2. The following technical specification shall be used for identification of Secondary Control Points

Sr.No	Criteria	Requirement
1.	Density	<ul style="list-style-type: none"> <li>• One in every 16sqkm (4km x 4km). 4kms apart on an average</li> </ul>

**II. Monumentation of Secondary control points -**

1. The Bidders can use an existing structure/object as the secondary control point if it satisfies all of the below mentioned points:
  - a) It lies within the location to satisfy the ground survey requirements
  - b) It is a permanent structure/object, which is likely to remain permanent over time
  - c) It is easily identifiable on the ground as well as in the Satellite Images used in the project
  - d) It is accessible for the project team to take DGPS/ETS readings
  - e) Setting up of survey instruments or allied equipments used for survey like survey pole/staff at the point is feasible
2. If a suitable structure/object as per the above details is available, it can be used as a Secondary control point. Monumentation may not be required for these points but strip marking with centre point will be required for DGPS/ Work Station housing for observations. If we do not have a suitable point on the ground as per the above mentioned conditions, Bidders are required to establish a point and monument the same using the following specifications.

Sr.No	Criteria	Requirement
1.	Size	<ul style="list-style-type: none"> <li>• 23cm x 23 cm x 75 cm</li> </ul>
2.	Material	<ul style="list-style-type: none"> <li>• Pre-casted RCC</li> </ul>
3.	Ground Fixing	<ul style="list-style-type: none"> <li>• 15cm above ground and 60 cm below ground</li> <li>• Fixed to the ground using at least 15cms of cement block</li> </ul>
4.	Monumentation Marking	<ul style="list-style-type: none"> <li>• Should bear a triangular plate(painted with white road marking paint) on top with plummet hole in the middle and 15cm steel rod inserted (flush with concrete surface) .Provision to put GPS reading of granite.</li> <li>• Monument Unique ID shall be inscribed on the monument</li> </ul>

### III. Additional marking for pre-signalization

The ground marking should be established by the field team before the acquisition of satellite images, similar to that done in Iconic/Primary control points except for here the cross bar marking should be of dimension 3MX3M with pillar at the intersection ( as shown in the related figure above) shall facilitate easy identification of Sub Iconic/Secondary Control Points on the Satellite Images.



#### IV. Establishment of Geo coordinates for Secondary control points

The Secondary Control Points shall be established using the following technical specifications:

Sr.No	Criteria	Requirement Time
1.	Minimum Observation	• 1Hour
2.	Accuracy	• < +/-1cms
3.	Vertical	<ul style="list-style-type: none"> <li>• All the secondary control points should be connected by spirit-leveled heights. The leveling lines for such connections should terminate at the nearest precision control point of the SOI or the Primary Control Point established by the Bidder. All errors must be adjusted within them.</li> <li>• Permissible error for leveling line (meters) = <math>0.025 \times \sqrt{k}</math> where k is the length of leveling line in km</li> </ul>
4.	Equipment	• Minimum Dual Frequency DGPS
5.	Recordings Required	<ul style="list-style-type: none"> <li>• Longitude using WGS 84 datum</li> <li>• Latitude using WGS 84 datum</li> <li>• X in UTM Coordinates</li> <li>• Y in UTM Coordinates</li> <li>• Altitude (Z) from Mean Sea Level</li> <li>• Monument Unique ID</li> </ul>

#### V. Numbering scheme for secondary control points

The Secondary Control Points shall be numbered as SDDNNNN, where DD shall represent the District Code and NNNNN is counting numbers starting from 1.

#### VI. Post Pointing

1. Post pointing is required for all control points including both monumented and permanent structure references used as control points

2. Post Pointing Sheets - While conducting the establishment of Control Points, the team should carry printouts of the satellite image of the location and the exact location of the point on the ground shall be marked in the printout with reference to the Monument ID. These sheets need to be supplied to the GIS/Photogrammetric Operator for processing of the satellite images. Alternatively, the team can carry a laptop and create a feature layer to mark the locations of the control point sites with reference to the satellite images along with the required readings.
3. Geo-Tagged Digital Photographs of the Control Points
  - (i) The Bidder is required to take geo-tagged digital photographs of the control point along with the pole/staff/monument to clearly indicate the control point location.
  - (ii) Photos should be taken from minimum two angles so that the location is clearly identifiable.
  - (iii) The photos should be named as <Control Point Id>\_n where Control Point Id is the Id of the control point as per the numbering scheme specified in this document and n is the counting numbers starting from 1.

#### **5.2.1.6 Tertiary control points**

- I.** Identification of location of tertiary control points- Tertiary control points shall be identified and established one in every 4 sqkm (2km x 2km) on an average based on the field conditions. It is mandatory to identify and establish tertiary control points at junction points of three villages (if any) Also a minimum of two tertiary control points are to be located in a village.

#### **II. Monumentation of tertiary control points**

1. The Bidders can use an existing structure/object as the Tertiary control point if it satisfies all of the below mentioned points:
  - (a) It lies within the location to satisfy the ground survey requirements
  - (b) It is a permanent structure/object, which is likely to remain permanent over time, existing Govt./non Govt. buildings like GP

office, school building, veterinary hospitals etc. may also be considered

(c) It is easily identifiable on the ground as well as in the Satellite Images used in the project

(d) It is accessible for the project team to take DGPS/ETSM readings

(e) Setting up of survey instruments or allied equipment used for survey like survey pole/staff at the point is feasible

2.If a suitable structure/object as per the above is available, it can be used as the Tertiary control point. Monumentation is not required for these points, but marking with white material is required for visibility in the satellite image. If we do not have a suitably point on the ground as per the above mentioned conditions, Bidders are required to establish a point and monument the same using the following specification.

S.N.	Criteria	Requirement
1.	Size	<ul style="list-style-type: none"> <li>• 15cm x 15 cm x 45 cm</li> </ul>
2.	Material	<ul style="list-style-type: none"> <li>• Precasted RCC</li> </ul>
3.	Ground Fixing	<ul style="list-style-type: none"> <li>• 10cm above ground and 35 cm below ground</li> <li>• Fixed to the ground in a pit with coal and lime mixture at the bottom</li> </ul>
4.	Monumentation Marking	<ul style="list-style-type: none"> <li>• Should bear a triangle on top(painted with white road marking Paint)</li> <li>• Monument Unique ID shall be marked on the monument</li> </ul>

### III. Establishment of Geo coordinates for Tertiary control

The Tertiary Control Points shall be established using the following technical specification:

S.No	Criteria	Requirement
1.	Minimum Observation Time	<ul style="list-style-type: none"> <li>• 45 Minutes</li> </ul>
2.	Accuracy	<ul style="list-style-type: none"> <li>• &lt; +/-5cms</li> </ul>
3.	Vertical	<ul style="list-style-type: none"> <li>• All the tertiary control points should be connected by spirit-leveled heights. The leveling lines for such connections should terminate at the nearest precision control point of the SOI or the Primary Control Point or the Secondary Control Point established by the Bidder. All errors must be adjusted within them.</li> <li>• Permissible error for leveling line (meters) = <math>0.025 \times \sqrt{k}</math> where k is the length of leveling line in km</li> </ul>
4.	Equipment	<ul style="list-style-type: none"> <li>• Single/Dual Frequency DGPS</li> </ul>
5.	Recordings Required	<ul style="list-style-type: none"> <li>• Longitude using WGS 84 datum</li> <li>• Latitude using WGS 84 datum</li> <li>• X in UTM Coordinates</li> <li>• Y in UTM Coordinates</li> <li>• Altitude (Z) from Mean Sea Level</li> <li>• Monument Unique ID</li> </ul>

#### **IV. Numbering scheme for tertiary control points –**

The Tertiary Control Points shall be numbered as TDDNNNNNNN, where DD shall represent the District Code and NNNNNNN is counting numbers starting from 1.

Post pointing-

- Post pointing is required for all control points including both monumented and permanent structure references used as control points
- Post Pointing Sheets
- While conducting the establishment of Control Points, the team should carry printouts of the satellite image of the location and the exact location of the point on the ground shall be marked in the printout with reference to the Monument ID. These sheets need to be supplied to the GIS/Photogrammetric Operator for processing of the satellite images. Alternatively, the team can carry, a laptop and create a feature layer to mark the locations of the control point sites with reference to the satellite images along with the required

#### **V. Geo-Tagged Digital Photographs of the Control Points**

- The Bidder is required to take geo-tagged digital photographs of the control point along with the pole/staff/monument to clearly indicate the control point location.
- Photos should be taken from minimum two angles so that the location is clearly identifiable.
- The photos should be named as <Control Point Name>\_n where Control Point Name is the name of the control point as per the numbering scheme specified in this document and n is the counting numbers starting from 1.

##### **5.2.1.7 Minimum control points per village of rural and urban area**

In each village of rural and urban area, the Bidders are required to establish at least four monumented control points.

#### Preparation and supply of Map control points

1. The Bidders are required to prepare and supply to the Procuring Entity a digital map of control points in geo-referenced point data. The map should be supplied in digital format in the form of a feature layer or a set of feature layers. The dataset should contain the triangulated lines of connection between the control points also.
2. The following deliverables in hardcopy and softcopy (CD/DVD) format should be submitted by the Bidder upon completion of the task of Establishment of Primary, Secondary and Tertiary Control Points.
  - A layout on A0 Size of Iconic, Sub Iconic, Primary, Secondary and Tertiary Control Points on WGS84 grid with unique Monument IDs along with existing SoI Points used in the network.
  - A table outlining the list of Monument IDs, Type of Control Points, Longitude and Latitude using WGS84 datum, X and Y in UTM Coordinates, Altitude Z from Mean Sea Level.
  - Post pointing sheets covering Monument ID, Digital Photograph, Location Map and a brief route description.
  - All Raw data and RINEX data in soft copy from DGPS and Raw data from ETS used for these Points.
  - All Processed data in soft copy from DGPS and ETS used for these points.
  - Should include all processing reports carried out during network adjustments and loop closures from DGPS and ETS.

#### 5.2.1.8 Verification and acceptance of the data -

1. The Procuring Entity may verify the Ground Control Network data either by its own or through an independent 3rd<sup>d</sup> party firm/ competent Govt. agency firm.
2. Upon rejection of data or any error requiring revisiting the field, Bidder shall have to carry out the necessary corrections and resubmit the data at no additional cost to SC & CEO. In such a case, the curing period

being used by the Bidder for rectification and resubmission of the data shall be liable to be included for computing penalties.

3. If the submitted data is found acceptable, payment relevant to Ground control network shall be paid to the Bidders after deducting penalties, if any.
4. In case of non-submission of the data or rejection of data after utilization of Grace Period and/or Curing period, the Bidder shall be disqualified and his Performance security shall be forfeited. No payment relevant to Ground control network shall be made to the unsuccessful Bidder.
5. SC & CEO would procure 40 Cm or coarser High resolution satellite images (HRSI) and provide to the selected Bidder.

#### 5.2.1.9 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 frequency GPS Receiver (as used for main control).
- iv) **Accuracy levels required:** minimum observation time 15 minutes.
- v) In case suitable structure is not available during the survey, fresh monumentation may be taken up with specifications similar to that of tertiary ground control points, discussed in preceding paras, the equipments to be used and accuracy of the measurements will also remain the same.
- vi) The Auxiliary Control Points shall be numbered as ADDNNNNNNN, where DD shall represent the District Code and NNNNNNN is counting numbers starting from 1.

## 5.2.2. Schedule -II

### 5.2.2.1 Preparation of up to date GIS compatible Land parcel maps

**“Hybrid method involving use of Stereo High resolution Multi-Spectral Satellite images, Pan Sharpened to have 40cm or higher resolution, DGPS and ETS”** is to be used for Agricultural Land and Abadi Land in Villages. Though the data will be also useful for urban land use and land parcel mapping, which may be planned by state Government separately. Under present scope of work except for “Gairmumkinabadi areas” all others are to be taken up under the project. The required accuracy levels mentioned as mentioned in this bid document are to be achieved. Following are the typical steps involved:

- Pre-Processing of Satellite Images and removal of Geometric/Radiometric errors
- DEM Generation using the Primary and secondary control points (also tertiary control points if required)
- Ortho-rectification of Satellite Images, Mosaicing and Creating Tiles.
- 2D feature capturing with reference to Ortho-rectified Satellite Images and existing cadastral map (will be provided for reference purposes).
- Identification, Establishment and Monumentation of Auxiliary Control Points on ground as per requirement of field survey for achieving the required accuracy levels. The Bidders are also required to connect the auxiliary points established by them to the control points established as part of Schedule-I of this RFP.
- Collection and Recording of Attribute information from field.
- Collection and recording of additional map data from field.
- Delineation of land parcels using ortho-rectified satellite imagery.
- Preparation and Distribution of Village level conformance statement
- Preparation and Distribution of Draft Land Parcel map.
- Conduct Public Interaction Sessions.
- Preparation and Delivery of Final Digital Land Parcel Database.
- Preparation and Delivery of Final Hard copy Parcel Maps



**5.2.2.2 Each step is further elaborated in the following sections**

General accuracy requirements -

Type of Area	Target Scale	Maximum on ground error on linear distance
Agricultural Land	1:4,000	+/- 40cm
Abadi Land in Village Area	1:1,000	+/- 20cm

40 cm or higher, high resolution, multispectral PAN sharpened satellite data will be procured through NRSC Hyderabad and made available to successful bidders. The data collection schedule will be fixed in such a way that as soon as monumentation complete by the bidder in a particular district of the awarded area, data collection through the satellite will follow and within 3-4 weeks to Procuring Entity who will pass it to the Bidder. Following is the specifications of the proposed data to be procured.

HRSI interpretation on land parcel mapping, DEM generation and ortho rectification activities are to be done in Procurement Entity is premises or designated places only.

**5.2.2.3 Fresh tasking stereo data specifications:****(Total AOI 342406 Sq.Km.)**

1. Category of Product : Stereo Pair (Fresh Collection)
2. Product Type : Stereo Pan sharpened at 40-cm (RGB)
3. Off Nadir Angle (ONA) : One leg 0-25°: Second leg: System computed (0-35°)
4. Resolution PAN data : 40-Cm or better
5. Resolution MSS data : 1.6-M or better
6. Cloud Cover : ≤ 15%
7. Image Bits/ Pixel : 16
8. Re sampling option : MTF Kernel
9. Product framing : Divided into equal parts
10. Overlap : 100% Lateral overlap. The overlap between image strips should be ~1-1.1KM
11. License : Base License up to 5 Users
12. Coverage/ AOI : As per the shape file attached.

**5.2.2.4 Important features of procedures to be followed for DEM generation, ortho rectification and capturing of parcels:-**

- (i) High resolution satellite data of post monumentation activity is to be processed for removing radiometric and geometric errors.
- (ii) PAN sharpening and DEM generation –  
(a) Bidders are required to generate a DEM in any compatible industry standard software using the Stereo Pair High-Resolution Satellite

Images with the help of RPC files and the Control Points collected as part of this project.

The following steps are expected to follow in generating the DEM -

- Separate multispectral images are to be merged into single file.
- Process the multispectral image and panchromatic image to ensure that they are properly aligned each other. This will involve use of RPC files
- Perform the pan sharpening
- Import the Control Points gathered as per schedule I
- Generate Epipolar Pairs table by choosing the left and right image pairs. Down sample factor of 2 may be used to reduce the noise and to speed up the DEM generation process
- Use automatic methods to generate DEM. Use minimum and maximum elevation values to speed up the process. Use pixel sampling interval of 2 Treat the failed pixels. Smoothen the irregularities. While treating the failed area or smoothening the irregularities, masks are to be used so that the treatment is affecting only the issue area and not the whole DEM

#### 5.2.2.5 Ortho rectification of High resolution satellite images

The Ioconic/Sub Iconic/Primary/Secondary/Tertiary Control Points Established and the DEM created as part of this project shall be used for Ortho-rectification of satellite images to create "Ortho-rectified" Satellite Images.

#### Technical Requirements

Sr.No	Criteria	Requirement
1.	Method	<ul style="list-style-type: none"> <li>• Use Only Primary or Secondary Control Points</li> <li>• Use minimum 9 Control Points per scene. (Considering a Typical scene of 9km x 9km approx)</li> <li>• Use DTM prepared as part of this project</li> </ul>
2.	Recommended Software	<ul style="list-style-type: none"> <li>• Any compatible industry standard software can be used</li> </ul>
3.	Accuracy Requirements	<ul style="list-style-type: none"> <li>• RMSE &lt; +/-1 pixel</li> </ul>

### 5.2.2.6 Mosaicing of Satellite Image Strips

- . Satellite image strips shall be mosaiced for contiguity during the ortho-rectification process.
- . Color balancing shall be done for the images to achieve homogeneity across strips boundaries.
- . Generation of **9 km X 9 km** Satellite Image Tiles.
- . After the mosaicing, the satellite images shall be cut in to tiles of 15kmX15km squares.
- . The following naming convention shall be used for file naming the satellite images:

Naming Convention: **DDRRCC**, where DD is name of districts, RR is the row number counted from bottom to top and CC is the column number counted from left to right. For example, a tile at 3r drow from bottom and **2nd**column from left shall be named as **DD0302** and **DD** will be prefix as name of district before **0302**.

### 5.2.2.7 Generation of Vector Grid for Satellite Tile Boundaries

A vector grid of polygons (mesh-like) shall be created and shall be added as a feature layer in the Digital Land Parcel Database. Each vector grid cell shall have attribute information of the District, Tehsil, RI Circle, Patwar circle, Village and the file name (without extension) of the satellite tile as per the mentioned naming convention mentioned above. This feature layer shall be utilized for loading and unloading respective satellite image tiles specific for a selection or a display area.

### 5.2.2.8. 2D features capturing with respect to ortho rectified images

- .Heads-up digitization using any industry standard GIS data capture suite can be used for 2D feature capturing from the ortho-rectified Satellite Images.
- .With reference to the layer requirements under **Annexure II: "List of Feature Layers"**, Features visible in satellite imagery shall be captured through heads-up digitization. Features those are not visible or unclear shall be captured using ground methods (DGPS and/or ETS) and later integrated with the digitized data.

**5.2.2.9 Technical Requirements**

Sr.No	Criteria	Requirement
1.	Method	<ul style="list-style-type: none"> <li>• Heads-up digitization using desktop computers</li> </ul>
2.	Recommended Software	<ul style="list-style-type: none"> <li>• Any compatible industry standard software shall be used for digitization but the delivery shall be as per the formats mentioned</li> </ul>
3.	Adherence to topology criteria	<ul style="list-style-type: none"> <li>• No sliver polygons are present</li> <li>• No overlapping features are present</li> <li>• Absence of No Man's land/Holes</li> <li>• Adequate nodes are present</li> <li>• Absence of Clustered/Pseudo Nodes</li> <li>• Layering is proper</li> <li>• Only OGC Simple Feature Types are present (Polyline, Point and Polygon) to represent spatial features</li> <li>• No Missing Attributes</li> <li>• No Incomplete Attributes</li> <li>• Non presence of Garbage features</li> <li>• No Undershoots are present</li> <li>• No Overshoots/Dangles are present</li> <li>• All polygon features are closed</li> <li>• Continuity and Contiguity is maintained</li> <li>• Nodes at intersections are present</li> <li>• Snapping within Layer is done completely</li> <li>• Snapping between Layers is done completely</li> </ul>
4.	General Requirements	<ul style="list-style-type: none"> <li>• While digitizing, it is required to capture the lines through the middle of the boundaries visible in the satellite image</li> <li>• Nodes should be judiciously inserted. Straight Line features should have only two nodes at the ends. Curved features should have nodes just sufficient to keep the shape of the curve</li> <li>• All data including Control points must be in UTM WGS84 projection system</li> <li>• Final Digital Land Parcel Map shall be a seamless map for the entire district.</li> <li>• Edge matching of features with data generated for districts lying either on top or right side of their allotted districts.</li> </ul>

**5.2.2.10 Feature layer requirement**

The feature layer requirements are detailed in **Annexure II : "List of Feature Layers"**.

**5.2.2.11 Quality assurance requirement**

The following quality assurance criteria shall be met:

<b>Sr.No</b>	<b>Criteria</b>	<b>Quality Requirement</b>
1.	Adherence to the List of Feature Layers	• 100%
2.	Adherence to symbology, for printouts	• 100%
3.	Adherence to the specifications of the printouts media (paper)	• 100%
4.	Topological Checks	• 100%
5.	Logical mistakes / mistakes in interpretation	• The whole lot shall be rejected, if more than one error in a village is found

**5.2.2.12 System/Software/Manpower for HRSI Processing requirement**

Each successful bidder will have to deploy at least following system/ software's and manpower for HRSI analysis work

**A. Hardware-**

1. High end work station(compatible for stereo image analysis)- two each per allotted district.
2. Ao Scanner-1
3. Ao colour Plotter one per district
4. A3 size colour plotter 2 per district
5. Black and white A4 printer 2 per district
6. Suitable UPS – One per district

**B. Commercial/Open source Software-(All genuine with license of latest versions)**

1. Arc GIS (work station)/QGIS/IGIS/compatible, 1 licenses per allotted district
2. ERDAS/Grass/Compatible, Image processing software – 1 licenses per district
3. Photogrammetric suite imagine or like – 1 per district
4. Auto CAD map/Bentley map/like – 1 per district
5. Database oracle/Post gray sql/like– 1 per district

**C. Manpower**

1. Senior Remote Sensing & GIS specialist -1 per district
2. System analyst capable of handling Photogrammetric and other software's -4 per district
3. Data Entry operator/system Assistant – 1 per machine

**5.2.2.13 Enhancement to the data by Ground Survey**

Ground survey using ETS and DGPS enabled smart stations (or equivalent or better) shall be conducted for the following objectives:

- Capture the features, which are not visible in the satellite images
- Achieve the required accuracy levels in the data by enhancing it by ground survey

**5.2.2.14 Grounds Survey Methods to be adopted.**

Though most of the details of land parcels are to be gathered from ortho rectified images of the assigned area, there may be cases where image may not be available or details are not clear or to further verify the interpreted details, Ground survey shall be carried out by DGPS and ETS.

The different cases and treatments are explained below:

1. Steps for Case A: At least two known points are visible from the equipment setup point
  - Setup the equipment
  - Take the DGPS readings
  - Connect to the known points with ETS readings
2. Steps for Case B: Only one known point is visible from the equipment setup point
  - Setup inter visible points and connect to two known points with ETS readings
  - Take DGPS readings
3. Steps for Case C: No known points are visible or setting up of inter visible points is not feasible in Case B
  - Setup the equipment
  - Take DGPS readings using two established base stations to form triangles instead of conventional one base station, preferably with all internal angles above 30 degrees

4. Steps for Case D: DGPS readings are not feasible due to any reason
  - Due a traverse using the ETS.
  - Start from a known point and preferably close to another known point, if feasible.
  - If traverse to another known point is not feasible due to any reason, close to the same known point to have a closed traverse.

#### **5.2.2.15 Resource requirement for ground survey and promulgation.**

1. Ground Survey Team Unit Requirements
2. The Bidder is required to form and deploy **Ground Survey Team Units** to execute the Ground Survey and other required activities. The Survey Units are required to comprise the following per team but not limited to:
  - Surveyor Personnel – 2 Nos.
  - Helpers – 3 Nos.
  - Smart Station or equivalent/better combination of ETS and DGPS – 1 No with required hardware and software.
  - Required Preprocessing and Post processing software.
  - Data Processing Personnel – 1 No.

#### **5.2.2.16 Minimum Team Required**

The Bidder is required and bound to deploy and operate a **minimum of 15no. Ground Survey Team Units** as defined under section "**Ground Survey Team Unit Requirements**" for carrying out Ground Survey in each and every allotted district as and where required.

#### **5.2.2.17 Requirements of increasing the resources to meet deadlines**

It is to be noted that the Bidder is required and bound to increase the number of Ground Survey Team Units as well as adding of additional equipment, hardware, software and personnel to all or any of the Ground Survey Team Units as demanded by the SC & CEO at any time during the project in order to execute the project in timely manner as described in the scope of work as per the need is felt by SC & CEO.

#### **5.2.2.18 Collection and recording of additional map data from the field**

Features those are not captured with reference to the ortho rectified satellite images shall be captured from field. This can include:

- Features those are not visible/unclear in satellite images, or those whose identity cannot be deduced from the satellite imagery.
- Bidder are required to cover all the features in feature layers mentioned in **Annexure- II : "List of Feature Layers"** in the prescribed format mentioned therein.

#### **5.2.2.19 Tagging against the parcel numbers**

The collected information will have to be tagged against the referred chalta parcel number and must be loaded in to the Final Digital Land Parcel Database.

#### **5.2.2.20 Ownership of Data**

At any time during or after this project, data including all final deliverables, all field readings, all intermediate data shall belong to the SCR & CEO, RBAAS, Govt. of Rajasthan any misuse or transfer to third party without prior approval found will be a criminal offence and shall be dealt as per law.



### 5.2.3 Schedule III

#### Generation of Draft Land Parcel Maps(LPM)

##### 5.2.3.1 preparation and finalisation

- Heads-up digitization is to be done using any industry standard data capture suite for 2D feature capturing from the ortho-rectified Satellite Images. Features visible in satellite imagery shall be captured through heads-up digitization. Department has digitized maps on 1:4000 scale in GIS environment of majority of villages in state, these can be used as reference maps for land parcels delineation and segregation. The accuracy of the measurements is of the order of second decimal place of a metre and 4<sup>th</sup> decimal place of a hactre.
- To increase accuracy of the efforts, these cadastrals can be geo referenced by using minimum 5 controls points per sheet gathered through DGPS observations, these may be out of earlier GCPs or need be felt few more be gathered. This geo referenced digital map of village may be superimposed over the one gathered through heads on digitization of ortho rectified image of village parcels.

**This will help in deducing the gaps in interpreted information and attributes available in GIS domain, which will further help in planning for ground surveys to correlate missing attributes. Features those are not visible or unclear including parcel information as per attributes (mainly due to sub division in family/sale/allocation by Government), shall also be captured using ground methods (DGPS and ETS) and later integrated with the data digitized / delineated on ortho photo satellite image and attributes of all the cadastrals.** Village wise parcels are to be delineated along with village boundary.

During the ground surveys, parcel wise information on number of attributes is also required by interacting individual parcel owners and concerned Government agency, all these are to be tagged to individual parcels in GIS

format .These are -

- Digital Photograph of the Owner(s)/Aadhar No./Voter ID No. and tagging it against the New Parcel Number.
- Digital Fingerprints of the Owner(s) and tagging it against the New Parcel Number /old parcel number.
- Land Attributes -
  - . Type of Land
  - . Details of Soil Type
  - . Cultivable Area
  - . Land Irrigation Details
  - . Ownership Type
  - . Crop Details
  - . Crop Irrigation Details
  - . Irgan
  - . Land value
  - . type of land ownership

.Map attributes –

- (a) Name
- (b) centre Id (WGS84)
- (c) Coordinates of area binding box
- (d) Name of verifier
- (e) Area
- (f) Measurements
- (g) Khasra no.old and new

Template for map will be provided to successful bidder.

### 5.2.3.2 Cadastral parcel map printout with attribute table

After successful digitization of ortho rectified image and matching with digitized village cadastral map

- (i) a temporary number (chalta number) is to be assigned to each parcel
- (ii) The Draft Land Parcel Maps prints on prescribed template with actual dimensions, details of adjoining parcels will be distributed to the concerned owner and receive the objections if any.
- (iii) The scale of LPM sketch should fit an A4 size paper and it should be fit to the next scale of 50. (For e.g. if the scale is

coming to 1:446 then it should be fit to a scale of 1:450; in case the scale is coming as 1:421 then it should be fit to a scale of 1:450 and in case the scale required to fit in the paper is 1:496, then it should be fit to a scale of 1:500)

- (iv) Wherever there is **reserved forest** or land transferred to forest department, concerned forest officers should be involved in identifying boundaries.
- (v) Wherever there is a government land, concerned government officers shall attend the survey activity and identify their land.
- (vi) All the attributes including current land use particulars and irrigation particulars etc. shall also be collected by the survey team and tagged into map data in GIS domain.
- (vii) Details of land parcels should be recorded in the prescribed formats.
- (viii) After the completion of demarcation, collection of textual data, the Bidder have to transfer the demarcated boundaries from the orthorectified image file in to computer to generate relevant spatial form.
- (ix) The demarcators shall generate the Draft Land Parcel Map (LPM) for each land parcel and print in the prescribed template in duplicate.
- (x) The survey teams along with the government officials shall participate in the objection redressal and if required the survey teams has to resurvey the land parcel.
- (xi) A register shall be maintained by Successful bidder to record and track the objections raised by the concerned owner.
- (xii) After the completion of survey, the survey team has to submit the completion report to Procuring Entity.

#### **5.2.3.3 Conduct public interaction session**

(1) The Bidders are required to conduct public interaction sessions along with the competent department officials to refine the database as well as to resolve issues to the extent possible. Bidders are required to bear all the cost incurred in conducting the public

interaction sessions.

(2) The comfortable dates for conducting the Public Interaction Sessions will have to be decided in discussion with the department.

(3) These dates decided are required to be in-line with the detailed project plan submitted by the Bidder without affecting overall progress of the project in terms of meeting the deadlines.

(4) At least 15 days prior notice need to be given to the owners before conducting the public interaction sessions.

#### **5.2.3.4 Publicity**

Bidders are required to provide due publicity at their cost regarding the dates and targeted activities of the public interaction sessions. Multiple media shall be used to give publicity, which are expected to be most effective with respect to the target village. The following are some of the means, which are expected from the Bidders.

- Sticking information notices and banners at public places or places of public attention.
- Sticking information notices and banners at Government offices, where public interact.
- Distribution of leaflets among public.
- Announcement using megaphone and amplifier on a moving vehicle on road.
- All publicity shall be done in discussion with and written approval from the department.
- All expenses in providing publicity shall be borne by the respective Bidder.

#### **5.2.3.5 Members required**

Public representative, revenue officers and other officers nominated by government and team members of Bidder are required to be present during the complete course of the public interaction sessions i.e Village Level Gram Sabha.

- Competent authority for certification and his staff.
- Representatives from the Bidder for public interactions (Good to excellent

knowledge of speaking, reading and writing in Hindi is a must among the field staff)

- Survey Team members of the Bidder for conducting required resurvey, if necessary.
- GIS Data Team members of the Bidder for adjudication of data and for operating the computer to explain the digital data to owner, neighbor and to the department officer.

#### **5.2.3.6 Field camp office**

(i) The public interaction session shall be conducted at the field camp office established by the Bidder at the village. Department will put all efforts to assist the Bidder in providing space in a government building like school, panchayat office etc. to set up the temporary office, if a suitable space is available. Only space shall be provided by the department. If a suitable space is not provided by the department, the Bidder will have to visit the respective villages from their Project Office established at Tehsil Headquarters at their own cost along with the necessary infrastructure as per the need and requirement for Public Interaction sessions.

(ii) The approval of Village Level Conformance Statement shall be carried out during the public interaction sessions by the Competent Govt. Authority as per acts and provisions stated under Government of Rajasthan Land Revenue Act and its subsequent amendments, presently one of those is by Gr.2, no. F7(1)Raj/2/2012 dated 6.1.2012 and many more to follow time to time.

(iii) For parcels wherein owners have no disagreement to the newly created data, the information shall be noted in the **Register of "Certification for No Objection"**. For Parcels wherein owners have disputes even after explanation from the competent authority, the information shall be noted in the "Disputed Register" and these cases shall be settled as per acts and provisions made under Rajasthan Land Revenue Act. The detailed process is as under:

### **5.2.3.7 Register of certification for No Objection**

(i) The department shall keep a "Register of Certification for No Objection" against each parcel.

(ii) The Bidders are required to prepare and supply the "Register of Certification for No Objection" to the department to be used for certification by the department at Bidder's cost. The register shall be kept and updated in hardcopy as well as softcopy format. The hardcopy shall be in custody with the department. The softcopy shall be in custody with the Bidder. The Bidders are required to update the softcopy as per the updates to the hardcopy, whenever and wherever applicable. Wherever signatures/thumb impression is taken in hardcopy, the Bidders are required to take digital thumb impression of the same person.

(iii) The following shall be the contents of the "Register of Certification for No Objection":

- Location details (District, Tehsil, RI Circle, Patwar Circle, Village)
- Venue, Date and time of certification
- Reference New Parcel Number
- Reference Khasra (Old Parcel Number)
- Details of owner
- Signature/thumb impression of the following persons on certification for No Objection.
  - o Competent Authority from the department
  - o Owner / Representative
  - o Neighbors, if applicable; witness otherwise
- Remarks

(iv) Competent departmental officer shall certify the parcel against "No Objection" in the following cases:

- (a) Owner/representative is present in the public interaction session and expressed his agreement on the map supplied to him.
- (b) Owner/ representative is not present in the public interaction session

but approved by village level committee/ gram sabha.

#### **5.2.3.8 SURVEY OF GOVERNMENT LANDS**

This section describes the procedure that must be followed for the survey of Government lands

- a) The village wise list of Government /community lands with area and the list of private lands adjoining the government lands shall be prepared by the successful bidder.
- b) If the concerned government officials are unable to identify the boundaries of the government land as per records or no record is available pertaining to those government land parcels/properties, the boundaries of the adjoining land parcels/properties should be fixed first and after fixing the boundaries of all the adjoining land parcels/properties, the government land parcels/properties should be worked out.
- c) Reconcile the area so worked out with the related records.
- d) The land parcel map pertaining to the government land parcels shall be handed over to concerned government officer or to the Tehsildar who shall record the objections if any.

#### **5.2.3.9 Convincing the issue raised person by explaining**

- The Bidder shall assist the department in convincing the person raised issue by explaining the reasons for differences. This could be:
  - Explanation of minor variations in area due to different methods of measurement
  - Explanation of surface area and projected 2D area to convince differences in area
  - Explanation of encroachment done by the owner and convincing him on his original boundaries
  - Explanation and convincing the neighbor for his original boundaries, if encroachment is done by the neighbor to the owner's (person raised issue) parcel.
- This exercise has to be completed on the same day of Public Interaction Session

#### **5.2.3.10 Convincing the issue raised at the time of Re Survey by land owners.**

- The Bidders are required to perform **resurvey in presence of the owner,** neighbor (if applicable) and the department representatives, if the person raised the complaint or the neighbor involved in the dispute are not convinced by explanation.
- This exercise has to be completed on the same day of Public Interaction Session

If the owner/neighbor is not convinced by the solution provided by the department in assistance by the Bidder, the issue shall be referred to be recorded in the **"Disputed Register"**.

#### **5.2.3.11 Disputed register**

The following minimum details shall be recorded in the disputed register

- Location details (District, Tehsil, RI Circle, PatwariHalka, Village)
- Venue, Date and time
- Details of owner
- Details of person raising issue (Owner or owner's representative)
- Reference New Parcel Number
- Reference Khasra (Old Parcel Number)
- Details of complaint in detail. Provide maximum information.
- Recommended action for resolution
- Space for inserting solution by competent authority including space to detail the multiple sessions, if applicable
- Date of resolution on agreement
- Signature/thumb impression of the following persons on agreement.
  - oCompetent Authority
  - oAll parties involved in the issue
  - oBidder Representative



The Bidders are required to prepare and supply the "Disputed Register" to the department to be used for certification by the department at Bidder's cost. The register shall be kept and updated in hardcopy as well as softcopy format. The hardcopy shall be in custody with the department. The softcopy shall be in custody with the Bidder. The Bidders are required to update the softcopy as per the updates to the hardcopy, whenever and wherever applicable. Wherever signatures/thumb impression is taken in hardcopy, the Bidders are required to take digital thumb impression of the same person.

**5.2.3.12 Preparation of second land parcel map print out and ownership print**

1. After getting no objection from parcel owners
2. And/or convincing owner having some objection, by showing records or re measuring area of parcel
3. Creation of new line of parcel division

Second land parcel map and table print are generated and process is repeated for third time also (if required) till final land parcel map prints for entire village and owner wise ownership table is finalized and printed.

**All the above process will be carried in accordance with the acts and provisions stated under Government of Rajasthan Land Revenue Act and its subsequent amendments, presently one of those is by Gr.2, no. F7(1)Raj/2/2012 dated 6.1.2012 and many more to follow time to time during the project implementation, details of which will simultaneously provided to the successful Bidders.**

**5.2.3.13 Promulgation of survey & Land Records**

- a) As soon as disposal of objections is completed a final notification under relevant rules and regulations will be published completing the process of survey.
- b) The village land parcel register will be updated by the Bidder as per objection disposal information received from the adjudication team.
- c) Bidder will print final guarantee patta (on good quality A4 paper along with field sketch and field book ) for all Accounts/ Khata's in village after updating khata numbers with new unique khata numbers.

- d) Bidder will prepare final Record of Right register for each village format and template will be provided to Bidder.
- e) The final information should be taken to data centre established at the state level/district level to generate all deliverables.

#### **5.2.3.14 VERIFICATION AND ACCEPTANCE BY PROCURING ENTITY**

The bidder will have to support the department for performing the verification of the deliveries made by him. The following sections elaborate the quality requirement, verification and acceptance criteria by the department.

#### **5.2.3.15 Completeness and Correctness of Attribute Data**

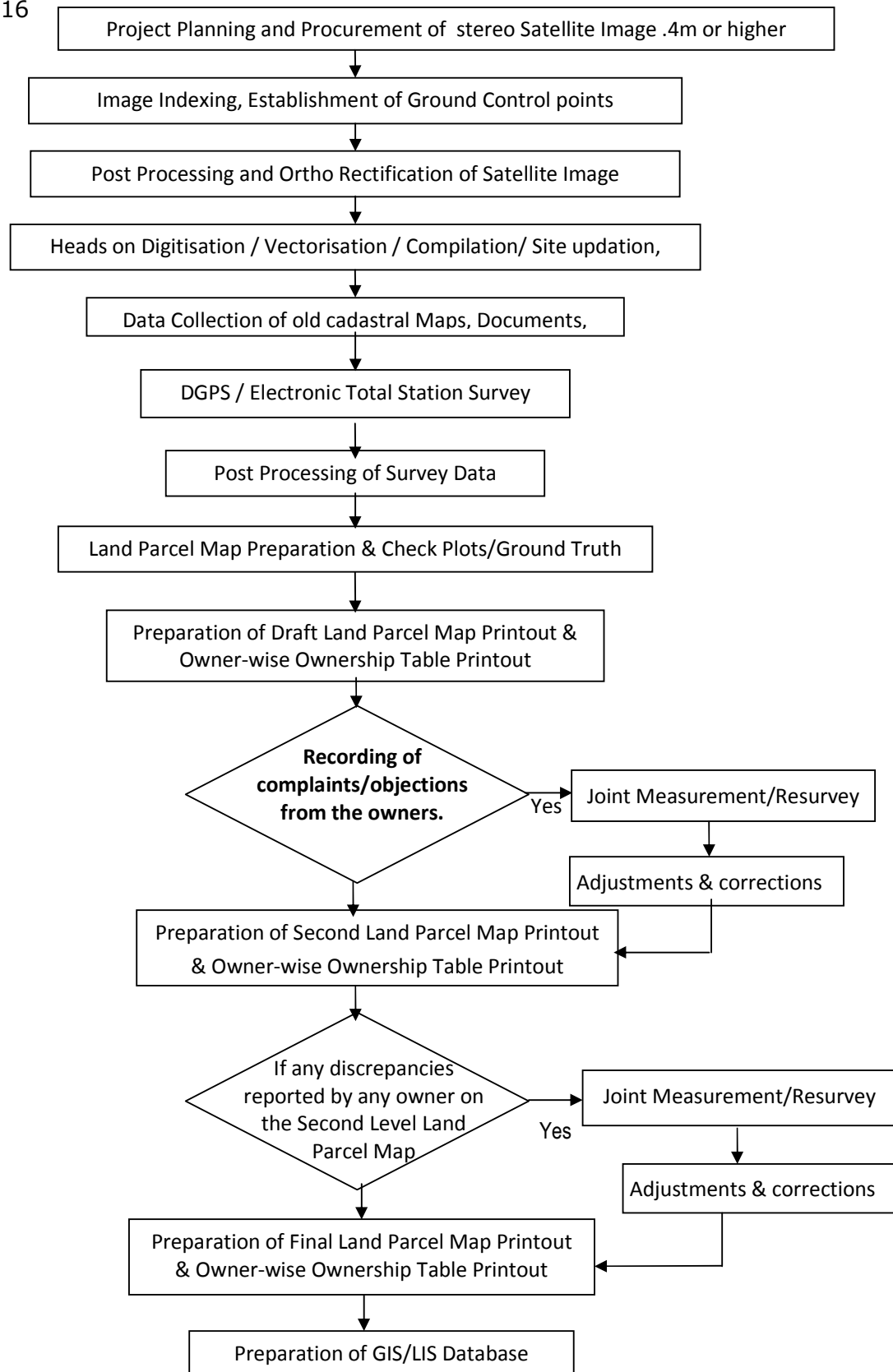
The attributes shall be checked by the department in the following sequence

- The respective Surveyor/SI and/or Patwari/LRI shall carry out 100% checking of the spatial and technical data entered.
- The respective ARO/Tehsildar shall carry out 30% checking of the data entered
- The respective SDO/ACM or an officer of the equivalent rank shall carry out 5% checking of the data entered
- The respective ALRO/DLRO shall carry out 2% checking of the data entered
- The Commissioner/Additional Commissioner shall perform sample check on any submission to their satisfaction of the data entered.
- For Monitoring and Review of the project, one **Monthly Meeting at District Level: Collector with Bidder** and **One Bi-Monthly Meeting: with Settlement Commissioner** for better coordination with Bidder and local revenue staff.

If the above mentioned acceptance criteria is not met, the data for the whole village may be rejected by the department and the Bidder will have to correct the data at the risk and cost of the Bidder and request the department for re-checking.

# **FLOWCHART**

5.2.3.16



#### **5.2.3.17 Adherence to general quality requirements**

- 100% adherence to the list of feature layers and feature layer specifications as per the agreed database schema are to be met
- 100% adherence to the topological correctness as required
- 100% adherence to the logical interpretation of features

#### **5.2.3.18 Method of verification and acceptance of delivery**

- Adherence to feature layer lists and layer specifications shall be checked by the department using automated methods
- Adherence to topology shall be checked by the department using automated methods
- 100% checks on the parcels and random checks on all other layers for interpretational correctness shall be done by the department
- 100% checks on the parcel data base
- Data submitted will be validated within 2 weeks by Procuring Entity and necessary feedback will be provided to the bidder. If the bidder doesn't receive any feedback within 2 weeks, than it will be assumed that data deemed accepted by Procuring Entity.

#### **5.2.3.19 TRAINING**

On site Practical Training (and refresher training if required) has to be provided by the Bidders to the District level teams (Approx. 150 persons per District in batches of 25) of Procuring Entity. Training should focus on following:

- Use and operation of ETS/DGPS machines in survey operations
- Process and procedure to be followed in Survey
- Other area as required by Procuring Entity and communicated to successful bidder

Again a second training should be provided near the project completion date to selected group of government employees on following lines:

- Modify the Digital Map
- Add & delete land parcel
- Print at any scale

Query based analysis of land parcels

#### **5.2.3.20 Quality Check**

Quality check for Grid tiles, Image tiles, GCP locations, Satellite image analysis, Geo-referencing of image, Digitized maps, Rectangular Triangulation DEM generation, Ortho rectification, Land parcel delineation, Field attribute linking and other will be done by designated nominees at respective stages and will be conveyed successive bidder during course of Project progress.

#### **Schedule IV**

##### **5.2.4 Project Management progress updation module**

1. Department proposes to develop a Project Management module, along with other activities it is proposed to add **progress updation activity**, under which Web based Bidder will have to update his progress weekly on this module, which will be monitored centrally at Procuring Entity's office.
  
2. Though the project is comprised of three schedules but work will be allotted district wise with all schedule. The major component of the project is – (i) Monumentation and GCP collections (ii) DEM, ortho rectification and delineation of land parcels. First activity will start first and after completion of monumentation, satellite data collection will be arranged phase wise, such that second activity will start on receipt of fresh stereo data. Sample areas for both the activities will be given for trial, on successful completion of which confirm order will be issued. Time period for the trial activity for **(a) Monumentation and GCP observations will be one month counted from the date of issue work order, (b) similarly for second activity (land parcel mapping and finalisation including generation of draft land parcel and finalisation. It will be one month (cases of legal complicity parcels will be excluded). Failure at any stage may lead the bidder to withdrawal of offer.**

### **5.3. ROLES & RESPONSIBILITIES**

The roles and responsibilities of the various parties involved in the Enrolment process are defined below.

#### **5.3.1 RESPONSIBILITIES OF PROCURING ENTITY**

The role of Procuring Entity in the successful implementation of the project includes discharging the following responsibilities.

- I. Review and approve implementation plan submitted by the bidder for the allotted area.
- II. Assist the successful bidder in framing required grids on maps.
- III. Approve Iconic, sub iconic, Primary, Secondary and tertiary GCP locations on ground proposed by the bidder prepared by him, after studying high resolution satellite imagery (archive data provided by Procuring Entity) and preliminary ground survey for the allotted area.
- IV. Liaison between the different stakeholders of the project and ensure that all the participating departments/agencies take active part in the project
- V. Issuing of Government Orders, circulars, instructions, notifications etc., to effect changes to existing policies, framing of new policies, and such other matters as may be necessary from time to time.
- VI. Constituting a Project Management Team to monitor and manage day to day activities of the Bidder and issue necessary instructions if required.
- VII. Constituting a Project Evaluation Committee to evaluate the performance of the Bidder and to take further decisions thereon.
- VIII. Conduct regular project review meetings to monitor timely implementation of project work.
- IX. Deploying the sufficient number of Government staff for assisting and monitoring the Bidder during the Survey and record updation activities.
- X. Identifying and nominating personnel for accepting the deliverables
- XI. Popularize land resurvey project through a media plan for creating citizen awareness.
- XII. Approve the field survey plan proposed by the successful bidder for the allotted area.

- XIII. Assist the Bidder during the survey/resurvey and Updation of Land Records by providing the necessary Government support.
- XIV. Co-ordinate with the participating departments involved in the land re-survey project.
- XV. Co-ordinate and supervise database creation work by bidders in edge matching with adjoining areas with an object to create seamless data. In case of any dispute decision of Procuring Entity will be final.
- XVI. Monitoring and review of the survey and land Record preparation.
- XVII. Finalization of the formats for the deliverables/outputs
- XVIII. Help the bidder in organizing training Programmes and change management programs.
- XIX. All other necessary support to all successful bidders during the course of project so as to run in smooth way.

#### **5.3.2 RESPONSIBILITIES OF BIDDER**

The following are the roles and responsibilities of the survey agency:

- I. Preparing detailed project plan Format and submit for approval.
- II. Establishing all kinds of ground control point network and get it approved from Procuring Entity, pre and post implementation stage.
- III. Setting up of infrastructure for processing of HRSI/survey/resurvey data analysis/map preparation.
- IV. Prepare the field survey/re-survey Plan involving all types of GCP locations, get it approved and intimate work progress regularly and also through departmental website, link for which will be provided.
- V. Conduct the field survey with Ground Reality and other requirements.
- VI. Deploying the required infrastructure and skilled & experienced resources, including workstations, required software, laptops, printers, scanners, plotters, connectivity, experienced manpower etc.
- VII. The Bidder should have a Local Support Office at Jaipur. If the bidder, at the time of bidding, does not have a local support office at Jaipur then he should submit an undertaking on his letter-head regarding establishment of same within one month of issuance of work order (if awarded the contract).
- VIII. The successful bidders are required to establish at district level, Project Office at District and Sub Office at Tehsil as decided by the Procuring

Entity, if required.

- IX. Prepare, the final WGS84 Co-ordinate based cadastral maps (land parcels), land re-survey Geo database and updated land record and Settlement operations as per state Government prevailing acts and rules.
- X. Edge matching with village/tehsil/district boundaries with adjoining districts, irrespective of whether those are allotted to him or other bidder, so as to create seamless data base for entire state.
- XI. Creation of non-spatial database, relating to the ownership particulars of each parcel of land, land use etc.
- XII. The Bidder will not be doing any statutory activity.
- XIII. Quality check of the all the deliverables before submitting to the Procuring Entity
- XIV. Provide user training at all levels and prepare and issue supporting documentation such as User Manuals, Maintenance Manuals, etc.
- XV. Liaison with other departments/agencies like Survey of India, Forest department and other land owning departments State Government to accomplish the commissioning the project as per the terms of the contract.
- XVI. Perform all other works as per requirement of scope of work of this Bid document.
- XVII. At any time during or after this project, data including all final deliverables, all field readings, all intermediate data shall belong to the SCR & CEO, RBAAS, Govt. of Rajasthan any misuse or transfer to third party without prior approval found will be a criminal offence and shall be dealt as per law.



### 5.3.3 DELIVERABLES & TIME SCHEDULE

#### 5.3.3.1 DELIVERABLES

The output of the entire exercise shall be as follows:

- I. Bidder shall submit hard and soft copy of the address, description and coordinates etc. of all kinds of GCP after establishing the same.
- II. Tehsil and District map on A0 sheet with observation duration (time and date), coordinates and type of GCP
- III. Geodetic network with co-ordinates and sketch of the control points showing their description and location on soft and hard copies for awarded district and photographs of GCP.
- IV. Accurate geo-referenced digital map using established control survey network around existing Survey of India permanent reference points.
- V. Geometrical location and associated attributes in Open file format of shape file (.shp) with all required associated files.
- VI. Spatial and non spatial data dictionary with feature codes, feature type (points ,line and polygon)
- VII. Feature description and symbols (As per NLRMP guidelines)
- VIII. UNICODE- character encoding for each and every alphabet of all the languages. The most commonly used encodings are UTF-8 (Unicode Transformation Format) and UTF-16 should be the character encoding.
- IX. Seamlessly mosaiced tehsil digital database with a provision to show various layers of various topographical details in GIS Software.
- X. Edge-matching with the adjacent tehsils/districts, if digital database pertaining to the adjacent tehsil/districts already exists or whenever such data is available.
- XI. Integration of spatial data with the non-spatial database.
- XII. Land registers in the prescribed pro-forma and maps (Soft copy along with one .pdf is must for all deliverables )–
  - a) Chalta Mauka Survey Report: 1 copy
  - b) Draft Land Parcel Notice: 2 copy
  - c) Raw files of ETS and DGPS

- d) Draft Village map (Scale 1:4000, Superimposed on old scanned/digitized map, Size 30"x36"): 1 Copy for verification and attestation as per format with .shp file
  - Superimposition of old scanned/digitized village map on the final resurveyed map. The color coding needs to be done as per following guidelines (colour coding may be changed by Procuring Entity at any time during project):
    - Boundaries and survey no. of new map – blue
    - Boundaries and survey no. of old map – black
    - Chalta No. - Green
    - Background – White
- e) Khata RakbaKamibeshiTulnatmakPatra Register (Area deviation register stating reasons for deviation) : 1 copy
- f) Summary report of area difference and final area : 1 copy
- g) Draft Khasra Survey Register : 1 copy
- h) Parcha Notice with map & field book : 3 copies
- i) Final Village Map (Scale 1:4000, Standard Paper Sheet, Size 30"x36"): : 4 copies in format provided (with legends, GCP etc. as per format agreed) with .shp file
  - Digitized copies of the Village maps showing features like Survey No. , Name, Chalta No. can also be marked on the digitized copies of village maps as it will provide linkage/reference to the old survey Nos.
  - Sheet wise as well as complete mosaic map of village / Tehsil/District/Zone/State.
  - Tehsil maps, village maps and Land Parcel Maps with coordinates.
- j) Khasra-wise field measurement book
- k) Final MisalBandobast Register (Final RoR register, Hard binded register as per format provided by Procuring Entity) : 3 copies
- l) Encroachment Register with map: 1 Copy
- m)Objection Register : 1 Copy
- n) Disputed land details register : 1 Copy

- o) Rent rate and soil classification register with map : 1 Copy
- p) Operational mutation register : 1 Copy
- q) Meeting proceeding register : 1 Copy
- r) Inspection Register : 1 Copy
- s) Village boundary mark register with map (map in pdf only)
- t) All original record and documents prepared during and record preparation process.

**Note: All the records will be in Hindi in Unicode**

- XIII. Correlation statement with correlation sketch showing correlation of every old survey number to the corresponding new LPM number. List of coordinates of all the points by which the land parcel would be determined including topo details. Every such point shall be given a unique number as prescribed. The correlation of the new LPM no. should be done with the Jamabandi and not the old survey no. as the Jamabandi shows the sub-division if any.
- XIV. Specification of equipment used for generating data
- XV. The boundaries of parcels surveyed shall be downloaded from the TS and linked with the attributes data collected, in the GIS format so as to create the DTDB (Digital Topographic Database). The final plotting and soft copy DTDB of the land parcels and other topographic details shall be generated from the TS data and associated software by the survey agency. Each polygon should have a unique Personnel identification No (PIN) as per the coding scheme indicated below. Unique PIN will be form by 11/12 characters. 12/13 digit code identify a parcel (6 digit village MDDS e-governance code (available on <http://censusindia.gov.in>) & 5/6 digit for land parcel)
- XVI. Bidder needs to submit following reports also:
  - a) Khata wise soil classification report.
  - b) Length of roads (kutchcha, pakka), rail tracks etc.
  - c) Abadi/Non-abadi area details.
  - d) Irrigated/non-irrigated land details.

- e) List of Coordinate Control Points.
- f) Field Measurement Book (FMB).
- g) Area details of kabristan/shamshan/devasthan etc.
- h) Village wise report on land use.
- i) Ownership category wise land details (Katedar/gair-khatedar forest, Charagah, Government Land, Agriculture and Non Agriculture land etc.)
- j) Map (.pdf) for registration department with land classification as per DLC rates and sorted list of land parcels according to land parcel numbers

**Note:** The draft of specified formats for graphical records, see – Annexure 4. Other formats not provided in Annexure-4 will be provided by Procuring Entity to Bidder.

#### 5.3.3.2 Other Deliverable Requirements

- a) The QC forms duly filled in should be accompanied with every submission of digital data in CD/Soft media.
- b) The names of features from field verification report need to be incorporated in the digital data. The job is treated as completed only after it is examined and final corrections carried out.
- c) The map projection and coordinates of the control points are to be in UTM Projection and WGS84 datum and MSL datum.
- d) Land parcels shall be oriented to north
- e) All data products should be handled carefully to avoid any loss or damage. In case of any damage / loss, the Bidder stands for the responsibility of replacing fully.
- f) The use of Open standards is mandatory for data sharing and interoperability among different systems.
- g) The digital data delivery will be in Four formats. (.DXF, .DWG, .SHP and .DGN)
  - a) .SHP file with all other associated files (.dbf & .shx)
  - b) .shp file will contain only polylines, points and text in their thematic layer and color.
  - c) .shp content should be the same as in case of DXF except the symbology assigned and hatch pattern.

- d) First submission shall be the .DXF, which will be checked digitally for the quality. On acceptance of the same, .DWG files should be submitted.
  - e) Prepare separate tables for Print and Line features.
  - f) According to coding of features class, preparing Point features, Point measurement, Point code, Point symbol, Point number, Point unique ID, Point longitude (UTM and Geodetic), Grid line (major and minor) according to thematic layer.
- h) Verification of submissions
- a) The Bidder has to enforce good quality control measures to meet the requirements of the Procuring Entity in order to finally deliver a quality product, satisfying the content, accuracy and cartographic presentation of the maps as specified.
  - b) The finally submitted village maps will be sample checked. More than 20 errors in a .DXF delivery may lead to complete rejection of the entire submission.
  - c) Similarly, in case of .DWG files submitted sheet wise should have all layers properly named as specified. More than 5 errors in a sheet may lead to the rejection of the sheet.
  - i) The specification / guidelines/ processes may be revised from time to time and the same will be given to the Bidder shall therefore make sure that the revised specification / guidelines are followed strictly thereon.
  - j) Bidder shall deploy a simple web site or a suitable tool to publish summarized view of the project progress and status. This shall be available on line and shall be accessible to all the stake holders. However this shall not be accessible to the public domain
  - k) Line: Line measurement, Line code, Line style, Line color, Line number, Line veering, Longitudes of First and Last nodes of Line, Line distance, Line type.
  - l) Polygon: Number of Lines, Number of Nodes, Field book, Enclosed area, RoRares, Land classification, Khata number, Khasra number, Name of projection, Title, any other attribute.

Symbology: Symbology table with coding and features.

**5.3.3.3 Indicative Milestones and Time schedule**

Milestone		Name of Zone									
T0 = Date of Work Order		Ajmer	Bharatpur	Bikaner A	Bikaner B	Jaipur	Jodhpur A	Jodhpur B	Jodhpur C	Kota	Udaipur
<b>S. No</b>	<b>Issuance of work order</b>	T0	T0	T0	T0	T0	T0	T0	T0	T0	T0
<b>1.</b>	<b>Signing of Contract</b>	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks	T0+2 Weeks
<b>2.</b>	<b>Deployment of Project Management Team and Core Technical Team</b>	T0+4 weeks	T0+4 weeks	T0+4 weeks	T0+4 weeks	T0+4 weeks	T0+4 weeks	T0+4 week	T0+4 weeks	T0+4 weeks	T0+4 week
<b>3.</b>	<b>Submission of Detailed Project Plan</b>	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks	T0+4 Weeks
<b>4.</b>	<b>Identification of Ground control Network Locations with help of Procuring Entity/district administration</b>	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks

Section V Procuring Entity's Requirements

5.	<b>Submission of detailed data model</b>	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks	T0+8 Weeks
6.	<b>Establishment of Ground control Network on field and Identification of Ground control Network Locations with help of Procuring Entity/ district administration</b>  <b>Iconic and Sub iconic : 1 Month</b>  <b>Primary : 3 Month</b>  <b>Secondary 3 Month</b>  <b>TertiaryGCP:4 Month</b>	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks	T0+60 weeks
7.	<b>Completion of Survey/ Creation of Land Survey spatial database for Tehsil &amp; all deliverables:</b>	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks	T0+234 Weeks

Section V Procuring Entity's Requirements

<p><b>Image Processing/ Ortho rectification and ground reality draft LPM: 104 week</b></p> <p><b>Superimposition on cadastral map, draft notice and promulgation:</b></p> <p><b>78 weeks</b></p> <p><b>Final Notice and record preparation :</b></p> <p><b>26 weeks</b></p> <p><b>Record handover to Procuring Entity :</b></p> <p><b>26 weeks</b></p>											
--	--	--	--	--	--	--	--	--	--	--	--

- Note:** 1. Time for activity seven will commence from the date of receipt of stereo HRSI data by bidder from Procuring Entity.
2. Delay in achievement of milestones as defined in table above will attract penalties as detailed in the Bid document (GCC 5.8). However, on justified grounds extension provision may be worked out mutually with Bidder and Procuring Entity.



**5.3.3.4 TERMS OF PAYMENT**

<b>Sr. No.</b>	<b>Milestone</b>	<b>% of Payment that can be claimed</b>
1.	Signing of Contract and submission of inception Report	<b>No Payment</b>
2.	Deployment of Project Management Team and Core Technical Team	<b>No Payment</b>
3.	Submission of Detailed Project Plan	<b>No Payment</b>
4.	Identification of Ground control Network Locations	<b>2% of work order value</b>
5.	Submission of detailed data model	<b>No Payment</b>
6.	Establishment of Ground control Network on field (up to tertiary with Auxiliary GCP network)  Iconic & Primary : (2%)  subiconic & secondary : (2%)  Tertiary : (4%)	<b>8% of work order value</b>
7.	Field Survey Operations , Image Processing/ Ortho rectification and ground reality draft LPM	<b>20% of work order value</b>
8.	Superimposition of cadastral map on HRSI digitized data, draft notice	<b>15% of work order value</b>
9.	Promulgation	<b>15% of work order value</b>
10.	Final Notice and record preparation	<b>15% of work order value</b>
11.	Record handover to Procuring Entity and required trainings.	<b>15% of work order value</b>
12.	After successful completion of Project closure notification after 6 Month	<b>10% of work order value</b>

Note: Bidder can raise ILR circle wise bill as mentioned above, after completion and verification of activity by competent authority.

**Section VI A: General Conditions of Contract****(General Provisions)**

<b>6A.1. Interpretation</b>			
<b>S.no</b>	<b>Particulars</b>	<b>Clause</b>	<b>Description</b>
	<b>Relationship Between the Parties</b>	1.1	Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the Procuring Entity and the Bidder. The Bidder, subject to this Contract, has complete charge of Experts, Personnel if any, executing the Works and shall be fully responsible for the Works executed by them or on their behalf here under.
	<b>Law Governing the Contract</b>	1.2	This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.
	<b>Language</b>	1.3	This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
	<b>Notices, Communications</b>	1.4	Any communication, notice, request or consent required or permitted to be given or made pursuant to this Contract shall be In Writing. Any such notice, request or consent shall be deemed to have been given or made when delivered personally, posted, e-mailed, faxed to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in bid data sheet.
		1.5	A Party may change its address for notice hereunder by giving the other Party a notice In Writing of such change to the address specified in bid data

			sheet.
	<b>Location</b>	1.6	Resident office at Jaipur and at that location in the field within the State, when required as when as requirement by the Procuring Entity in the field within the state.
	<b>Authority of Member in Charge or Team Leader</b>	1.7	In case the Bidder consists of a Joint Venture the Members hereby authorise the entity specified in the bid document to act on their behalf in exercising all the Bidder's rights and obligations towards the Procuring Entity under this Contract, including without limitation the receiving of instructions and payments in the joint name from the Procuring Entity.
	<b>Authorized Representatives</b>	1.8	Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the Procuring Entity or the Bidder may be taken or executed by the Authorized Representatives specified in the bid document.
<b>6A.2. Code of Integrity</b>			
	<b>Code of Integrity</b>	2.1	<p>It is required that bidders observe the highest standard of ethics during the procurement process and performance of the Contract. Therefore, The Bidder their personnel shall-</p> <ul style="list-style-type: none"> <li>a. not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or performance of the Contract or to otherwise influence the Procuring Entity;</li> <li>b. not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit</li> </ul>

			<p>or avoid an obligation in performance of the Contract;</p> <p>c. not indulge in any collusion, Bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process and performance of the Contract;</p> <p>d. not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process and performance of the Contract;</p> <p>e. not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process and performance of the Contract;</p> <p>f. not obstruct any investigation or audit of a procurement process and performance of the Contract;</p> <p>g. disclose conflict of interest, if any; and</p> <p>h. Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by state government and any other procuring Entity.</p>
	<b>Measures to be Taken On Breach Of Code of Integrity</b>	2.2	Breach of Code of Integrity by the Bidder, their personnel:- Without prejudice to the provisions of Chapter IV of the

			Rajasthan Transparency in Public Procurement Act, in case of any breach of the Code of Integrity by the Bidder, their personnel, the Procuring Entity may take appropriate action in accordance with the provisions of sub-section (3) of section 11 and section 46 of the said Act.
<b>6A.3 Commencement, Completion, Modification and Termination of Contract</b>			
	<b>Effectiveness of Contract</b>	3.1	This Contract shall come into force and effect on the date (the "Effective Date") on which the Procuring Entity issues to the Bidder the Letter of Acceptance of his Proposal. The notice to commence the Works, if issued separately, shall confirm that the effectiveness conditions, if any, listed in the bid document have been met.
	<b>Forfeiture of Performance Security</b>	3.2	<p>Performance Security amount in full or in part may be forfeited by the Procuring Entity in any of the following cases:-</p> <ol style="list-style-type: none"> <li>If the Bidder fails to commence the Works within the time period after signing of the agreement as specified by the Procuring Entity.</li> <li>If any of the terms and conditions of the Contract is breached.</li> <li>When the Bidder fails to execute the Contract satisfactorily.</li> <li>If the Bidder breaches any provision of the Code of Integrity prescribed in the Act and Chapter VI of the Rules and ITB clause 12.17.</li> <li>If the survey/Re-survey activity work of sample revenue villages will not match to the satisfaction of Procuring Entity work</li> </ol>

			<p>may be withdrawn and forfeit performance security.</p> <p>Notice of reasonable time will be given in case of forfeiture of Performance Security. The decision of the Procuring Entity in this regard shall be final.</p>
	<b>Termination of Contract for Failure to Become Effective</b>	3.3	<p>If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as specified in bid document, either Party may, by not less than twenty one (21) Days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect here to.</p>
	<b>Commencement of Works</b>	3.4	<p>1. The Bidder shall confirm availability of Key Experts and begin carrying out the Works not later than the number of Days after the Effective Date as specified in bid document.</p> <p>2. Within the awarded zone, successful bidder will start their work as per the approved work plan by Procuring Entity.</p>
	<b>Expiration of Contract</b>	3.5	<p>Unless terminated earlier, this Contract shall expire at the end of such time period after six months of completion of project.</p>
	<b>Entire Agreement</b>	3.6	<p>This Contract contains all covenants, stipulations and provisions agreed by the Parties as per RTTP Act and Rules.</p>
	<b>Modifications or Variations</b>	3.7	<p>Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the</p>

			scope of the Works, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.
		3.8	In cases of substantial modifications or variations, the prior written consent of the competent authority of the Procuring Entity will be required.
<b>6A.4 Force Majeure</b>			
	<b>Definition</b>	4.1	For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and subject to those requirements includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.
		4.2	Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Experts, or employees, nor (ii) any event which a diligent Party could reasonably have been expected both to take into account at the time of the conclusion of this Contract, and avoid or overcome in the carrying out of its obligations

			hereunder.
		4.3	Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.
	<b>No Breach of Contract Due to Force Majeure</b>	4.4	The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.
	<b>Measures to be Taken</b>	4.5	A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force Majeure.
		4.6	A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.
		4.7	Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.
		4.8	In the case of disagreement between the Parties as to the existence or extent of Force Majeure, the matter shall be settled through Dispute



			Resolution Mechanism.
	<b>Suspension</b>	4.9	The Procuring Entity may, by written notice of suspension to the Bidder, suspend all payments to the Bidder hereunder if the Bidder fails to perform any of its obligations under this Contract, including the carrying out of the Works, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Bidder to remedy such failure within a period not exceeding thirty (30) Days after receipt by the Bidder of such notice of suspension.
<b>6A.5 Termination</b>			
	<b>By the Procuring Entity</b>	<b>5.1</b>	<p>The Procuring Entity may terminate this Contract in case of the occurrence of any of the events specified in paragraphs mentioned below. In such an occurrence the Procuring Entity shall give a not less than thirty (30) <u>days'</u> written notice of termination to the Bidder in case of the events referred to in (a) through (d), sixty (60) <u>days'</u> in the case of the event referred to in (e), fourteen (14) <u>days'</u> in the case of the event referred to in (f) and (g), and five (5) <u>days'</u> in the case of the event referred to in (h),</p> <p>a. If the Bidder fails to remedy a failure in the performance of its obligations under the Contract, as specified in the notice of termination, within thirty(30) Days of receipt of such notice of termination or within such further period as the Procuring Entity may have subsequently approved In Writing.</p> <p>b. If the Bidder becomes (or, if the Bidder consists of more than one entity, if any of its Members become) insolvent or</p>

			<p>bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary.</p> <p>c. If the Bidder fails to comply with any final decision reached as a result of Dispute Resolution Mechanism or arbitration proceedings, where permissible.</p> <p>d. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Works for a period of not less than sixty (60) days.</p> <p>e. If the Procuring Entity, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.</p> <p>f. If the Bidder, in the judgment of the Procuring Entity, has breached any provision of the Code of Integrity as given in GCC Clause or engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for or in executing this Contract.</p> <p>g. If the Bidder submits to the Procuring Entity a false statement/document which has a material effect on the rights, obligations or interests of the Procuring Entity.</p> <p>h. If the Bidder fails to confirm availability of Key Experts as required.</p>
		5.2	Termination by the Procuring Entity due to failure of the Bidder to provide the required Works shall lead to the

			forfeiture of the Performance Security as per ITB and GCC Clause [Forfeiture of Performance Security].
	<b>By the Bidder</b>	5.3	<p>The Bidder may terminate this Contract, by not less than thirty (30) <u>days</u>' written notice to the Procuring Entity, in case of the occurrence of any of the events specified as under:</p> <ul style="list-style-type: none"> <li>• If the Procuring Entity fails to pay any money due to the Bidder pursuant to this Contract and not subject to dispute within sixty (60) Days after receiving written notice from the Bidder that such payment is overdue.</li> </ul>
	<b>Cessation of Rights and Obligations</b>	5.4	<p>Upon termination of this Contract pursuant to GCC Clauses hereof, or upon expiration of this Contract pursuant to GCC Clauses, all rights and obligations of the Parties hereunder shall cease, except:</p> <p>(i) such rights and obligations as may have accrued on the date of termination or expiration,</p> <p>(ii) the obligation of confidentiality set forth in GCC Clause,</p> <p>(iii) the Bidder's obligation to permit inspection, copying and auditing of their accounts and records by the Procuring Entity .</p> <p>(iv) Any right which a Party may have under the Applicable Law.</p>
	<b>Cessation of Works</b>	5.5	<p>Upon termination of this Contract by notice of either Party to the other pursuant to GCC Clause, the Bidder shall, immediately upon despatch or receipt of such notice, take all necessary steps to bring the Works to a close in a prompt and orderly manner and shall</p>

			make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Bidder, the Bidder shall proceed as provided, by GCC Clause.
	<b>Payment upon Termination</b>	5.6	Subject to the GCC Clause [Measures to be Taken on Breach of Code of Integrity], upon termination of this Contract, the Procuring Entity shall make the following payments to the Bidder: (a) payment for Works satisfactorily performed prior to the effective date of termination; and (b) in the case of termination pursuant to paragraphs (d) and (e) of GCC Clause 5.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of this Contract.
	<b>Disputes about Events of Termination</b>	5.7	If either Party disputes whether an event has occurred, such Party may, within forty-five (45) Days after receipt of notice of termination from the other Party, may take recourse to Dispute Resolution Mechanism, and in that case this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting award in accordance with the Dispute Resolution Mechanism or arbitration, where permissible.
	<b>Extension in Completion Period and Liquidated Damages</b>	5.8	If the Bidder considers at any time during the performance of the Contract that it is unable to meet the agreed dates and deadlines set forth for various deliverables due to occurrence of an event of Force Majeure or any other reasons, it may request in writing within 14 (Fourteen) days of the occurrence of cause of

			<p>hindrance to the Procuring Entity to extend the completion period of the Contract giving detailed reasons and justifications. The Procuring Entity, after considering the reasons and justifications, may extend the period set forth for completion of the contract with or without liquidated damages. The Procuring Entity, except in case of an event of Force Majeure or reasons beyond the control of the Bidder, shall be entitled to impose on the Bidder</p> <p>(a) Delay up to one fourth period of the prescribed period- 2.5%, (b) Delay exceeding one fourth but not exceeding half of the prescribed period- 5%, (c) Delay exceeding half but not exceeding three fourth of the prescribed period- 7.5%, (d) Delay exceeding three fourth of the prescribed period- 10% .</p> <p>However, the liquidated damages shall not exceed a total of 10% of the Contract amount.</p> <p>Note: Activity wise final Milestones and Time schedule district/tehsil wise will be conveyed at the time of work award.</p>
<b>6A.6 Obligations of the Bidder</b>			
	<b>Standard of Performance</b>	6.1	<p>The Bidder shall perform the Works and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, approved professionals, machinery, materials and methods. The Bidder shall always act, in respect of any matter relating</p>

			to this Contract or to the Works, as faithful adviser to the Procuring Entity, and shall at all times support and safeguard the Procuring Entity's legitimate interests. No decision regarding design or incidental thereto of the Bidder should cause any loss to the Procuring Entity. All designs, drawings and the estimates should provide optimum value to the Procuring Entity.
		6.2	The Bidder shall employ and provide such qualified and experienced Experts as are required to carry out the Works.
	<b>Law Governing Works</b>	6.3	The Bidder shall perform the Works in accordance with the Contract and the Applicable Law and shall take all practicable steps to ensure that any of its Experts, as well as the Personnel of the Bidder complies with the Applicable Law.
	<b>Conflict of Interests</b>	6.4	The Bidder shall hold the Procuring Entity's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.
	<b>Bidder Not to Benefit from Commissions, Discounts, etc</b>	6.5	The payment of the Bidder pursuant to GCC Clause shall constitute the Bidder's only payment in connection with this Contract and, the Bidder shall not accept for its own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract in the discharge of its obligations here under, and the Bidder shall use its best efforts to ensure that any, as well as the Experts/ Personnel, similarly shall not receive any such additional

			payment.
	<b>Bidder and Affiliates Not to be Otherwise Interested in Project</b>	6.6	The Bidder agrees that, during the term of this Contract and after its completion or termination, the Bidder and any entity affiliated with the Bidder, as well as any and any entity affiliated with such, shall be disqualified from Works resulting from or directly related to the Bidder's Works for the preparation or implementation of the project.
	<b>Prohibition of Conflicting Activities</b>	6.7	The Bidder shall not engage, and shall cause its Experts, Personnel as well as and their Personnel not to engage, either directly or indirectly, in any business or professional activities that would conflict with the activities assigned to them under this Contract.
		6.8	The Bidder has an obligation and shall ensure that its Experts shall have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the Procuring Entity, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Bidder or the termination of its Contract, in addition to any action which may be taken under the provisions of the Act and the Rules.
	<b>Confidentiality</b>	6.9	In addition to the provisions of Section 49 of the Act and Rule 77 of the Rules, except with the prior written consent of the Procuring Entity, the Bidder and the Experts or Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Works, nor shall the Bidder and the Experts or Personnel make public the recommendations formulated in

			the course of, or as a result of, the Works.
	<b>Liability of the Bidder</b>	6.10	Subject to additional provisions, if any, set forth in the SCC, the Bidder's liability under this Contract shall be provided by the Applicable Law.
	<b>Insurance to be Taken out by the Bidder</b>	6.11	The Bidder shall bear all insurance liabilities. Procuring entity will not liable for any loss and damages.
	<b>Reporting Obligations</b>	6.12	The Bidder shall submit to the Procuring Entity the reports and documents specified in Bid Document hereto, in the form, in number and within the time periods set forth in the said Appendix. Final reports shall be delivered in soft copy in addition to the hard copies specified in the said Appendix.
	<b>Proprietary Rights of the Procuring Entity in Reports and Records</b>	6.13	All reports and relevant data and information such as maps, drawings, diagrams, plans, databases, other documents and software, supporting records or material compiled or prepared by the Bidder for the Procuring Entity in the course of the Works shall be confidential and become and remain the absolute property of the Procuring Entity. The Bidder shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Procuring Entity, together with a detailed inventory thereof. The Bidder may retain a copy of such documents, data and/or software but shall not use the same for purposes unrelated to this Contract without prior written approval of the Procuring Entity.
<b>6A.7 Bidders' Experts, and Personnel</b>			
	<b>Description of Key Experts</b>	7.1	The title, agreed job description, minimum qualification and



			estimated period of engagement to carry out the Works of each of the Bidder's Key Experts are described in Bid Document.
	<b>Replacement of Key Experts</b>	7.2	Except as the Procuring Entity may otherwise agree in writing, no changes shall be made in the Key Experts.
		7.3	Notwithstanding the above, the substitution of Key Experts during Contract execution may be considered only based on the Bidder's written request and due to circumstances outside the reasonable control of the Bidder, including but not limited to death or medical incapacity. In such case, the Bidder shall forthwith provide as a replacement, a person of equivalent or better qualifications and experience.
	<b>Removal of Experts</b>	7.4	If the Procuring Entity finds that any of the Experts has committed serious misconduct or has been charged with having committed a criminal action, or shall the Procuring Entity determine that Bidder's Expert have engaged in corrupt, fraudulent, collusive, coercive or obstructive practice while performing the Works, the Bidder shall, at the Procuring Entity's written request, provide a replacement.
		7.5	In the event that any of Key Experts, is found by the Procuring Entity to be incompetent or incapable in discharging assigned duties, the Procuring Entity, specifying the grounds therefore, may request the Bidder to provide a replacement.
		7.6	Any replacement of the removed Experts shall possess better qualifications and experience and shall be acceptable to the Procuring Entity.

		7.7	The Bidder shall bear all costs arising out of or incidental to any removal and/or replacement of such Experts.
	<b>Resident Project Manager</b>	7.8	The Bidder shall ensure that at all times during the Bidder's performance of the Works a resident project manager at jaipur, acceptable to the Procuring Entity, shall take charge of the performance of such Works.
<b>6A.8 Obligations of the Procuring Entity</b>			
	<b>Assistance and Exemptions</b>	8.1	Assist the Bidder in obtaining work permits and such other documents as shall be necessary to enable the Bidder to perform the Works.
		8.2	Assist the Bidder in promptly obtaining, for the Experts and, if appropriate, their eligible dependents, all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in India while carrying out the Works under the Contract.
		8.3	Facilitate prompt clearance through customs of any property required for the Works and of the personal effects of the Experts, Personnel and their eligible dependents.
		8.4	Issue to officials, agents and representatives of the Government all such instructions and information as may be necessary or appropriate for the prompt and effective implementation of the Works.
		8.5	Assist the Bidder and the Experts employed by the Bidder for the Works in obtaining exemption from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity in India

			according to the applicable law in India.
	<b>Access to Project Site</b>	8.6	The Procuring Entity warrants that the Bidder shall have, free of charge, unimpeded access to project site in respect of which access is required for the performance of the Works.
	<b>Payment Obligation</b>	8.7	In consideration of the Works performed by the Bidder under this Contract, the Procuring Entity shall make such payments to the Bidder for the deliverables.
<b>6A.9 Payments to Bidder</b>			
	<b>Schedule of Payments</b>	9.1	The schedule of payments shall be as stated in the terms of payment in Bid Document.
	<b>Taxes and Duties</b>	9.2	The Bidder is responsible for meeting any and all tax liabilities arising out of the Contract.
	<b>Currency of Payment</b>	9.3	Any payment under this Contract shall be made in Indian Rupees only.
	<b>Mode of Billing and Payment</b>	9.4	The mode of billing and payments under this Contract shall be made as per terms of payment mention in Bid Document.
		9.5	<u>The Final Payment:</u> The final payment under this Clause shall be made only after the final report have been submitted by the Bidder and approved as satisfactory by the Procuring Entity. The Works shall then be deemed completed and finally accepted by the Procuring Entity. The last lump-sum instalment shall be deemed approved for payment by the Procuring Entity after six months of closure notification. Any amount, which the Procuring Entity has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract, shall be reimbursed by the Bidder to the Procuring Entity

			within thirty (30) Days after receipt by the Bidder of notice thereof. Any such claim by the Procuring Entity for reimbursement must be made within twelve (12) calendar months after receipt by the Procuring Entity of a final report and a final statement approved by the Procuring Entity in accordance with the above.
	<b>Good Faith</b>	9.6	The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realisation of the objectives of this Contract.
	<b>Incentive for performance</b>	9.7	The plan is under consideration to give incentive to bidder who completes the entire work before completion period subject to approval of State Government & DoLR.
<b>6A.10 Period of contract</b>			
	<b>Completion Period</b>	10.1	The contract/work period shall commence from the date of issue of work order and up to the till period (234 weeks) defined in deliverables and time schedule and completion of the project whichever is earlier.
<b>6A.11 Settlement of disputes</b>			
	<b>Settlement of Disputes</b>	11.1	<b>Dispute resolution shall be as per RTTP Act and Rules.</b>

## Section-VI B: Special Conditions of Contract

- 1) The procuring entity's full address is **Office of the CEO, RBAAS & Settlement Commissioner, Rajasthan, VimanBhawan, Gopalbari, Jaipur- 302001, Rajasthan.** Telephone No. with STD Code: 0141-2373904, Email address: scr-rj@nic.in
- 2) The Bidder is responsible for all contracted activities as defined in the Bid Document.
- 3) The bidder will abide by the Job safety measures prevalent in India and will free procuring entity from all demands or responsibilities arising from accidents or loss of life. The Bidder will pay all indemnities arising from such incidents and will not hold procuring entity responsible or obligated.
- 4) The Bidder will treat as confidential all data and information and will not reveal such information to any other party without the prior written permission of procuring entity.
- 5) Procuring entity or Authorised Officer will do the technical/administrative inspection as required; Bidder will provide all assistance to such officer to enable periodic technical/administrative/operational verification of the system.
- 6) The time period within which the contract must become effective after signing of the contract.
- 7) **The resident project manager is required to be present at Jaipur and local support office required at headquarters of districts/tehsils of relevant zone area.**
- 8) The payments shall be made as per terms of payment prescribed in bid document.
- 9) Bidders should maintain an objection register, a district register to resolve the issues in departmental forum. The competent authority officer from the department shall conduct hearing from the parties concerned in an issue.
- 10) Bidder should carry out Gram Sabha (public awareness camp) in the village before the commencement of survey work and the entire process should be explained in local language. Good knowledge of speaking, reading and writing of Hindi/local language for interaction with local person for rural conversion. The day wise survey schedule should also be

discussed and farmers concerned should be asked to remain present during field adjudication work.

- 11) The bidders are required to conduct public interaction sessions along with the competent department officials to hear the objection and if required, joint verification of individual land parcels needs to be carried out to satisfy the objector/occupant and required to bear all the cost incurred conducting the public interactions sessions.
- 12) The bidders are required to prepare/delivered a draft parcel map and final parcel map as per requirement mentioned in bid document.
- 13) The digitalised village cadastral maps are in local coordinates. The bidder will have to bring this to the projection system used in the project by geo-referencing. The ortho-rectified satellite image and the control point established as part of this project shall be used for geo-referencing the existing digital maps however if cadastral map of any village is not available in digitized form than Procuring Entity will provide original/scanned cadastral map or sheets of cadastral map for further activity.
- 14) Upon successful completion and acceptance of the data for the selected sample village, bidder shall be allowed to proceed with the work as per the specification and requirements stated in the bid document for remaining area of the zone.
- 15) Procuring Entity shall supply 0.40 m or higher, High Resolution Stereo Satellite Images (HRSI) to selected bidder for processing of images and generation of up-to-date base map using the latest hardware and software. Maps prepared using HRSI shall be used for field verification and re-survey of villages, adjudication process using ground survey method (using DGPS & ETS), preparation of land records and promulgation.
- 16) The selection of successful bidder method is QCBS (Quality-cum-Cost Based Selection) The decision of the evaluation committee will be final at any stage of in this regard.
- 17) The evaluation of Technical and Financial Bid shall be done by a Bid evaluation committee as constituted by Revenue Department, GOR

/Procuring Entity. The weights criteria of qualification of bidders in technical bid 70% and financial bid 30%.

- 18) Commercial bid will be opened of those bidders, who have obtained minimum mark of 60% in Technical bid as per evaluation criteria laid down in section III of Bid document.
- 19) Pre bid conference will be held on date 21-01-16 at 11:00 A.M.
- 20) The Technical and Financial bids are to be electronically submitted only on the website <http://eproc.rajasthan.gov.in>
- 21) Bidders submit monthly online progress report for evaluation process.
- 22) As soon as work will be awarded to a successful bidder
  1. Bidder shall start monumentation work of GCP in awarded area.
  2. As soon as the bidder will complete the monumentation work of one district Procuring Entity will procure HRSI of that district on earliest.
  3. The Bidder shall take on sample activity of survey/Re-survey of minimum two adjoining revenue villages to assess the accuracy and competence of working of bidder.
  4. After providing HRSI of sample revenue villages to bidder it is expected that bidder shall complete the Survey/Re-survey work of sample revenue villages within two months with all respect.
  5. After successful completion and satisfaction of Procuring Entity of the survey/Re-survey activities in these two sample revenue villages the bidder may proceed for further activity.
  6. If the survey/Re-survey activity work of sample revenue villages will not match to the satisfaction of Procuring Entity work may be withdrawn and forfeit performance security.
- 23) Within the awarded zone, successful bidder will start their work as per the approved work plan by Procuring Entity.
- 24) The plan is under consideration to give incentive to bidder who completes the entire work before completion period subject to approval of State Government & DoLR.
- 25) At any time during or after this project, data including all final deliverables, all field readings, all intermediate data shall belong to the SCR & CEO, RBAAS, Govt. of Rajasthan any misuse or transfer to third party without prior approval found will be a criminal offence and shall be dealt as per law.

- 26) Govt. of India and state Govt. though principally agreed to roll out NLRMP Programme in all 33 districts; however as per financial sanction received, work order for zones covering 11 districts (Banswara, Barmer, Bhilwara, Churu, Sriganganagar, Hanumangarh, Jaipur, Jhalawar, Jodhpur, Rajsamand and Tonk) of first phase will be awarded and proposed work will start from these 11 districts only. For rest of zones work order will be awarded or in remaining districts work will start after financial sanction received.



To be executed on Non-Judicial Stamp Paper of appropriate value

**SECTION VIC -**

**CONTRACT AGREEMENT**

(Text in brackets [ ] is optional; all notes should be deleted in final text)

This CONTRACT (hereinafter called the "Contract") is made the *[number of day]* day of the month of *[month]*, *[year]*, between, on the one hand, *CEO, RBAAS & Settlement Commissioner, Jaipur* (hereinafter called the "Procuring Entity") and, on the other hand, *[name of Bidder.....]* (hereinafter called the "Bidder").

*[Note: If the Bidder consist of more than one entity, the above should be partially amended to read as follows: "... (hereinafter called the "Procuring Entity") and, on the other hand, a joint venture of the following entities, each of which will be jointly and severally liable to the Procuring Entity for all the Bidder's obligations under this Contract, namely, [name of Bidder] and [name of Bidder] (hereinafter called the "Bidder").]*

WHEREAS:

(a) The Procuring Entity has requested the Bidder to Ground Control Network, Survey/Resurvey and Land Record Operations as defined in this Contract (herein after called the "Works")

(b) The Bidder, having presented to the Procuring Entity that it has the qualified professional skills, expertise and technical resources, has agreed to execute the Works on terms and conditions set forth in this Contract;

Now therefore the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract. This agreement shall prevail over all contract documents:

- (a) The General Conditions of Contract
- (b) The Special Conditions of Contract;
- (c) Procuring entity, Requirement (ToR/Scope of Work)
- (d) Appendices:
- (e) Letter of Acceptance
- (f) Completed Schedules

In the event of any inconsistency between the documents, the following order of precedence shall prevail: the Special Conditions of Contract; the General Conditions of Contract;

Any reference to this Contract shall include, where the context permits, a reference to its Appendices.

2. The mutual rights and obligations of the Procuring Entity and the Bidder shall be as set forth in the Contract, in particular:

(a) The Bidder shall carry out the Works in accordance with the provisions of the Contract; and

(b) The Procuring Entity shall make payments to the Bidder in accordance with the provisions of the Contract.

(c) The work shall commence on .....and be completed within a period of .....months.

IN WITNESS HEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first written above.

Witness 1                      FOR AND ON BEHALF OF THE BIDDER

Witness 2                      (Name)  
   (Designation)  
   (Address)

Witness 1                      FOR AND ON BEHALF OF THE PROCURING ENTITY

Witness 2                      (Name)  
   (Designation)  
   (Address)

*[Note: If the Bidder consists of more than one entity, all these entities should appear as signatories]*

**APPEALS**

**(see ITB clause 13.1)**

**Grievance Handling Procedure during Procurement Process**

**(1) Filing an appeal.-** If any Bidder or prospective Bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued there under, he may file an appeal to First or Second Appellate Authority, as the case may be, as may be designated for the purpose, within a period of ten days or such other period as may be specified in the pre-qualification documents, Bidder registration documents or Bidding documents, as the case may be, from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:

Provided that after the declaration of a Bidder as successful in terms of section 27 of the Act, the appeal may be filed only by a Bidder who has participated in procurement proceedings:

Provided further that in case a Procuring Entity evaluates the technical Bid before the opening of the financial Bid, an appeal related to the matter of financial Bid may be filed only by a Bidder whose technical Bid is found to be acceptable.

**(2) Appeal not to lie in certain cases.-** No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:-

- (a) determination of need of procurement;
- (b) provisions limiting participation of Bidders in the Bid process;
- (c) the decision of whether or not to enter into negotiations;
- (d) cancellation of a procurement process;
- (e) applicability of the provisions of confidentiality.

**(3) Form of Appeal.-**

(a) An appeal under sub-section (1) or (4) of section 38 shall be in the annexed Form along with as many copies as there are respondents in the appeal.

(b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.

(c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorised representative.

**(4) Fee for filing appeal.-**

(a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.

(b) The fee shall be paid in the form of bank demand draft or banker's Cheque of a Scheduled Bank payable in the name of Appellate Authority concerned.

**(5) Procedure for disposal of appeals.-**

(a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.

(b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-

(i) Hear all the parties to appeal present before him; and

(ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.

(c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.

(d) The order passed under sub-clause (c) above shall be placed on the State Public Procurement Portal.

**FORM No. 1**

[See rule 83]

**Memorandum of Appeal under the Rajasthan Transparency in Public  
Procurement Act, 2012**

Appeal No \_\_\_\_\_ of \_\_\_\_\_

Before the \_\_\_\_\_ (First / Second Appellate Authority)

1. Particulars of appellant:
  - i. Name of the first appellant: Principal Secretary /Secretary,  
Revenue Department.
  - ii. Official address: Secretariat Jaipur.
  - iii. Residential address:
  - iv. Name of Second Appellant: Principal Secretary, Finance  
Department, Secretariat Jaipur.
2. Name and address of the respondent(s):
3. Number and date of the order appealed against and name and designation of the officer / authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:
4. If the Appellant proposes to be represented by a representative, the name and postal address of the representative:
5. Number of affidavits and documents enclosed with the appeal:
6. Grounds of appeal: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(Supported by an affidavit)
7. Prayer:  
\_\_\_\_\_  
\_\_\_\_\_

Place \_\_\_\_\_

Date \_\_\_\_\_

Appellant's Signature

189

## ANNEXURE II

### LIST OF FEATURE LAYERS

(see clause 5.2.2.17)

**Note:** The table given below is an indicative list of feature layers. The actual database schema covering the final list of layers along with attributes to be captured shall be decided during the design stage of the project as per the clause **"Preparation and Delivery of Final Digital Land Parcel Database"**.

The following table describes the indicative feature layer list with major information to be captured and /or fed to the corresponding attribute table.

Sr.No	Feature Layer	Feature Type	Major Attribute to be captured
1.	Parcel Boundaries	Lines forming closed polygons	Parcel Number (New and Existing), Owner details, Area details, Type of Land (Agriculture, Abadi, Urban, Forest), Land attributes, Crop details, Soil details, Irrigation details etc.
2.	Parcel 2	Line (Boundary lines, which are not present physically on ground)	Corresponding Parcel Number
3.	Parcel 3	Line (Boundaries physically present on the ground but not part of actual parcel boundary)	Corresponding Parcel Number
4.	Paddy Lines	Line	
5.	Embankment	Polygon	Name
6.	Forest Boundary	Polygon	Name, Area, Remarks
7.	Urban Area Boundary	Polygon	Name, Area, Remarks
8.	Railway Lines	Line	Name, Category

9.	Railway Station	Polygon	Name
10.	Road Polygon	Polygon	Name, Category
11.	Carttrack	Line	Name
12.	Water bodies (like ponds, lakes, Streams, Canals, Rivers, Dams etc.)	Polygon	Name, Category, Remarks
13.	Abadi Boundary	Polygon	Name, Area, Remarks
14.	Rills	Line	Name
15.	Village Boundary	Polygon	Name
16.	Panchayath Boundary	Polygon	Name
17.	Halka Boundary	Polygon	Name
18.	RI Circle Boundary	Polygon	Name
19.	Block Boundary	Polygon	Name
20.	Tehsil Boundary	Polygon	Name
21.	District Boundary	Polygon	Name
22.	Educational Institutes	Polygon	Name, Category
23.	Govt. Hospitals/PHCs	Polygon	Name, Category, No of beds
24.	Govt. Offices	Polygon	Name, Type (Police Station, Post Office, etc)
25.	Worship and Religious Places	Polygon	Name, Category (Temple, Church, Mosque etc.)
26.	Smashan, Kabristan	Polygon	Name, Category
27.	High Tension Electric Towers	Point	Substation (110kV or More)
28.	Trees (Beyond a particular girth)	Point	Tree Type
29.	Wells	Point	Category, Condition
30.	Mining Area	Polygon	Name, Area, Remarks

31.	Orchards	Polygon	Name, Area, Remarks
32.	Airports	Polygon	Name, Area, Remarks
33.	Soil	Polygon	Soil Type
34.	Irrigated Land	Polygon	Type, Area, Remarks
35.	Stones (used for demarcation of parcels)	Point	Remarks
36.	Control Points	Point	Type, ID, Observed Accuracy, Longitude, Latitude, X (UTM), Y (UTM), Z (MSL)
37.	Topobase	Topological Polygons created covering the land parcels.	Parcel Number (New and Existing), Owner details, Area details, Type of Land (Agriculture, Abadi, Forest), Land attributes, Crop details, Soil details, Irrigation details etc.



### Annexure-III

#### List of Districts with Geographical area

S.no.	Name of Districts	No. of tehsils	Area (Sq. Km)
1.	AJMER	16	8484
2.	BHILWARA	16	10449
3.	NAGPUR	13	17805
4.	TONK	8	7190
5.	DHAULPUR	6	3040
6.	BHARATPUR	11	5080
7.	KARALI	7	4985
8.	SAWAI MADHOPUR	8	5052
9.	HANUMANGARH	7	9929
10.	GANGANAGAR	9	10684
11.	CHURU	7	13844
12.	BIKANER	8	30279
13.	DAUSA	8	3418
14.	ALWAR	16	8383
15.	JAIPUR	16	11136
16.	JHUNJHUNU	8	5911
17.	SIKAR	9	7727
18.	SIROHI	5	5139
19.	JALORE	9	10647
20.	PALI	10	12379
21.	JODHPUR	13	22720
22.	BARMER	14	28467
23.	JAISELMER	4	38564
24.	KOTA	6	5122
25.	BUNDI	6	5776
26.	JHALAWAR	8	6314
27.	BARAN	8	6995
28.	RAJSAMAND	9	4626
29.	CHITTAURGARH	11	7823
30.	UDAIPUR	13	11773
31.	DUNGARPUR	9	3769
32.	PRATAPGARH	5	4401
33.	BANSWARA	11	4495
	Total	314	342406

**Annexure-IV****Draft Format****चलता मौका सर्वेक्षण रिपोर्ट**

पार्टीनम्बर .....

दिनांक .....

नामग्राम	तहसील	जिला	सर्वे कन्ट्रोल बिन्दू के नम्बर व निर्देशांक	
			नम्बर	निर्देशांक

सेटेलाईट इमेज इन्डेक्स नम्बर	क्रमांक	चलतानं.	भूमिवर्ग	भूमिवर्गकोडनं.	भूमिमूल्यांकनवर्ग	सिंचाईकासाधन	सिंचित	असिंचित	कृषिअयोग्य	कब्जाकास्त	फसल	गत ख.नं.	कास्तअवधि	वि.वि.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

राजस्थानसरकार  
भू-प्रबन्ध विभाग  
कार्यालय भू-प्रबन्ध अधिकारीदल .....  
(राजस्थान भू-राजस्वअधिनियम 1956 की धारा-113 के अन्तर्गत निर्धारितफार्म संख्या 4)

**Draft Format**

पर्चा खतौनी

पर्चा खातानं. ....नामग्राम ..... तहसील ..... जिला..... कृषककावर्ग ..... भूमि धारककानाम ..... कृषककानाम,  
पिताकानाम, जाति, निवासस्थान .....

हाल ख.नं.	क्षेत्रफल	परिमाप	क्षेत्रफल		भूमिवर्ग	क्षेत्रफल	कृषि योग्य	कृषिअयोग्य	भूमिमूल्यांकनवर्ग	लगानदर	लगानराशि	गत ख.नं.	क्षेत्रफल	वि.वि.
			गारण्टी योग्य	गारण्टीअयोग्य										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

हस्ताक्षरभू-मापक ..... हस्ताक्षरनिरीक्षक .....  
दिनांक ..... दिनांक .....

हस्ताक्षरसहायकभू-अभिलेख अधिकारी  
एवंसहायकभू-प्रबन्ध अधिकारी  
दिनांक .....

हस्ताक्षरपर्चानोटिस  
प्राप्तकर्ता एवंउसका पता

उपरोक्तसम्पूर्णप्रविष्टियाँ मय नक्शाफील्डबुकतकप्रमाणांकित की गईहैं।स्थान ..... दिनांक ..... कोकृषकनेसार्वजनिकसामाग्रीग्राम/सरपंच/पंच की  
उपस्थितिमेंबयानकियाकि .....

कृषक के हस्ताक्षर  
अंगूठेकाचिन्ह

ग्राम के सरपंच/पंच  
के हस्ताक्षर या अंगूठेकाचिन्ह

हस्ताक्षरभू-अभिलेख  
प्रमाणांकित

राजस्थानसरकार  
भू-प्रबन्ध विभाग  
(राजस्थान भू-राजस्वअधिनियम 1956 की धारा 121 के अन्तर्गत)

**Draft Format**

मिसलबन्दोबस्त

नामग्राम ..... तहसील ..... जिला ..... भूमिधारककानाम ..... सन् .....

खाता सं०	पर्चा सं.	खातेदार/ गैर खातेदार/ विभागीय	खातेदारकानामपिताका नामजाति एवंनिवासस्थान	ख.नं.	क्षेत्रफल	परिमाण	क्षेत्रफल		भूमिवर्ग	क्षेत्रफल	लगानरा शि	कृषि योग्य		कृषिअय ोग्य	भूमिमूल्यां कनवर्ग	वि.वि.
							गारण्टी योग्य	गारण्टी अयोग्य				सिंचित	असिंचित			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

राजस्थानसरकार  
भू-प्रबन्ध विभाग  
कार्यालय भू-प्रबन्ध अधिकारीदल .....  
(राजस्थान भू-राजस्वअधिनियम 14 की धारा-112 के नियम 19 के अनुसार)

**Draft Format**

खसरा सर्वे

ग्राम ..... तहसील..... जिला ..... सन् .....

ख.नं.	चलतानं	क्षेत्रफलहेक्टेयर में (चार दशमलव तक)	परिमाप (एक दशमलवतक मीटर में)	गारण्टी योग्य क्षेत्रफल	गारण्टीअ योग्य क्षेत्रफल	वर्तमानभू-माप										
						भूमिवर्ग	भूमिवर्ग कोड़ नं.	भूमिमूल्यांकन वर्ग	सिंचाईका साधन	कृषि		लगानद र	लगानर शि	हाल खातानं.	वर्तमानइन्- द्राज	खातेदार/ विभागीय/ गैर खातेदार
										योग्य क्षेत्रफल	अयोग्य क्षेत्रफल					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

गतभू-माप						प्रमाणीकरणकर्ता			विशेषविवरण
इन्द्राजपरिवर्तननामान्तरकरण सं. एवंसंशोधितआदेश	अन्तिमजमाबंदीकाइन्द्राज मय सम्बत्	खातानं.	ख.नं.	क्षेत्रफल	किस्मजमीन	हस्ताक्षरभूमापक	हस्ताक्षरनिरीक्षक	हस्ताक्षरसहायकभू-प्रबन्ध अधिकारी	
18	19	20	21	22	23	24	25	26	27

## Draft Format

### चलता व गतमिलान क्षेत्रफल

सर्वेपार्टीनं. .... नाम..... ग्राम ..... तहसील .....

वर्तमान					गत					
क्रमांक	चलतानं.	क्षेत्रफल	क्षेत्रफलगारण्टी		भूमिवर्ग	गतभूमिवर्ग	गत ख.नं.	गत क्षेत्रफल	गत खातानं.	वि.वि.
			योग्य	अयोग्य						
1	2	3	4	5	6	7	8	9	10	11

Map of Rajasthan





## Annexure VI

### Performance Security

### Performance Security

..... [Bank's Name, and Address of Issuing Branch or Office] .....

Beneficiary: **CEO, RBAAS & Settlement Commissioner, Rajasthan, Jaipur.**

Date:.....

Performance Guarantee No. : .....

We have been informed that . . . . [name of the Bidder] . . . .

(hereinafter called "the Bidder") has entered into Contract No. . . . .

[Reference number of the Contract]. . . . dated . . . . .with you, for the execution of establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan. (Hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance security is required.

At the request of the Bidder, we . . . . [name of the Bank] . . . . hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of Rupees\* . . . . [amount in figures] . . . . (.Rupees..... . . . [amount in words] . . . . ) such sum being payable upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

The Guarantor agrees to extend this guarantee for a specified period in response to the Procuring Entity (Beneficiary) written request for such extension for that specified period, provided that such request is presented to the Guarantor before the expiry of the guarantee.

This guarantee shall expire, no later than the . . . . Day of . . . . , . . . . \*\*, and any demand for payment under it must be received by us at this office on or before that date. . . . .

**Seal of Bank and Authorised Signature(s)**

201

\* The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract

\*\* Insert the date sixty days after the expected completion date, including defect liability period and maintenance period, if any.

Note:

1. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.
2. Bank Guarantee shall be executed on non-judicial stamp paper of applicable value purchased in the name of the bank.
3. Two persons should sign as witnesses mentioning their full name, designation, address and office seal (If any).
4. The Executor (Bank Authorities) may mention the power of attorney No. and date of execution in his/her favour authorising him/her to sign the document. The power of Attorney to be witnessed by two persons mentioning their full name and address.
5. The bank Guarantee should be executed by a Nationalised Bank/Scheduled Commercial Bank only.
6. Non-Judicial stamp paper shall be used within 6 months from the date of purchase of the same. Bank Guarantee executed on the non-Judicial stamp paper after 6 (six) months of the purchase of such stamp paper shall be treated as non-valid.
7. The contents of Bank Guarantee shall be strictly as per format prescribed by Procuring Entity.
8. Each page of Bank Guarantee shall bear signature and seal of the Bank and B.G. number.
9. All corrections, deletions etc. in the Bank Guarantee should be authenticated by signature of Bank officials signing the Bank Guarantee.
10. Bank should separately send through registered post/courier a certified copy of Bank Guarantee, mentioning Bid reference, Bid title and bidder name, directly to the Procuring Entity at the following address: CEO, RBAAS & Settlement Commissioner, "VimanBhawan", Gopalbari, Rajasthan, Jaipur

## Annexure VII

### Performance Security Declaration

#### Form of Performance Security Declaration

Date: \_\_\_\_\_ [insert date (as day, month and year)]

Contract Name and No.: \_\_\_\_\_ [insert name and number of Contract]

To: **CEO, RBAAS & Settlement Commissioner, Rajasthan, Jaipur**

We, the undersigned, declare that:

We understand that, according to your conditions, the Contract must be supported by a Performance Security Declaration as a guarantee to ensure fulfilment of our all performance obligations under the Contract for establishment of Ground Control Network, conducting Survey/re survey and updation of the survey & Settlement (records) operations in Rajasthan.

We accept that we will automatically be suspended from being eligible for bidding in any contract with you for the period of time of \_\_\_\_\_ [Procuring Entity to indicate here the period of time for which the Procuring Entity will declare a Bidder ineligible to be awarded a Contract if the performance Security Declaration is to be executed] starting on the date that we receive a notification from you, the CEO, RBAAS & Settlement Commissioner, Rajasthan, Jaipur that our Performance Security Declaration is executed, if we are in breach of any of our performance obligation under the conditions of the Contract,

We understand this Performance Security Declaration shall expire after 60 days of completion of our all obligations under the Contract including Defect Liability, warranty/ Guarantee, operation, maintenance, etc. in accordance with the conditions of the Contract.

Signed: \_\_\_\_\_

[insert signature of person whose name and capacity are shown]

In the capacity of: \_\_\_\_\_

[insert legal capacity of person signing the Performance Security Declaration]  
Name: \_\_\_\_\_

[insert complete name of person signing the Declaration]

Duly authorized to sign the Contract for and on behalf of: \_\_\_\_\_  
[insert complete name and address of the Bidder]

Dated on.....day of ..... [insert date of signing]

**Annexure VIII**

**CHECKLIST FOR ELIGIBILITY CRITERIA ( To be submitted by the bidder)**

<b>S.No</b>	<b>Clause No.</b>	<b>Eligibility and Pre-Qualification Criteria</b>	<b>Supporting Document Requirement</b>	<b>Brief Details of Documents Attached as per requirement</b>	<b>Page No</b>	<b>Remarks</b>
<b>A</b>	<b>About Company Competency</b>					
1	3.3.1 (A) 1	Bidder shall be registered in India under Companies Act 1956 and must be operational since last 10 years as on 31/03/2015.	Certificate of Incorporation of both prime Bidder & consortium need to submit in this regard.			
2	3.3.1 (A) 2	Bidder must have valid certificate of ISO 9001:2008. In case of Consortium, prime bidder should have ISO 9001:2008.	Copy of certificate of ISO 9001:2008 need to be submitted.			
3	3.3.1 (A) 3	The Bidder should be registered for Sales Tax /VAT/Service Tax/ Excise/PAN as applicable.	Copy of certificate need to be submitted.			
4	3.3.1 (A) 4	Joint Venture/ Consortium is allowed. Joint Venture/ consortium shall not consist of more than three companies. (one + two) Every member of the consortium shall be equally responsible and jointly and severally liable for the successful completion of the entire project.	Notarized document of Memorandum of Understanding (MOU) must be submitted clearly defining scope of work and financial sharing of Individual partners. The MOU agreement shall be exclusively for this project and shall be signed by the Chief Executives/ Authorized Signatories			

5	3.3.1 (A) 5	Bidder Should produce Articles of Association (in case of registered firms), Bye laws and certificates for registration (in case of registered co-operative societies), Partnership deed (in case of partnership firm).	Copy of Article of Association or relevant documents for all bidder members			
6	3.3.1 (A) 6	Original signed copy or Authorization / Resolution.	Original copy should be signed and notarized in a legal bond paper			
7	3.3.1 (A) 7	Bidder shall submit a self-declaration for being not under legal action for corrupt or fraudulent practices or not being blacklisted /banned / disqualified / declared ineligible / declared having dissatisfactory performance by any Ministry/ Department of GOI/ State/UT Government/ PSU/Government Organizations/ Govt. or Govt. organisation of countries other than India and Nifty listed companies.	Self-Attested Declaration on company letter head for all bidder members.			
8	3.3.1 (A) 8	Bidder should have an office in Rajasthan. If not available then should provide undertaking to setup office within	Address Proof document or Undertaking			

		1 month after award of contract and also at district head quarters of awarded districts in due course of time.				
<b>B</b>	<b>Technical Criteria</b>					
1	3.3.1 (B) 1	The bidder should have completed project or Should have NLRMP Project in progress of survey work involving processing of High Resolution Satellite images / Stereo Satellite images / Aerial Imageries using DGPS / ETS or Ground Survey using DGPS / ETS including preparation of GIS Base map or Linear survey and mapping using DGPS/ETS covering a minimum cumulative geographical area of 1500 Sq. Km. in last 10 Financial Years for Central Govt. of India/ UT Govt./any State Government/ Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.	<p><b>1.For completed work:</b>Copies of Work order and Completion Certificates should be enclosed in the bid.</p> <p><b>2. For completion of work in countries other than India or Nifty listed Private Companies:</b> In case of experience in countries other than India certificate of Government or Govt. organisation/other appropriate agency shall be attached. In case completion certificate is from other than Government, then proof of accounts showing transactions of the project mentioned be attached. Reputed private company should be NIFTY listed company.</p>			

			<b>3.In case of NLRMP Project in progress:</b> <u>Only NLRMP projects</u> shall be considered in this category. Bidder should have Submitted Ground control point network establishment, processing of High resolution Satellite Imageries / Aerial imageries and generation of cadastral maps. Bidder shall submit certificate from concerned authority mentioning completion of above mentioned activities and area against work order.			
2	3.3.1 (B) 2	<b>Project Cost:</b> Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/aerial photographs using DGPS / ETS or Ground Survey using DGPS/ETS including Preparation of GIS Base map or linear survey and mapping of value as mentioned	1. <b>For completed work:</b> Copies of Work order and Completion Certificates should be enclosed in the bid.  2. <b>For completion of work in countries other than India or Nifty listed Private Companies:</b> In case of experience in countries other than India certificate of Government or			

		<p>below in the last 10 years for Central Govt. of India/ any State Govt.</p> <p>Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p> <p>One project of value 4 Crores.</p> <p>Two projects of value 5 Crores.</p> <p>Three projects of value 6 Crores.</p>	<p>Govt. organisation/other appropriate agency shall be attached. In case completion certificate is from other than Government, then proof of accounts showing transactions of the project mentioned to be attached. Reputed private company should be NIFTY listed company.</p> <p><b>3. In case of NLRMP Project In progress:</b>  <u>Only NLRMP projects</u> shall be considered in this category. Bidder should have submitted Ground control point network establishment, processing of High resolution Satellite Imageries / Aerial imageries and generation of cadastral maps. Bidder shall submit copy of work order and satisfactory certificate from concerned authority mentioning submission of above mentioned activities and area against work order.</p>			
--	--	--	---	--	--	--



3	3.3.1 (B) 3	<p>Bidder should have minimum following instrument /equipment available with their firm for carrying out project activities</p> <p>Differential Global Positioning System (DGPS) – 09 Nos. Electronic Total Station (ETS)/Real Time Kinematic (RTK)– 05 Nos.</p> <p>Scanner/Plotter- 01 Nos. each</p> <p>Licenses of Genuine softwares - image processing, GIS/ Photogrammetric suite with genuine Hardware- at least 01 each</p> <p>They may mention how much more they plan to add, in case they get this order. In that case bidder will have to submit proof of purchase.</p>	Relevant invoice /bill in the name of firm should be produced/ enclosed with bid, in case of any of equipment on rent/lease, documentary proof may be attached.			
4	3.3.1 (B) 4	The Bidder must have an overall GIS and Remote Sensing Engineer, Land Surveyor, CAD Engineer/Operator strength of sufficient number of personnel on their payroll as on 31 <sup>st</sup> March 2015.	Bidder must submit HR head Certificate .			

C	Financial Criteria					
1	3.3.1 (C) 1	Bidder should have a minimum average annual turnover of Rs. 15 crore & above during the last 3 financial years (FY 2012-13, 2013-14& 2014-15)	Copy of audited financial Statements for last 3 financial years. Certificate from CA /statutory Auditor for Annual Turnover to be attached.			
2	3.3.1 (C) 2	Net Worth: The net worth of the bidder must not be less than Rs.10 Crores for the financial year 2014-15.	Certificate by firm of chartered accountants or statutory auditors			

<b>D.1 Additional Documents to support Organisational Strength for Technical Evaluation (if any)</b>						
S.No	Clause No.	Eligibility and Pre-Qualification Criteria	Supporting Document Requirement	Brief Details of Document(s) Attached as per requirement	Page No.	
1						
2			.			
3						
4						

<b>D.2 Additional Documents to support Domain Technical Expertise and Resources for Technical Evaluation (if any)</b>						
S.No	Clause No.	Eligibility and Pre-Qualification Criteria	Supporting Document Requirement	Brief Details of Document(s) Attached as per requirement	Page No	
1						
2			.			
3						
4						

## Office of the CEO RBAAS & Settlement Commissioner, Rajasthan, Jaipur

No. F-3(1)/survey/resurvey/tender/RBAAS/2014-15/Part-II/585 Date: 25-01-2016

### Modifications/Amendments in Bidding Document after Pre bid meeting for Establishment of Ground Control Network, Conducting survey/re-survey and updatation of the survey & Settlement (Records) Operations in Rajasthan

NIB No.CEORBAAS&SCR/Establishment gcn& survey/resurvey/2015-16/2

#### **Modifications/Amendments**

Bid doc. Page No.	Bid document Section No.	Section details	Revised section details (Modifications/ Amendments)
10	1.29	"HRSI" means High Resolution Satellite Imagery	"HRSI" means High Resolution Satellite Imagery with resolution 1 mtr. or higher.
15	5.1 (2 <sup>nd</sup> para)	all parties to the Joint Venture, Consortium or Association shall sign the Bid and they shall be jointly and severally liable; and a Joint Venture, Consortium or Association shall nominate a representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the Joint Venture, Consortium or Association during the Bidding process. In the event the Bid of Joint Venture, Consortium or Association is accepted, either they shall form a registered Joint Venture, Consortium or Association as company/firm or otherwise all the parties to Joint Venture, Consortium or Association shall sign the Agreement.	all parties/Authorized signatory to the Joint Venture, Consortium or Association shall sign the Bid and they shall be jointly and severally liable; and a Joint Venture, Consortium or Association shall nominate a representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the Joint Venture, Consortium or Association during the Bidding process. In the event the Bid of Joint Venture, Consortium or Association is accepted, either they shall form a registered Joint Venture, Consortium or Association as company/firm or otherwise all the parties to Joint Venture, Consortium or Association shall sign the Agreement.
17	5.6 (1 <sup>st</sup> para)	<b><u>Financial Requirements</u></b> Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/aerial photographs using DGPS / ETS or Ground	<b><u>Financial Requirements</u></b> Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/aerial photographs using DGPS / ETS or Ground Survey using DGPS/ETS

		<p>Survey using DGPS/ETS including Preparation of GIS Base map or linear survey and mapping of value as mentioned below in the last 10 years for Central Govt. of India/ any State Govt. Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p> <ul style="list-style-type: none"> <li>• One project of value 4 Crores.</li> <li>• Two projects of value 5 Crores.</li> <li>• Three projects of value 6 Crores.</li> </ul>	<p>including Preparation of GIS Base map or linear survey and mapping of any of the value as mentioned below in the last 10 years for Central Govt. of India/ any State Govt. Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies.</p> <ul style="list-style-type: none"> <li>• One project of value 4 Crores.</li> <li>• Two projects of value 5 Crores.</li> <li>• Three projects of value 6 Crores.</li> </ul>
55	12.9	<p>In the written intimation of acceptance of its Bid sent to the successful Bidder, it shall also be requested to execute an agreement in the format given in the Bidding Document on a non-judicial stamp of requisite value at his cost and deposit the Performance Security or a Performance Security Declaration, if applicable, within fifteen days from the date on which the LOA or LOI is dispatched to the Bidder. In case the successful bidder is a JV still to be legally constituted, all parties to the JV shall sign the Agreement.</p>	<p>In the written intimation of acceptance of its Bid sent to the successful Bidder, it shall also be requested to execute an agreement in the format given in the Bidding Document on a non-judicial stamp of requisite value at his cost and deposit the Performance Security or a Performance Security Declaration, if applicable, within thirty days from the date on which the LOA or LOI is dispatched to the Bidder. In case the successful bidder is a JV still to be legally constituted, all parties to the JV shall sign the Agreement.</p>
63	12.9	<p>The time period within which the successful Bidder shall have to submit Performance Security and sign the Contract Agreement after issue of LOA or LOI by the Procuring Entity is: 15 days</p>	<p>The time period within which the successful Bidder shall have to submit Performance Security and sign the Contract Agreement after issue of LOA or LOI by the Procuring Entity is: 30 days</p>
63	12.12,12.13	<p>Performance Security or Performance Security Declaration shall be required from the successful bidder within 15 days after issue of the letter of awards. The amount of Performance Security shall be @ 5% of the Contract amount.</p>	<p>Performance Security or Performance Security Declaration shall be required from the successful bidder within 30 days after issue of the letter of awards. The amount of Performance Security shall be @ 5% of the Contract amount.</p>

64	3.3.1 (A) (1)	Bidder shall be registered in India under Companies Act 1956 and must be operational since last 10 years as on 31/03/2015.	Bidder shall be registered in India under Companies Act 1956 and must be operational since minimum last 5 years as on 31/03/2015.
67	3.3.1 (B) (2)	<b>Project Cost:</b> Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/aerial photographs using DGPS / ETS or Ground Survey using DGPS/ ETS including Preparation of GIS Base map or linear survey and mapping of value as mentioned below in the last 10 years for Central Govt. of India/ any State Govt. Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies. One project of value 4 Crores. Two projects of value 5 Crores. Three projects of value 6 Crores.	<b>Project Cost:</b> Bidder should have completed project or should have NLRMP Projects in progress of survey work involving processing of High Resolution Stereo Satellite Images/ aerial photographs using DGPS / ETS or Ground Survey using DGPS/ETS including Preparation of GIS Base map or linear survey and mapping of any of the value as mentioned below in the last 10 years for Central Govt. of India/ any State Govt. Organization/ PSU in India/ Govt. or Govt. organisation of countries other than India and Nifty Listed companies. One project of value 4 Crores. Two projects of value 5 Crores. Three projects of value 6 Crores.
70	3.3.2 (A) (2)	<b>Bidder certification</b> ISO 9001:2008 – 2 marks ISO 9001:2008 in GIS and Image processing – 3 marks	<b>Bidder certification</b> ISO 9001:2008 – 2 marks ISO 9001:2008 with GIS/Image processing – 5 marks
87	4.6 (Note below table)	Note: 1. Use separate form for each key personnel/non key personnel and relevant technical and administrative support staff. 2. The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the key personnel.	(Note: deleted)
124	5.2.1.6 (III) (4)	Single/Dual Frequency DGPS	Dual Frequency DGPS
124	5.2.1.6 (III) (5)	<ul style="list-style-type: none"> <li>Longitude using WGS 84 datum</li> <li>Latitude using WGS 84 datum</li> <li><b>X in UTM Coordinates</b></li> </ul>	<ul style="list-style-type: none"> <li>Longitude using WGS 84 datum</li> <li>Latitude using WGS 84 datum</li> <li><b>X in UTM Coordinates</b></li> <li><b>Y in UTM Coordinates</b></li> </ul>

		<ul style="list-style-type: none"> <li>• Y in UTM Coordinates</li> <li>• Altitude (Z) from Mean Sea Level</li> <li>• Monument Unique ID</li> </ul>	<ul style="list-style-type: none"> <li>• Monument Unique ID</li> </ul>
126	5.2.1.7	In each village of rural and urban area, the Bidders are required to establish at least four monumented control points.	In each village of rural and urban area, the Bidders are required to establish at least four observations.
138	5.2.3.2 (ii)	The Draft Land Parcel Maps prints on prescribed template with actual dimensions, details of adjoining parcels will be distributed to the concerned owner and receive the objections if any.	The Draft Land Parcel Maps prints on prescribed template with map dimensions, details of adjoining parcels will be distributed to the concerned owner and receive the objections if any.

**(Dinesh Chand Jain)**  
**CEO, RBAAS & Settlement Commissioner**  
**Rajasthan, Jaipur**